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### *Exposures: Exploring Selves and Landscapes in the Chernobyl Exclusion Zone*

NICHOLAS RUSH-COOPER

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# **Exposures: Exploring Selves and Landscapes in the Chernobyl Exclusion Zone**

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**2013**

*This thesis is submitted in fulfilment of the requirements for the degree of  
Doctor of Philosophy in the Department of Geography.*

# Exposures: Exploring Selves and Landscapes in the Chernobyl Exclusion Zone

Nick Rush-Cooper

## ABSTRACT

This thesis contributes to understandings of tourism and landscape by detailing how embodied tourist subjects are active producers of knowledge and place, rather than passive consumers. However tourists are not understood as the sole producers and this thesis details a world of active agencies in negotiation and mutual re-configuration. It is based upon an ethnographic study through participant observation of 25 day-trip tours to the Chernobyl Exclusion Zone in Ukraine. The participant observation was undertaken as researcher, visitor and tour guide and offers a range of perspectives and accounts. The thesis offers an account of embodied subjectivity and landscape as mutually implicated and in a co-becoming, but a mutuality that is fraught, negotiated and uncertain rather than a given vitality. The thesis is presented as five 'cuts' through this ethnographic material, each broaching specific theoretical and empirical concerns. First, the Chernobyl Exclusion Zone is argued to be a site of post-apocalypse in a manner which re-purposes a post-apocalyptic imaginary as a salient political narrative that holds a fidelity to events, pasts and futures and in contrast to Hollywood spectacle and certain climate change prophecies. Secondly the thesis examines practices of meaning-making in the ruins of Pripyat, drawing on theories that highlight material, embodied practices of making-sense through encounters with vestiges of other lives. Thirdly it presents a post-phenomenological account of embodied subjectivity. Merleau-Ponty's philosophy of the flesh is examined and, through the work of Luce Irigaray, a re conceptualisation is presented that asserts a necessary passivity of exposure as the predicate for all action and that offers a radical account of the reversibility of the flesh that de-centres the embodied subject. Fourthly the map that accompanies this thesis is presented as a means of examining networks of negotiation with the resistant, wilful, trickster agencies of radiation. Drawing on the work of Bruno Latour and Donna Haraway the thesis focuses on the Geiger counter as a key mediator in practices which assert a topographical account of networked practices in contrast to topological accounts associated with actor-network theory. Finally, the thesis offers a conception of difference and boundary-making practices as performative re-configurations where difference is understood not only as produced, rather than given through a priori assumptions of bodily and worldly boundaries, but also as actively productive. The thesis contributes to debates on subjectivity, landscape and knowledge production.

# TABLE OF CONTENTS

<b>Abstract</b> .....	<b>ii</b>
<b>Illustration Index</b> .....	<b>vii</b>
<b>Statement of Copyright</b> .....	<b>ix</b>
<b>Acknowledgements</b> .....	<b>x</b>
<b>1. A Guide to The Zone</b> .....	<b>1</b>
<b>Introduction</b>	
Plat du jour: Cs137.....	1
<b>Tourism and the Chernobyl Exclusion Zone</b>	
Ukraine.....	5
Chernobyl.....	7
The Zone.....	14
Tourism.....	29
<b>Conceptualising Tourism and the Chernobyl Exclusion Zone</b>	
Dark Tourism?.....	36
The academic landscape.....	38
Phenomenological accounts.....	41
Landscape obliterated by the relational?.....	42
Landscape as tension.....	43
<b>Researching tourism and the Chernobyl Exclusion Zone</b>	
The Research.....	44
Pilot research.....	44
Participant ethnography.....	46
Researcher, Visitor, Guide.....	52
<b>Writing tourism and the Chernobyl Exclusion Zone</b>	
The thesis.....	57
At the end of the day.....	65
<b>2. Locating the Post-Apocalypse</b> .....	<b>68</b>
<b>Welcome to the post-apocalypse</b>	
Theme Park: Apocalypse.....	68
“Let's do something real” .....	70
Towards a post-apocalyptic sensibility.....	73
<b>The Post-Apocalyptic City</b>	
Worlds with and without us.....	75
The world without the Soviet.....	78
Early modern pessimism.....	81
<b>Naming the apocalypse</b>	

Nuclear disaster.....	85
Diagnosis: Apocalypse.....	87
Post-apocalypse as lived reality.....	89
<b>The event &amp; after</b>	
Experimentation.....	92
Tipping point.....	94
Fidelity to the event.....	97
<b>Locating the Post-Apocalypse in the Zone</b>	
Three sensibilities.....	99
<b>3. In Ruins.....</b>	<b>101</b>
<b>Pripyat</b>	
Of ruins and their ghosts.....	101
Hauntings.....	107
<b>Encounters</b>	
Making sense through encounter.....	110
The secret lives of gas masks, dolls and birch trees.....	115
<b>The Uncanny</b>	
Kopachi and spectral remains.....	120
Unheimlich.....	122
<b>Imagined History Making</b>	
The 'second chances' of objects.....	126
<b>Archaeology</b>	
The Radioactive Playground.....	129
Investigation and Being struck.....	130
<b>Salvage</b>	
Artefacts of the future.....	136
Competing salvages.....	138
Museum city.....	139
Contra Detroit.....	142
<b>4. Exposure.....</b>	<b>145</b>
<b>The failure of experience</b>	
Of Prometheus and his brother.....	145
Gazing on the sublime.....	147
<b>The Chernobyl sublime</b>	
The sublime.....	150
The sublime tourist in Chernobyl.....	152
The Nuclear Sublime.....	155
The Chernobyl Sublime.....	158
<b>The Red Forest</b>	
Gesturing towards the invisible.....	162
In what sense a Red Forest?: Of Red Forests and Red Dresses.....	165

Reversing the reversible.....	168
Being-in-the-Zone as the 'unrealized in fact' of feeling being felt by radiation Or: Are we trees to the world's painters?.....	173
A necessary, not cultivated receptivity: How radiation does not need our receptivity to be a creative one.....	175
Sublime exposure.....	182
The Narrator Exposed.....	183
<b>5. Translations, Resistances and Tricksters.....</b>	<b>187</b>
<b>Outlines</b>	
A sheet of glass coming down from the sky.....	187
<b>Cartography</b>	
Cartographic anxiety.....	192
The radioactive playground.....	193
Map-propriation.....	197
Geiger counter, chalk, camera and measuring tape.....	201
Tracing and mapping.....	207
Cartographic practices.....	208
Navigational practices.....	211
<b>Guiding and Geiger counters</b>	
Technologies of guiding and fortuitous assemblies for stuttering conversations with chameleon tricksters.....	212
Actors and networks.....	215
The price of translation.....	217
<b>Resistance</b>	
Not withdrawal.....	219
Radioactive reality as resistance.....	220
Partial connections with a trickster world.....	222
<b>6. Difference.....</b>	<b>226</b>
<b>Pulling together</b>	
Different cuts.....	226
<b>Bodies, cities, natures, ruins</b>	
Something more like a chimera?.....	227
The view from the tower, the view on the ground.....	230
Of bodies and cities: Decaying, not dead.....	233
<b>Boundaries</b>	
Performing & bounding the tourist body.....	241
"Keep your arms and legs inside. No smoking, eating, drinking" and "You should now put on gumboots or stout shoes, a coat done up to the neck, a hat or headscarf and some gloves" .....	243
Breathing and breezes.....	247
Borders.....	249

<b>Difference</b>	
Exteriority within.....	251
Knowledge practices.....	254
<b>7. Conclusion.....</b>	<b>256</b>
<b>Five cuts</b>	
Overview.....	256
<b>Lines across</b>	
Landscapes.....	257
Knowledges.....	258
Subjectivities.....	259
Further avenues.....	260
<b>Appendix.....</b>	<b>264</b>
<b>Research dates &amp; summaries</b>	
Interviews (not conducted as part of tours).....	264
Tours.....	265
<b>Quoted respondents</b>	
<b>Bibliography.....</b>	<b>273</b>

# ILLUSTRATION INDEX

Image 1: "Hard Rock Cafe Chernobyl" t-shirt design.....	2
Image 2: Checkpoint Dityatki (#p0334).....	15
Image 3: Map of the Zone at checkpoint Dityatki (#p0192).....	17
Image 4: The signs to the offices in Chernobyl. (#p0775).....	24
Image 5: Visitors gather in the meeting room at Chernobyl (#p1077).....	24
Image 6: One of the radiometric maps of the Zone on the wall of the meeting room in Chernobyl (#p1404).....	26
Image 7: Example route of the tour. GPS data kindly provided by Mick and Peter as recorded during my second visit. Checkpoint Dityatki is 16km south of the edge of the map.....	26
Image 8: The sarcophagus (#p0908).....	28
Image 9: The memorial outside Chernobyl's fire station (#p0607).....	31
Image 10: The 'vehicle museum' in Chernobyl (#p1173).....	34
Image 11: The buses stop along the road to the power plant for visitors to take photos (#p1086).....	51
Image 12: Unfinished reactors 5 & 6 with construction cranes pool.....	51
Image 13: Pausing to feed the catfish (#p0965).....	54
Image 14: Taking photographs of reactor 4 (#p1182).....	57
Image 15: Entrance sign to Pripyat (#p0138).....	58
Image 16: A room at the top of hotel 'Polissya' (#p1367).....	60
Image 17: Visitors gather on the top floor of the hotel (#p0978).....	60
Image 18: Pripjat as seen from the top of the hotel (#p0143).....	61
Image 19: The Ferris wheel in Pripjat (#p1097).....	63
Image 20: The 'scanners' at Dityatki checkpoint used when leaving the Zone (#p0579).....	66
Image 21: Employee of Chernobyl InterInform stands in a road in Chernobyl. Still from This Momentary music video.....	71
Image 22: Birch tree, top floor of the hotel (#p1758).....	101
Image 23: Walking across to the cultural centre (#p0650).....	102
Image 24: Crossing from the hotel to the cultural centre (#p1375).....	102
Image 25: Taking a closer look at the books (#p0405).....	103
Image 26: Store room at back of Pripjat cultural centre in the main square (#p0072).....	104
Image 27: The school, as seen (just) from the road (#p0918).....	111
Image 28: The entrance to the school (#p1499).....	111
Image 29: Inside Pripjat School 3 (#p1302).....	113
Image 30: Children's NBC masks, canteen floor, «ПСШ #3» (Middle School No. 3), Pripjat. (#p0924).....	115
Image 31: "this old doll in the middle of the square in Pripjat" (#p0983).....	118
Image 32: Radiators arranged for later collection by scrap collectors (they were gone the next week). Next to the entrance steps to the swimming pool, Pripjat. (#p1051).....	119
Image 33: Tracing Kopachi (#p0223).....	122
Image 34: A daring visitor jumped into the pool to look at the film reels (#p1039).....	131
Image 35: Having a closer look (#p1040).....	132
Image 36: Reels of film are scattered about the cultural centre (#p0421).....	132
Image 37: Pripjat Hospital; operating theatre (#p1571).....	134
Image 38: is that a... ? (#p0468).....	135
Image 39: Having a wander in the memorial garden by reactor 2. (#p0132).....	146
Image 40: The statue of Prometheus. (#p0623).....	146
Image 41: Photo taken at the edge of the area tourists are permitted to move within. (#p1355).....	149
Image 42: Photo of tourists photographing a Geiger counter (#p1637).....	154
Image 43: Yuri has stopped the minibus to step out and highlight how contaminated the red forest is. Visitors are instructed to stay within the bus. (#p1282).....	185
Image 44: Waiting for passport checks at КПП Дитятки (#p0892).....	187

Image 45: Close up of the map of the two central Zones (note the pink inner-Zone) which stands at Кпп Дитятки (#p0487).....	188
Image 46: Radiometric maps of the Zone in the briefing room at the Chernobyl Interinform offices, Chernobyl Town (#p0194).....	190
Image 47: Tour guide using radiometric maps to describe and narrate the Zone (#p1771).....	190
Image 48: Geiger counter being used as prop during my second tour of the Zone (#p0142).	194
Image 49: Geiger counter in Pripyat with Reactor 4 in the background (#p0144).....	194
Image 50: Maxim brings attention to the moss with a Geiger counter (#p1194).....	195
Image 51: The famous patch of moss (#p0432).....	195
Image 52: The asphalt plains of the amusement park (#p1682 through #p1689).....	198
Image 53: Tracing of the amusement park, based upon satellite imagery. The same tracing forms the basis of the final map. North is not at the top of the image.....	201
Image 54: The previous image after annotation with the location of readings. Smaller areas (labelled 1 to 7) appear on other sheets, measured more accurately than the locations on this map (as seen in section 2 which appears on this image) .....	203
Image 55: Details of recording point locations in area ❶ on the map near to small building to the west of the amusement park. Readings 20-26 are by the 'famous' patch of moss.....	205
Image 56: A photograph of part of area '1' on the map with some chalk marks of reading locations visible. p1793.....	205
Image 57: Two visitors to the left of the image explore a small patch of highly irradiated asphalt (#p1138).....	210
Image 58: (Close up of patch of asphalt in above image) In comparing my counter (right) with that held by visitor (left) which has had the $\beta$ -particle barrier removed, it is clear that the patch of asphalt above is almost entirely a source of $\beta$ radiation (meaning it is likely $^{90}\text{Sr}$ in the asphalt, though also possibly an isotope of Plutonium) (#p1762).....	210
Image 59: Having just measured the radiation levels in the grass just a couple of meters away, Yuri shows how the levels are much higher near the source of radiation; the caterpillar tracks contaminated with radioisotopes (#p1314).....	213
Image 60: Antler with $^{90}\text{Sr}$ contamination showing $\beta$ -decay radiation, but not $\gamma$ (#p1267). .	214
Image 61: Body scanners giving the 'all-clear' to visitors as they leave the Zone at Кпп Дитятки (#p0573).....	215
Image 62: Buildings inside a forest (#p0387).....	230
Image 63: "Kinda freaky" (#p1150).....	235
Image 64: The stairs taken from the cultural centre to the amusement park (#p1547).....	238
Image 65: Moss is carefully avoided in positioning for a photograph (#p1782).....	239
Image 66: Feeding the catfish. The rusting hulks of the half-built reactors 5 & 6 with still standing cranes can be seen in the background. (#p0633).....	242

# STATEMENT OF COPYRIGHT

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Any errors are, of course, entirely my fault.

# 1. A GUIDE TO THE ZONE

## Introduction

Plat du jour: Cs<sup>137</sup>

It's half seven in the morning and I'm on my way to Lukianivska metro station in Kyiv. On the way I pass the large rynok (market) just as it is opening for the day. Watching the stallholders setup, I am reminded of advice given to me when I first headed to this market: "Most everything is safe, just don't buy any wild mushrooms." The implication is clear; no qualification as to why is needed.

This morning I'm not going shopping, but am heading to Independence Square to join today's tour to the Chernobyl Zone of Alienation (the Zone). Later today my attention will be drawn to mushrooms again; the size of a particularly large flat cap specimen will be jokingly ascribed to irradiation. For now, though, I'm at the northern end of Independence Square where I meet Sergei, tour operator for the majority of English speaking tour to the Zone. He hands me a t-shirt, one I've seen himself, his employees and occasionally the tour guides for the Zone wear before now, and which he has begun to sell as souvenirs (see image 1). I'm told I can have the t-shirt as by now, a dozen trips in to my fieldwork, my role as participant observer is spent more as guide than visitor. The selling of souvenir t-shirts is somewhat at odds with Sergei's insistence previously that visits to the Zone are "not tourists" but "visitors to a very special place, a restricted place." (#fn05)<sup>1</sup> The t-shirt's design is situated in this tension. The deliberate absurdity of "HardRock Café, Chernobyl" is a clear message: This is no ordinary tourist destination.

\* \* \*

A ruinous, radioactive landscape, a site of disaster, a Zone of evacuation. An apocalyptic landscape nevertheless verdant and full of the sound of birdsong alongside the chirrup of Geiger counters. The Zone is a key site for the ongoing debate on nuclear power, as well as Ukraine's own national identity<sup>2</sup>. An area extensively covered by radiological studies, yet with remaining uncertainty. Drawing photographers and artists, taking back home evocative photographs or leaving equivocal drawings on the ruins of Pripjat. A source of inspiration for

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<sup>1</sup> For ease of reference direct data extracts are referenced using a sequential numbering system, sorted by type. The first letters indicate the data type: '#fn' are transcripts of fieldnotes, '#r' come from 'go-along' interviews and other recordings during the tour, '#i' come from interviews conducted after tours (and occasionally during lunch breaks) and photographs begin with '#p'. The appendix contains a summary of the of the tours attended and which recording, interview and photographs numbers are associated with them.

<sup>2</sup> See Dawson (1996)



Image 1: "Hard Rock Cafe Chernobyl" t-shirt design.

computer games, films, fiction and poetry and a source too of its own myths. Knowledge in and of the Zone is rarely simple, clear, complete. Not so much a competition of knowledges as a testament to the world as ever illusive, ungraspable. By any account the Zone is an exceptional place, certainly an exceptional place for tourism.

\* \* \*

Here at the northern end of Independence Square, visitors begin to arrive for today's tour. As more arrive the usual small talk begins; where are you from? Just visiting Kyiv or on tour? This nice little restaurant over there, that great bar we found last night, check out this market sometime, don't bother going to that gallery. I chat with a few people, introducing myself and my reasons for being here today. I find myself asking the same old questions about visitor motivations; why did you decide to visit the Zone? What was it about Chernobyl that drew your interest? What are you be expecting?

There's a group of backpackers from Sweden who have been travelling through Eastern Europe, an Australian couple visiting Ukraine, a group of friends from the UK spending a few days in Kyiv. All visiting the Zone as part of a longer trip, none in Kyiv here solely for today's tour. Why visit? Why not; it's an interesting place. Historically important. Unique. Nothing else like it.

Those I speak with begin to ask questions in return: What are the ruins of Pripyat like now? What should be done to avoid radiation exposure? Is it *really* that safe? They tell me about the computer games they've played that were set in Pripyat and the Zone, the photos

they've seen, the rumours they've heard. Some want to know how much freedom they'll have to go off and take photos and walk around Pripjat. Others want to know about the radiation levels near the destroyed Reactor 4 and the huge steel and concrete sarcophagus that covers it. No matter how often I visited the Zone, speaking to people on these early morning in Kyiv always once again engendered an excited, if somewhat anxious, anticipation.

\* \* \*

It is these anxiously anticipated experiences with the unique landscape of the Zone that are the core focus of this thesis. The unfolding of thoughts, feelings and practices; not in, or of, but *with*<sup>3</sup> the Zone. For whether a being-with the alien agencies of radiation, the textures and topographies of ruins or the Geiger counter as translator; few other landscapes so clearly demand a full realisation of the world as forceful in its own right. What follows in this thesis is a study of the Zone's landscape not as inert visual material for tourist consumption: not produced, but productive, invisible as much as it is visible. The aim of this thesis is to explore these experiences in order to develop accounts of landscape and knowledge production that bear witness to both the embodied and imaginative practices of people and other wilful, alien agencies encountered.

This thesis is concerned with ontological questions of entities, borders and their constituting forces. Primarily this can be seen in the figure of the irradiated body in a radioactive landscape which makes problematic any sense of easy delineation between body and world and questions occularcentric modalities of Being. The responses to these ontological questions are driven by epistemological preoccupations with agency, relations, and, above all, with knowledge production. Specifically here I question how we can 'make sense' of a world that exceeds our senses. In many ways radiation denies any attempt to figure the human as the constituting force of Being. Thus I ask how can we begin to know ourselves and the world after an awareness of ourselves having been entered into (as opposed to actively entering) a world that exceeds our senses and, importantly, for which human agency, thought and consciousness cannot be considered necessary, central nor primary in action?

Despite these somewhat abstract statements my aim throughout has been to embed these questions in rich empirical material. Or, rather, it was only after months of working through, writing and thinking with this empirical material that such questions began to solidify as the driving forces of the thesis. This empirical work took the form of ethnographies of 'day trips' to the Zone conducted as both tourist and tour guide. The thesis offers this ethnographic data in a way that I hope you will find to be engaging, thought provoking and,

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<sup>3</sup> Yet this with should never be taken to suggest alliance, agreement, coincidence. Not allied, possibly ambivalent, but if anything a fundamentally antagonistic relationship between selves and worlds.

above-all, enjoyable to read. From reading which it should be clear why these ontological and epistemological questions are important.

Thus, whilst the thesis is about tourist experiences, it is not about tourism. In the sense that tourism, as a social phenomenon, is not given a great deal of consideration. Questions of motivation, interpretation and management that preoccupy much of the 'tourist studies' literature are put to one side. Instead this thesis is concerned with questions of landscape, agency, experience and knowledge production. Questions not of why people visit the Zone nor of what they take home with them but how they experience the unique landscape of ruins and radiation. These questions are broached from a variety of angles, each drawing together a different theoretical framework to address the specifics of each chapter. What does unify each chapter is a fidelity to tourists' experiences as meaningful and generative engagements with the world but also to the myriad other agencies that structure and influence these engagements. As such, each chapter in this thesis does, in many ways, stand as its own distinct entity. Each is structured around either a specific empirical narrative and theme or a specific conceptual and theoretical approach (or both). (For more details on the specifics of the chapters, you are invited to skip to the final section of this chapter.) In other ways there is an arc that this thesis progresses along whereby each chapter builds upon the next. In a reflection of the open-ended nature of much social research, and that all good answers often lead to more questions, each chapter, starting from chapter 2, ends not only with a response to the questions posed therein but the questions that arise from and are left unanswered by that journey. This arc begins in chapter 2 with a positive affirmation of tourist agency in the face of theories that position them as dupes in cultural cycles of reproduction by taking seriously the Zone as feeling post-apocalyptic. This affirmation of agency is increasingly questioned and other, nonhuman, agencies of ruins and radiation are progressively brought into the picture. The result is not an annihilation of human, tourist agency, but a repositioning vis-a-vis the surrounding landscape and technologies. This arc ends with a return to human agencies, this time not affirmed from the start, as *a priori* but as contingent (but nonetheless important) forces in the construction of difference.

This arc travels through the many different areas of Zone; its abandoned cities, the power plant itself and irradiated forests. It also moves across from cultural and political concerns, through anthropological material cultures through (post-)phenomenological enquiry via Merleau-Ponty and Luce Irigaray through Actor-Network-Theory (ANT) and related Science-and-Technology Studies (STS) and finally some quantum theory for good measure. Many of the driving questions and approaches (empirical and theoretical) are bound up in questions of landscape, agency and knowledge production that draw upon a disciplinary tra-

dition in geography. Thus cultural geographers are, by and large, the intended audience for this thesis. This being said, audiences from cognate areas of anthropology and sociology should be able to draw from my writing here, especially given that various chapters address various lineages of theoretical thought. Finally anyone interested in the Zone as a unique landscape or wider fields of urban exploration and urban ruin or tourism and, I would hope, anyone else who just enjoys reading ethnographic reportage should be able to gain something from this thesis.

This first chapter serves to provide context to this thesis, doing so in four parts. In the first section I begin by providing details on the Chernobyl disaster of 1986 and the Zone as it was created and exists now. This section ends by detailing how the Zone came to be a tourist destination and makes the case for studying the landscape of the Zone through practices of tourism. The second section places this thesis in the academic context of current issues and debates within geography. This is in lieu of a literature review as a separate entity, instead each chapter of this thesis introduces and works through different conceptual and philosophical issues. The third section details the research methodologies that I developed over the course of the fieldwork. I provide a reflexive account of participant observation (which latterly involved me participating as tour guide rather than visitor) and outline the ethnographic framework used during visits. This chapter ends with a short introduction to each chapter of the thesis; what questions they answer and their empirical context.

## Tourism and the Chernobyl Exclusion Zone

### Ukraine

Choosing when to start with a history of Ukraine is not easy. So, like the rest of this thesis, I turn to tourist experience as a framework. This is the, now absent, Jewish population of the region that some tours will be introduced to.<sup>4</sup> The region is called Polissya, the name given to the forested area in southern Belarus and northern Ukraine. Given the dense forest in the area it was a focus for partisan resistance against the Nazi invasion during the Second World War (Mould 2000). Despite the resistance the Nazi army eventually occupied the town

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<sup>4</sup> It would be possible to trace a natural history much earlier, especially through the Przewalski's horses that live in the area which are possibly the only living descendent of pre-domesticated horses. Or through the geology of the region of which the large aquifers are of major importance to ongoing monitoring. Although in both instances it could be argued that these are not entirely natural histories (certainly not post-Chernobyl) my reason for eschewing these (and other) possible starting points is that though they form part of the context of the Zone they were not ever engaged with as part of the tourist experience.

of Chernobyl and executed a large number of Jewish families in the region. The mass grave of these killings is marked by a small memorial erected after the war. This memorial is not passed during the tours, but another remnant of the Jewish community is; a synagogue.

The Nazi holocaust was not the first time Jewish people were targeted and killed in the region. Many were killed during the pogroms during the Bolshevik revolutions a decade earlier. As I note in chapter 6, a guide informed a tour group that this synagogue had been used as a commander's residence or field office and possibly prison during the "October Revolution". The October Revolution of 1917 marks a major part in the civil wars of Russia, though it was not until late December that Ukraine was invaded by the Bolshevik Red Army. The German army would occupy Kyiv in 1918 and fighting between the Red and White armies would continue in Ukraine until 1921. During this time there were two attempts to create an independent Ukraine though both failed after occupation by German and Bolshevik armies (Reid, 2000). Poorly understood in the west and "hopelessly out of their depth in the gilt and green-baize world of international diplomacy" (ibid.: 51) those fighting for Ukrainian independence were unable to shape the outcome of the treaty of Versailles. An incredibly important moment in the history of east European nations, the treaty brought with it many grievances, though "none matched by the Ukrainians', who, though numbering tens of millions, had been left with no state of their own at all." (ibid.: 52)

This period would end with the creation of the Ukrainian Soviet Socialist Republic as part of the USSR (Union of Soviet Socialist Republics or Soviet Union). It was as part of the USSR that the region was occupied by the Nazi army in World War Two, it was as part of the USSR that millions of Ukrainians died of starvation in 1932-3 (more than four million, possibly seven million, though as Khrushchev's memoirs notes "No one was keeping count." (in Reid, 2000)), it was as part of the USSR that the energy ministry chose the region as a site for a nuclear power station and it was, eventually, as part of the USSR, that this reactor exploded, contaminating areas beyond the USSR. However, 'part of the USSR' in no way does justice to the history of Ukraine through the middle of the 20th century. Yet, when it comes to nuclear power in the Soviet Union, that is an accurate reflection of writing in the area. Which, in turn, reflects that decisions and developments on these matters were not, by and large, made in Ukraine. What follows is a description of nuclear power in the USSR and the building of Chernobyl and Pripyat which, in doing so, is weakened by losing sight, somewhat, of Ukraine and Ukrainians. It would be possible to write a history of Chernobyl that is a history of the people who lived there and the places they inhabited. A history that the end of Mould (2000) hints at. This is not a history that this thesis can provide. This absence of Ukrainians, of the people living and working in (what would become) the Zone, in the following, relatively

technical, discussion I offer next is one I address later in considering the impact of the Zone after Ukrainian independence.

### Chernobyl

Visitors get into the two waiting minibuses, I jump into the front bus first and take the opportunity to introduce myself, the research and what this will entail and offer the opportunity to decline to be involved. Then I move to the rear bus where I repeat my introductions. In both I provide a quick readout of the radiation in the square, in order to provide a reference point for the rest of today. Around 0.16  $\mu\text{SV}/\text{hour}$ .<sup>5</sup> In the rear bus I take a seat up front and pick up a microphone. I'll also be acting as tour guide today. I still feel a small bit of apprehension about this, but recent experience proved that this dual role of researcher and tour guide has been beneficial in a number of ways. By later tours this apprehension had gone entirely.

The bus I'm in pulls off. Once we are clear of central Kyiv the driver inserts a DVD into the player, and it begins to show on a small screen. I can't see it from where I'm sitting, not that I mind; I've seen it enough by now as it is played on every journey to the Zone. It is a documentary entitled *The Battle of Chernobyl* (2006). There's an hour or so drive ahead of us until we reach the first checkpoint to the Zone. I use this time variously; going over notes in my field diary from the previous day if I had been on consecutive days, developing thoughts and ideas in my notebooks, or getting a getting a bit more sleep before the 12 hour day ahead of me.

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As in the west, the development of nuclear power in the USSR was a scientific and engineering offshoot of the processing of plutonium for nuclear weapons. The events that led to the Manhattan Project in the United States began, after fears, raised by Albert Einstein, that a fission bomb was possible and that Germany may have, or be developing, a fission bomb. In the Soviet Union developments of nuclear weapons began after a similar warning. A physicist named Georgy Flerov returned to his studies after being drafted into the army to find a lack of publications in the area. He concluded that atomic physics research had been classified and, in April 1942 Flerov wrote to Stalin (Medvedev, 1990). Zhores Medvedev goes on to note that though the Soviet bomb was the last to be made (after Britain) it was the first to adapt the technology for the production of electricity (ibid.: 227). The "Obninsk Atomic Energy

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<sup>5</sup> Sievert (SV) is the standard SI measurement for 'effective' radiation dose (usually given in micro sieverts ( $\mu\text{SV}$ )). Sieverts are measured as either a total exposure for a given period or, more commonly, the dose rate (per hour). See chapter 5 for a more detailed explanation

Station (AES)” began generation in June 1954 and, Medvedev also notes (writing in 1990) that Soviet scientists are proud of this “pioneering role in the peaceful use of nuclear energy.” (ibid.)

Medvedev recounts some dispute between the USSR and Britain over when and where the fission of uranium was first controlled for the production of energy. The exact details aside, the development of nuclear power in the USSR can be said to be taking place in the context of the widening of the uses (in practice and in theory) of nuclear fission. In the US these developments ushered in, for some, a period of atomic futurism which “expected the atom to provide inexpensive electricity that would power vehicles and even aircraft.” (Corn and Horrigan, 1996: 121) Beyond power generation the USSR conducted various experiments (largely aimed at resource extraction) aimed at peaceful use of nuclear explosions under the “Nuclear Explosions for the National Economy” program, much like the US 'Plowshares' program.

The first nuclear power reactors developed in the Soviet Union utilised water cooling and graphite control systems as these had been tested for military purposes (Medvedev, 1990). These early designs would lay the foundation for later developments and, ultimately, be a significant factor in the disaster. These early designs were eventually developed into higher-power versions known as RBMK (reactor, high-power, boiling, channel-type) reactors. However, due to an abundance of cheaper energy sources in the USSR, for some years the focus remained on plutonium production (for weapons) and submarine reactors rather than power stations. When the nuclear energy programme began in earnest in 1956 it would be these RBMK reactors that would be the chosen priority (over pressurised water or fast breeder types common in the west). Not for “economic efficiency, safety or institutional support” Medvedev notes, but because “in the late 1950s and the 1960s it was simply easier for Soviet industry to construct its less sophisticated design”, a result, he argues, of “the diktat of producers over consumers” and also as “the only entirely Soviet system. Other designs would have entailed copying or imitating Western models.” (ibid.: 230)

It was in this context that the Soviet Union began building nuclear power stations. A political and cultural context that prioritised Soviet-based designs and, importantly, obscured criticisms of these designs. There is a general agreement by those writing on the topic (see: Park, 1989; Medvedev, 1990; Mould, 2000) that design features of the RBMK reactors (including graphite control systems and a lack of pressure vessels and a containment structure) were touted as benefits for cost and efficiency; that safety features were not needed, as the design was safe enough without them. It was also these (lack of) features that resulted in the Polissya region being chosen for the site of a fourth complex of RBMK reactors. The

RBMK reactors required a larger area (radius 2.5km) which excluded people from living or farming, a result of no pressure and containment systems. Thus the earlier ones were built in areas with little agricultural value. This stipulation would make situating one in Ukraine difficult; it was, after all, known as the 'bread basket' of the USSR.

Grigory Medvedev recalls a visit to the area in the early seventies, and area he would later reside in as an inhabitant of Pripyat and as a member of management for the power plant:

“They were digging the foundation pits for the main building. This was in sparse young pine forest with air that is intoxicating as it is nowhere else. Sandy hillocks grown up with the low trees, bald spots of clean yellow sand against the background of green moss. No snow. In some places, green grass was warmed by the sun. Silence and a sense of the primordial.

“Worthless land,” the taxi driver said, “but ancient. Here in Chernobyl, Prince Svyatoslav chose his bride ... This little town is more than 1,000 years old. And it has remained standing after all, it has not died...” (Medvedev, 1989: 12)

This sparse forest, with little large scale agriculture, would be chosen as the location of Ukraine's first nuclear power plant.

Pripyat, founded in 1970, was built to house those working at the power plant; its fate tied intimately with the power plant from the start. Unlike cities where those involved in nuclear weaponry was developed, Pripyat was not a closed city; it was open to visitors. Indeed, I have been told by tour guides, foreign visitors would be taken to the city as a shining example of Soviet urban design. The power plant itself was called the Vladimir Ilyich Lenin Power Plant and, in 1977, began operations. Reactors two, three and four would follow in 1978, 81 and 83 respectively and the buildings to house two more reactors were near-completion by 1986.

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We join a dual carriageway, I put my head back on the headrest. I make a mental note to have a proper search for a better documentary to put on DVDs and give to Sergei for the trips. The excellent selection of archive footage and some insightful interviews with key figures don't, in my mind, make amends for the hyper sensationalism (my favourite being the breathless claim of the potential for a “second explosion” to have wiped out half of Europe<sup>6</sup>).

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<sup>6</sup> This claim, based upon a possible critical reaction between the molten material and groundwater, draws on an actual, and not insignificant, problem. The potential for radioactive material (whether within reactor 4 or from the many known and unknown locations of buried matter throughout the Zone) to percolate into the aquifer remains a central focus for observation and management of the Zone (see Large and Associates, 2006).

For although *The Battle of Chernobyl* is not all bad, it's just that it's, well, not very good and, in places, awful.

The DVD starts to play.

\* \* \*

The night of April 26<sup>th</sup> 1986 at Reactor 4 has been well documented. The test gone wrong, the explosion at 01:23, the fire-fighters first on the scene. Mould (2000) has collated a number of eyewitness accounts which tell of a bright flash over the power plant and the initial response in which the six firefighters on duty at the power plant died. The detail in which Mould and others have documented the events of that night (and its continuing unfolding over months, years and into the future) cannot be replicated here and I can only offer an all-too-brief summary. The experiment was designed to determine if, in an emergency, the reactor turbine was capable of running the main coolant system during the one minute it would take for the diesel powered backup coolant systems to reach capacity. The experiment went ahead in the early hours, but as coolant systems powered down and thermal output rose critical levels of steam built up in the reactor core. An emergency shut-down was triggered, however the control rods failed to halt (and even exacerbated) a feedback loop of steam reducing coolant efficiency which increases thermal output which increases steam production. Control rods failed, and in some cases cracked, and the feedback loop resulted in an explosion.

What began as an experiment would soon have firefighters from across the region attending a fire belching vast quantities of radioactive isotopes into the atmosphere. By the early morning all fires would be extinguished except for that in Reactor 4, which continued for days. The armed forces of the USSR responded the next morning in what would be the beginning of months-long 'liquidation'. Helicopters would fly directly over the reactor to drop sandbags of boron and lead. In the afternoon of the 27<sup>th</sup> Pripyat was evacuated. The next day more villages would be evacuated, the area of evacuation increasing in the following weeks. 24 years later, when I was visiting the Zone for this PhD, the event was still unfolding, and it continues to do so. The Zone does not begin to encompass the geographical extent of the biggest technological disaster of the twentieth century.

Back in the bus I begin to drift off as *Battle of Chernobyl* begins.

\* \* \*

*Archive footage. Children playing in Pripyat.*

NARRATOR

*Friday the 25<sup>th</sup> of April, 1986. A beautiful spring day for the 43,000 inhabitants of Pripyat in the Ukraine. A day that will remain forever engraved in their memory.*

*Archive footage. Control room for an RBMK reactor system.*

NARRATOR

*Three kilometers from the city: The Vladimir Ilyich Lenin Nuclear Power Plant, where several thousand people go to work each day. Tonight the 176 employees of bloc 4 have been ordered to carry out a test on the self fuelling system of the reactor. Something that could save energy.*

*Exterior. Wide shot of a model of reactor 4 as viewed from the south-west. Lit as if night. Small lights at windows.*

NARRATOR

*At 1:23 AM, the security systems are activated and the experiment begins.*

*Exterior. Zoom in to model.*

*(SFX) Small explosion is heard, lights flash inside the model and then all go out.*

NARRATOR

*A series of detonations go off in the core of the reactor. While Pripyat sleeps peacefully, the floor of the plant begins to tremble.*

*Exterior. Panning shot over a depiction of Pripyat at night.*

*Soundtrack: rising strings and brass. Distant rumbling.*

*Exterior. Chernobyl power plant (model) from a distance, Reactor 4 bloc in centre of view.*

*(SFX) Noise of explosion.*

*Exterior: Reactor cap jumps up from the model and lands again. Fiery explosion and smoke. Plume of fire begins to rise.*

NARRATOR

*An ultra-powerful stream of radioactive vapour releases Uranium and graphite over hundreds of meters around the plant. [...]*

*(FX) Fire fills screen*

*Exterior. Reactor 4 model with plume of fire.*

NARRATOR

*The most serious nuclear accident in history has just taken place.*

– *Excerpt from The Battle of Chernobyl (2006) from 0:00:04 to 0:02:15*

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The 'most serious nuclear accident in history' would play a key role in political changes in Ukraine, and the wide world, in the coming years. There are two stories to be told here, or, rather, there are two positions from which to tell this story: From within the USSR and without.

An accident of this scale was immediately brought to the attention of authorities. By four in the morning Ukraine internal affairs had set-up a disaster headquarters, soon setting up road blocks to prioritise fire-fighters and ambulances and warnings were sent to those nearby to stay indoors and supplies of Iodine pills were distributed (Gould, 1990 and Mould, 2000). A team of radiation experts were detached from Moscow and arrived ten hours after the explosion. Soon the USSR Army was brought in and what followed was months of what is referred to as the 'liquidation'. These responses involved helicopter pilots dropping sand, clay and lead to seal the core whilst soldiers replaced the remote controlled machines that would not work in the radiation to remove graphite debris from the roof. In order to stabilise the floor of the reactor and stop the molten core burning through to the underground water systems a team of miners from Russia were flown in to excavate under the reactor room and fill the void with concrete. Few of these 'biorobots', pilots and miners would survive, fewer still without life long disabilities as a result of their irradiation.

These liquidators are the recognised heroes of the disaster. But stories of individual and collective action are often told alongside stories of bureaucratic delays, improper information sharing and poor decision making. In *Battle of Chernobyl* Mikhail Gorbachev (then head of state) claims that he was not made aware of how bad the disaster was; laying blame at subordinates for hiding the truth. The key example of the critical nature of the decision making regimes in place is the evacuation of Pripyat; famously not occurring until 26 hours after the explosion. Gould notes how the decision to evacuate Pripyat would have been at question, but that "in a rigid bureaucratic system, in which requests go up and directives come down deeply incised official channels, no one was prepared to take responsibility for such a large-scale decision as evacuation." (1990: 16)

These problems were critical. However, Chernobyl was not first (nor the last) disaster at a nuclear reactor, and not the first. In 1957 there had been a fire at Windscale, a British military reactor. Though reported in the news the next day, a now unclassified inquiry reveals

that warnings had been issued and the extent to which knowledge about the fire (which burned for three days) had been kept secret from the press (UKAEA, 1989 and Dwyer, 2007). Similarly, there was a great deal of silence and incorrect information from officials with regards to the disaster both within the USSR and with their dealings with other nations. The Chernobyl disaster, however, marks some important changes in this. Knowledge about the disaster outside of the USSR first came to light in Sweden through routine radiometric testing. Significant atmospheric radiological pollution was detected and the data suggested a significant radiation leak in the region of Kyiv. United States spy satellites soon located the plume of smoke leaving the power plant, indicating a major event. What began with Soviet denial and downplaying would eventually result in visits to the plant from the director of the International Atomic Energy Agency (IAEA). Not that this suggests a full turn-around, the IAEA, of course, has a mission to promote nuclear power. Nevertheless, openness to international media and governments became more common after the Chernobyl disaster. This was part of the wider glasnost political movement, of which Chernobyl was a catalyst. Though things did not change overnight. Medvedev notes that the disaster “finally brought an end to the *carte blanche* enjoyed by the bureaucracy and technocracy and to public apathy and silence” yet, even so, there was “little real debate in the Soviet Union even after Chernobyl” (1990: 253). There was little tolerance for anti-nuclear opinion amongst the public and no technical or scientific debate on the future of nuclear power; it was understood as a given line for development. Writing four years after the disaster, Medvedev notes the beginnings of debate in places such as Pravda and emerging, vocal, public anti-nuclear power stances. Glasnost, of which Chernobyl played a part, would eventually be a catalyst for the dissolution of the USSR. A year after Medvedev notes increasing debate on the subject, Ukraine would declare independence. A newly formed state now burdened with the ongoing effects of the disaster as well as the site of the plant itself.

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I will return to the Zone's status in Ukraine post-independence when discussing the Zone. For now there is one more point to make. Over 25 years since the disaster, remaining issues have not been tied up and no small amount of uncertainty remains. This becomes clear through one question: “How many people were killed?” A clear cut and simple question tour guides (including myself) are often asked by visitors, and yet unable to provide a clear answer to. My response is usually to duck the question, admitting there is no clear number (and, that, in any case, the effect upon lives might be better quantified through increased incidents of thyroid cancers, leukaemia and other health problems).

On the subject of health effects and attributable deaths Monty Charles (2011) neatly summarises the problem in a review of the recent United Nations Scientific Committee on the effects of Atomic Radiation (UNSCEAR) report:

I have awaited this UNSCEAR report [...] with some anticipation. I naively expected it to provide some guidance to help adjudicate between the often diametrically opposed views which regularly appear in the media and the scientific literature regarding the magnitude of the health effects from Chernobyl. (ibid.: 275)

Charles concludes that “the 2008 UNSCEAR report Annex D neatly sidesteps [his] anticipation.’ (ibid.: 276) A conclusion he notes is reached through the exclusion of various studies from within the former USSR (such as that by Yablakov et al. (2010) published by the *Annals of the New York Academy of Sciences*). Thus the relatively simple question of the number of deaths attributable to the disaster comes with no simple answer and this is a theme that emerges throughout any engagement with Chernobyl.

Thus the relatively simple question of the number of deaths attributable to the disaster comes with no simple answer and this is a theme that emerges throughout any engagement with Chernobyl. This includes the attempts to collate information about the radiological material that remains in the Zone and its environmental impact (for an excellent overview, see Large and Associates, 2006) or in the complex personal stories as recorded by Svetlana Alexievich in *Voices from Chernobyl* (2005) or Petryna's (2002) study of the body-politics of compensation<sup>7</sup>. Despite there being no small amount of research on / of the Zone, despite the events of the night in 1986 being chronicled in detail, and despite the research on the effects of the disaster, it is not the case that there is a bedrock of collected, codified knowledge to begin from.

## The Zone

The bus begins to slow down and I stir from a not-quite-sleep. Driving along a single road with few junctions and no settlements, just west of the very wide stretch of the Dnipro river, the area here is largely plain; fields and forest. I find no easy topographical or other landmark cues to judge how far we've been. Rather, I measure the journey by the point the documentary has reached. We're onto the “biorobota”; the soldiers who – after the remote controlled machines stopped responding due to interference - were kitted out with lead lined suits to shovel graphite off of the roof of Reactor 4 for a few seconds at a time. For many

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<sup>7</sup> See the work of Thom Davies' whose ongoing PhD work considers the social and economic impact of the disaster.



Image 2: Checkpoint Dityatki (#p0334)

this is remarked as one of the more striking moments of the documentary, largely given the extreme situation. It means I've missed the better part of the documentary; the story of the miners who were flown in from elsewhere in the USSR to dig a tunnel underneath the reactor, later filled with concrete, to avoid the molten material penetrating through to the water table. It's a story often missed, or given passing reference, in other documentaries about Chernobyl; here we have a significant amount of time spent on it, with detailed “talking head” interviews. And, for once in the film, little in the way of sensationalism; their stories don't need it. Still, the biorobota section means we're about an hour in, and, yes, that's the checkpoint up ahead.

A quick rub of my eyes and a stifled yawn and I pick up the microphone. I explain that we are about to stop at the first checkpoint “Dityatki” (image 2). Named after a village that was once nearby, though now evacuated. It serves as the busiest checkpoint to the Zone. Pretty much everything going in and out of Chernobyl town (the settlement where anyone working in the Zone stays on a temporary basis) passes through here.<sup>8</sup> We'll be here for about 20 minutes or so. Passports will need to be made available as each visitor is checked against a compiled list of permitted visitors arranged for that day. Photos are fine here, I say, though not at the other checkpoints we will pass. I put the microphone down and collect together my

<sup>8</sup> Though busy is a relative term. At the most this might mean the odd truck or van every few hours, if anything else at all.

things, doing a quick check that my audio recorder, camera, memory cards for the camera, notebooks and pencils are all still there; the tour is about to begin.

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The official Ukrainian name for the Zone is “Зона відчуження Чорнобильської АЕС”, traditionally translated as “The Chernobyl Nuclear Power Plant Zone of Alienation”. Nowadays English language texts are more likely to refer to it as “The Chernobyl Exclusion Zone” or “The Chernobyl Zone”. By those who work there, and as I do throughout this thesis, it is referred to as simply “The Zone”.

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Visitors pile out of the bus and stretch their legs. Passports are at the ready as a police officer<sup>9</sup> comes over to collect them, walking off again without a word. One of the first questions to be asked, now that everybody is out, is the nearby radiation measurements. I switch on my Geiger counter<sup>10</sup> and wait for the readout to become stable<sup>11</sup>. Though, without needing to wait, I know that the readout will be within  $\pm 0.02$  of the reading earlier in Kyiv. The LED stops blinking and, sure enough, the readout is almost exactly the same as the earlier reading in Kyiv. This always seems slightly disappointing to visitors, but I explain to them that this checkpoint is on the southern edge of the Zone. And that, although an appreciable amount of the fallout reached southern parts of Ukraine, not least of all being a major problem for residents of Kyiv, the wind was blowing towards the west, and the vast majority of the highly concentrated fallout that fell near to the plant fell to the western part of the Zone. That wind pattern is reflected nowadays in the shape of the Zone's boundaries (see image 3).

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<sup>9</sup> Ukrainian police authorities are broken up by district, though a specific authority exists to police the Zone that takes priority over the police authority of the administrative districts the Zone is part of. I know little more than this; early on I was told by a tour guide about the zealous nature of police around the nuclear power plant (who are always armed and armoured), having broken bones of another tour guide in the past when forcefully stopping photography. (All visits to this area are accompanied by exhortations to please, please not take photos.) Suffice to say I was not particularly emboldened to approach an already wary group of people after this. Although another story recounts an illegal trespasser there out of curiosity being arrested and then put up for the night in the nearby house of the police commander, fed well and then released the next morning.

<sup>10</sup> It will remain on for the rest of the day; as well as real-time readouts it provides a cumulative exposure for the time it had been on. Given I usually kept it with me at most times this served as a record of my exposure each day I was in the Zone.

<sup>11</sup> Given that exposure is provided by the machine in a 'per hour' measurement, it takes a while from being switched on, or from a large change in the nearby radiation levels, to collect enough measurements to provide an accurate readout. This calibration time is exhibited by the LED readout flashing.



Image 3: Map of the Zone at checkpoint Dityatki (#p0192)

It will not be until we reach the town of Chernobyl that there will be an appreciable increase, but even then, given the area has been extensively cleaned for temporary habitation, the difference is not great. Not to worry though; this little yellow box will see a fair bit of action before the day is up. I mill about with the visitors for 10 more minutes. A few photographs are taken and there's an idle chatter. Some discussion of *The Battle for Chernobyl* picks up and surprise is expressed at certain stories of which visitors were previously unaware. One group asks me if this is the “30 kilometre checkpoint”. I explain that it's often called that, but that though the Zone may be referred to as the “30K Zone”, this is technically inaccurate. I point them towards a nearby map (image 3) and begin explaining the current borders and different areas in the Zone.

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What follows is a brief 'outline' of the Chernobyl Exclusion Zone. Much of this is a result of my attempts to put together the Wikipedia page on the Zone, a task I began in order to force myself to produce a relatively 'matter of fact' account of the Zone as well as to organise and evaluate the large number of official documents and secondary material I had. The page as it stood when I started lacked a map of the borders of the Zone. I intended to create a simple map detailing these boundaries. There is still no map of the Zone's borders on Wikipedia: I can find no one, single authoritative source that delineates the Zone. Rather, various

official, semi-official and secondary sources conflict with one another. I go into the details of this impossible cartography in chapter six, for now let us return to those matters of facts.

Covering about 2,600km<sup>2</sup> of northern Ukraine, the Zone borders Belarus to the north, where a “radio-ecological” park exists within a similar area of exclusion managed by Belarus authorities. The Zone was initially significantly smaller, first designated on May 2 1986, six days after the explosion, by the USSR commission tasked with dealing with the disaster. 30km in radius, centred on Reactor 4, the Zone designated the area to be evacuated<sup>12</sup>, with an interior 10km-radius Zone where there were stricter controls on the clothing and activities of military personnel. Marples, in one of the earliest books to detail the disaster, describes these 30 and 10 kilometre radii as 'rather arbitrary' (1988: 161) and it was not until later in the year that the Zone's boundaries shifted to be delineated by relative radiation levels. Colour coded, these Zones designated areas of total exclusion to which no return could be made (Black), areas of evacuation where return might one day happen (Red) and areas where children and pregnant women were to be evacuated (Blue). The majority of the 'Red' area remains within today's exclusion Zone. All in all some 91,200 people were evacuated from these Zones (Mould, 2000).

This number would increase. A year after Ukraine gained independence, laws were passed which again re-defined the borders of the Zone. Based upon detailed radiometric surveys of soil deposits of the most prevalent, long lasting, isotopes; Cesium-137 (<sup>137</sup>Cs), Strontium-90 (<sup>90</sup>Sr) and Plutonium. By 1993 new laws classified these areas in the immediate vicinity of Reactor 4 (still colloquially referred to as the “10k Zone”), the Exclusion Zone and areas of resettlement. The Exclusion Zone, as well as some areas nearby, were classified as “Zones of absolute mandatory resettlement”, others as “Zones of guaranteed voluntary resettlement”. Some further 53,000 people were resettled from these areas in the years up to 1995 (Mould, 2000).

These borders are roughly as they stand now, albeit for an extension in 1997. The zones of resettlement are relatively well delineated, being detailed in various Ukrainian laws.<sup>13</sup> However the Exclusion Zone does not align with resettlement zones and includes some, but not all, of the area of absolute mandatory resettlement. There are a number of variations in its delineations; for example, extending west beyond the border into the Zhytomyr Oblast (province) in some maps, or delineated to the west by this administrative border<sup>14</sup>. For the

<sup>12</sup> Pripjat had been evacuated by this point, albeit some 36 hours after the explosion.

<sup>13</sup> Decree of the Council of Ministers of Ukraine №106 of 1991, orders of the Cabinet of Ministers of Ukraine (CMU) №17-г of 1993 and №37-г of 1995 and Law of Ukraine №1411-IV of 2004

<sup>14</sup> I know of no separately administered zone in Zhytomyr, and given there is a specific agency to oversee the Exclusion Zone, I doubt that regional borders are a major factor. Nevertheless, various official maps have the border extending into Zhytomyr and others don't.

purposes of this thesis “the Zone” refers to that area patrolled by a specific branch of the Ukrainian police, to which access is restricted without governmental permission, administered by the “State Agency of Ukraine on the Exclusion Zone Management”<sup>15</sup> (part of the Ministry of Emergencies) and within which time of stay is limited.

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During fieldwork I tried to arrange an interview with the head of the agency within the Ministry of Emergencies. I was initially cautious about approaching official bodies. It was clear from early on that there was a general suspicion of anyone being overly interested in the Zone. It was some time before all those involved in tours to the Zone were convinced I was not a journalist. Had I been researching pretty much anything else but tourists in the Zone, I would not have been quite so apprehensive about approaching officials. Yet explaining that my interests was in tourists in the Zone was often met with surprise. Initial assumptions were that maybe I was interested in developing business opportunities, or had some other kind of commercial interest. With those I worked with regularly, this eventually became no issue at all. Yet, with potentially the power to halt my entry to the Zone, I was wary about having to try and explain my research to officials. Especially as, up until that point, every experience I had had with Ukrainian officialdom had been at best exasperating and at worse hostile.

About half way through my research I heard that the head of the agency responsible for the Zone had been changed. With this news I was also made aware that this new head was interested in possibly developing tourism in the Zone. It was, upon hearing this, that I decided, worries aside, I should contact the agency to arrange an interview. Two interviews with the new head of the agency were arranged, both cancelled by the agency at the last minute. Eventually my emails and messages stopped being responded to. This tendency to avoid discussing the Zone seemed to me indicative of a general reluctance on the part of the Ukraine government to publicly discuss the Zone. This is not to say the Zone and the ongoing issues are not taken seriously, rather it is that the Zone represents a major economic burden and links to problematic histories. I will discuss these links shortly, for now a short summary of the agency's responsibilities gives an indication of the ongoing work in the Zone. The agency is responsible for; environmental and radiation monitoring of the Zone, the management of long-term storage and disposal of radioactive wastes, monitoring and preserving of documentation that describes the subject of radioactive wastes, warning signs, fences, etc. and co-

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<sup>15</sup> The power plant is administered separately. This agency was created by the “Decree of the President of Ukraine № 393/2011 On approval of the State Agency of Ukraine of the Exclusion Zone” in 2011. It replaces the “State Department – Administration of the exclusion zone and the zone of absolute (mandatory) resettlement”. It oversees (amongst other things) environmental and radiometric monitoring, disposal of wastes in the Zone and cataloguing waste locations (a difficult task given a lot was buried with no record).

ordinating the decommissioning of the power plant (from 2011 decree, see footnote 8). The most recent developments in these areas is the ongoing construction of the New Safe Confinement Unit. This was in the early stages of construction when I was visiting. A long time in development, and already delayed, this new unit was intended to be a long term replacement for the sarcophagus, which was not originally built to last as long as it has. At the time of writing the first section of the new unit has been completed. The construction site is two hundred meters from the reactor building itself. The design is primarily a tunnel-like structure that will be rolled into place over the sarcophagus. This allows for a safer construction environment and the eventual dismantling of the sarcophagus to take place below the unit.

Though I never got to speak with her, the new head of the agency presided over a change in circumstances for the Zone and the agency. In June 2011, the year after my field-work ended it was announced that the Zone would be closed to visitors. The reasons given were reported in the *Kyiv Post*; Ukraine's English-language newspaper: The prosecutor general's office challenged the Ministry of Emergencies as having broken the law and questioned the money being made. *Russia Today* reported this quote from the prosecutor's office:

“We urge the ministry to inform the government of every dollar earned by these trips. We know that a lot of money has been made – but we have no idea in whose pockets it ended up. Why not put the money into the budget and use it to solve the zone’s problems?” (In Yaroshevsky, 2011)

Aside from these legal proceedings it was suggested that, actually, the Zone was being closed in order to allow for filming of a movie set in the Zone. Though many movies are set in the Zone, the only one to have actually been filmed there is *La terre outragée* (2011) a French-Ukrainian film about a woman whose wedding day is ruined by the disaster and who later returns to the Zone as a tour guide. Within a year the Zone was open to visitation again. The most immediate change was the formation of the formalisation of visitation procedures. (Prior to this the procedures in place were geared towards scientific research visitors and international delegations. These procedures had been co-opted for tourists.) News reports at the time spoke of newly designed routes and regulations, and tours now come with a mandatory medical insurance fee. I have yet to return to the Zone since it has re-opened for visitors and so do not know the extent of these changes.

Before returning to my day in the Zone I wish to end this discussion with a closer examination of the disaster and the Zone in the context of Ukrainian independence and, more recently, a rising democratic movement. The early consequences of Chernobyl implicated it directly in the policy of glasnost and, eventually, the dissolution of the Soviet Union. Reid claims the most common reply when Ukrainians are asked about their disillusionment with

Communism is “Chernobyl” (2000: 92). Gould concludes his 1990 reflection on the 'democratic consequences' of the disaster by declaring that atomic energy problems are no longer (and never were) just scientific problems; but political and international problems. After 1991 these problems were inherited by a newly independent Ukraine. As Petryna argues; “the key determinants for much of a Ukrainian political identity rest in biological, technical, and existential realities that haunt it at present.” (1995: 215)

It is not the case, however, that after independence there was a flourishing of free debate on issues such as Chernobyl. Reid (2000) catalogues the ills that defined early governments of Ukraine; corruption, violence and the repression of media. Ukraine's economy struggled for many years. The management of the Zone was no small drain on this and IAEA reports on the Zone and the power plant continually criticised the management during the first decade of independence, claiming conditions similar to that which led to the initial disaster. The Ukraine government were left not only with Reactor 4 and its sarcophagus, but the other three, still operational, reactors. The need for power meant these reactors stayed in operation for years after the disaster. Repeated pressure from the US to decommission the reactors was met with direct responses that Ukraine simply lacked the funding to provide alternate power production. Indeed, the ongoing problems of managing the Zone and the plant, not to mention the bill and who would foot it, became the source of significant involvement between Ukraine, Europe and the United States. It became the central discussion point for many ambassadors and envoys (Roche, 1996). It was only after international investment in replacement power that the reactors were finally disconnected from the power grid. Though they remain to be fully decommissioned: A nuclear reactor is not something that can just be switched off.

There remains much uncertainty about Chernobyl, initiated by the cover-up from the Soviet government and a lack of clear and public engagement by successive Ukrainian governments. Nevertheless, Dawson (1996) makes clear how the disaster solidified a significant public, political anti-nuclear movement that negotiated Ukrainian nationality. Prior to independence, anti-nuclear demonstrations had begun to occur and, as elections became free and mass in 1990, many standing for election near nuclear power plants took strong anti-nuclear positions. This resulted in a moratorium on new nuclear plants. After this moratorium, Dawson notes the environmental movement in Ukraine dissipated (*ibid.*: 81). Nuclear power would continue to have a place in independent Ukraine's national identity, though a major shift took place. After independence the position of nuclear power changed dramatically. It was no longer seen as a representation of Moscow's dominance, and of the dangers this could bring. Whilst in the rest of the world Chernobyl was becoming synecdoche for all

the dangers of nuclear energy, Ukrainian politicians, and the general public, took nuclear power to be a signal of independence, of a nation now able to be self-sustaining. With little debate the previous moratorium was lifted.

In the years since there has been a slow growth of anti-nuclear sentiment in Ukraine, with Chernobyl being no small focus. For the government it remains an issue that, I could not help feeling after my fieldwork, many politicians would rather just went away. Few discuss it, there is a general reluctance to debate it. When foreigners bring the subject up it is met by concern that Ukraine is most famous for the Chernobyl disaster; a status that, understandably, is not desired. The Zone is situated in an awkward position politically. A significant situation that requires ongoing maintenance and vigilance and, in doing so, is an economic drain. This means envoys and ambassadors are always tasked with gaining international funding for the management of the Zone, clean-up operations and the new shelter. Yet, at the same time, there is an awareness and worry that Ukraine runs the risk of being known only for this.

The failings of the Ukrainian governments post-independence came to a head in 2004 and 2005 during the Orange Revolution. A response to electoral fraud, rigging and intimidation the centre of Kyiv was occupied by protesters and general strikes took place. Speaking to young residents of Kyiv during my pilot research there was a significant sense of power being exerted and that, actually, things might be getting better. Soon after I departed there was a general election which voted in the very same man whose election rigging had sparked the revolution. Needless to say, there was a dramatic change in political feeling upon my return. There is much more to be said about the Orange Revolution than I have space for here. Though, for the moment, the future looks to be shaped by the geographical and age divide between supporters of a Russian-facing politics and those looking elsewhere. What was notable about this period was that Chernobyl featured hardly at all. It has never really featured as a political axis for debate and distinction between competing parties. For something that was so central to the eventual collapse of the USSR and the formation of Ukraine and which is an ongoing concern and problem, there is precious little political debate. With corruption, violence and vote rigging there seems little energy left to debate the intricacies of managing the Zone. Despite the centrality of the disaster to early national identity and independence (Gould, 1990; Petryna, 1995 and Reid, 2000) it now occupies a fringe position in contemporary political debate.

This is not, of course, to suggest that the disaster has no effect on the lives of Ukrainians. Millions were subject to fallout, and there remains a high rate of childhood thyroid cancer in the country. Though systems exist to support victims these are mired in misunder-

standings and cultural conditions that make people averse to the seeking of such support. Like so much of the wide impact of the disaster, I am ill-equipped to properly examine the impact of the disaster on the everyday lives of Ukrainians affected. The best I can do is refer to the work of anthropologist Ariana Petryna (2002), who, amongst the many books written on 'survivors', offers incredible insight to the ways in which knowledge structures, legal, scientific and economic circumstances situate and shape citizens. This is borne out of research with those living with the effects of the disaster and their negotiation of the medical, political, legal and cultural knowledges of survivorship.

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Passports back in hand, seats are taken once again on the buses. The final moments of the documentary roll by as the bus driver takes us directly north along the main road towards the town of Chernobyl. Yuri is waiting for us upon arrival. I jump out and slide open the door of the minibus. Over there, I point, is the local offices (image 4)<sup>16</sup> of the state agency for the Zone where the tour begins. Yuri greets everyone and they begin to make their way inside. I've worked a lot with Yuri the past few weeks; he and Maxim are the two official tour guides attending the majority of the days I visited. As everyone is filing in Yuri comes up to me to check that I'm okay with helping out a bit today. "Sure." I say. "No problem." Though I wonder exactly what, if anything, is expected of me.

We follow the last of the visitors up the stairs to a meeting room used to brief all visitors before the tour starts. With two minibuses today, it's a bit cramped. Yuri stands at the far end of the room; near to the corner where the wall is adorned with various maps of the Zone and begins the introduction to the day.

*"So. Try to keep brief, to save time to see more today. Pripjat and other places. On this map is the modern territory of Chernobyl Exclusion Zone [...] here is the checkpoint you passed when entering and now we are in Chernobyl town. It is 15 kilometres from the Chernobyl Nuclear Power Plant. [...] Chernobyl is an ancient town, it was founded 1,000 years ago, and it was the provincial centre before construction of nuclear power plant.*

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<sup>16</sup> The sign reads "The Ministry of Ukraine of Emergencies and Affairs of Population Protection from the Consequences of Chernobyl Catastrophe. State Enterprise Agency of Information, International Co-operation and Development "Chernobylinterinform AGENCY"". There's something about the over-description and length of the names I always quite liked, and so I was disappointed that in 2011 the Ministry was renamed simply "Ministry of Emergencies" and the agency renamed to "State Agency of Ukraine on the Exclusion Zone Management".



Image 4: The signs to the offices in Chernobyl. (#p0775)



Image 5: Visitors gather in the meeting room at Chernobyl (#p1077)

*So, as for today, we will head inside the ten kilometre zone, there is another checkpoint, and then we'll drive around the nuclear power plant. Make a few stops. And, er, finally we will visit Pripyat town, former company town of Chernobyl Nuclear Power Plant. It was founded in February, 1970, near the power plant as a company settlement. And, in 16 years, after the accident at reactor number four, all this territory was evacuated.*

*[...]*

*As for Chernobyl Nuclear Power Plant, nowadays it doesn't generate energy any more, so we will visit it and drive around. About 4,000 people are still employed here. Especially for the staff of the nuclear power plant was constructed Slavutych town, it's a new company town, 55 kilometres [away]. So every morning, by train, people go to their jobs at the nuclear power plant.*

*As for nuclear power plant, well look at this poster; here we can see a view of the power plant. This is the first stage, constructed in the 70s, reactor units one and two. And second stage, reactor units number 3 and 4, they were constructed in the 80s. As for reactor unit number one, it was in operation from 1977 'till December of 1996 when it was shut-down after an agreement between the G7 countries and Ukraine. Number two was in operation from 1978 'till October of 1991. In 1991 there was a fire in the reactor room of unit two, no radiation was released, but since then it has been shut-down. So, number three, it was in operation from 1981 to September 'till December 15<sup>th</sup> of 2000, it was the last operational reactor unit of Chernobyl nuclear Power Plant. [...] Over reactor unit number 4 was constructed a special shelter, which was named, um, the official name is 'object shelter' but reporters named it 'sarcophage' and from that time, all over the world, [it is now known as the] sarcophagus.*

*[...]*

*Approximately the same number of people [as work at the power plant] are employed in different companies of the exclusion zone. This territory is pretty big, it's about two-point-five thousand square kilometres. There are four abandoned towns [including] Pripyat [and] Chernobyl, and 94 smaller villages. So, totally from the territory of the exclusion zone were evacuated and resettled about 130,000 people. Some of them decided to go back, and in 1988 there were about 1,500 former inhabitants that were living in the exclusion zone, in 12 villages. Now the number of them is just 250. They are all elderly people, the average age of them is 75 years old. [The] 4,000 people, employees of the exclusion zone, this category of people take residence here in shifts. Chernobyl town was evacuated on the 5th May 1986 and in modern times it exists as administration and industrial centre of the exclusion zone and residential area. So, totally in the exclusion zone are employed more than 8,000 people.*



*Ok, I can speak about this maybe all day long, but do we have any special questions? No questions? That's great. In this case, what we do now, we have to sign the safety rules."*

– Yuri's introductory briefing (#r050)

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A considerable effort has been expended in cleaning the roads and buildings in the centre of the town of Chernobyl. Local radiation levels are still elevated with respect to Kyiv. (At 1.5 times to double in places this is in excess of most natural rates in the world, but much less than many places visited during the tour). Those working in the Zone, as well as some re-settlers, are provided with accommodation in the apartment buildings of Chernobyl. In order to reduce accumulated exposure, workers, as the guides tell visitors, are required to abide by shift patterns; either four days in the Zone, three outside, or 15 days in and 15 days outside.

During my research I kept my visits to no more than three a week. Most weeks involved only one or two visits, early on determined by available space upon the day trips, often with me being contacted late in the day before to be informed there was space available and later on, when I was taking on the role of tour guide, I would be contacted for busier tours. Early on in the research I invested in a hand-held Geiger counter, purchasing the same Ukrainian-produced model that was most used by tour guides in the Zone. By providing cumulative dose rates over the course of the day, I was able to keep track of my own exposure.<sup>17</sup>

For introductory and context purpose an overview that builds upon Yuri's description above will suffice. The Zone's geography is varied, though it is largely forested. Areas which had previously been cleared for farmland are seeing rapid return to forests as saplings take hold. This is the case in Pripyat too; though a large number of trees lined the avenues and roads initially, it is now so densely populated with trees it was described by the guide Maxim (#fn2; #i28) as like a Mayan ruin.

To the west and south of Pripyat stands an area known as the "Red Forest" (as discussed in chapter four). An area of pine forest where the vast majority of fallout fell and the area remains the most radioactive part of the Zone outside of the sarcophagus. The sarcophagus itself (image 8) is a vast steel and concrete structure built in the months after the disaster, completed in November of 1986. Standing 3.5 kilometres from the edge of Pripyat, its silhouette remains an ominous presence on the horizon. Up close it is no less imposing. The structure originally used cross beams of the reactor room to support some of its weight. Over the years this became dangerous and a large stabilisation frame was completed in 2006. As of December 2012 the very first parts of the "New Safe Confinement" have just been erected.

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<sup>17</sup> The day in which I received the largest dose was the last tour I attended (during which I gathered the readings for the map that accompanies this thesis). The total accumulated dose was 0.0022 mSv.



Image 8: The sarcophagus (#p0908)

This is being constructed away from the sarcophagus and will be rolled into place. As Yuri pointed out, the other reactors, being undamaged, continued to be operational for a number of years. Work at the power plant was made safe by the removal of the first few feet of soil in the vicinity of the plant.

Other locations of note include reactors 5 & 6 which were under construction at the time of the disaster. They now stand to the south of the plant complex as rusted shells of buildings and still erect cranes. There are a number of industrial sites in the area, such as the large “Jupiter” factory on the outskirts of Pripjat; a destination usually only reached for those who elect to attend private two or three day excursions.<sup>18</sup>

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Yuri leaves the meeting room, heading into the adjoining office, he returns shortly with two pieces of paper. “So, group from one bus, number one, sign here.” Yuri holds up one of the piece of paper “from the other bus, here” as he holds out the other. Yuri usually asks a native English speaker to read the contents of the document aloud (though the awkward translation makes this no easy task). Usually this falls to me. I stand up and read aloud:

*“Rules the foreign or domestic delegation is to comply with during their visit to the Exclusion Zone and the Zone of Absolute Resettlement.” (#r050)*

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<sup>18</sup> I twice stayed the night in Chernobyl, though never attended any private tours. There is a building erected after the disaster to house visitors. I primarily remember it for being very cold.

The rules are lengthy, though more wordy than exacting.<sup>19</sup> A few paragraphs later I reach the end of the sheet. The sheets are handed around to be read and signed. One man begins to chat to me, saying he has heard that he would get more radiation on the plane journey over here (he came from Australia).<sup>20</sup> He asks me about the day's itinerary, if I know where we'll be going. I tell him the exact locations can change depending on time available and where the guide wants to go, but we largely follow a route (see image 7) that will take us from Chernobyl to the power plant then onto Pripjat for the rest of the day. As I chat Yuri is handing out Geiger counters to those who have rented them for the day. Yuri speaks up; "If you have finished signing all these papers, well, lunch is served downstairs." The visitors begin to file out of the room and down the stairs. Yuri says that after lunch, the tour will begin.

## Tourism

*"Today you are not tourists, you are visitors to a very special place, a restricted place."*

– Sergei (#fn05)

*"They say in Forbes this is the most exotic for tourism. Tourism is the wrong word. To make barbecues, picnics, hunting and fishing is not allowed. You are visiting. It is better to say you are visitors."*

– Maxim (#fn14)

Despite Sergei and Maxim's assertion that visits to the Zone are not tourism in the traditional sense they are still part of wider practices of travel and tourism. Though, in deference to Sergei and Yuri's statements, I tend to refer to 'visitors' more often than 'tourists' I use these terms interchangeably

As the tour finally heads out two questions need to be addressed. Firstly; "*why tourism in the Zone?*" Why – if the Zone is such a unique and interesting landscape – research it through practices of tourism? Secondly; "*why not tourism studies* (in particular; why not 'dark tourism') in the Zone?" Why avoid embedding this engagement in the literature, theories and discourses that arise from the study of tourism? That second question will be left until the next section of this chapter. In this section I argue that researching tourist practice is important and sketch out the context and history of tourism in the Zone.

<sup>19</sup> The rest of these regulations can be found in chapter six.

<sup>20</sup> Photo #p1846 (not reproduced in this thesis) records a rate of 2.24  $\mu\text{Sv}/\text{hour}$  at a height of 11,000 m above Poland on my return flight. This is approximately half the rate recorded where tourists stand near Reactor 4 for photographs and commensurable with much of Pripjat.

In a globalised world travel is increasingly a practice by which people produce knowledge. These 'lay knowledges' of tourism (Crouch, 2000) are diverse and bear examination. This is not to suggest that tourism is 'good'; its globalising context is one of increasing air travel and climate change, of wealth inequality and the spectre of cultures and histories flattened out as little more than tourist spectacle. Acknowledging this context shouldn't lead, however, to ignoring the importance of that knowledge production, nor dismiss such knowledges as necessarily problematic.

Why have I chosen to focus on tourist practices of knowledge production? It is a decision grounded in an assertion of the Zone as unique<sup>21</sup>; that in visiting such a location, being there for the first time, there is a sense of wonder, confusion and uncertainty. Research with tourists helps to capture this. It is also a decision that asserts that tourist knowledges and tourist practices are important; that they matter.

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Lunch is an odd affair. A three course meal of 'traditional Ukrainian cuisine' prepared in Chernobyl that is often accompanied with a palpable atmosphere of impatience; an awareness, expectation and excitement of how much there is still to do, a desire to get on with it. Though sitting at a table with three or four other people, I rarely used this time to record conversations, or even to ask questions. Partly this was because so many people in a fairly small room meant far too much background noise for any recording. Partly because eating, talking and taking notes meant I wouldn't get through lunch in the time provided (being aware that the next meal wouldn't be for another 8 or 9 hours at least). But mostly because I would spend most of lunch fielding questions, borne of that same excitement and expectation. Not that these moments were empirically useless; far from it. As the weeks went by, I had found that conversations beginning with myself being asked questions – whether as tour guide or as the guy who's been a dozen times – were just as fruitful, if not more-so given that they were instigated by research participants.

After lunch we pile back into the waiting minibuses. Yuri tells me we'll do the usual sights in Chernobyl and that I should take the microphone at the front of the bus and provide some commentary. I take the seat, microphone in hand, and the driver pulls out, following the first bus. I begin pointing out things of some small interest: On the right, as the bus pulls out of the first junction, is the local offices for radiometric monitoring. On it can be seen a large LED display which rotates through a series of monitoring points throughout the Zone, displaying radiometric readings in real time. As we pass through the town, large pipes

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<sup>21</sup> At the end of chapter two I expand on why I continually refer to the Zone as unique.

can be seen above ground. The infrastructure here has been placed above ground so as to make maintenance less hazardous, given the soil contamination.



*Image 9: The memorial outside Chernobyl's fire station (#p0607)*

We head towards the first sight of the day, the “Fireman's memorial” (image 9); a small statute on the outskirts of Chernobyl. Funded through charitable donations it stands outside the fire station for the town and for most of the southern reaches of the Zone. My time in Ukraine coincided with a period of an intense heatwave; forest fires in parts of Russia that were affected by the fallout of 1986 had released small amounts of radioactive material into the air, and there was no small concern for the potential of fires in the Zone (and no small suspicion amongst friends in Kyiv as to whether the Ministry of emergencies was as prepared as it claimed to be). On high alert, the fire station we stood outside had been putting out small fires in the Zone all week.

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The nationalities of visitors tends to be, according to Yuri, about “70% of foreigners.” By which he means “non-Russian and Ukrainian.” (#125) Asking about the nationalities that visit, they provided this summary:

*Sergei: “European.”*

*Yuri: “Mostly Scandanavian”*

*S: “New Zealand, Australian. Brazillians”*

*Y: “Northern Europe. The same people that are visiting Ukraine in general as well.” (#125)*

Yuri's comment that these are the same people who visit Ukraine was supported by pretty much every discussion I had with visitors about why they visited: They were in Ukraine and this is one of the most well known historical events in the nation's history.

On several occasions, early on in interviews, respondents would ask me if I was researching, or had an interest in visiting, sites specifically related to disaster. The answer the this was always a truthful no. 'Why disaster?' was never a point of departure for my work. Few visitors expressed any particular moral dilemma of their own; by the time I meet them at the departure point from Kyiv and they stump up the \$150 for the day trip, one can assume they've worked through any concerns. Nevertheless, a significant number took pains to declare (often without prompting by questions) that they were not driven because it was a disaster site per se. As if it were a genre of holiday – such as a trip to the beach – that they had a preference for.

At the time of the research 'dark tourism' had begun to filter into news media. Articles began to appear on this 'new' form of tourism. The upcoming release of Dom Joly's *The Dark Tourist: Sightseeing in the World's Most Unlikely Holiday Destinations* (2011) had seen various articles on his trips in *The Independent* (2010a) and *The Guardian* (2010b). Earlier still is Hodge and Weinberger's *A nuclear family vacation: travels in the world of atomic weaponry* (2008). Before then, the term had already been used in newspaper articles such as *Tomb Raiders* which begins 'Beaches and theme parks? Forget it – dark tourism is the new way to enjoy yourself. David Atkinson rounds up five of the world's most popular graveyard destinations.' (Atkinson, 2006) The most recent 'dark tourism' account comes from Blackwell in *Visit Sunny Chernobyl:... and other adventures in the world's most polluted places* (2012). Blackwell's and Joly's books consist of darkly comic recountings of their visits to various places of disaster or, in the case of Joly, death. Hodge and Weinberger's account differs in that the drive was specifically the interests they had developed as journalists; the locations they visited far off the 'tourist map'. Indeed, what is notable about Dom Joly's account is that almost all of the places he visits are places easily accessible from 'tourist hotspots'; locations

key to tourist mobilities. Whenever these places feature in his account they are there only to provide a contrast with the 'dark' places he visits.

Conversely, I only met one pair of visitors who defined their own trip as seeking out 'unusual' places. Though not 'dark', they had been visiting abandoned ruins and old military installations in eastern Europe. I met Mick and Peter during my second visit to the Zone, and met no one after that who defined their trip as specifically seeking out 'dark' or unusual places. This is not to say that the Zone being an unusual destination was not a draw. Rather that this was not the only draw. All visitors, when asked, would rattle off the itinerary of their travels thus far. Some visiting only Ukraine, others on a tour of various parts of Russia and eastern Europe. The Ukrainian cities of Lviv, Kyiv, Odessa were the main locations, each with their own set of places people had visited. Unlike Joly's journey, the Zone was not sought out because it was 'dark'. I increasingly found that any attempt to categorise why people visit the Zone was fruitless. There was nothing of the 'spectrum' of engagement (from personal interest to some kind of morbid fascination) as outlined by Seaton (1996).

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The last stop on the way out of Chernobyl is the small sports stadium, now referred to as the 'vehicle museum' (image 10). For in it stand a handful of vehicles; two BTR-60 armoured personnel carriers, a BTR-50 APC, a fire truck and a, well, something: A modified BTR-50 with a large funnel attached, though for what purpose no-one ever knew. All have been cleaned and have relatively low contamination levels. Yuri uses this location to highlight the manner in which radiation levels change over very short distances, waving the Geiger counter over the BTR-50, and then moving it a few feet to the caterpillar tracks where it begins to crackle with urgency. The tracks, he explains, haven't been cleaned, and are thus a localised source of high levels of radiation. This small-scale variation is a feature of the contamination in the parts of the Zone visited during the tour.

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Yuri's been doing this for the best part of a decade. Sergei began organising tours around the same time in 2000/01. Although visitation to the Zone was possible right from the late 1980s. For a long time the only interested parties were scientists, journalists, visiting dignitaries and those from official institutional bodies. This began to change between 2003-06 and since then numbers of visitors have increased year on year. Sergei runs SoloEast, a tour company based in Kyiv that specialises in tours the Zone. My very first visit, though arranged by a tour operator in the UK, was organised by Sergei / SoloEast. After a while it was clear



Image 10: The 'vehicle museum' in Chernobyl (#p1173)

that Sergei ran the vast majority of English-speaking tours to the Zone<sup>22</sup>, with a tour every day during the high season. In the end all my visits were with SoloEast but I don't believe this means the research is limited. Indeed this led to mutually beneficial arrangements.

Yuri and Sergei recollect the first visit organised by SoloEast and the differing requirements for visitors and employees:

*Yuri: "And, well, as for SoloEast company, I remember the first visit, it was this one lady from Canada, I should meet him [Sergei] at the checkpoint, as we remember, we used a big bus just for one person, it was like possible for ten people, but only one lady from Canada, and Sergei brought this lady in a Mercedes to the checkpoint."*

*Sergei: "That was the second time, first client was a Japanese. No. A guy from the States and he came, it was one guy a month, I guess. I remember, we came to the checkpoint then we had to drive this 'gas '69' or something – the old one."*

*Y: "Yeah."*

*S: "It was hot, and when we got to the sanitary check here, we changed our clothes. They gave you everything, shoes and socks and..."*

*Y: "Yeah."*

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<sup>22</sup> This is limit of the research. It is entirely with English-speaking tourists. Research with Ukrainian and Russian visitors would no doubt be interesting, especially with respects to the situating of the disaster in the national identity of Ukraine (see Dawson, 1996).

*S: "I remember [these] clothes were three sizes more and I looked like a maniac. Then we came to, you know, the reactor and they had this, erm, conference room by reactor number 4. You know, and we came with all these clothes and these gas masks, and there is... was it Julia [a previous guide of state agency] there or somebody? Somebody else, just in a mini skirt." (#i25)*

In the early days tourist visits were rare and required specific clothing, and even gas masks. Now the rules are relaxed somewhat.

*Nick: "We were talking earlier about how you began with SoloEast. [...] How did it start?"*

*Sergei: "How did it start? See, well, I used to work in the United Nations, so when I heard that United Nations, kind of, they encouraged this agency to. So, yeah, it was always of interest to me, so. You know, it's like catching, when you start coming here you just can't stop..."*

*Plus the money.*

*\*laughter\** (#i25)

Sergei began the tours after working for the UN. A United Nation Development Program report from 2002 (more of which in chapter 2) suggested the possibility of 'ecotourism' for economic development (UNDP, 2002). As a local entrepreneur, the possibility of profit aligned with Sergei's own interest in the Zone, his desire to return coupled with the UNDP suggestion acting as a trigger. Though Sergei began the tours around 2001, he has noticed a significant increase in interest the past few years. Talking in August 2010 at the height of the busy season, with a few more months of daily visits to go, Sergei and Yuri explain the numbers they are now seeing:

*Sergei: "Last year there were 8,000?"*

*Yuri: "7,000"*

*S: "And this year it's already 6,000" (#i25)*

Tours to the Zone are clearly no where near the scale of any major destination, nevertheless, these are by no means insignificant numbers. Especially as they show no signs of decreasing. Despite the legality of visits being challenged in Ukrainian courts during 2011 (due to some internal wrangling within the Ukraine government) they were granted legal status and the Zone is 'open' again drawing up to 10,000 visitors a year. Certainly not mass market but not entirely niche either.

## Conceptualising Tourism and the Chernobyl Exclusion Zone

### Dark Tourism?

One last stop before leaving Chernobyl. We pull up at a nearby shop, by a crossroad. Usually serving those who live in Chernobyl, the shop stocks sundries and food, but also a small number of 'souvenirs'; mostly cigarette lighters, baseball caps and the like with "Chernobyl" printed on them. These items cause a few eyebrows to be raised before visitors move on and buy<sup>23</sup> water, soft drinks and snacks for the day. There are no postcards.

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Early on it was clear that the study of 'dark tourism' was problematic for understanding tourist practices in the Zone. The term 'Dark Tourism' originates with Lennon and Foley (1996; 1999) and their book, *Dark Tourism* (2000). However, they were not the first to draw attention to tourism sites related to disaster and death. Seaton (1996, 1999) had offered 'thanatourism' (linking it specifically to death) as a category. Rojek's 'Black Spots' (1993), one of his four classifications of 'escape areas', is one of the earliest observations of the specificities (as different from other forms of tourist sites) of the commercial, tourist development of 'grave sites and sites in which celebrities or large numbers of people have met with sudden and violent death' (ibid.: 136).

To what extent this is a burgeoning new activity as part of mass tourism or more closely related to historic activities, is debated. Nevertheless, the term 'Dark Tourism' and 'thanatourism' have gathered increasing interest.<sup>24</sup> Despite an increasing number of case studies, there remains little debate as to the use of the term 'dark'. Rather, most writers either implicitly or, as in Stone's case (2006), explicitly accept a 'common sense' meaning. Whereby 'the term 'dark' [...] alludes to a sense of apparent disturbing practices and morbid products (and experiences) within the tourism domain [and] it is suggested that dark tourism may be referred to as the act of travel to sites associated with death, suffering and the seemingly macabre.' (ibid.: 146) Seaton's 'typology' of thanatourist sites is indicative of the first issue I have with this body of work. By naming and categorising sites (as dark or otherwise) the project seems yet another exercise of the impulse to categorise and typologise that besets tourism literature (Franklin and Crang, 2001). This potentially renders the activities in and rela-

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<sup>23</sup> I have been asked by visitors whether there was any kind of commission aid to tour guides for taking them to these shops. Far from it; the tour guides will occasionally take visitors to one of the two shops in town, swapping between them, simply to help support other people living and working in the town.

<sup>24</sup> Including the new "Institute for Dark Tourism" at the University of Central Lancashire

tions with the sites homogeneous within categories, and provides little in the way of direction for engaging in the practices of tourism.

My second issue with 'dark tourism' literature stems from a theme that can be found in tourism literature in general; the focus on questions and concerns driven by the needs of industry (Franklin and Crang, 2001). This is best illustrated through Lennon and Foley's (2000) book on the subject. In *Dark Tourism: The Attraction of Death and Disaster* Lennon and Foley separate dark tourist sites from historical (beyond living memory) battle sites and similar locales and state that 'the events of ancient and medieval battles, etc., do not posit questions, or introduce anxiety and doubt about, modernity and its consequences.' (ibid.: 12) Indeed, their linking of dark tourism to a certain 'postmodern' anxiety about modernist narratives of progress seemed initially fruitful. This is not pursued and dark tourism is defined as:

It is this particular element of the *commodification* of anxiety and doubt within *interpretations offered* and the *design of the sites* as both products and experiences (including merchandising and revenue generation) that introduces dark tourism. (ibid.: 12 emphasis added)

These are the questions that drive Lennon and Foley's work on dark tourism, and much work in this area since: Questions of design, commodification and interpretations (as offered, not made). These are not questions that were going to get me very far in the Zone. There is no design of the site with respects to tourism. No attempts to modify the ruins to make them safer, no areas cleaned of radiation that were not cleaned for the workers. Nor does commodification work as a framework for tours. There is money being made, but this is not as a result of any attempts to 'package' the Zone as a destination, but rather a response to demand. It is the focus on 'interpretations offered' that I found particularly jarred with my own experience.

Standing in the school during one trip, tourists having been wandered off in small groups or by themselves, I ask Yuri if he ever walks around with the visitors here after it's been announced that they have time to explore by themselves. He explains that he prefers not to. Partly it's a welcome break, but mostly because he's aware that many visitors come here to experience this unique space, and it is best experienced for oneself, rather than accompanied always by a guide. Moreover, he went on to explain, he likes the school because of the emotions it brings forth. Indeed, this was a common claim he made; that he enjoyed guiding in the Zone for the emotional engagement. This engagement that he enjoyed seeing in visitors was best fostered when not being closely directed by a guide. In fact, both Yuri and Sergei expressed an emotional attachment to the Zone; memories of their own pasts during

that period, as well as the evocative nature of the ruins and landscape. Yuri in particular finds that the school “contains a lot of memories” and that “it's nice to touch this history” (#i25).

As such, with issues of design and commodification rarely at the fore, the question of 'interpretations offered' can be put on hold. Especially as this focus on the interpretation as a product of authorial intent from tour operators has often led to descriptive or taxonomic approaches (e.g. Strange and Kempa, 2003; Ashworth and Hartmann, 2005; Stone, 2006). An alternative can be found in one example amongst this dark tourism literature. In their analysis of tourism at Fort Silso, Singapore Muzainii et al. (2007) consider tourists not as consumers of commodified sites but engaged in 'finding out more, and enhancing what they know' (ibid.: 43) This returns us back to the concern with the production of knowledge *by* tourists to answer to question 'why tourism?'

Not interpretations offered, but knowledges produced. Not sites managed and designed, but performative, embodied landscapes. Here it must be said that I am far from the first to shift these questions in this manner with regards to tourism. For outside of the body of work on 'dark tourism' there are increasingly theoretically vibrant and empirically rich accounts of tourism and travel that place tourist practices at their core. Within the body of work on tourism I have taken specific inspiration from the work on the 'performativity of place' (Coleman and Crang, 2002a), on networked approaches to tourism (Van der Duim, 2007; Larsen et al., 2006; Jóhannesson, 2005) and on bodies and embodiment in tourism (beginning with Veijola and Jokinen, 1994). These are but a few examples, and such literature within tourism can be found in relevant parts of the thesis. In summary; where relevant I have gladly drawn on studies of tourism that take embodied, networked and performative practices *of tourists* as their focus but in doing so the thesis as a whole is not embedded amongst 'tourism studies' but the bodies of work that are concerned with practices and embodied experience.

## The academic landscape

Landscape has been, and remains, a very mobile and ambiguous term across a range of disciplines and critical enquiries (Dorrian and Rose, 2003). It is complex, heterogeneous and eludes quantification (Bender, 1993). There is even some uncertainty that the term remains useful, with a noted tendency for a non-analytical interchangeability of the terms landscape and place (Cresswell in Merriman et al., 2008) and with movements towards relational and topological (M. Rose and Wylie, 2006; Wylie, 2006) problematising some of the ways in which landscapes are thought. Despite, or, rather, because of these ongoing concerns of

meaning and use, landscape remains a regular feature of geographical and other work, for as well as research on landscape(s) there is much talk of what landscape is. This diverse and lively work on landscape leads to radically different stories depending on different understandings of what landscape is and how it is studied. Early definitions give landscape as 'a portion of the earth's surface that can be comprehended at a glance' (Jackson, 1984: 3 as cited in M. Rose, 2002) 'an achievement of the mature mind' (as opposed to the given reality of 'environment') (Tuan, 1979: 100 as cited in Ingold, 1993) or as 'a way of seeing' (Cosgrove, 1985). Recent departures from these approaches have been led by work on embodiment and performance, on work drawing from and building upon phenomenological traditions such as Heidegger and Merleau-Ponty, on hybrid and more-than-human geographies, and drawing on Deleuzian ontologies.

A certain orientation to landscape in cultural geographies has often closely identified the term with landscape art (Wylie, 2007) and much has been written as a critique of ocular centrism. Here, ocular-centrism is taken not only as the well recognised modernist privileging of knowledge through sight, but is also the *objectifying* modality of the visual (Macpherson, 2006) which owes much to a Cartesian mode of thinking about mind/body and world. Most prominent has been the work of Denis Cosgrove (1998) on the development of the idea of landscape as a cultural concept in the West which takes an idealised notion of landscape as a way of seeing (landscape, society, nature) from an elite perspective bound up in a specifically modern focus on sight and (detached) observation (Cosgrove, 2003). Landscape as a 'way of seeing' pays particular attention to the relations of power from which certain perspectives on landscapes arise (see G. Rose, 1993). Though this is not to render problematic all and any form of visual pleasure in, or aesthetics of landscape (Nash, 1996; Soper, 2003) this pays attention to the historicism and social specificities of the visual technologies which continue to privilege a (never morally or politically neutral (Cosgrove, 2003)) detached, visual observation. Whilst this work within cultural geographies has done much to critique a particularly modern mode of imagining observer and landscape relations as a primarily visual and objective, there remain a number of issues I would like to expand upon.

In some of these approaches there remains a need for an *external* observer (albeit not the objective, neutral observer). Here, landscapes, whilst having 'an unquestionably material presence,' they 'come into being only at the moment of their apprehension by an external observer' (Cosgrove, 2006: 50). This is an externality of the (seeing) subject. A subject-object differentiation and a conception of sight and visibility as (only) a distal form of knowledge which 'establishes the world through a set of stable and fixed relations in which there is a clear distinction between subject and object as singular and coherent entities' (Hetherington,

2003: 1935). In challenging the politics of landscape representation, there has been a tendency to collapse landscape into a solely discursive realm; specifically into a textual metaphor where landscape is like 'a flickering text displayed on the word-processor screen whose meaning can be created, extended, altered, elaborated and finally obliterated' (Cosgrove and Daniels, 1988: 8). And so, whilst these approaches do much to destabilise any dreams of objective visualisation by asking pertinent questions of identity and power in representation; of the for *whom* and *why* of landscape, there is little such an approach can say to the *how* of landscape (M. Rose, 2002). Asking how, for Rose, explicitly suggests a need to address 'how a landscape matters (how it has material effects on our lives) is directly connected to how it matters (how it comes to be significant within a network of meanings and relations)' (ibid.: 456). One of the criticisms of representational approaches of landscape-as-text has been a tendency to render landscape immaterial (Macpherson, 2006) and unable to engage with questions of embodied practice and material relations. This has led to a response that highlights alternative modes of experience and cognition (Cosgrove, 2003).

It is pertinent here to put forward some of the challenges I believe the Zone, as a radioactive landscape, presents some of the work discussed so far. Firstly, and foremostly, a radioactive landscape and associated issues of contamination and vulnerable bodies challenges any received notion of detachment. A Geiger counter (as discussed in chapter five) may be a technology of representation (though, given the primacy of audible feedback, not necessarily one bound to visuality), and, it could be argued, presents a certain, technologised, mode of 'reading' landscape. But it highlights the impossibility of Cosgrove's (2006) external observer that apprehends (and in doing so, brings into being) landscape. Bodies in radioactive environments are vulnerable there is a 'corporeal existent as always already open or exposed in some way beyond its will and intentions' (Harrison, 2008: 425). The Geiger counter is used because of this vulnerability – bodies in the ZoA are difficult to refer to as detached or external – they are always already open to the landscape, to the radiation. Unless we consider the space of the cultural landscape as entirely disembodied, it is difficult to accept a terminology of externality or of freeform textual spaces written onto a physical realm or of a 'way of seeing' that implies a certain detachedness. Not externality and more than textual, and yet neither easily understood as material, the radioactive landscape of the Zone presents a number of challenges. I will offer some avenues of thought that have influenced this PhD and which are broadly on the subject of landscape. However each chapter will put forward and engage with literature as best fits the questions and theme present therein. Whilst landscape serves as a frame here, it is not always the case that each and every chapter deals directly with what could be termed 'landscape studies'. Neither am I presenting here a codex of theories

which I apply to the empirical material of this thesis. Rather it is to set the scene of various current debates which different chapters work their own way through and develop new ways of dealing with the issues at hand.

### Phenomenological accounts

An alternative account that avoids an externally located observer can be found in phenomenological accounts. Drawing particularly upon the works of Heidegger and Merleau-Ponty a phenomenological approach to landscape is much more practiced-orientated (Cresswell, 2003). For Ingold, drawing on the concept of dwelling, landscape is 'the world as it is known to those who dwell therein.' (Ingold, 1993: 156) Ingold sets out his approach as rejecting 'the division between inner and outer worlds [...] of mind and matter, meaning and substance [...] The landscape, I hold, is not a picture in the imagination, surveyed by the mind's eye; nor, however, is it an alien and formless substrate awaiting the imposition of human order.' (ibid.: 154) Part of collapsing such binaries is a shift in terminology, landscape as 'with' us, as part of us (and us as part of it). Dwelling as an approach – although not the only way landscape has been thought of in a phenomenological vein – has been important in developing this understanding of the world as a 'rich intimate ongoing togetherness of beings and things' (Cloe and Jones, 2001: 651).

A fundamental result of disrupting such a dichotomy is to ask questions of subjectivity and intentionality (Tilley, 2004) as these are no longer taken for granted and no longer easily located in human bodies and minds. But can a tourist on a half-day trip be said to dwell? It is difficult to capture a sense of dwelling during a fleeting visit (at least in comparison to the communities often taken in dwelling based landscape studies). Cloe and Jones (2001) recognise a certain tendency towards rootedness in work on dwelling; a 'oneness' between landscape and community which implies an obduracy to the dwelling. They remain fixed upon the term dwelling, urging that it needs to be adapted to a state where authenticity is an unhelpful concept, and which pays attention to the 'interpenetration' of places, flows, people and materials. Yet I am not so sure that dwelling, with its particular phenomenological pedigree, is easily adapted in this manner (Ingold, for one, has moved away somewhat from the term dwelling partly for this reason, amongst others (Ingold, 2008))

Despite these concerns with a dwelling approach, there are a number of insights from a phenomenology to move forward with. Here I turn to what Wylie notes is Merleau-Ponty's 'quintessentially anti-Cartesian' project (2007: 148) and the resulting importance of embodied practice in knowledges and perception as opposed to the primacy of an abstracting and

reflective mind. Merleau-Ponty can be said to 'haunt' much work on embodiment (Grosz, 1994) and though I only engage directly with his work in chapter 4, an ethos of engaging with embodied practice runs throughout this thesis. A focus on embodied practice begins to answer some of the concerns that a collapse into image or text disregards practice (see Thrift, 1996). Whilst this is not to deny that visuality is often still central to landscape experience (Soper, 2003) but there is a need to expand upon how visuality is theorised beyond sight, gazes and representations (G. Rose, 2003a).

### Landscape obliterated by the relational?

This section deals with what Wylie has termed 'topological' geographies (2006, 2007): The fluid geographies arising out of a general move towards relational thinking in human geography. Actor-Network-Theory (ANT) as exemplar of this relational thinking, and this seems a good place to begin with regards to tourism. Thinking with networks has been increasingly common in tourism studies, challenging a simplistic model of arrival then visitation and consumption then departure. Instead it promotes a thinking which takes tourism as heterogeneous networks of 'hosts, guests, buildings, objects and machines' (Bærenholdt et al., 2004: 150). A 'tourismscape' is thus performed and where power and form are not invested in pre-given entities, but in relations (Van der Duim, 2007). With Geiger counters and cameras it is fruitful to consider *interactional* subjectivities that explicitly address the importance of technologies (Haraway, 1998). Here the camera is probably the tourist technology *par excellence*. The 'networked camera tourist' (Larsen, 2008) disperses intentionality and asserts the important effects and agencies of the camera. It is vital that landscape is considered active part of this process; landscape is not the product of photography (the representational 'text' of the photograph-as-visual-image) it is inherently part of the visualisation processes.

This networked or relational thinking not only disperses intentionality and subjectivity, it also disperses boundaries. Locality and place are no longer easily constituted as bounded entities. They can be said to take shape as paths and relations come together in various constellations and configurations (Massey, 2005). Mobilities flows and networked thinking is a 'topological' imagination and whilst very useful in disrupting some of the thinking around place and landscape it should not lead to an imagining of a flat world or relegate landscape to an 'ambience' of mobility (Kamvasinou, 2003). It is through a notion of 'topography'; of surfaces and depths (see Wylie, 2006) that this tension may be thought through.

## Landscape as tension

'Landscape is tension' (opening line in M. Rose and Wylie, 2006; and Wylie, 2007; see also G. Rose, 2003b; Merriman et al., 2008). The excesses of relational, networked thinking tend to flatten the world, or to render places so fluid that they cannot account for obduracy. Whilst some phenomenological studies may tend towards boundedness, individualism and localism (as well as, possibly, universalism and an inability to speak to / of power (Nash, 2000; Tolia-Kelly, 2007) or avoid responsibility (Macdonald, 2006)), landscape may allow for a productive tension. If the problem is not a 'problem of definition' but actually a 'problem of the problem of definition' (Dorrian and Rose, 2003: 16) then landscape is taken as complex term incorporating many tensions, never fully reaching resolution. The brief overview of landscape above was not in order to pin down a specific signification salient to this particular research. Rather the use of landscape provides for a productive field of tension between various attempts to resolve, or care for (M. Rose, 2006), the term landscape in academic geography. Landscape-as-tension is not to imply a set of dialectical relations. By taking landscape to be a provocative tension I imply a process of 'constantly being made', a suspension without resolution and with constant negotiation and uncertain future (Massey, 2006: 43 & 46).

This thesis and tourism in the Zone are part of landscape in the making. What I put forward in this thesis are a series of 'cuts' which cross in places, all of which broach various aspects of the thinking of landscape presented here, even if they do not always directly respond to the 'landscape' literature. These cuts are not, necessarily, mutually supporting. Rather I hold these different approaches in tension in order to hold fidelity to the heterogeneous, active, productive and embodied practices of landscape. Landscape has served to highlight the key themes that run through this thesis. Themes of embodied experience and tourist practice which pay due attention to the productive capacities of knowledge production. Such attention to these practices in the Zone necessitate an analysis of networked practices where technologies and other agencies are implicated in the production of knowledge. This attention to knowledge production is touched on in the next section on methodology. However my insistence upon attention to tourists subjects as active agents rather than passive consumers is not to imply a given-ness to subjectification. The radioactive landscape of the Zone makes problematic any assumed subject-object or self-landscape cleaving. These three themes; landscape, knowledge and subjectivity run throughout this thesis and whilst each chapter offers a different focus I will conclude by putting forward the contributions of this thesis towards these themes.

## Researching tourism and the Chernobyl Exclusion Zone

### The Research

This thesis is based upon 25 separate day-trips to the Zone. The research was largely ethnographic and each trip I attended as a participant; either as visitor or, later, as tour guide. Three of these were attended during August-September 2009 during a period of pilot research. These early trips were intended primarily to ascertain the feasibility of different methodological approaches, as well as prepare for a longer stay in Kyiv. Access was relatively easy. The first tour was booked prior to leaving through a tour operator based in the UK. On this tour I met Sergei with whom I arranged two more visits during my pilot period (due to budget, I was wary of booking more). I contacted Sergei via email before my return the next year to arrange more visits. This is not to say that I was welcomed from the start. For a while I was treated with the same suspicion as journalists, someone just looking for a 'scoop' with little regards to actualities of the Zone.

Upon my return I discussed my research at length with Sergei, who was keen to assist, although I would still be charged for the going rate visits.<sup>25</sup> After a couple more visits a process was in place whereby Sergei would inform me the day before a tour if there was a spare space available. I would be offered this space at half the usual cost. This mutual arrangement again changed as I found myself increasingly taking on (informally) the role of tour guide. After some time (as discussed below) I found myself taking on the role of guide and my arrangement with Sergei changed such that I would attend particularly busy tours for free if I was willing to assist either Yuri or Maxim. It permitted Sergei to send another minibus and that I would attend for free (meaning I went on many more tours than I would have been able to otherwise). It also resulted in interesting (and insightful) adaptations of my role during my ethnography.

### Pilot research

During my first visit to Kyiv I stayed in a hostel in the centre of Kyiv, something I found immediately useful. My first three interviews took place before I had visited the Zone myself, with people who had visited the Zone and were staying in the hostel (the hostel offered a booking service for the tours). These first interviews took the form of photo-elicitation

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<sup>25</sup> The agency that manages the Zone charges a flat rate for all visits from foreign nationals, whether researchers or tourists. This applies to each and every visit, regardless of number.

(Harper, 2002) whereby the interviews were structured through practices of showing, describing and talking about the photographs tourists had taken during their trip to the Zone.

These early interviews turned out to be relatively descriptive affairs. This is something I found when referring to photographs in future discussions. Rather than being the sources of memory and emotion that the social life and materiality photographs have been suggested to be (Edwards, 1999; G. Rose, 2004), discussions which involved photographs quickly shifted to a descriptive modality. Whether this was the short time between taking them and their enrolment in discussion or something else, I'm not sure. In any case, I found it more useful when respondents would take out their camera to show a photograph that would better illustrate the point they were making, rather than to feature photographs as the main point of discussion.

Early on in the research I would ask visitors about their plans for the photographs; how and with whom they would share them. This was an attempt to 'follow the tourist' whereby tourism 'can no longer be bounded off as a discrete activity, contained tidily at specific locations and occurring during set aside periods' (Franklin and Crang, 2001: 7). By following-up on the social lives of photographs I intended a modest attempt at a virtual multi-site ethnography (Hannerz, 2003; Larsen, 2008) to address the multi-sited mobilities of tourism. In the end, however, even this modest attempt was fraught with problems from uncertainties as to what – if anything – was to be done with the photographs, to difficulties in following where photographs from tourists ended. Primarily, though, I realised this line of enquiry was veering towards a use of the photographic image as a stable, fixed 'text' to be read and analysed, losing much of the depth of the embodiment of photographic practice. An analysing of 'the seeing eye rather than the mobile subject' (Crang, 1997: 365).

As opposed to a 'reading' of tourist photographs of the Zone (as in Goatcher and Brunsden, 2011) I was always more interested in the materialities and practices of taking, sharing and talking about photographs. Difficult surfaces, disordered spaces and the presence of radiation come together with embodied visitors and digital cameras to negotiate the production of an image. It was this negotiation that I found more interesting than, and here the work of Jonas Larsen was a key inspiration (Bærenholdt et al., 2004; Larsen, 2005, 2008) as well as earlier work by Crang (1997).

Photographic practices are as part of the embodied, performative co-production of landscapes and tourist subject, and so remain part of the empirical reserve for this thesis, albeit without a dedicated section for sustained focus. My sustained engagement with technological practices of negotiation refers primarily to the Geiger counter. My research is also

tightly focused on the Zone. Despite its porous and problematic boundaries, my research takes little into account the multiple mobilities and locations of tourists and tourism; the impacts of visiting beyond the visit, the Zone that returns with visitors 'back home' (whether feelings, ideas or shoes that are worn with hesitation<sup>26</sup>). These are, of course, not the only things that I ended up not including in this thesis, but they highlight a major decision in the methodological approach and research goals; to focus closely on the landscape of the Zone as it is experienced by tourists.

### Participant ethnography

This close focus lends itself to an ethnographic 'thick description'. It's worth momentarily examining Cosgrove and Jackson's early (1987) analysis of thick description as it applies to geography. They describe thick description as the 'disclosure of multiple layers of meaning in ethnography' (ibid.: 97). These multiple layers of meaning weave method and writing together. Each chapter broaches another 'layer' (albeit without any clear hierarchy) of meaning (and meaning-making) but does so not by parcelling out discrete methodological approaches. Rather a robust ethnographic methodology enabled a variety of different 'cuts' through tourism in the Zone. Participant observation is a fundamentally *intersubjective* endeavour (Crang and Cook, 2007) and, as such, I chose from the start to be as frank about my own goals.

The practicalities of this ethnographic methodology were as follows. Every tour I would be accompanied by a field notebook, my two cameras, an audio recorder and my Geiger counter. Each tour would involve various stages. I would begin by introducing myself and my research to visitors as they arrived to join the tour, as well as a formal announcement to everyone once they were inside the minibuses. I explained my reasons for attending, and what they could expect me to be doing and sought (verbal) permission from everyone. They were informed that they would remain anonymous and could simply ask me now, or at any time, to pull out of the research or not be included in any photographs I took. Due to the relatively public nature of tours and without need for strong confidentiality, anonymity is here provided as the inclusion of no personal data (all names are pseudonyms) rather than total anonymity. The only exceptions to this anonymity are Sergei and the tour guides Yuri and Maxim, whom I refer to by their first names. Given their specific positions as English speak-

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<sup>26</sup> I met another academic geographer who had been on a tour to the Zone, who confessed to have thrown their shoes away. I pointed out that I was then wearing the same shoes (a pair of comfortable, sturdy walking shoes; the weather was terrible) I had worn for every trip to the Zone. I admitted that I occasionally ran my Geiger counter in my office draw over them, just to be sure.

ing tour guides and tour operators, anonymity here is not feasible. Each provided permission to refer to them by their first name.

The bulk of the data was collected in two parts; a participant ethnography of the tours and post-tour interviews / focus groups. I shall come to the participant ethnography soon, but for now describe the format of these focus groups. Early on in the research I piloted interviews during the return bus journey. However this was not effective. If tiredness was not enough alone<sup>27</sup> to make the prospect of an interview far from appealing, then the noise of a bus journey made later transcription nigh impossible. The logistics of moving about the interior of a cramped minibus were also prohibitive. The better solution turned out to be to conduct a group interview back in Kyiv at the end of the trip. Fortunately a return to Independence Square meant the nearby presence of a café and the not-unwelcome prospect of a relaxed chat about the day over a drink made recruitment for these focus groups easy (albeit self-selecting). These interviews lasted at least half an hour, the majority being between one hour to 90 minutes in length. They were also largely unstructured, and though I kept a bullet-point list of themes and questions to aim to cover, my instigation for various discussions were more often guided by the notes I had taken during the tour (used to to instigate discussion about certain events, to pick up on points made by visitors during the tour, or to use as examples of certain issues). I would make an effort from the start to foster group conversation as the format, rather than a 'question and answer' interview format. This worked well, allowing me to ask questions for expansion on interesting themes that would emerge during these discussions, or to encourage further discussion on one subject or another. In total 35 post-tour interviews were conducted, many with two or three respondents, and some larger ones with five or six respondents (see the appendix for more detail). Interviews were also conducted with three tour guides and Sergei, the tour operator. Two with Maxim, one with Sergei, one with Sergei and Yuri and one with another guide (who declined to be named). This is in addition to the many discussions I would have with Yuri and Maxim as we toured the Zone (some recorded, others transcribed into field notes). I had arranged an interview several times with the head of the state agency that organises visits to the Zone, but each of these arranged appointments was cancelled, often at the last minute.

Walking has generated interest in cultural, embodied experience<sup>28</sup> and these, and more, practices of walking in the Zone bear more sustained and specific engagement than I have been able to provide in this thesis. Yet they were central to my ethnography, for walking, whilst touring, is accompanied by talking. Kusenbach (2003) recognises five important as-

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<sup>27</sup> A large number of visitors would fall asleep on the return journey.

<sup>28</sup> See, amongst others, Solnit (2001), Wylie (2002, 2005) and Ingold and Vergunst (eds.) (2008) amongst others.

pects of 'go-along- interviews', though for my purposes I was particularly interested in two of these; perception and the texture of spatial practices. In terms of perception, go-along interviews 'can sensitize ethnographers to the idiosyncratic sets of relevances that govern their informants' environmental experiences.' (ibid.: 469) Go-along interviews can avoid the shortcomings of observation-only in trying to imagine what an experience is like for someone else and interview-only techniques where the 'pre-reflective nature' or experience is difficult to engage with. Secondly the 'go-along' offers a chance to engage with the textures of spatial practice; the embodied, material and imaginative engagements with landscape. Interviews whilst walking / touring are in part simply an aspect of touring. People 'walk and talk' during tours to the extent that the practices are not easily considered as distinct. Though it is not uncommon for talking to be put on hold as tricky areas to navigate, especially in Pripjat, are traversed. In part it is also a methodological commitment to the embodied experience of the Zone; the textures and multiple stimuli that make up being-in-the Zone cannot be addressed in interviews after the tour as easily as they are whilst walking. Talking-and-walking was often talking-about-walking; a narration on the surprisingly difficulties (ruins, radiations, plants etc.) of negotiating the landscape of the Zone.

The majority of direct 'block' quotations from respondents that appear in this thesis are from these post-tour discussions. This is not to say the 'go-along' interviews were not useful. Far from it. Later discussions with time for reflection lend themselves better to being quoted in full whilst go-along interviews rarely produced transcriptions that made a great deal of sense extracted from the embodied practices they were part of. Indeed the point of these go-along interviews was not simply another tool to extract textual data, but inherently part of textural experiences of touring the Zone. Anderson (2004) describes the very different forms of knowledge produced from talking-and-walking than from traditional interviews as the ability to produce 'a collage of collaboration' (ibid.: 260) that is informed by both conscious reflection and embodied practice. As such, extracts from the recordings during the tour tend to appear as part of the various ethnographic narratives that I use throughout the thesis. These re-narrations draw on these go-along interviews, my field notes and photographs.

In addition to interviews I kept an extensive field diary / notes as well as undertaking photo documentation (over 1,800 photographs were taken). Each tour involved three distinct uses of the diary. I would begin each day by noting basic information; who was tour guide that day, how many people attended, any notes from the first meetings at Independence Square. I would do this during the trip to the Zone and I would also take the opportunity to read, annotate and analyse previous diaries. It was during these early morning bus tours that much of the different 'cuts' this thesis takes were seeded. The rest of the field diary was simil-

arly a negotiation of the time-space mobilities of touring the Zone. During the tour I would keep as extensive a collection of notes as I was able to. These included my own feelings and concerns as much as they were documents of observations (see Crang and Cook, 2007). At the moment of note-taking these notes tended to be less verbose than those I had made in the morning. Whilst walking I was often negotiating risky spaces which did not lend themselves writing whilst walking. Moreover, the inertia of a tour group meant that significant pauses to make notes would leave me quite some distance behind. Instead of a stop-start approach that was dictated by the needs of ethnographic note taking, I adapted a format where I would often write down simple exclamations, short sentences, a word or two. Often accompanied by a photograph. At the next bus-journey between locations I would annotate these short entries with something more coherent. These fieldnotes form a record of my own feelings and sensual engagements, details of particular emotional and material encounters I had been part of or witnessed in the Zone, discussions I had been involved in, practices of guiding I had observed (and later, was learning) and so forth. The result is a field notebook of stanzas that begin with staccato words and phrases which then develop into prose, each stanza relating to the period between one short journey in the bus and the next.

Photographs were a central part of this field note taking, as well as an important practice in their own right. It has been noted that photographic methods lend themselves to the study of tourism, as they are clearly participatory in this context (Sather-Wagstaff, 2008). Rather than only documentation, I understand photographs and photography (including photography as research method) to be 'opportunities for exploration and discovery, accommodation, and understanding, they are wholly immersed in a dynamic triangulation of the tourist experience as constructed via intersubjective negotiations' (Scarles, 2009: 485). The objects encountered, ruins walked through and radiation avoided are similarly part of this negotiation. Photography as a research method for studying tourism allowed me to move beyond purely verbal responses from tourists. Taking photographs *with* tourists (as opposed to the distance of photographs *of*) is a form of 'sharing encounters' (Scarles, 2010: 922) in which 'both respondents and researchers [...] occupy an active role in the emotional and transformative process of research [...] Thus, the tangibility of the visual allows respondents to re-enliven a range of wholly embodied and sensual habits, practices and behaviours of the tourist experience.' (ibid.) Thus photographing-with locates the researcher subject within a relational endeavour towards understanding, rather than as an inert gaze. This is not to say that the photographs do not perform the function of documentation at all (I have, for example, hundreds of photographs of tourists taking photographs) rather that as part of participant observation, they were central to the walking-talking-photographing of tours. A prac-

tice in which each function (walking, talking and photographing) cannot be extracted to function on its own as empirical reserve. In the ethnographic narratives that I produce, I attempt to retain a fidelity to these embodied, material and intersubjective negotiations across multiple practices of knowledge production.

I began transcribing interviews whilst in Kyiv and the rest were transcribed upon return. All materials (interview audio and transcripts, tour recordings and transcripts, field notes and photographs) were entered into *Atlas.ti*, qualitative analysis software. With which I undertook the traditional practice of coding these materials.

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That's the end of our visit to Chernobyl town today. Occasionally the tours will take in the nearby church that still serves the town, or a stretch of the Pripyat river where a few rusted boats can be seen, leaning precariously, slowly sinking.<sup>29</sup> We pack back into the buses and drive north. On the outskirts of the city there is another checkpoint. This is a much smaller affair; a couple of guards wave to the driver and lift the barrier. We are now entering the central part of the Zone, where we will see the power plant and Pripyat; the real draws of the tour.

After a short while I take the microphone again. "To the left" I announce "stands the 'Woodpecker'. That's the huge metal lattice structure you can see in the distance. Intended to act as an early warning system by detecting nuclear missiles in the atmosphere." This facility is under control of the Ukraine military, and remains off-limits. A brief moment later I pick up the microphone again. "To the right" this time "you might catch the entrance sign to the village of Kopachi. This village was demolished and buried as an experiment in contamination control. All that remains are apple trees and a few mounds of earth." Tours very occasionally stop here, but not today.

We do stop at the usual place, however. The bus pulls over to the side of the road. In the distance stands the iconic chimney between reactors 3 and 4. I tell everyone that we'll have a few minutes here. I hop out and wait for everyone to leave the buses. My first announcement is a reminder to keep clear of the grass verges. The road surface remains fairly clean, this having been laid recently to improve road access. The grassy areas, however, are still highly contaminated. I point towards the reactors in the distance. (See images 11 and 12) "There are two tallest chimney towers. The rightmost stands between reactors one and two, the left most between reactors three and four. Four being the one that exploded in 1986. From here, to the far left, you can see the top of the sarcophagus, the large concrete and steel structure that covers reactor 4. This waterway here is part of the large cooling system in place. Over to the

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<sup>29</sup> Abandoned boats can be found in any river in Ukraine, Yuri will tell me in a later interview, he tends to skip this location, even if it fits a certain aesthetic associated with the Zone.

right, on the other side of the water, are reactors five and six. They were under construction at the time of the disaster, you can still see the cranes in place.” We usually keep this a brief stop; just enough time for visitors take photographs. What with this being a larger group than usual, it takes a while before everyone has taken a photo. During this time, visitors take the opportunity to ask me questions. We get back into the bus and I wonder to myself; shouldn't I be the one asking questions?



*Image 11: The buses stop along the road to the power plant for visitors to take photos (#pio86)*



*Image 12: Unfinished reactors 5 & 6 with construction cranes pool*

## Researcher, Visitor, Guide

Bruner (2005) recounts his own experience as part guide, part ethnographer. He tells of a 'delicious ambiguity' in his dual role arising from 'enjoying the tourists but simultaneously observing them' (ibid.: 1). This emerges from the covert nature of his research; having initially avoided informing any respondents of his role as researcher. I remained committed to being open and frank about my role as researcher, but I shared a concern that, as guide, I was particularly involved in structuring tourist experience. Like Bruner my guiding 'mediated their experience [and so] I found myself studying myself' (ibid.: 204). I was comfortable with this aspect of 'self-study'. An examination of my own experiences was in line with the auto-ethnographic approach that parts of this thesis take and developed this as part of my methodology. It also meant an extension of an examination of my own situatedness; guiding offered a foci for reflexive thought.

What began as assisting Maxim, on his request, with keeping track of visitors (a difficult task in some of the vast buildings we would walk through) and in fielding an increasing number of questions directed at myself (first noted in length during tour 9) became more fully part of my role on tour 13. This was in response to a particularly 'relaxed' and almost entirely silent official guide (neither Yuri or Maxim) who attended that tour and offered no direction once we reached Pripjat. In some ways this role as guide was not entirely 'new'. I had for some time been the subject of questions, often at the beginning of the tour. My openness about the intentions behind my presence highlighted me as a source of information, which I was generally willing to provide. It did not seem to me that sharing information I had garnered from secondary sources would be a problematic influence; for, though I am interested in knowledge production, this is not a knowledge production as auto-affective but rather relationally produced through negotiation. I was, simply by virtue of being present, part of this negotiation and not some distant observer. I was wary, however, of answering questions of the order "what does it feel like to be there" and would often return with a "what do you expect it to be like?" Although tourists visiting did not arrive as emotional 'blank slates', most having read various accounts and looked up images of the Zone, I wanted to avoid instigating certain responses. Although I was usually forthcoming if visitors approached me to ask what I, personally, felt and thought. If anything, this was an opportunity to strike up a conversation based upon comparing and contrasting differing emotional and verbalised responses to the Zone.

Despite these earlier questions, and my positioning as a source of information, guiding was a significant shift in my positioning. Rather than passively providing information at re-

quest, I was now expected to volunteer information (if not interpretation) and directly mediate and arrange tourist experiences in the Zone. I was initially conflicted as to this new positioning; on the one hand it was, in terms of research costs, a welcome arrangement. It was also an exciting chance to be directly involved in the role of guide, to produce an autoethnographic account of a practice I had spent some time examining. On the other I was anxious that I would even be unable to fulfill this role (even if it was only ever as a secondary guide) and anxious still that this role would have a detrimental effect upon the research.

In the end, both these anxieties were put to rest. Days spent in the Zone recording the minutiae of tourist practices, observing Maxim and Yuri and talking with them about their role meant I was able to perform this role. The second anxiety took me some time to address. I realised this anxiety was a remainder of some desire for a distanced, objective researcher. A distance I had not put a great deal of effort in trying to achieve thus far. I realised that the issue was not that by being a guide I was somehow less objective in my research, but that it had fundamentally shifted the intersubjective relations of my research in such a way that I had a disproportionate impact upon the structure of experience. My anxiety was of power, not objectivity. As a guide I was (in the context of tours) prominently in a position of power vis-à-vis the visitors.

I decided that the best course of action here was to remain open and frank. I had always intended that my own presence in the research (whether analytical voice or actual involvement) would be clear. As such, any empirical material that appears in this thesis in which I was involved as a guide directly implicates me in that role. If certain actions are undertaken at my direction, I have not screened my involvement. When, for example, I point or otherwise bring attention to something, that will be part of my renarration, for the alternative is simply misleading. I remained open with visitors too. In interviews after the tour I began asking people for their reflections, opinions and critiques of the tour, including the guiding. This was a genuine desire on my part for feedback, not really because I wanted to be a better guide, but because discussions of this type helped illuminate the ways in which guiding was a structuring factor in meaning-making practices. From this feedback I was able to get a better understanding of my position, as guide, in negotiated meaning-making, and to engage tourists in describing the experience of being guided as a corollary to my experience as guide. Thus through transparent ethnographic accounts and an ethnography that takes into account both guiding and being guided, I developed a methodology that involved a variety of roles, responsibilities and varying degrees of effect, but that takes into account (if not overcomes) the power relations at the centre of the research.

Back in the bus again. As we approach the power plant complex, I pick up the microphone again to make a quick announcement. “No photographs are permitted from this point on” I say. “We’ll be able to take photographs of reactor 4, once we’re on the other side of the power plant facility, but for now photographs are not permitted in this area.” We stop by a bridge. On the one side stands a statue of Prometheus and the entrance to reactor one on the other a canteen. Large catfish congregate here, as they are regularly fed by workers as they pass over the bridge, as well as tourists. Yuri provides a loaf of bread and we pause for a moment to feed the catfish (image 20). I take the opportunity to talk with tourists, many of whom are still in awe of the fact that, yes, they are here. Right by Chernobyl.



Image 13: Pausing to feed the catfish (#p0965)

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The methods and context as outlined in this chapter are part of my general approach that appreciates the manner in which the world constantly exceeds our capacities. Whether these are sensory, representational or intellectual. The 'statistical method', it has seemed to me,<sup>30</sup> is entirely about producing knowledge that quite rigorously defines what is *not* known via that line of analysis. Scientific knowledge of radiation is largely statistical in nature, exemplified by the Sievert measurement of effective dose rate (see chapter five). Further still the quantum states of radiation are only ever defined by their being part of 'apparatuses' (Barad, 2007) and thus only ever situated, partial, never knowledges of radiation 'in itself

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<sup>30</sup> Though they do not appear in this thesis, I have both used and taught statistical methods in a professional capacity.

(detailed in more depth in chapter six). But beyond statistical, scientific or assemblages of apparatuses, knowledge in / of the Zone requires a fidelity to its situatedness.

Knowledge in / of the Zone is always situated, always partial (Haraway, 1988) and this is a theme that permeates throughout this research. This should not be read as a distance or withdrawal of the 'world' (as object of knowledge) from 'us' (as producers of knowledge). It is a slippage despite (possibly even because of) the constant impinging, penetration, irradiation of bodies and selves. This slippage is enunciated in various ways throughout the thesis, in stylistic, empirical and theoretical forms. Here the work of Krupar and her 'ethno-fable' (2007) provided inspiration. As in her recounting of an ex-military waste site's conversion to nature reserve, I utilise various strategies of ethnographic (re)narration and differing tonalities of voice. In Krupar's account:

the personal stories of the researcher bleed through the surface [...] embodied knowledge and self-disclosure take on a particular significance in the presence of large-scale technological-environmental disasters, [...] where the variability and duration of harmful waste and its biological effects are uncertain and never closed. (2007: 195)

The resonances for the Zone are clear, although there are significant differences in emphasis. For Krupar, this strategy is in response to an arena of competition, with a particular formation of 'the claims of scientific truth' mobilised in support of state enterprise. My story here has no such identifiable antagonistic position. Nor is it the case that differing knowledges enter into direct competition: Scientific knowledge of radiation, technological machines, embodied knowledge producing practices of walking, (not) touching, photographing and guiding and the experience of those who work in the Zone are not set against one another. They circulate together, fold into one another.

Petryna's *Life Exposed* (2002) highlights the multiple ways in which complex knowledge production in Chernobyl's aftermath draws people in in such ways that destabilise easily understood and defined agencies and subjectivities. In the aftermath, the known, unknown and part-known are in dynamic re-configuration, and within this people are variously subjects and objects, agential and passive (ibid.). The aftermath of Chernobyl, and the experiences of being in the Zone, disrupt easy accounts of embodiment, agency and subjectivity. All the while certain that 'the researcher is a part of this flux' (Krupar, 2007: 195). My writing and my-self are part of this flux, part of the dynamic of knowledge production. The stories that follow are situated, partial. In a wider sense this is a methodological and conceptual commitment to finding 'ways of knowing the indistinct and the slippery without trying to grasp and hold them tight.' (Law, 2006: 3)

To summarise this interest in knowledge production in the Zone, I turn to Mario Petrucci, physicist-cum-poet and author a collected volume of poetry on Chernobyl, who makes this assertion about the stories to be told:

Chernobyl is not merely something that went wrong or that happened *to us*, but a material expression of the collective human self, of what makes us us. Which is why the quantification of Chernobyl and its after-effects, crucial as it is, can never become our sole aim. Chernobyl stands to remind us that knowledge is as much qualitative as quantitative. *One of the chief outcomes of Chernobyl will be what we allow it to tell us about ourselves.* (2006: 258 emphasis added).

What follows in this thesis are not stories *of* Chernobyl. They can be said to be about the Zone perhaps in the sense of being 'out-and-about' (in) the Zone. Arguably "my" stories in the sense that they are, on occasion, auto-ethnographic. Mine too in the composition. This chapter is driven by an account of a visit that is a re-narration across multiple visits and data across trips. Elsewhere in the thesis I rely upon ethnographic vignettes of more specific moments. But not mine in the sense that they belong to an 'atomistic' narrator-subject that pre-exists in full prior to the Zone (Wylie, 2005). For, as much as the Zone denies an understanding of people as atomistic subjects and the sole agents in an otherwise passive world, this is not at the expense of a discussion of subjects and agencies, rather it is a shifting in the terms upon which those discussions can take place. This is not a project of "listening" to Chernobyl. As if all we need do is learn the right language or manage the correct disposition and the world will divulge itself (and in doing so reveal our true selves). In Petrucci's poetry that 'allowing' is not one of simply stepping back, being quiet. His poetry speaks of negotiation, trial, a lack of clarity, never as if the Zone had a burning desire to utter revelations about itself or ourselves.

Any such stories of ourselves that emerge do so through negotiation, consideration, a being-with that is without elected choice in entering, and with no small amount of antagonism. Nothing in the months I spent visiting the Zone suggested that it held any desire to divulge; though not for reasons that would affirm landscape as mute passivity. No communion here, no revelatory moment where the Zone speaks. Listening to the Zone we are more likely to hear the birdsong in Pripyat's ruins, so loved by the guide Maxim, joined in chorus by the chirruping of Geiger counters. It is in these moments (and so, so many others) that the stories emerge. It is in these moments where selves and worlds are found inextricably bound, yet uncannily alien to one another that the stories in this thesis are found. What is learned is uncertain at times, hazy at the edges, difficult to gather thoughts on, slippery. But things are to be learned from Chernobyl. Not least through practices of tourism.

## Writing tourism and the Chernobyl Exclusion Zone

The thesis



*Image 14: Taking photographs of reactor 4 (#p1182)*

The stop by the sarcophagus / memorial (image 14) is a fairly short one; just enough time for visitors to have their photo taken (often taking turns to pose with the Geiger counter) and we're off. The driver takes us around the outskirts of the power plant complex. A short while later and we turn right at a junction whereupon a sign marking the entrance to the town of Pripjat can be found, erected whilst the city was being built. The driver slows a little here for photographs, but we're not stopping today.

Soon we pass over an elevated rail crossing and reach another checkpoint. Pripjat has its own checkpoint; ostensibly to keep out those attempting to salvage metal for scrap. The checkpoint here is usually as perfunctory as that leaving Chernobyl; a brief headcount in both minivans and we're off again. After the break up of the Soviet Union, a lack of security has led to excessive looting, and is now heavily overgrown in places, a ruderal ecology, hybridised urban and natural environs.

I pick up the mic again. "This road we are currently driving down", I say, is the "prospekt Lenina, the main road into Pripjat". Four lanes wide and lined by rose bushes and trees it's now a bumpy ride along a narrow path between the new growth. Visitors have spoken to me before about the difficulty in imagining what Pripjat was 'once like', so I ask



Image 15: Entrance sign to Pripjat (#p0138)

them to look to the left. “Once this would have been wide avenue”, I explain, “with a wide pedestrian promenade, beyond that apartments, offices and shops”. Nowadays you might be lucky to catch a glimpse of the buildings through the trees; the promenade now totally obscured by both newly seeded saplings and mature trees. Behind me I hear a conversation about how it's nothing like *I Am Legend*.<sup>31</sup>

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Pripjat is, of course, nothing like *I Am Legend*. Or any of Hollywood's post-apocalyptic output for that matter. Where it does appear on screen it has been as resource for after-the-human thought-experiment documentaries from the History and National Geographic channels. Nevertheless, Pripjat still has something of the post-apocalyptic about it. As one visitor remarked; it “feels like the end of the world” (#i05).

What, then, is the meaning of somewhere feeling 'like the end of the world' if this is not to be taken as merely a reference to cinema? It is the case that some visitors do arrive in Pripjat looking for visual cues that remind them of this-or-that film, but this practice is soon replaced by one that doesn't find its referent in cinema. Importantly it is cinema that is found to be lacking. As if the best CGI cannot keep up with the actually existing disasters of the last century (Berger, 1999). Chapter two answers the question of what meaning might be

<sup>31</sup> A 2007 film starring Will Smith in an abandoned and partially overgrown New York

taken from 'post-apocalypse' if it were to be located in the Zone, rather than on-screen. Rather than dismiss this description as hyperbolic I argue that there is an ethical impetus; found in the reflections of tourists and concerns of tour guides, in recognising catastrophic events as 'end' points in an attempt to open up pasts, presents and futures to be thought anew. From CGI documentary and Hollywood disaster and post-apocalypse as well as some of the earliest examples of the post-apocalyptic narrative in literature through to climate change prophecy and nuclear annihilation I explore various formations of the post-apocalypse. In response I find that locating the post-apocalypse in the Zone avoids some of the pitfalls of these other post-apocalypses and offers a new reading of the post-apocalypse that does not dismiss or deny the 'feeling' that the Zone is, indeed, post-apocalyptic.

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The minibus parks at the edge of a large square. We're just outside one of the tallest buildings in Pripyat; the hotel *Полісся*. Everyone jumps out and Yuri announces that the first stop is the top of the hotel. Heading through the main entrance, the climb of the stairs always seems to maintain a certain tempo; as the dozens of footsteps on the tiled floors echo up the stairwell they have an odd metallic ring to them: Clank-clank-clank-clank as we walk to the top.

The top floor of the hotel is wet, mossy; small plants have begun to take root amongst the cracked tiles. Visitors peer in through the doorway, but few venture further. The balcony on the eastern edge fares better; open on three sides the sunlight has done a good job of keeping the floor dry and moss free. Here visitors gather; chatter (absent during the climb, drowned out by the echoing footsteps) picks up as we take in (and take photos of) the view.

Eventually we head back down. A few floors later a small group heads off to explore some of the rooms, and follow behind them. Most of these rooms are bare. Anything of value has been removed by teams of scrap collectors. In one room a pair of shoes is found. A visitor remarks that she has a pair, just like those. Other, small, everyday items are found in other rooms, each instigating imagined histories. As we reach to ground floor a group wanders through the reception room into a large, wooden floored room. Yuri explains that this used to be a concert and dining hall. The raised stage has now collapsed. Another visitor, behind me, says she can just imagine what it was like back then. Tables set out, a band playing. It must have been, she says, quite nice, what with that view across the square through the floor-to-ceiling windows.



*Image 16: A room at the top of hotel 'Polissya' (#p1367)*



*Image 17: Visitors gather on the top floor of the hotel (#p0978)*



Image 18: Pripyat as seen from the top of the hotel (#p0143)

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When exploring the ruins of Pripyat there are many moments for these kinds of 'imaginative histories' (Gregson and Crewe, 2003), triggered by spaces and objects of other lives. Chapter three is an examination of these various practices of meaning-making as undertaken by tourists. This is in contrast to a focus on offered interpretations. Indeed I argue that this examination of tourist subjects as imaginatively engaged is necessary precisely because tours to the Zone lack a certain scripted format associated with tourism performance. Chapter three draws on a range of work on ruins, 'second hand' or discarded objects, and the uncanny in order to analyse the manner in which meaning-making in Pripyat negotiates the uncanny (im)materialities of ruins and radiation. This chapter serves to highlight the importance of engaging with tourists as active subjects (as laid out in this introduction) and is relevant to the growing body of work on ruins (DeSilvey and Edensor, 2012). Drawing on the practices of illicit scrap collection (visible in effect, but rarely in action) I end by arguing that the metaphor of salvage (Williams, 2011) can be utilised to describe and examine these meaning-making practices that are orientated to both unknown histories and possible futures.

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After the hotel we pass across the main square of Pripjat towards the cultural centre. In this square once stood a large bronze statue of Prometheus. I leave the hotel through the old dining room this time, rather than the lobby. As I pass the threshold, I hear the Geiger counter in my pocket chirrup with urgency. I take it out to find that here there's a localised area of raised contamination. I point it out to Yuri, and tell him I'm not sure why. He says, given that it's in a depression by the side of the building, probably the result of the "washing" of the buildings (by both rain and some active cleaning efforts that were undertaken in the early parts of the liquidation effort) that would have collected the radioactive materials in puddles. It seems obvious, now.

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Chapter four begins with the forgetting of Prometheus' brother, Epimetheus 'the scatter-brained'. Where *ēpimētheia* is taken to be the 'return through the failure of experience' (Stiegler, 1998: 186) a problem is opened up for a phenomenological account of this failure of experience. Extra-sensory radiation requires a thinking through the limits to phenomenological accounts, and this is the project of chapter four. I explore this by beginning with the sublime, in a historical context, in the context of 'the nuclear sublime' (Nye, 1994) and put forward what I refer to as the 'Chernobyl sublime'. I then move on to provide an account of the exposure of Being by developing a post-phenomenological account that draws from Merleau-Ponty (specifically *The Visible and Invisible* (1968)). This is a response and development of various post-phenomenological accounts of landscape and subject such as that by John Wylie (2005). I inflect this through a reading of Luce Irigaray's writing on 'Being-with' to suggest that the 'reversibility of the flesh' is not as asymmetrical as Merleau-Ponty lays out. This results in a radical account of Being-with as an acknowledgement of the necessary passivity inherent to any and all activity; a reflexive return to an embodied subject that is always already exposed.

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We pass through the cultural centre and emerge in the 'amusement park'. In actuality this is a square that had been converted for the placement of a Ferris wheel, bumper cars, swing boats and a carousel in preparation for the upcoming May Day celebrations. The Ferris wheel is probably the most iconic structure of Pripjat.



*Image 19: The Ferris wheel in Pripyat (#p1097)*

At one end of this area is a patch of moss, a location often used by tour guides to provide a moment of spectacle. Here there is a large, localised, source of ionising radiation. Geiger counters crackle with urgency as tourists gather to take photographs. This whole amusement park (and Pripyat and the Zone in general) are dotted with these localised spots, the moss simply provides a visual cue. This tour a few visitors had rented the use of Geiger

counters, and they explored the cracking concrete hunched over these little yellow boxes, guided by their intermittent chirrups.

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Chapter five places the Geiger counter centre stage. It is based upon data I collected during the 25<sup>th</sup> – and last – tour I attended. During this tour I was left alone in Pripyat for the duration and collected 135 separate readings which I have used to produce the map that accompanies this thesis. My aim with the map is twofold. Firstly to explore the processes of guiding as a necessarily networked, technological practice. In this approach the Geiger counter is taken to be an active agent in the production of knowledge, as well as of touring subjects. I examine this role through the work of Bruno Latour, arguing for the importance of understanding mediators and translators not as discrete entities, but for all actors involved as co-constitutive. I find this argument is supported by the work of Bruno Latour, despite the overtly 'topological' format that Actor-Network-Theory can produce. Secondly, I examine the role of radiation, for which I draw on Donna Haraway's figure of the 'trickster'. It is my assertion that radiation is a prime example of the 'independent humour' of a lively, trickster world. Beyond a development of 'after' ANT approaches, this chapter provides a methodological and empirical examination of cartographic practice in geography. An opportunity to rehabilitate the practice of cartography that attempts not to resurrect the 'view from above' (Haraway, 1991a).

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The final stops in Pripyat are 'School number 3' and the large swimming pool (adjacent to one another). Visitors have to jump fences, crawl under low trees and push their way through tall grass to enter these buildings, which are not clearly visible from the road. The school is often said to be a particular highlight of the trip, filled as it is with interesting objects and spaces. Part of this highlight is the manner in which the school is introduced. As we enter the school visitors gather on the open ground floor near the rows of numbered coat hooks, windows on the other walls looking out into the courtyard. Once everyone is inside I explain that visitors have half an hour, or thereabouts, to move through the school as they wish before we move on, back to Chernobyl.

Half an hour later we are shuffling back into the minibus. I count visitors as they get back onto the bus, to make sure no one is still wandering through the school. Once everyone is safely back, I hop onto the bus myself. I knock my shoes against the step to the bus before getting on. A habit I have picked up over the weeks, instigated by a suggestion from some workers in the Zone that this might help knock off any radioactive particles amongst the

dust, vegetation or anything else the shoes may have collected. I have no idea if it works, but I now do so out of habit and without much thought.

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Though a minor habit, knocking my shoes is a performative attempt at bolstering boundaries. If radiation complicates any *assumed* separation of embodied self and world, there are still practices which hope to *achieve* some kind of separation. Chapter six begins with these performative practices of separation and boundary-making. This is a response to the work on bodies-in-ruins as porous (Edensor, 2005a; Dobraszcyk, 2010) as well as the wider context of the recognised multiplicity (Mol, 2007) of bodies as fluid / open (Longhurst, 2001). Rather than an a priori assumption of the boundedness of bodies, I examine practices which respond to a realisation of the radical openness of bodies. I argue this can be related to the navigation and negotiation of Pripyat's hybridised natural / urban landscape (Davis, 2002). This chapter draws on threads from each previous chapter; cities after-the-human, the negotiation of ruins, being-in-exposure and the active agencies of a wilful world. Each of these threads highlights questions of difference. In examining Karen Barad's (2007) analysis of 'apparatus' and quantum theory I argue for an understanding of difference as a produced and productive force.

### At the end of the day

Back at the Chernobyl offices there's a very short debrief. (Along with a welcome toilet break). This usually involves a quick go on the hand/feet radiometry machine and a quick brief on what will happen as we go back through the scanners (image 20) at the checkpoint. Once we get to this checkpoint I take a chance to thank everyone for participating in the research and explain that, if they chose to participate, I will hold an after-tour discussion in a café back on Independence Square in Kyiv. First drink on me.<sup>32</sup> The bus trip back to Kyiv is usually a sedate affair; fatigue has set in and many doze off for the next hour or so. I take this time to expand upon the notes I have taken for the day.

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The final chapter of this thesis offers an overview of the themes that run across this thesis. Though each chapter puts forward different arguments, themes emerge which are drawn together to highlight the contributions of this thesis.

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<sup>32</sup> This was a marginal research expense and was offered less out of a desire to provide an incentive than an expression of gratitude.



*Image 20: The 'scanners' at Dityatki checkpoint used when leaving the Zone (#p0579)*

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We disembark the bus where we got on, at Kyiv's Independence Square. I bid those leaving farewell and move with a group of visitors to a nearby café. I tend towards one particular café as its tables are on the square (away from the road) and it does not play music thus providing a clearer recording from which to transcribe. An hour and a half later and I am

packing away my equipment, and heading towards the metro. Soon enough I am back at Lukianivska, over 12 hours later, the *rynok* now long since closed. Before heading back to the apartment I stop at the 24 hour supermarket by the metro station to purchase a few things I will need to make dinner. I don't buy any mushrooms.

## 2. LOCATING THE POST-APOCALYPSE

### Welcome to the post-apocalypse

#### Theme Park: Apocalypse

In the event that half the metropolis is wrecked in the next earthquake (or riot, for that matter), Disney and Dreamworks can collaborate to reshape the ruins into a really stunning version of what Saint John of Revelation claimed to see at the end of time. Then the tourists' shekels will flow in like the Los Angeles River at floodtide.

- Mike Davis, *Ecology of Fear* (1999: 52)

Los Angeles' regular appearance in film as the archetypal city of ills to be destroyed at the hands of natural, alien, human or other disaster<sup>33</sup> is the departure point for Davis' commentary above. What Davis recognises here is that each catastrophe comes with its own remainder; a remainder that is politically ambiguous at best, and which does not necessitate a departure from business as usual. What Davis' criticism lays bare – amongst a scathing critique of the LA disaster trope in general – is the inability of the disaster movie trope from the 1990s to think beyond (temporally or otherwise) the spectacle of catastrophic Armageddon<sup>34</sup> even as this remainder is mobilised as threat, promise or ambiguously both. This unrealised promissory of the remainder of the disaster movie suggests more than a never-ending fulfilment of urbicidal desire, it hints at the possibility of finding meaning in such spectacle, yet regularly falters. For it is *after* (the spectacle of) The End that any such meaning (even if co-opted by Disney) might precipitate out. Repetitive annihilation of cities on screen opens a vacuum of thought that Davis' finds the perfect space for a Disney theme park of the post-Armageddon.

I would even suggest that the specific link to biblical Apocalypse would be far from necessary to bring the punters into Davis' Disney World: Armageddon. For a contemporary audience living after 'the end of history', familiar with Hollywood destruction and apocalyptic prophecies, catastrophe (simulated or otherwise) no longer needs biblical allusions to be enjoyed as the spectacle of the aftermath of The End. The front page of *The Sun* on 12<sup>th</sup> March 2011, the first print after the earthquake and tsunami in Japan, consisted entirely of a full page photograph of a destroyed settlement with the headline 'Apocalypse'. In the evening news, a BBC journalist, walking through the ruins of a town in Japan destroyed by the same

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<sup>33</sup> Most recently envisaged on film through alien invasion in the all-you-need-to-know title *Battle: Los Angeles*

<sup>34</sup> Indeed, as Davis points out, this inability is necessary for the movie to form the function of bringing to climax its driving racist desires.

earthquake and tsunami that were the cause of the only nuclear disaster to receive the same IAEA 'score' as Chernobyl – describes the landscape as 'like something out of a Hollywood blockbuster'. No horsemen needed; the apocalypse here as heuristic device drawn from the cinema screen. Rather than existing as cultural synthesis of catastrophic events, filmic urbi-cide becomes the reference; and in referencing only itself, the simulacra of the Apocalypse is its own revelation.

Maxim, more than Yuri, would often stick to a specific route through Pripyat and its buildings. This changed during my 20th visit to the Zone during which Maxim took the tour group to the “Jupiter Plant”; a factory and warehouse on the edge of Pripyat. He told me, as we arrived, that he had made this decision after feeling bad for me, having visited the same locations many times now. I explained that visiting the same locations multiple times was, actually, quite useful for research. Having said this I was, nevertheless, interested to see a location I had thus far only heard about. Indeed, one place I had heard about this was as a location in the S.T.A.L.K.E.R. computer game franchise. The factory itself was a large, echoing building which was full of many machines in various states of disrepair.

After the trip I sat down with six of the visitors for a group interview. Very quickly, discussion of the Zone in relation to fictional settings became a focus for this discussion. Amongst the interviewees were Ishmael, a British man in his early 30s who was visiting the Zone alone as part of his week long visit the Kyiv and Lviv and Yvette, an Australian student in her early 20s who was visiting with her partner Graham on a long trip through a number of countries in eastern Europe.

In describing his experiences of walking through Pripyat, Ishmael noted that it “reminded me very much of a horror film” (#i29), something he had mentioned earlier during the trip (#fn20) and which was responded to by another visitor by directly relating it to the TV series X-Files. This was agreed upon by the other interviewees, though it was noted that what it felt like was not being in the film as much as a possible setting for a film. Yvette spoke further on this, commenting that it was “a bit like a stage set” but lacking in the actors and performers. Whilst, visually, it may have looked like a stage set, or possibly a film studio's prop warehouse, it also, for Yvette, recalled video games. Specifically she mentioned it felt like “1st person” games in both the setting and the momentum and manner of movement through the space.

Here fictional spaces (the referents of movies and games) and their staging (stage sets, 3D game environments) are related to as reference points for the Zone. These references are an indication that the Zone – especially the evacuated, abandoned, in-ruination remains of

Pripyat – does not escape this inverse reference of reality to fiction. Yet, with the references to the feel of the space beyond simply visual analogy, there is more here than the ways in which popular culture becomes a referential resource for visitors getting to know the Zone. As such, I wish to move beyond simply describing the 'hermeneutic circle' (Caton and Santos, 2008; Jenkins, 2003) by which visitors come to the Zone with various images (photographs of Pripyat on the internet, film and game references) in mind and reproduce these visual grammars.

For despite these references to movies, games, and post-apocalypse otherwise, this is not the only way in which the Zone can be said to be post-apocalyptic. Rather than dismiss any reference to the Zone as post-apocalyptic, I instead argue that there is a political project in an affirmation of the Zone as post-apocalyptic. Not as an echo of a future or Hollywood writ large, but post-apocalyptic *in its own right*. In this chapter I argue that the Zone offers a way out of those vacuums of thought which would otherwise be colonised by Disney World: Armageddon though a post-apocalyptic politics that is neither threat nor an (in thought or in practice) impasse.

### “Let's do something real”

Real stories always come off worse

- Delphic, *This Momentary* (2009)

The music video for Delphic's dance-track *This Momentary* consists of little more than shots of various locations and people in and around Pripyat and Chernobyl. Nevertheless, it was nominated for three awards in the 2009 UK Music Video Awards. Almost every shot in the video is from a still camera. Bar the occasional panning shot which traces weathered concrete walls, or which pulls back, but, in increasing the field of view, never completes a revelatory moment of any wider context. Famous sites (the Ferris wheel, Reactor 4) appear with little purpose over than to make sure we know that they went all the way out to the Zone. The only context for these images comes from the constant refrain within the vocal track to 'let's do something real'. A refrain amongst a music track that is as formless as the video; lacking any centre-point or structure, almost demanding that we pay it no attention as it aborts each attempt to reach crescendo. As if Delphic aren't really convinced with their own repeated injunction, the images serving only to mock what was already a half-hearted desire, as the music finally draws to a close and the vocal refrain on repeat is pulled apart and put together, though never quite to reform.



Image 21: Employee of Chernobyl InterInform stands in a road in Chernobyl. Still from *This Momentary* music video

Critique of a banal bit of music and its video aside, there are a few introductory points to be drawn from this. Though recognisable in form, images of reactor 4, the Ferris wheel, abandoned dolls and toys, radioactive warning markers and so forth are not easily understood signifiers. It's never clear (whether in music videos or elsewhere) quite what meaning they are intended to convey. This is certainly not to suggest such images are devoid of meaning, rather that they are not so overly coded and tightly circulated as to have proscribed semantic relation with denotata. Such lack of easily accessible meaning,<sup>35</sup> is not taken as impetus to code certain interpretations and to 'manage' the message by tour guides, contra to much of Lennon and Foley's empirical focus on Dark Tourism sites (2000). Amongst the tour guides there is no strict intention that tourists leave the Zone with a certain understanding, bar a general willingness and desire to deny certain rumours. Yuri occasionally recounts a visit by a camera crew who had paid to visit the Zone with the sole intention to film mutants; expecting something akin to Hollywood horror. Yuri's recalls his initial exasperation turning to frustration, the camera crew eventually leaving disappointed. Whether the Zone or the ruins of a coastal Japanese towns, camera crews, photographers and journalists often go looking for that inverse reference; for the Hollywood found in the real. This desire to find something real – as long as all that is found is something akin to fiction – is just as unconvincing as the refrain as found in *This Momentary*.

By 'locating the post-apocalypse in the Zone' I do not wish to follow journalists and film crews in seeking out a fantasy (Hollywood trope or otherwise) amongst real disaster; not least as I found no such desire was ever expressed to me in such terms by visitors. Indeed, an

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<sup>35</sup> In the literature on tourism one might call a site fully 'sacralised' (MacCannell, 1999) once short-cuts to meaning have formed through a circulation of images; a circulation which would include the hermeneutic circles of tourist photography (Urry, 2002). No such sacralisation or semantic short cuts exist for many of the common images of the Zone.

almost romantic notion to see things 'for real' was more often expressed, in contrast to Urry's (2002) 'postmodern tourist' who enjoys and even seeks out the staged and choreographed aspects of tourism. Unlike the refrain in *This Momentary* to 'do something real' that falters and fades when confronted with the Zone, most visitors to the Zone were thoroughly engaged in producing meaning and knowledge from the visit. An engagement that remained despite the lack of interpretation management, despite having never been proffered an easy regime of meaning by tour guides. This is not to say such meaning comes easy; faced with the uncanny landscape of the Zone, many discussions held after the tour were full of visitors not being sure what to make of their visit (occasionally respondents expressed annoyance at the fact that they had been offered no way to synthesise the experience). This chapter takes inspiration from the (fragmented, difficult) perseverance of tourists in engaging with the Zone to analyse the various 'post-apocalyptic' sensibilities that are neither a sensibility that shys away, as Delphic do, nor a sense in which lived reality is but an echo of Hollywood, as journalists and mutant hunters find.

This being said, the post-apocalyptic genre of fiction and fantasy was hardly an uncommon reference point for visitors. Albeit contra to the manner in which Žižek finds Hollywood dreams of catastrophe played out 'for real' in the fall of the World Trade Center towers (2002). Rather than real life found to imitate Hollywood dreams of destruction, this an awake world, destroyed. CGI spectacular finds itself unable to keep up fidelity with apocalyptic landscapes of actual disaster, and, in turn, the landscape of the Zone and Pripjat has been folded back into circulations of representation in such big-budget US documentaries as *Aftermath: Population Zero* (National Geographic Channel 2008) and *Life After People* (History Channel 2008). Drawing on the knowledge of urban ruin produced from Pripjat's decay back into CGI spectacle, these documentaries are the product of what James Berger's calls a 'strange prospective retrospective' (1999: xiii). A position that finds what a world beyond/after civilisation might look like not in fiction, but in the landscapes of major events in the 20<sup>th</sup> (and 21<sup>st</sup>) centuries. In this, the Zone needs no more than its situation as the location the most significant nuclear disaster of the 20<sup>th</sup> Century to draw tourists, with no need of any intervention by any Disney or Dreamworks. As such, the Zone is much more than a place where one can walk through the ruins of Hollywood in actuality. It is a space where the thinking of possible futures (including a beyond the human), and encountering half-known pasts lends itself to an uncanny sensibility that is more than simulacra of the screen. Locating the post-apocalypse in the Zone is, then, part of a project in finding our own world post-apocalyptic. Unevenly (Williams, 2011), uncannily (Berger, 1999) and materially so (Keller, 2004).

No need for theme park simulacra at the Chernobyl Zone, then. Christiaan, whom I spoke with as part of a group of six respondents from the trip, was a Dutch student travelling through Ukraine and Poland with a friend described one of the draws to the Zone for him, a reason for visiting, as offering him a chance to:

*“see the overestimation of humanity. Where humans again overestimated themselves with the lack of knowledge, and, yeah, see the scratch on the Earth here.” (#io4)*

Here we find a post-modern sensibility; a looking back at the hubris of industrial, technological progress and knowledge and working through that mode of reflection through visiting a landscape of one of the largest modern disasters. Lennon and Foley claim such a sensibility is central to practices of what they term Dark Tourism (2000). Giving three reasons as to why: Global communication technologies creating interest, doubt about modernity, and commodification. Tourism in the Zone involves little to none of the last, only in part the first, but primarily the second, whereby (as can be seen in the above interview quote) “the objects of dark tourism themselves appear to introduce anxiety and doubt about the project of modernity” (ibid.: 11). Yet this bent towards a post-modern scepticism is both exemplified and disrupted by one visitor – a nuclear power station engineer – who visited precisely because Chernobyl, for this profession, was *the* “never again” case study. Tempered too, in part, by those visitors who are certain that the disaster is entirely the product of a ‘Soviet mentality’. In actuality, then, the aftermath – the remainder of catastrophe – is a lot more messy and more politically ambiguous than a Disney theme park.

### Towards a post-apocalyptic sensibility

Whilst it is evident that apocalyptic imaginaries pre-date the Hollywood tropes, I want to begin here by noting trends in contemporary apocalyptic imaginaries in popular media (particularly film), which indicate a shift in focus and theme (although by no means a radical break) and which suggests a differing mode of engagement with possible futures. This is a shift towards *post*-apocalypses, an imaginary concerned with the remainder of an event or point in time considered final, rather than with the possibilities and content of that event itself. Any critique of the post-apocalypse should do more than to simply dismiss, as easy as it may be, a certain hyperbolic heuristic of apocalyptic end times found in bad journalism (though there is much of it) or bemoan the lack of fleshed-out alternatives in the futures of contemporary popular film and fiction (although there is a dearth). These are the kind of post-apocalypses and dystopias which too often hold the future hostage to the present; denying a future imagined as different through a futile cynicism which simply accepts a drive to-

wards self-induced catastrophic climax, as if it has already happened. The apocalyptic imaginary; the catastrophe as the model for our times, has not gone away. In response, a critical engagement with nuclear catastrophe should locate, diagnose and make meaningful events that rupture and hold on to the impossibility of 'business as usual' that apocalypse – as catastrophic end of the world as we know it – promises. This chapter, then, is a tentative attempt to rehabilitate (post-)apocalyptic sensibilities, albeit with a critical eye to the manner in which the apocalypse has become little more than a hyperbolic heuristic.

To unearth some of this critical purchase, and to engage more fully with the contemporary post-apocalyptic imaginaries enunciated by visitors to Pripjat, I develop this sensibility with a view to a number of post-apocalyptic fantasies. Evan Williams in *Combined and Uneven Apocalypse* describes the work of post-apocalyptic fantasy as;

a structure of simultaneous approach and deferral, appearing to work through possibilities while also foreclosing them [...] They are symptoms that actively try to work through their absent cause, and they are the fantasies constructed around the difficulty of that working through. (2011: 10)

As well as important points of reference for engaging in the post-apocalypse, fantasies help illuminate key tensions of the post-apocalypse. Yet here I do not aim for yet another reflection on the apocalyptic trend in postmodern culture. Rather the claim is that the post-apocalypse is not just fantasy, it can be located, diagnosed and is a lived and material experience; uncanny and temporally ambiguous. There is no need to chronicle the increasing prevalence for a post-apocalyptic imaginary (as opposed to the disaster movies of the 1990s discussed earlier in the context of Davis' work) in contemporary cinema and fiction (nor of the nuclear apocalypse genre of the 60s to 80s), beyond a recognition that this a context in which the following discussion takes place. Instead, where I do examine various (post-)apocalypses in film, documentary or fiction these are specifically chosen because they were, at one point, directly referred to by participants.<sup>36</sup> The only exception being a short analysis of some examples of what are very first appearances of a post-apocalyptic (as opposed to catastrophic end-of-times) narrative in western literature, given that I feel the sensibility within these texts is similar to that which can be identified in contemporary post-apocalyptic film.<sup>37</sup>

The main contention of this chapter then, is that contemporary (read: postmodern) post-apocalypses differ in important ways from historical eschatology, and that such post-apocalyptic imaginaries are important to the ways in which visitors to the Zone derive expect-

<sup>36</sup> For that reason the film *Chernobyl Diaries* (though not post-apocalyptic per se.) is not mentioned, for it had not been released at the time of the research.

<sup>37</sup> Including both environmental concerns and the 'death-of-civilisation' motif then identified with Pompeii. Though without the kind occasionally appearing trope of a return to frontier society that is specific to a US historical and cultural imaginary.

ations, interpret experiences and consider possible futures. From this, I argue that there remains an important need to differentiate apocalypse from cataclysm, disaster and catastrophe, despite it often slipping into synonym for these, and that there is a political project in taking seriously the contention that our contemporary material lived experience is post-apocalyptic. I begin with a post-apocalyptic sensibility that is concerned with urbanism; cities and their fall as concrete metaphor for the fall of civilisation (here the fall of the USSR) and for the demise of the human species and of thinking of the after-the-human as a reflexive process of thinking the human. This is followed by a nuclear sensibility; of the positioning of Chernobyl as nuclear apocalypse as an opening up of possibilities of thought. I end with the various temporal sensibilities such a post-apocalyptic politics must navigate that – in response to the mobilisation of apocalyptic imaginary as threat – locates the post-apocalypse in the Zone in a manner that neither holds the future as determined, nor the present as determinate of a given future.

### The Post-Apocalyptic City

#### Worlds with and without us

Despite ongoing human activity (not least tourism), Pripjat has a featured position in 'after-people' thought-experiments in documentaries, books and elsewhere. An early appearance in its role as existing example of what might happen to urban buildings were people to suddenly disappear (or die) can be found in a *New Scientist* article of 1996 in which a description of the growth of oak forests and marshlands and the sinking of the rubble is followed by a joyous note that, in such an eventuality (the complete annihilation of humans) "London is no longer a blot on the landscape" (Spinney, 1996: 31). However it is a later volume; *The World Without Us* (Weisman, 2007) that was most often mentioned by tourists, as well as the various documentaries inspired by Weisman's thought-experiment and research. Weisman specifically refers to the Zone as example of what would happen – given the premise of the book is instant and total disappearance of humans – once the hundreds of the world's nuclear plants are no longer maintained. On the presence of avian life in the Zone, he remarks that 'It seems so normal, as if apocalypse has turned out to be not so bad after all. The worst happens, and life still goes on.' (2007: 214) Going on to note this return to nature/normalcy in Pripjat, ('an unlovely cluster of concrete 1970s high-rises') where 'returning poplars, purple asters, and lilacs have split the pavement and invaded buildings. Unused asphalt streets sport a coat of moss.' (ibid.: 216) Here, then, is the first feature of the post-apocalyptic

Zone: A landscape of a possible future without people accessible not only to thought, but to empirical account. The post-apocalyptic Zone will involve a coming together of the experience and events folded across times and spaces both known, knowable and imagined.

The key point of this thought experiment, whether Weisman's book, or documentaries commissioned by the History (*Life After People* 2008) and the National Geographic (2008) channels is to examine what of 'us' remains when 'we' have gone. (As if all we needed was the big budget special effects of the History channel to deconstruct that perennial thorn of the 'human-nature binary'.) In a deviation from the usual spectacle of the catastrophic End, both Weisman and the documentaries simply state that the how and why of the disappearance of people is neither here nor there, all that is important is that the thought experiment begins with everyone blinking out of existence, rather than some cataclysm that would effect the world more widely. On this, Weisman notes – citing patches of albino feathers in swallows and life-cycle changes in voles – that, despite the apparent normalcy after the apocalypse, 'Life goes on, but the baseline changes' (ibid.: 214).

Evan Williams provides a categorisation of the role of the city in post-apocalyptic fantasy. Here we have 'the city as ruins emptied of human life, a melancholic reminder of the voluntary extinction of the species at our own hands.' (2011: 159) Here there is a clear narrative being mobilised; a reclamation by nature. For as much as Weisman's intention may in fact be to highlight the *impossibility* of a 'world without us' – that this is a world irrevocably changed by humans – there is a sense in which nature may remain to instigate a reclamation of our destructive effect. Reflecting upon his visit to the Zone, Ben, a visitor in his late 40s from Canada who was travelling through Russia and Eastern Europe with a Canadian friend who has Ukrainian ancestry, found in the Zone what he had previously encountered in Weisman's thought experiment:

*Ben: "I found it interesting how that city pretty much has been reclaimed by nature almost. I read the book two years ago, The World Without Us."*

*Nick: "Ok, yeah?"*

*Ben: "And he talks about Chernobyl in there, how, humans pretty much did disappear almost overnight, which is the premise of this book. And twenty years later, that city, there's no main street boulevard, there's one tiny little narrow road with trees threatening to take it over and there's trees growing in the top floor of that hotel and wild boars roaming around."*

*\*pause\**

*Ben: "I think he talks about it [Chernobyl] in two sections [...] as an example of how nature will take over human structures and also how even though there was this huge nuc-*

*lear explosion, animals are living there not that long afterwards, and presumably they've adapted or evolved to be more resistant to radioactive dust and life goes on, it's not as uninhabitable as people think. Maybe it still is for humans, but birds and boars and insects are still living there.” (#io8)*

This sense of wonder at a resilient nature was shared by many. The tour guide Maxim was particularly fond of the bird song; the variety and density of which he was certain he could not hear elsewhere. Weisman too finds this duality; a world changed noting both that 'anytime we raise the natural background dosage, we force living tissue to respond.' (2007: 207) and later writing at the wonder of reclaimed toxic and radioactive waste dumps for (often thriving) natural habit. Ben's description of the trees in the boulevard as “threatening to take over” was spoken without a hint of alarm; the trees may have a clear intention, but this was hardly seen as malicious. This is what Williams' terms the 'gentle reclamation' mode of the 'war' between city and nature; a 'lyrical melancholy of the abandoned zone quietly reclaimed by natural processes: nature is what remains and gently recolonizes, after we're gone.' (2011: 173) There is, however, Williams argues, a limit to this train of thought with regards to the post-human; remaining 'in thrall only with the possibility of its own death and the non-subjective processes that will come along and swallow up the ruins of humanity ... it is the end of politics, the end of the thought of intervention in the patterns of history.' (ibid.: 164)

Nevertheless there is a certain pleasure to encounter, as a tourist, a landscape with so little maintenance<sup>38</sup>. In reflecting upon its difference to other sites (specifically Auschwitz), Ben went on to remark;

*“It was probably one of the first tours I've been on where safety wasn't really an issue and there was broken glass everywhere and nobody had made any effort to clean it up. And it felt a lot more like I was the last survivor of a nuclear apocalypse and I'm walking through the wreckage, and less like this is just a museum.” (#io8)*

I met Robin after the end of my pilot research whilst in Odessa. A British student, he was backpacking through eastern Europe and had previously visited the Zone. He had specifically sought the destination as a unique place, and his sentiments echo Ben's:

*Nick: “how did that make you feel being in that space?”*

*Robin: “Like a survivor” [later] “you get into your [...] Armageddon stories, end of the world stories, I think, with Pripyat.”*

*N: “You were talking about the apocalyptic end of the world. Was that one of the draws to that place?”*

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<sup>38</sup> Maintenance being another aspect of Williams' perceived 'war' between nature and city.

*Robin: "Yeah, definitely. It's a unique place in that sense. Where can you go and feel like you've survived the end of the world?" (#105)*

Here we have a clear situating of Pripjat and those who visit as within the post-apocalypse, and in more than just an imagined sense. Through a folding of temporality, Williams' (2011) 'melancholic reminder' of what is yet to come and Berger's (1999) 'prospective retrospective' – spaces otherwise in thought alone – find empirical countenance in Pripjat's ruins.

### The world without the Soviet

If Pripjat's present works as an imagined future's past, then its past is no less of interest, and no less apocalyptic. The people-less world thought experiment may have a lineage to be drawn from a romantic motif associated with ruins; that of the inevitable fall of civilisation. Again we find countenance in Pripjat; for if the Chernobyl disaster is oft cited as the beginning of what would be the end of the USSR then the ruins of Pripjat stand as a Soviet Pompeii. Robin again:

*"it looks Soviet in so many ways. There's, partly there's so many reminders around [...] But you can still identify with it, even with that architecture, it still feels like the end of the world, you survived the nuclear holocaust and, where are all the people?" (#105)*

Despite, then, the Chernobyl disaster being the beginning-of-the-end for the Soviet world; the city still feels like the end of *the* world. Our world. Unlike the ruins of civilisations past, Pripjat stands not as symbol of the end of an empire, but an end point for a collective world. One should here state that people are –unlike those of *The World Without Us* – not gone. Civilisation fell, but people remained. Yet the important moment here is that of identification. This Soviet ruin not so alien and Other as to disrupt the 'feel' of the end. For any post-apocalyptic sensibility to be meaningful it affords a sense of familiarity yet at the same time uncannily, hauntingly force an awareness to the presence of multiple absences and unfamiliar and novel content and forms. Pripjat features centrally in the ways in which visitors engage with possible futures, as well as unearth unfamiliar Soviet pasts. Fixed somewhere in the past yet envisaging possible futures, familiarly urban yet architecturally alienating, culturally recognisable in places, but still very much that of the Soviet 'Other,' expressed by one visitor as a kind of 20<sup>th</sup> century Pompeii.

*Ben: "I grew up in the Cold War, in Canada [...] One of the things I was interested in was seeing Pripjat as kind of Pompeii town, frozen in time, see what life was like right back when I was being told these guys were incredibly evil. One thing I didn't know was this*

*town was built in 1970 and was a model town. He [the tour guide] called it a super city, something to show off the glory of the Soviet. I found that pretty interesting.” (#io8)*

Such ruminations were often then compared to visitor's own home towns. After my eighth visit I interviewed two men in their late 20s who were travelling together. Jason, for whom this was his first visit to Europe, found that despite a noticeable difference between north American and Soviet urban spaces, he still found himself thinking about urban futures back home:

*“I would say it definitely felt like a Soviet city, which I may not have been able to say a month ago until I'd actually seen several Soviet cities so that's more of a comparison than 'I know what a Soviet city looks like'. It was still based on a very weak knowledge of what a Soviet city is, um, but at the same time I do remember thinking about New York city, which is the city that I grew up near, and wondering what that would look like if we'd left it alone for 25 years.” (#i12)*

Visitors from the US had the chance to compare Hollywood representation of their home city, or cities they knew well, destroyed with what they now, being in an abandoned city 'for real', might imagine it to be:

*[continued from previous] “And as cheesy as this sounds, I had a brief flash of the movie Twelve Monkeys. [It] deals with New York city having been somehow abandoned, it actually made me realise the movie did not do a very good job of what it would look like.” (#i12)*

Yet, with echoes of Delphic's faltering request to do something real:

*“The real thing was much scarier than the Hollywood thing.” (#i12)*

This 'Soviet Pompeii' is found to be rife with symbolism; not only the remains of a fallen empire, but moments of a lost quotidian found whilst exploring the ruins. One of my first visits to the Zone comprised of a small group; amongst which were a duo; Mick and Peter. A couple for friends in their late 40s from the US, They had been travelling through Ukraine specifically taking in what they classed as “obscure locations”. They spent much of their time in Pripyat remarking on the rich symbolic value of the landscape. “Radioactive stinging nettles. That's a metaphor if there ever was one” and the metaphorical power of the “symbolic, rusted Ferris wheel” (though without suggestions as to what the metaphors may allude) juxtaposed with homely artefacts recognisably part of personal pasts and presents. Speaking with them after the day, the interview ended with a recital of a poem, the last lines of which read:

Nothing beside remains. Round the decay  
Of that colossal wreck, boundless and bare  
The lone and level sands stretch far away.

- Percy Shelley, *Ozymandias* (1818)

A landscape of the post-apocalypse found in the Zone might slip easily into being considered an end only for the “glory of the Soviet”. What we have then is, at first hand, an arguably confused temporality. A landscape of a future without any human beings experienced in the present (even as people traipse around it and pick it apart for symbolic (touristic) and material (scrap) value) but stuck (in stasis even) in the past. Echoes of a partially known, rumoured Other. The landscape of the Zone is all these things (and more). As the USSR's Pompeii or an echo of a possible future after the fall of all civilisation, Pripyat's ruins can be located in that romantic tradition. It is for this reason I next turn to early, and what are probably the very first appearance of the properly *post-apocalyptic* in literature. Within which can be found the sensibilities inherent in much contemporary post-apocalyptic. However, this sense of folded time is to be found alongside by yet another sensibility, one which begins to appear in more recent imaginings of the post-apocalypse: That, standing in Pripyat – in a landscape that, as from the interview quote above, “feels like the end of the world” – one might be to find that things feel a little too familiar.

Before discussing *Ozymandias*, the earlier conversation had been far from other expressions of the fantasy of a world without people in an imagined future:

*Peter: “I think the thing that really impresses me about Pripyat is that it's really not that unlike any Soviet city. We were just out of Tula, [it's] ringed with abandoned Soviet factories which look pretty much like what we saw today. They were abandoned for economic reasons as opposed to radiation, but there were these big concrete shells, all the metal fittings had been stripped, everything of value has been taken from them, the leaves are blowing in, there are trees growing in them, and, just about any Soviet city you went to, because they had so many factories that shut down after the USSR broke up, that, Pripyat is really, it's shocking the extent to which it is not unusual. And even in the US there is plenty of housing, I mean, the, my home town of Stockton has got about 15,000 abandoned houses in it right now just because of the mortgage crisis that the Americans cooked up for us.*

[...]

*“It's a nice metaphor or a compact, understandable place. It's a lot easier to understand what happened to Chernobyl than it was to understand what happened on Wall Street. The same kind of, explosion.” (#io4)*

What emerges here is an uncomfortable sense that although recognisably post-apocalyptic, the Zone is eerily not too dissimilar from spaces of everyday lives. Though Chernobyl's disaster may seem more comprehensible than contemporary crises, the difficulty, or unwillingness for Mick and Peter in defining the metaphorical import of its landscape belies the complexity. Much like that other much-photographed ruined city of Detroit has become problematic synecdoche for the unevenly experienced catastrophes of contemporary capitalism, reading Pripyat solely as a 'Soviet Pompeii' bypasses the complexity of its spaces, meanings, histories and futures.

### Early modern pessimism

I form no expectation of alteration for the better, but the monotonous present is intolerable to me.

- Lionel Verney, narrator of *The Last Man* (1826)

These are the last lines of Mary Shelley's *The Last Man* (1985 (orig. 1826)). In it we find the prime function of the post-apocalyptic narrative to be similar to that of dystopia: passing comment upon the present by writing the present as the history of a possible future. Except here the intimation differs from the usual use of dystopic writing as a warning of what *might be*, rather here we find that the present condition *is currently* one of post-apocalypse. For these lines are clearly written as Shelley reflecting upon her own time<sup>39</sup>. In it we find the lack of hope for a future differing from the present and the resultant sense of stasis. What sets this work apart too is that in *The Last Man* – probably the first example of secular post-apocalyptic narrative – there are found the beginnings of an apocalyptic imaginary based upon cataclysm (understood as 'natural' rather than divine in provenance) and human causes. The apocalypse happens in a secular fashion; brought on by plague and war there is an absence of expectations of or any instances of divine judgement or intervention before, during or after.

Yet before the post-apocalypse was written, it had already been found and located at Pompeii. As Davis notes, those last thoughts of Shelley's *The Last Man* take place in the ruins of Rome's Colosseum; a staple of the Romantic reminder that all civilisations shall fall. Mike Davis (1999) traces the 'pessimism' (in *The Last Man* and through to contemporary film and literature) behind the largely anti-urban post-apocalyptic sentiment to the unearthing of Pompeii. As, amongst other things, it is taken to represent a reminder of the impermanence of civilizations in response to a rhetoric of progress. Here too are the beginnings of an apoca-

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<sup>39</sup> The book sees every character (each character being based upon a number of writer and artist friends of Shelley's) bar one killed off one by one as Shelley works through in fiction what she sees as the death and failure of the Romantic movement in her own time (Seed, 2000)

lyptic imaginary located in (natural) cataclysm rather than (biblical) Armageddon. Here is the potential of urban ruins to be invoked as *memento mori* on the scale of civilisations rather than individuals. For Davis, the late 18<sup>th</sup> Century sees the beginnings of a shift away from 'optimistic' futures of the Enlightenment to a pessimistic one.

The Lisbon catastrophe, together with the rediscovery of Pompeii and Herculaneum only a few years earlier, were profound shocks to the philosophical "optimism" (a word coined in 1737) that had infused the early Enlightenment ... Lisbon and Pompeii – and, later, the French revolutionary Terror of 1791 – became touchstones of a fundamentally modern "pessimism" that found its inspiration in historical cataclysm rather than the Book of Revelation. (1999: 283)

This kind of pessimism becomes apparent in Stuart Jeffries' *After London* (1905 (orig.1885)); another early post-apocalyptic novel here predicated upon the biological unsustainability of industrialising London and resulting natural cataclysm.

The deserted and utterly extinct city of London was under his feet.

[...]

the earth was poison, the water poison, the air poison, the very light of heaven, falling through such an atmosphere, poison. There were said to be places where the earth was on fire and belched forth sulphurous fumes, supposed to be from the combustion of the enormous stores of strange and unknown chemicals collected by the wonderful people of those times. (chpt. XXIII)

Both *The Last Man* and *After London* are predicated upon natural cataclysm, but in *After London*, the exacerbation by contemporaneous human activities, a feature of both narratives, is more starkly highlighted. What can be seen clearly in both these novels is a key feature of the post-apocalyptic narrative: not only – not even – a vision of the future, but a commentary on the present. We are all post-apocalyptic. Described by Goode, *After London* can be seen intended as commentary on contemporary developments.

This is both history of the future and analogy. Future London is also 'darkest London', the swamp is an ecological disaster and a metaphor for the moral degradation of a divided society proleptically announced by the double world of the unnamed paradigmatic 'city'. (Goode, 1992: 17)

*After London* shows clearly how, from the start, post-apocalyptic imaginaries encompass both visions of the future (told as histories) which are simultaneously interpretations of the present. The assumption that human causes are enrolled in the apocalypse is important here. Despite being the result of natural, volcanic cataclysm, Pompeii has often been represented as a centre of moral corruption, without there being much evidence for it beyond anxiety over a few pornographic murals. *The Last Man* and *After London* take on what they deem

to be the immoralities of business and industry. Later, in the second half of the 20<sup>th</sup> Century, the post-apocalyptic narrative returned in force. This time the development of methods to control nuclear fission added nuclear weapons and reactor meltdowns to the roster of human causes. More recent still we have the spectre of apocalyptic climate change. With *The Last Man* and *After London* we can already find key features of the post-apocalyptic narrative; (1) that the apocalypse derives not from divine intervention but natural cataclysm *exacerbated* by 'human folly', or that folly alone. (2) That any fantasy of a future (post-)apocalypse finds its referent in past and present events and places. (3) Thus, it acts as both history of the future and analogy of the present. All of these three forms can be and are found in the Zone as experienced by visitors; firstly the Zone as the aftermath of the post-human, secondly the reference to the Zone as a Pompeii and finally the Zone as eerily familiar with regards to contemporary crisis.

Davis makes an important distinction between the status of the urban in earlier and more recent apocalyptic fantasies. For Jeffries, in writing *After London*, London was understood to represent a whole civilisation. The End of London through natural disaster was The End of (a) civilisation. The destruction of cities in postmodern (post)apocalyptic scenarios, Davis argues, is one where the 'obliteration of Los Angeles [...] is often depicted as, or at least secretly experienced as, a victory *for* civilization.' (1999: 277 original emphasis) This is a notable trend, whereby 'increasingly, in these "post-modern" times, cities are depicted as sites of ruination, fear and decay, rather than ones of development, order or "progress".' (Graham, 2004: 188) In an overview of US post-apocalyptic fiction, Abbott (2006) recognises this trend, noting that 'when cities do appear in postapocalyptic fictions, they are dangerous and deadly far more often than desirable, bearing the burden of old times rather than the hopes of the future.' (ibid.: p.177) Nevertheless, cities play a 'contradictory role'; 'they are mythical places of knowledge, repositories of learning, and valuable artefacts, but they are also dangerous. They may still be radioactive. They may be filled with mutants and monsters. Even their knowledge itself may be dangerous.' (p.189) This ambiguity towards the urban is a feature of a post-apocalyptic sensibility. Pripjat standing not as some reminder of urban ills, but as a reminder of the human: For without cities, only the Geiger counter distinguishes a post-apocalyptic landscape from 'wilderness'.

*The Day After Tomorrow* (2004) (where the northern hemisphere<sup>40</sup> is plunged under water and ice due to 'catastrophic climate change') differs from the disaster movie tradition of the 90s in that it is truly apocalyptic; there can be no return. Separating it from the endings of films such as *Volcano* (1997): L.A. preparing to rebuild, although now with "Mount

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<sup>40</sup> Though only North America is ever shown on screen bar a final depiction from space.

Wilshire” on the horizon; a present continuing, a returning to normalcy. Here the disaster movie is the big screen realisation of Walter Benjamin's angel of history (1999); one catastrophe after another. Whilst the climate change apocalypse is the apocalypticism of modern pessimism writ large. Once 'civilisation's ills' are understood as global through climate change, any *memento mori* of the inevitable self-inflicted downfall of civilisations can no longer make distinction. No more empires falling, no more Pompeii's for the Romans or Soviets: only the possibility of total annihilation remains through auto-extinction. Mark Fisher finds films such as *Children of Men* (2006) and *The Road* (2009) them exemplary of the inability to think beyond the end; that vacuum of thought that is the after-the-end. For here, in these post-apocalypses, he writes; 'the old Leninist question “What is to be done” has no possible purchase.' (2010: 73). No space for old questions and no possibilities, Hollywood post-apocalypse sits firmly in a state of perpetual crisis and catastrophe, never being fully post-apocalyptic.

Both climate change hyperbole and disaster movie tropes maintain that same vacuum of thought with respect to the inability to think the aftermath. Rather, the key insight of the post-apocalyptic narrative – as seen amongst the reflections of tourists as much as in the very early examples of the fantasy genre – comes in folding together future history and present analogy: Both a warning of an apocalyptic future to be, and a sense that, maybe, somehow, that future is already here. This, then, is the first post-apocalyptic sensibility that might be cultivated from visiting Pripyat's ruins. A sensibility grounded in that romantic reading of ruins as *memento mori* for civilisation, but finds little to be happy about. There is a pleasure in exploring Pripyat's ruins, this is true, but it is not one driven by the same urbi-cidal desires that fuel the apocalypses of Hollywood and the first post-apocalypses in 19<sup>th</sup> Century literature. Such desire can only stutter when confronted with the reality of crumbling concrete. Talking to people as we walk through Pripyat I am confronted with questions about those who lived here; every corner found filled with their absent presences. The clicking Geiger counter as we walk is a constant reminder of a world changed; a reminder that does not need the dream of a world without people. The world has changed, and we are still here. Now what?

Pripyat offers no easy answers to this; if any. But that it is asked at all is important. That, sitting down after trips, discussions vary from nuclear power, to generational legacies, to urban ruination meaning in the context of contemporary crisis. Questions of meaning that are being asked, that cannot be asked by the apocalyptic narrative for such questions reside in the vacuum of thought they leave in respects to the aftermath. Questions too that cannot be asked by a post-apocalyptic narrative that holds present actions hostage by making them

histories of a foretold future, but that begin to form when post-apocalyptic narratives are considered as analogy for the present. In asking these questions, in talking about them, but also in embodied actions of 'being there', tourists are not left to be considered perpetually stuck in a hermeneutic circle whereby images from Hollywood direct their visual experience of the Zone. The reality is, indeed, "scarier", difficult, much more ambiguous than any film. These questions, engaged with to greater and lesser extents, but engaged with nonetheless are questions that are asked by a post-apocalyptic sensibility that takes lived reality to be post-apocalyptic.

It would be too much to suggest that such questioning is some kind of radical shift in lives and actions. Visitors return home, lives return to normal. Nevertheless, this working through forms part of touristic 'lay knowledge' and 'lay geographies' (Crouch, 2000) that are all the more potent in Pripyat for the lack of strict management of interpretation. Making meaning and sense of Pripyat is no easy task, yet it is a task visitors take on; a task that synthesises histories and presents of the post-apocalypse; a task of synthesis that should not be the preserve of urbicidal Hollywood. This then is Pripyat's post-apocalyptic sensibility; one that suggests we *can* locate the post-apocalypse outside of thought-experiment and CGI-laden cinema. That we can (and possibly should) locate it in lived experience in order to open questions.

To get towards the sense in which the post-apocalypse may be a lived reality, we need to move beyond 19<sup>th</sup> century novels and Hollywood blockbusters. Thus from urban destruction & pollution I turn now to the nuclear apocalypse and closer examination of 'end-times' thinking as described by Derrida, Baudrillard, Žižek and later relate this to more recent work on the mobilisation of climate change apocalypse as threat recognised by Erik Swyngedouw.

## Naming the apocalypse

### Nuclear disaster

Nuclear disaster invites apocalyptic thinking<sup>41</sup>. Incipient within the technologies of nuclear fission is the possibility of a secular annihilation, of irreversible destruction. Yet the end of the nuclear apocalypse is not necessarily of everything, nor even of all of humanity, but it is a final end to the world as we know it, as it can be known to us. Derrida highlights

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<sup>41</sup> Even though the atomic once invited utopian thought (Corn and Horrigan, 1996).

this by enunciating the nuclear apocalypse from the point of view of literary criticism as the possibility of the end of the 'archive'. What is important here, is that such destruction is:

Not necessarily the destruction of humanity, of the human habitat, nor even of other discourses (arts or sciences), nor even indeed of poetry or the epic; these latter might reconstitute their living process and their archive, at least to the extent that the structure of that archive (that of a nonliterary memory) implies, structurally, reference to a real referent eternal to the archive itself. I am taking care to say: to that extent, and on that hypothesis. It is not certain at all that all the other archives, whatever their material basis may be, have such a referent absolutely outside themselves, outside their own possibility. If they do have one, then they can rightfully reconstitute themselves and thus, in some other fashion, survive. (Derrida, 1984: 26)

This is the archive by which we have literary memory, by which we have historicity. This is not The End; a plunging into void; it is the end of the world as we know it or, specifically, the end of the world as it is knowable to us, for us, as it is graspable and amenable to our discursive regimes of knowledge. It is a world that cannot be unearthed in the archive, is not an extrapolation and cannot be predicted. It is unthinkable within the bounds of linear histories of cause and effect, but linear histories nevertheless imply, or necessitate ends. It is an end which does not allow the work on/of the remainder of mourning, memory, monumentalization (Derrida, 1984).

An unknowable, unthinkable referent we nevertheless refer to, and from which we would not be able to refer back: Such is this understanding of the apocalypse. But nuclear disaster has occurred, is occurring and may occur again. 25 years after the explosion of Reactor 4, residents of California and Los Angeles experienced, for the first time, what it may be like to be 'downwind' as the LA Times traced radioactive iodine in cow's milk: Pacific air currents, which brought small amounts of fallout from Fukushima Dai-Ichi power plant, do not have the same sense of decency to avoid large urban areas as the US departments of energy and defence did during atmospheric tests of nuclear weapons at the Nevada test range (see Gallagher, 1993). The naming of disaster (Japanese catastrophe, US military necessity) is inherently a political move.

Nuclear disaster invites apocalyptic thinking, but nuclear disasters have happened. To think apocalyptically is a symptom, argue both Derrida (1984) and Baudrillard (1994), of linear narratives and discourses of history. Such a discourse makes the end both unthinkable, and yet necessary: An artefact of modernist histories of progress (Baudrillard, 1989, 1994). This would suggest it is always only ever anticipatory; an impassable terrain towards which we march, although may never reach. Here there can be no post-apocalypse. For even in the eventuality of survival of human life there is still no 'post'; for after the loss of the archive,

then in what sense a historicity of 'after'? In order for a post-apocalyptic sensibility to have any purchase here; to allow it to, having been located, to be thought, it must be extracted from its position as symptom of modern historicity.

Not only histories which would be linear have end points. Earlier forms of apocalyptic logic, such as that found in stoic cosmologies, presented a cyclical time: For the stoics, time wrapped in on itself through all consuming conflagration, a great fire that would herald a new beginning and a return to innocence. However, cyclical, eternal returns do not forward to us any further assistance in dealing with the after-the-end. The apocalypse is found in both cyclical and linear histories, but the post-apocalypse disrupts both these narrative forms. Indeed, the modern apocalypse is but a stoic conflagration that is perpetually moved towards but forever postponed. Instead: The end of the world as we know it is strangely familiar. Neither unknowable end points which disrupt all access to meaning and also not eternal returns, the conflagration of April 1986, as well as many other events, may signal the ends of worlds as we know them, may present opportunities for new beginnings, or different ends, but are symptomatic (Berger, 1999). As symptoms they are part of our histories, even as they disrupt them; there are remainders to be recognised even as the post-apocalypse bridges gaps to the unthinkable; new futures and presents no longer hostages to known pasts.

In many ways, then, both the disasters of Chernobyl and at Fukushima are laying down another structure of an archive. Radioactive sedimentation as referent for the post-apocalyptic archive. Tourism takes its part in this; constructing with this post-apocalyptic archive new lay, touristic knowledges through processes of making sense, generating meaning from this radioactive archive. For apocalyptic thinking to bring meaning, we must situate ourselves in the post-apocalypse, to diagnose ruptures, rather than anticipate them.

### Diagnosis: Apocalypse

Returning to the BBC journalist during the immediate aftermath of the 2011 Tōhoku earthquake and tsunami; as much as this was a throw away line in disposable 24 hour news, this is also the problem of apocalypse devoid of content and uniqueness, and of its power. Conflating apocalypses such that they are indistinguishable from one another (even from the silver screen) is to begin to internalise the view from the eyes of Walter Benjamin's angel of history. Instead of progress we now find ourselves looking upon a single catastrophe piling rubble at our feet as we are swept into a future envisaged as no more than endless, undifferentiated catastrophe; the storm still blows (Boyarin, 1995).

The proliferation, repetition and reproduction of nuclear apocalypse, suggests Baudrillard – writing in response to cinema of the 1970s and 80s – is suggestive of a sense that we may already be living in end times and its 'coarse projection into a film is only a diversion from the nuclearization of everyday life.' (1989: 37) In doing so this is to divert from actual ruptures, to develop 'an aesthetic counterpart to the radical transformations' that acts 'as compensation for their alienating effects' (Stewart and Harding, 1999: 291) This nuclearisation of everyday life is what Joseph Masco terms the 'nuclear uncanny.' (2006) For, in reference to the time in which Baudrillard was writing, Masco states:

The nuclear age has witnessed the apotheosis of the uncanny. During the Cold War this was most obviously manifested in the psychic anxieties produced by knowledge that less than thirty minutes were all that separated the quotidian from annihilation, from living within a temporal space in which the missiles may have always already been launched. (ibid.: 28)

Now such nuclearisation is complete; fears and threats have moved on. Though the minutes-to-midnight Doomsday Clock of the Bulletin of Atomic Scientists<sup>42</sup> still inches forward. Moving from six minutes to five minutes in 2012 (Science and Security Board, the Bulletin of the Atomic Scientists, 2012) as our impending doom was considered sped up by the threat of climate change. This movement 'reflect[s] the displacement of apocalyptic anxieties onto other enemies, and the diffusion of fears to include ecological threats' (O'Leary, 1998: 422). For even as the capability of nuclear annihilation remains we are finding ourselves in the discourses of fear and threat that surround climate change (or as Mike Davis aptly calls them; *ecologies of fear* (1999)). It is this politically mobilised threat of climate change apocalypse that Erik Swyngedouw (2010) attacks. Such threats, he writes, turn towards 'post-apocalyptic images of waste lands reminiscent of the silent ecologies of the region around Chernobyl' (ibid.: 217). Recalling Maxim's love of the bird song mentioned earlier, it is debatable just how silent this landscape is. Yet Swyngedouw is right to highlight that the mobilising Chernobyl as post-apocalyptic in the modality of threat; that this *will* happen, this is what *will* be (unless, except) is the apocalypse of climate change as the apocalypse forever. No revelation here, no rupture or alteration of history; 'The environmentally apocalyptic future, forever postponed, neither promises redemption nor does it possess a name; it is pure negativity.' (Swyngedouw, 2010: 219) The threat of an environmental apocalypse-to-come takes place in the 'gap' which Žižek takes to be 'between knowledge and belief' in that 'we *know* the (ecological) catastrophe is possible, probable even, yet we do not *believe* it will really happen.' (2010: 328) It takes place in this 'gap' in order to promote a belief that this *will* happen. Just as a politically salient post-apocalyptic sensibility needs extracting from it positions as a future

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<sup>42</sup> Intended to convey 'how close humanity is to catastrophic destruction'.

hostage to present fears or simply a vacuum for thought for the post-apocalyptic narrative, it similarly needs to be extracted from symptom of a certain historicity that would have it forever postponed; mobilised as threat. In opposition to this mobilisation of threat, locating the post-apocalypse is to suggest a space of rupture. Such places mark points of no returns and the beginnings of futures without easy prediction; it asks us to know not that it is possible, probable, inevitable, but rather that it *has* happened. Here then the second post-apocalyptic sensibility: No diversion from the uncanny nuclearisation of everyday life; but rather an affirmation of the post-apocalypse as lived-reality.

### Post-apocalypse as lived reality

Relic of a past event which is yet to take place in the future, the nuclear narrative is transmitted backward to us in the present, which is that future's past. The paradoxes shuttle and blur into "time no more," as announced by the angel of the apocalypse; and that "no more" is echoed in the last resonances of a disappearing world. (Schwenger, 1995: 279–280)

The nuclear narrative of which Schwenger writes is a formation of the (post-)apocalypse which can be found too in Baudrillard's critique of a 'suspension' in crisis which is forever an oscillatory moment 'only around a hypothetical centre, a statistical mean. Oscillations [which] no longer result in inversions' (1989: 42). Outside the time no more of the post-apocalyptic narrative, outside of this oscillation, offering a different vision for Benjamin's Angel, what I want to suggest is that, yes, apocalypses have happened. The 20<sup>th</sup> and 21<sup>st</sup> Centuries are complete with formative catastrophes, and we are living in a remainder.

To be true to the event requires they be seen as formative catastrophe (see also Berger, 1999; Castells, 1983). To view our contemporary world as post-apocalyptic is not to resign us to a world with no histories (and thus no futures). It is to accept the formative nature of the catastrophes. As Berger highlights:

It seems significant that in the late twentieth century we have had the opportunity, previously enjoyed only by means of theology and fiction, to see after the end of our civilization – to see in a strange prospective retrospect what the end would actually look like: it would look like a Nazi death camp, or an atomic explosion, or an ecological or urban wasteland. We have been able to see these things because they have actually occurred. The most dystopic visions of science fiction can do no more than replicate the actual historical catastrophes of the twentieth century. (Berger, 1999: xiii)

No wonder then, that sites of such apparent import, draw interest and invite engagement through travel. In accepting the formative nature of these catastrophes, we may take such apocalypses to be the 'originary revelations of the contemporary world' (ibid.: 4).

Why not then (just) catastrophe? Naming certain events as apocalyptic hints towards a temporality which is not about a mean from which one may deviate and towards which one may swing a return. Such naming gives voice to the sense that, in some way, they do represent end points of sorts; 'definitive historical divides [...] ruptures, pivots, fulcrums separating what came before from what came after.' (ibid.: 5) and that, somewhere, there may still be something to be revealed in them, whereby 'previous historical narratives are shattered; new understandings of the world are generated.' (ibid.: 5) This is the potential of 'Nuclear destruction [to] disrupt the binary of death/life or absence/presence in the here and now and forces us to think the future differently.' (Heffernan, 1995: 177)

The nuclear explosion at Chernobyl provides us with relics of past events that may yet take place in the future. But here the 'nuclear narrative' is transmitted from no stable place in time. Sent forward from 1986 to the present it continues to shape the future both imagined and lived, and, by formulating possible future events in turn is transmitted back to us as we inhabit future's past. Here, in the present, experiences in the Zone inhabit multiple temporalities. Visitors can experience 'here and now' the Zone's various histories (Soviet, nuclear technology, nuclear disaster), various apocalyptic futures (Chernobyl again, urban destruction, personal possibilities) which in turn formulate present experiences of the Zone as well as reflection on contemporary issues and spaces. The Zone is experienced as never fully present (temporally, and, not least with radioactivity, phenomenologically), but simultaneously historic and prospective. Possible futures and uncertain histories collapse together in the Zone, for the Zone as both historic and prospective is not a 'shifting between' or even paradoxical. This expansiveness or slippage in temporality is also spatial. Often, especially in Pripjat, responses are elicited which recall possible futures and experienced pasts, at home or elsewhere.

It seems that apocalypses are representable, represented, and, in the context of tourism, consumable. They have happened and may happen. Again it is tempting, in the face of this paradox of thinking the unthinkable and representing the unrecognizable, to simply dismiss talk of apocalypse as hubris and a rhetoric immersed in a love for catastrophe. But to do so means denying the potentialities that come from dwelling in that paradox. Here, then, is the possibility and critical potential of, instead of confining post-apocalyptic sensibilities to hubris, fostering a sense of the apocalypse, even the apocalypse in plural, as having happened. To suggest that the post-apocalypse is more than an interpretative framework, but

also a set of material habits (Keller, 2004). Thus the apocalypse can only be said to have passed us unawares (Baudrillard, 1989) to the extent that the post-apocalypse bears an uncanny resemblance to the world as we know it. They are recognised and recognisable, moreover they are material and consumable. Neither are they beyond representation.

Reservations of the 'apocalypse-to-come' (or even perpetual apocalypse in becoming) narratives of climate change again leave us with a void of/for thought that is the aftermath. Rather than shying away from apocalyptic thought in all its anti-political and populist realms, there is a project, sketched out here, in affirming that the world as it has been knowable is no more; apocalypses have happened and they are far from undifferentiated. Locating the post-apocalypse in the Zone is to suggest a thinking of futures, presents and pasts differently. It is to move beyond the void of thought beyond the apocalypse to be or the apocalypse without end; the apocalypse as threat (as criticised by Swyngedouw, 2010). Beyond apocalypse as a undifferentiating heuristic and other forms of apocalypse-to-come (or even current unending catastrophe) for the foreclosure of imagination it entails.

The second sensibility, then; that having located the post-apocalypse we can affirm the post-apocalypse as *lived reality*. To visit the Zone, to walk through its landscape is to be in the post-apocalypse both figuratively and materially. This extends the sensibility of opening questions otherwise unavailable to the post-apocalyptic narrative through a movement that states the post-apocalyptic as more than aesthetic. This move does a few things; firstly it escapes the apocalypse as that ever-postponed unthinkable necessity of modernity or climate change threat. It does this through naming, through a recognition of formative catastrophe. Thus Berger's (1999) temporality of a prospective retrospect that permits the future be seen in present and past catastrophe may be collapsed; no longer a future relic transmitted back, apocalyptic events have happened, we are here post-apocalyptic and our responsibilities lie in the present; hostage neither to foretold future that transmits back, nor a historicity that finds there wherewithal to negate the present. The post-apocalypse, then, is both 'a state of affairs and an interpretation of that state of affairs ... both an interpretive and material set of collective habits.' (Keller, 2004: 13)

In a sense, then, this sensibility is a promise, or maybe just a hope, of 'an end of some world and a corollary vision' (ibid.: 13). It is grounded, however, in the visitors in the Zone who travel there, drawn by historical events and present formations, and find themselves not merely in some simulation of the end of the world, but in the post-apocalypse, and engaged in a variety of imaginative, thoughtful and material practices. Practices which diverged from the usual and the expected; diverted no more from the nuclearisation of life. There is no easy or necessary political or ethical imperative or result here, however. Though such material

practices of post-apocalyptic interpretation are examined closely in the next chapter, I now wish to consider the ethical impetus for a fidelity to the uniqueness of the apocalyptic event.

For part of this post-apocalyptic sensibility which desires or interprets a historical rupture in catastrophic events of the recent past is wrapped up in the postmodern disillusionment: With narratives of technological progress and technological solution. Indeed, Lennon and Foley (2000) include the categorisation of dark tourism as being often invested with a certain postmodern disillusionment. Such investment was certainly a component of discussions in the Zone. Yet Lennon and Foley fail to push this point further; other than maintain the difficulties this represents for managing interpretation. What I want to move on to suggest is a final sensibility; that having located the post-apocalypse and having named the post-apocalypse we now must pay attention to the political and ethical implications. To answer, if we are to take seriously the suggestion that we might recognise our world as, in part, post-apocalyptic and the formative, if uneven, formative apocalyptic events, what of the future? Here I follow on from Keller in suggesting a possible re-habitation of the apocalyptic revelatory potential. In returning to apocalypse as form; beyond crisis and oscillation, we may, as we 'dwell in the dregs of modernity, preoccupied by the shutdown of sustainable ecologies, viable communities, and historical hopes.' find that a "coming again" to "The End" may, paradoxically, dis/close an opening.' (Keller, 2004: 2) This opening, I suggest, is one that orientated towards uncertain pasts, presents and futures, and in being so orientated can be considered a 'working through'; that there is ethical and political imperative to such working through even (maybe even especially) tourism.

## The event & after

### Experimentation

The United Nations Development report on the Zone; *The Human Consequences of the Chernobyl Nuclear Accident: A Strategy for Recovery* (UNDP, 2002) suggests that 'ecotourism' might be encouraged as one possibility for the future of the Zone. That being said, the tourism organised in the Zone is not the result of any organised effort on the part of international organisation or state agencies, it is (as described in the previous chapter) rather a small-scale response to demand from those working in the Zone and an ex-UN employee. Nevertheless the UNDP report bears some consideration, and I will later return to the attitudes and political motivations of tour guides and operators. The report presents an orientation towards future concerns enunciated through a discourse of development. It's not an unproblematic mo-

bilisation of this discourse<sup>43</sup> by any means, but I'm going to present some extracts here to give an idea of the kinds of problems catastrophic, world changing events can produce.

Fifteen years after the accident, [...] the question may reasonably be asked, why should the international community continue to fund measures to address the complicated cluster of human problems that were triggered by the explosion of 26 April 1986? (UNDP, 2002: 1)

Three, fairly extensive, reasons are given, and the first is reproduced below to provide some flavour of the kind of temporal imaginary associated with the Zone:

The first reason is that the rest of the world has an important practical interest in remaining involved with the issue of Chernobyl. This interest not only concerns the safety of the complex itself but also the knowledge that can be gained about the long-term effects of the radioactive fallout on health and about the difficult issues of disaster management involved in the post-accident response. (UNDP, 2002: 1)

Although health effects and disaster management is not the kind of knowledge I am concerned with in this thesis, the sentiment remains; an accepting, possibly embracing even, the uniqueness of this event. We can, and must, it is implied, learn from this specifically because of its uniqueness. It also implies that what can be learnt could otherwise not be learnt by extrapolation or predictive modelling based upon given knowledge prior to the events of 1986. Returning to Derrida's (1984) comments; here we find the sense in which the post-accident future cannot be unearthed within or extrapolated from the existing archive. There is something to be learnt from here – a new external archive – because there has been nothing else like it, because it is novel, the world is now, fundamentally *and unpredictably* different because of the events of 1986. This is made more explicit in the third given reason:<sup>44</sup>

The third reason why the international community must continue to cooperate in resolving the human problems linked to Chernobyl is more positive. It lies in the potential that such cooperation has to serve as a model for the future. In all the disruption and distress, the issue has become the focus for a unique experiment in international collaboration. (UNDP, 2002: 2)

Serving to highlight the uncertainty and openness towards possible futures brought about by dealing with the events of 1986, these passages are indicative of the wider context in the Zone. A context where by the networks of organisation in the Zone are not solely fixated on the legacy of the events of 1986. Or, rather, their fixation on this legacy of the event necessitates that they orientate themselves to the future, and think about and negotiate possible

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<sup>43</sup> A critical analysis of the language of development is beyond the purview of this thesis. Suffice to say that the uncritical mobilisation of a discourse 'sustainable development' finds an odd home in an area with long-term radionuclide contamination.

<sup>44</sup> Reason two, which I skip, simply prostrates to the needs and concerns of the nuclear industry.

futures, a future that defies usual modes of access and thought. There are a number of conditions in the Zone which defy easy prediction, and present unique problems: For example the widespread, undocumented burial of radioactive and contaminated materials, such as the vehicles used during the initial liquidation works. Questions remain as to possible and best course of action with regards to the large amount of uranium and graphite mix left within the remains of reactor 4, and so forth. Although these questions are not the domain of tourists, an orientation towards the past events promotes future-orientated questions of the kind discussed the earlier section on Pripyat.

Yet the difficulty with planning for the future, of even coherently thinking of the future in any predictive manner, does not mean that this is not practised. The problems here are not merely a matter of time scale; that the mere extent is beyond the anthropocentric time scales of institutional planning. This is not the 'problem' of a geological or cosmological time where the referent archive can be extrapolated from. We can know exactly how fast  $^{137}\text{Cs}$  radioisotopes will decay and we can calculate half lives and even suggest how it might act in earth systems and biological processes. Yet  $^{137}\text{Cs}$ , being entirely anthropogenic as it exists on this planet; a product of 20<sup>th</sup> Century technologies, it lacks any extensive histories (material or otherwise) upon which we can draw upon to orientate to the future through prediction. The world as it was known truly has changed, and it demands of us that we experiment uniquely, not extrapolate and predict, and offers new knowledges previously impossible.

The time of nuclear material in the Zone requires that we think the future as unknown, beyond easy extrapolation. It requires a new stance towards futures which are inherently uncertain. So if we follow with the usage of apocalypse as a pivotal event or location, calling an end to easy certainties, to worlds as known and knowable to our regimes of knowledge, then the Zone may be said to be post-apocalyptic. Thinking the future of the Zone necessitates an openness to that which cannot easily be planned for, factored for. This again breaks us free of the post-apocalyptic narrative, or the post-apocalyptic threat. Here the future is no longer hostage as a 'given' or merely analogy for the present. A thinking of the future when we locate the post-apocalypse in the present is just that; *of* the future, not one which can only borrow meaning from the present and constantly refer back. This is a future that asks of us a responsibility.

### Tiping point

*“Anywhere you go in the world, you can go to visit places and you see old churches and old buildings ... This for me was different because this is something where it was going in one*

*direction and because of something we as human beings did, it changed direction completely. It was not that it was basically outgrown by time, or like an old church that is no longer used because there is a new church built ... It was completely changed from one day to the other because of something we did, not because of something that happened.” (#io6)*

This is a statement from Milos, a man in his late 30s from Mexico who was travelling alone. He had chosen to visit the Zone specifically because of its unique landscape; for him it was a chance to see a landscape left after people had disappeared, to experience a landscape which made clear how “nature takes over” despite how important humans think they are.

Chernobyl as tipping point: In this response to the Zone from one visitor there is a sensibility akin to that outlined above that bears examination. The world has changed, changed direction completely “from one day to the other.” Here too, albeit in a very different register to the UNDP report, is a formulation of the importance of the uniqueness of Chernobyl. Its figures as an event which sits outside of usual patterns of cause and effects and ruptures into total change, demanding fresh responses and new knowledges. But, on top of this, the above extract stresses a responsibility, or at least an accountability. Sitting outside of neat linear cause and effect, the rupture of Chernobyl is our rupture.

There is, of course, a certain problem in this sensibility. Apocalypses are unevenly distributed and unevenly felt (Williams, 2011): The day-tripper remains distinctly differently engaged in the aftermath than the elderly cancer patient of the adolescent population of Ukraine. That being said, there is a sense of responsibility that emerges from this sensibility as expressed by the above extract. This is a different 'we' that maintains a responsibility missed responsibility by the 'we' of a populist threat of impending climate change catastrophe that would have 'us' (as socially and politically homogeneous) set against, and made victims of forces (CO<sub>2</sub>) considered external, to be saved by (now necessary by this logic of equivalences) given political changes (Swyngedouw, 2010 after Žižek (2006)).

Much like the <sup>137</sup>Cs which contaminates it; the Zone is anthropogenic. This is no 'divine' apocalypse or 'natural' cataclysm brought on by forces generally portrayed as outside of human control, this is a secular apocalypse of the nuclear age. In recounting a discussion with friends that the trip seemed a bit 'dark' a visitor stated:

*Peter: “It's not dark, anymore than any other history is dark. It's actually a warning.”*  
(#io4)

This, then, comprises one of the issues with disaster tourism considered a form of 'rubbernecking'. The disaster was the draw inasmuch as it was a major historical event: For many visitors to the Zone, the events of 1986 and the Zone itself present a form of warning, 'wake

up call' or other 'near miss' that should be heeded. The Zone here is experienced as encapsulated and enclosed; an example both of what could have been and what yet could be. A reminder, in many senses, of fallibility and of limitations.

This, then, is an experimentation very different from the thought-experiment of *The World Without Us*. Castells asks us to heed what catastrophes ask of us; 'after the end [...] we must accept the challenge to innovate, to discover, and to experiment' (1983: 4). Here I agree entirely with Berger (1999) that to heed this is a moral imperative; one to see the post-apocalyptic injustices as our injustices, not to rationalise them away as another blip in the cause and effect in history but to hold onto the responsibility it demands. But he also calls for a bifocal vision, one made no more clear than at Chernobyl, whereby the damage and remainder of the apocalypse is 'long-standing, symptomatic, haunting and historical' (1999: 218), to recognise apocalypses as formative, and as illuminating the ways in which damage is hidden. This is the apocalypse as unique, and which demands unique and multiple responses, a uniqueness which is not repeatable, which takes the event as more than form or heuristic.

The uniqueness of the event is important here. Throughout the media coverage of the events at Fukushima Dai-ichi power plant, there are regular references to Chernobyl, usually in comparison. Talk or portrayal of "another Chernobyl," or of similar events is to do more than simply use the events of 1986 as archetype for nuclear disasters or as benchmark for such events. To ask about "another Chernobyl" is not just to compare events. It is to begin conflating them. A line in *The Economist* referenced these ongoing events as "a bit like three Three Mile Islands in a row." (*The Economist*, 2011) Fukushima is, of course, nothing like three Three Mile Islands. Nor is it anything like the '60% of Chernobyl'; the figure given for reports on <sup>137</sup>Cs output per day in various news media<sup>45</sup>. Here the apocalypse pronounced only as form, with no regard to the uniqueness of any content (not even obviously unique from the cinematic). It is to slip into undifferentiated apocalypse and, therefore, indifference. 60% Chernobyl, 3 Three Mile Islands. We've seen this all before...

Except, of course, we haven't seen all this before, not at all, the events in Japan of March 2011, even as they still unfold, bear only superficial resemblance to April 1986, or to those at Three Mile Island. To refer the events in Fukushima prefecture to Chernobyl and to explore the events unfolding as "another Chernobyl," or rather, to portray them as holding within the possibility of another Chernobyl, as incipient and embryonic of a Chernobyl come again, Chernobyl revenant, is to do a massive injustice to the events. It is to extrapolate from

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45 Not least because this statement was always reported without the qualifier: 60% of what? Of the total Cs-137 output from Chernobyl? Of the daily output of Chernobyl? Of current Cs-137 levels around Chernobyl?

past apocalypses the outcome of current events, to hold possible futures hostage to the known present, and denies us a critical purchase.

### Fidelity to the event

*"It's become a symbolic byword for terrible disaster and conspiracy, it's important to see what the reality of it is, it's been used as an adjective with a lot of association." (#io7)*

I want to hold onto to this sense of the Zone as a warning, as requiring heed. For this, I believe, is the core possibility of a post-apocalyptic sensibility. It differs entirely from what Derrida describes as the work of 'the historian's critical vigilance' which is 'blind and deaf [...] alongside what would be absolutely unique.' (1984: 21) The Zone remains a space of the unknown; uncertain pasts, unknown presents and unpredictable futures. Even, maybe, an experiment. Here, even (especially) through the practices of tourism there is a political imperative, where "'after the end" as oxymoron, as straddling both sides of an impossible conceptual limit – turns out to have real ethical and historical consequences.' (Berger, 1999: 218)

Berger continues:

Events have consequences, there are remainders to every catastrophe, and "obliteration" is always a relative term, for a cultural memory has many storage areas and modes of expression. To see a world as post-apocalyptic is to recognize its formative catastrophes and their symptoms [...] It is also, finally, to recognize and create narratives that work through these symptoms and return to the apocalyptic moments that traumatize and reveal. At that point, new – more healthy and more truthful – histories and futures may be possible.' (ibid.: 218-219)

The claim of the post-apocalypse, then, differs from apocalypse as state of affairs, for it is a demand that we recognise formative catastrophe. Yet, despite such remainders, tipping points exist. Thus the recognised, named apocalypse is not the end of history but nevertheless may well be the end of a certain kind of history (Derrida, 1994). For that's what the apocalypse is; the end of a certain historical and material mode of living. This is the literal fact of devastation. Such devastation is never quite the monstrous apocalypse as Derrida points towards; the archive remains and 'there is still signification' (Robson, 1995: 754).

My third and final aspect of the post-apocalyptic sensibility is one that builds upon the previous two points: Having located the post-apocalypse and, in doing so, named it, one final movement is required to assure this sensibility does not return to one where the Zone is just 'something out of Hollywood'. This final movement, then, is to affirm a fidelity to the event; an affirmation of its uniqueness and of a necessary responsibility to the possibility of new

'healthy and truthful' histories and futures. For only in this fidelity can the post-apocalypse hold onto the promise of revelatory potential. This is Berger's recognition of formative catastrophe that makes possible new histories and futures.

To return once more to the above extract from Berger; it is my contention that tourism knowledges are no less part of those 'storage areas and modes of expression' of cultural memory. This, then, is a modest proposal; the post-apocalypse as something oddly like normality; but therein lies its power. This is most certainly an uneven, relative obliteration and catastrophe. Reminders remain. The Zone is post-apocalyptic even though Derrida's (1984) monstrous apocalypse is not to be found in the Zone; the Zone is not monstrous. Earlier I recounted Yuri's exasperation at a camera crew determined to locate the Zone's mutants and monsters; no monsters were to be found, and their determination to find them met with little accommodation. Directing tourism in the Zone is driven by a desire to remain truthful; to the event, its histories, spaces and possible futures.

*Yuri: "we can see the visits as just educational tours, not entertainment and still trying not to entertain people, just to educate, what had happened here." (#i25)*

Yuri raises concerns with a number of things; a lack of information about Chernobyl's effects, rumours and misinformation; all of which he hopes might be addressed by visitors coming to the Zone, to "have a look with their own eyes". Recounting early visits, Yuri describes the misinformation that he has often dealt with:

*Yuri: "But in those times, foreigners were real scared, 'cos the information was very limited. Right now, well, tourists visiting these places, well, [they have] a lot of information, a lot of pictures, I think it's really positive. When it started, well, I think all people are badly informed about Chernobyl and in this case it's very easy to explain to them if some materials in newspapers or magazines or films are not true, but sometimes, well reporters especially, our Ukrainian and Russian reporters they really exaggerate the risk of staying here and some times, honestly, they are lying, because it's not true, because they want to make an interesting story, to make it interesting for ordinary people, which is sometimes why they are using a lot of legends of the exclusion zone, for example, ghosts of Chernobyl, for example, showing some mutants and that." (#i25)*

This does not indicate a desire to choreograph tours in the Zone; both Yuri and Maxim expressed their desire to permit as much freedom as was safe and possible for visitors; that it was through experience, rather than some script of rehearsed information, that visitors would most likely leave the Zone with a sense of having learnt, explored and made sense of this unique landscape for themselves. It is this exploration and experience that thus forms the centre to the thesis going onwards.

A short email exchange that took place some time after I had returned from Kyiv. Sergei had been invited to an academic conference on dark tourism; the theme of which was the difficulties of managing moral concerns with the commercial interest in opening these places up. Our response to this was similar; that this was a false dichotomy. The ethical response is to permitting such spaces of formative catastrophe to be open to experience. Tourist knowledges in / of the Zone are a key mode of expression and 'storage area' of cultural memory.

### Locating the Post-Apocalypse in the Zone

#### Three sensibilities

In locating the post-apocalypse in the Zone I have done three things. Firstly I have claimed that the post-apocalypse *is* locatable; it is geographical. Rather it is to find the geography of the post-apocalypse as a geography not traced by the wandering of last men; be it Lionel Verney in Rome's Colosseum or Will Smith in New York. For after Shelley and Jeffries, the romantic apocalypse is only a flattening of experience (Goldsmith, 1993) and so I draw on Baudrillard's critique of nuclear cinema, which finds that 'this film itself *is* our catastrophe [for] It does not represent our catastrophe, it does not allow it to be dreamt.' (1989: 37) Locating the post-apocalypse is to allow it to be dreamt, and more; to be experienced, but only ever unevenly so. This unevenness to the heterogeneous experience, acknowledges the privileged position of the visitor; being a fleeting experience with little danger. Yet this acknowledgement still allows for an assertion that the 'feeling' of being in the after-the-end is not merely the same hermeneutic circle the BBC journalist found himself in, where only Hollywood constituted a suitable referent. Rather it is to do justice to the questions asked, concerns (of selves and others) raised and the making and navigation of meaning that took place as we toured the Zone.

Secondly, having located the post-apocalypse, I affirmed the import of the naming of events as apocalyptic, and of the lived reality of the post-apocalypse. This movement salvages the apocalypse from only aesthetic or interpretive framework (though it is still part this) to affirm post-apocalypse as material; and thus maintains the importance of recognising moments of rupture. The world as we know it has changed, and it is both a break and a symptom. This opens new futures and uncertain futures. It forces us to develop new habits and perceptions in orientation to the future, of new thoughtful, practised and political responses.

Thirdly I have highlighted a need for a fidelity to the event. This draws upon the previous arguments as I am concerned with avoiding the conflation of apocalypse such that it merely become perpetual, indistinguishable catastrophe. Such a fidelity to the event makes possible a recognition of formative catastrophes in such a manner than the questions posed and new modes of perceptions are orientated towards a revelatory potential for new futures; futures not held hostage to narratives of impending doom. Such a fidelity can take place during tourism; tourist knowledges are an important reserve of cultural memory through which to engage these events.

These three sensibilities cut across pasts, presents and futures, and finds a future brought into question, rather than determined as threat; the Zone as an echo of a future, fictional or otherwise. In announcing a post-apocalypse that is not Derrida's annihilation of the archive, there remains the possibility of salvaging a future from the archive. The archive here as hypomnēma; not memory; the 'printing, writing, prosthesis' (ibid.). Berger's 'storage areas and modes of expression' of cultural memory. Importantly, here, this archive is not merely inert stockpile, rather the '[process of] archivization produces as much as it records the event' (Derrida, 1995: 17) Hence the need for some fidelity else the events of 1986 become but echoes of a fictional or threatened future. Tourists blogs, photographs, Facebook posts and so forth are no less practices of archiving than the meticulous historian, news media or email Derrida mentions. In its constant production, the archive is 'never closed' but rather 'opens out of the future' (ibid.: 45). This opened future is the promise of the Zone as post-apocalyptic; a future freed from Derrida's ambitious historian who would find the future predicted by the archive, or apocalyptic climate change prophecy or some simulacra for Hollywood. For 'As much as and more than a thing of the past, before such a thing, the archive should call into question the coming of the future' (ibi.: 26). It is in this space of questioning, in the post-apocalypse, that we might find Berger's more 'healthy' futures (1999). I want to move on, however, from this concept of the archive, even as I remain interested in the cultural memory of tourism. The archive, it seems to me, does not lend itself to the embodied, emotional, material practices<sup>46</sup> of meaning-making in the Zone. I have asserted throughout that visitors to the Zone engage themselves in the making of meaning; not as passive consumers. Indeed, it is this very engagement that gives impetus to define the 'feeling' of (being in) the post-apocalypse as a political, ethical sensibility. This making of meaning is the focus for the next chapter; the embodied practices which salvage meaning from the ruins of Pripyat.

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<sup>46</sup> Even as Derrida describes three modalities of 'inscription' that frees the archive from being merely that which is printed (onto paper or hard drives).

## 3. IN RUINS

### Pripyat

#### Of ruins and their ghosts



*Image 22: Birch tree, top floor of the hotel (#p1758)*

The tallest tree in Pripyat is a small birch tree that has taken root on the top floor of the hotel (image 22). There never fails to be laughter and surprise as visitors turn the corner and encounter this. Such oddities are not uncommon in ruins, but Pripyat is a modern ruin; its spaces can be recognisably everyday spaces. Everyday spaces that lack birch trees pushing through tiled floors. This is a common feature of Pripyat; everyday urban boundaries have begun to breakdown, but they have not been entirely undone. Visitors gather around it to take panoramic pictures of Pripyat's ruins, the apartment blocks rising out from the forest. Soon enough we are heading back down the stairs.



*Image 23: Walking across to the cultural centre (#p0650)*



*Image 24: Crossing from the hotel to the cultural centre (#p1375)*

We pass across the central square of Pripyat. There once stood a large bronze statue of Prometheus here. This has since been moved to the power plant complex to save it from the scrap collectors that salvage materials from Pripyat. As borders breakdown in these ruins, they are aided by human activity through the removal of aluminium window frames and other metal items. As we pass the square (image 23), visitors stop to take photographs (image 24). An old doll that sits in a patch of moss is a particular draw for photographs.



*Image 25: Taking a closer look at the books (#po405)*

Not all encounters are through the lens of the camera, however. Once inside the cultural centre visitors pass the theatre (now emptied of anything of value) and head upstairs,

broken glass cracking under foot. Old electronic equipment and piles of books strewn over the floor become objects of interest. Intrigued, visitors take a closer look, though most are apprehensive about touching these objects. The invisible presence of radiation a barrier to tactile engagement. Discussion picks up about what some of these items might have been. One visitor recognises an old record player as very similar to one they used to own. The scattered books of the old library (image 25) turned over by a flick of the foot as titles are translated, possible contents imagined.



*Image 26: Store room at back of Pripyat cultural centre in the main square (#p0072)*

The backstage area of the theatre can be accessed through an external door (without artificial lighting, the auditorium is too dark to traverse). A large collection of painted posters can be found backstage. Probably intended for the May Day celebrations that never went ahead, they seem to have been deemed to be of no value to scrap collectors. Ben remarked that this “big room full of propaganda pictures [...] looked to me like that they created that for tourists” (#io8) having made an assumption of a staged tourist experience. This is not the case, however. Rather the goal of guides, as we shall see, is that tourists are left to make their own emotional connection with the ruins as ponder the remains of the city. Whether books or birch trees, meaning is still being made. In any case, if the site has been designed such as to assemble a collection of ‘propaganda’ posters for tourists, one wonders if they have also made sure the usual tour route was strewn with broken glass, odd bits of metal with sharp

edges and loosen the tiles on staircases just to add to the sense of danger. Indeed, it was more often the case that visitors were surprised at the lack of site management. Nigel and Simon, students from the UK visiting the Zone as part of a few days in Kyiv, related a conversation between them and the four other interviewees to popular political discourse in the UK on health and safety.

*Nigel: "I was surprised that we were even allowed to walk round. Broken glass, asbestos sheeting and metal and bits of paint coming of the ceiling that could be contaminated, and it just seemed a bit..."*

*Simon: "They have a different attitude to health and safety.*

*\*laughter\** (#129)

Pripyat remains a less overly determined space than many tourist destinations. Neither representationally nor materially configured through precise management for tourism purposes. Tourist encounters with objects and spaces in Pripyat are (in comparison to many tourist destinations) much more lively, imaginative and productive than they are scripted, determined and managed. This chapter is an exploration and analysis of visitor engagement with the ruins of Pripyat as a productive meaning-in-the-making covering the following themes: First encounters with buildings and objects that visitors make sense of. Second, oractices of knowledge production inflected by the uncanny, boundary disrupting, radioactive ruins Pripyat. Finally, knowledge production instigated and undertaken by tourists, expressed through the metaphor of salvage. A salvage not of material value, but of meaning.

The Zone is a site of very different forms of engagement and knowledge production than at other tourist sites, a difference summarised in Edensor's contrast of (modern, industrial) ruins to sites of heritage:

The form of knowing available in [modern] ruins is not like that of the heritage industry which collects and organises particular fragments [and] disguise[s] the excess of matter and meaning of which they are part. [In ruins] we can construct alternative stories which decentre commodified, official and sociological descriptions, producing an open-ended form of knowing which is sensual and imaginative, which resides in chaotic arrangements, fragments, indescribable sensations and inarticulate things. (2003: 267)

Practices of tourism and the forms of knowing in the Zone are not reducible to consumption and choreography. Tourism in the Zone is a working through of all manner embodied and imaginative encounters with decaying objects, ruined urbanity, historical modes of existence, with uncanny places and a host of ghosts. Practices, performances, networks, images, texts, knowledges and discourses are often open to adaptation; configuring and re-configuring places, things, bodies and discourse.

There is a sense in which this is even more heightened in Pripyat. Edensor (2003) focuses on those ruined spaces that are within cities, and the radical possibilities that lie in such spaces otherwise part of 'orderd' urbanism. Pripyat, a city ruined *in toto* is a somewhat different experience; especially for the history of its ruination.

*Simon: "Say you went into another city that had been abandoned, but not for the same reason, industry moved on or whatever, suppose you look at this one completely differently because it was left in such a hurry. Trying to picture how it was back in 1986, the day before it happened, all the buildings full of life. I guess you're much more careful to think about the lifestyle there, whereas derelict buildings in other cities, it's just a building."*  
(#129)

The specific history of Pripyat's ruination becomes easily thought of than a more nebulous 'industrial flight'. Just as Pripyat's ruins are different from ruined spaces in urban areas, it is too different from the ruined places that share a specific history (and thus draw interested tourists); for Pripyat sits outside of the forces of 'heritage'.

Pripyat affords multiple opportunities for engaging in histories and possible futures that differ from commonplace acts of memorialisation and commemoration. Its ruins are as yet untouched by site design, interpretive offerings, or staged experiences as one might find at heritage sites. Such strategies of remembering have a tendency to 'exorcise' haunted places, and require fixed performances and narratives (Edensor, 2005b: 829). Rather than the stabilising work of heritage and memorialisation aimed to be *for* tourists, it asks of us to examine the production of knowledge as it is in process; the ongoing, changing imaginative work and the performative practices of tourists.

On North American ghost towns, deLyser suggests that 'In ghost towns ... such landscapes convey not the past per se, but how people in the present think about the past' (1999: 606) and this is no less true for Pripyat, though a more recent ruin. Yet where deLyser finds visitors to ghost towns re-affirming 'mythic' notions of historical progress, visitors in Pripyat tend to be not only more open to, but often actively seeking, a disruption of received histories of Soviet Others. Moreover I have already suggested that as well as a thinking about the past the ruins of the Zone suggest a thinking of the future. Here then we might look for, and sometimes find, amongst the knowledge production of tourists in the Zone, the need to pay attention to haunted objects for:

as social scientists we should pay attention to the object and its phantasm-agera [...] It is not just humans that have memory and oral history, things too can tell us something about their past, and our possible future that we cannot find in our own representations of that past. (Hetherington, 2001: 40)

Modern ruins, then, are far from the sublime or romantic engagements with which older ruins are approached (Edensor, 2005c: 324), and in Pripjat they are not overly coded by tour guides or existing representations. Akin to Edensor's work on modern ruins, Pripjat offers unpredictability and 'speculative interpretation' (ibid.) along with 'spooky allegories that keep the past open [and] that acknowledge that it is radically unknowable.' (2001a: 49) Ruins haunt through a 'logic of disruption,' (Trigg, 2006: 136) and often that disruption is a moment of chance encounter with uncanny, haunting objects. Here then I aim to indicate the ruins of the Zone as the landscape of a potent mix of experiences that pays heed to the work of the imagination, whilst at the same time paying dues to a wilful agency of things amongst the unsettling company of radiation.

### Hauntings

The 'final disposal' of objects happens 'only when all forms of value have been exhausted or translated and thereby stabilised.' (Hetherington, 2004: 169); and before such complete disposal objects have a 'second chance'. This second chance is especially possible, Hetherington suggests, when – as in Pripjat – expected processes of disposal remain unfinished or inefficient for a significant period of time. Such second chances are not simply for a renewed value; but for objects themselves to reclaim and exert their own agencies. These items for which acts of disposal have not taken place or have not fully dealt with the translation or exhaustion of value are encountered as ghostly, Hetherington argues, and 'its agency is expressed in the idea of haunting.' (ibid. 170).

Pripjat haunts and is haunted for it has not been 'dealt' with through disposal as per Hetherington. Neither have the ruins – as with Edensor's work on industrial ruins – been fully 'dealt' with through memorialisation nor the fixing of historical narratives associated with heritage (Edensor, 2003). Ruins are 'inarticulate, indeterminate and hybrid' but are full of traces of 'emotion, activity, knowledge and event.' (2001a: 50) Such traces, the 'vestigial signs' may lead to emotional, imaginative engagement with other pasts and people, and 'conjure up only the half-known or imagined' (2003: 266); different engagements with imagined pasts. There is no simple hierarchy between interpretive practices of visitors and haunting agencies; they are mutually implicated.

Undisposed and replete with excess, unexhausted, value and not fully translatable, the objects and spaces that tourists encounter in Pripjat are haunted: and such haunting involves a range of tactile, material engagements aligned with imagination and memory. The work of imagination and memory as exercised by visitors; for this is not the work of memori-

alisation, not of heritage or 'site sacralisation' (MacCannell, 1999) nor the role of management in providing 'interpretation' (contra Lennon and Foley, 2000). Aside from ongoing (illegal<sup>47</sup>) scrap metal collection (which I will return to later), so many objects in Pripjat remain outside of commodity chains, yet visitors engage in their own mode of salvage as a practice of finding 'what values emerge outside of the loops of circulation and accumulation.' (Williams, 2011: 41). In Pripjat then, the salvage of imaginative value of the 'half-known'. Jack, an Australian in his mid 30s who was travelling alone, visiting the Zone for the photograph opportunities, recalls how his parents thought of Communism, and how this has affected his opinions:

*"I think this park, it was so great, because I can somehow hear the children playing or something ... My family were against communism, and communists were a kind of myth for me, and this time I could see how fragile they were. Not communism itself, but the people, how human they were. When you make a mistake, how easy it is to destroy a dream or something ... it's very weird, very poetic." (#i30)*

Two Swedish friends, both male and in their 20s, were visiting Kyiv for three and a half days, a trip arranged by one of them as a birthday present for the other. Sven, whose birthday it was, recalls how the items that do remain allow a greater connection:

*"I think one of the reasons I liked it is it enables you to connect a bit more with the people that lived there. It's not just empty buildings, you know. I mean, they're mostly empty but there's still some stuff. Stuff I have in my house, I have books in my house. Brings it a bit closer." (#i09)*

In part, such haunting is of absent presences; imagined Others. Objects in the Zone haunt, and are haunted by, the absent presences of other times, other places and other people. Of no interest to the scrap collector looking for market value, such objects are nevertheless not fully exhausted of all value, neither are they translated by heritage; these objects are haunting reminders of the events of April 1986, and provide opportunities for imagining Others in a contrast to official Cold War rhetoric of the Soviet Other. Objects, however, do not have to form central parts to wilful imaginaries to haunt; they exert their own power, their own ability to surprise. What this chapter aims to express is that such conjuring or imaginings, such salvaging of meaning, is not wholly the product of tourist subjects, but is as much driven by decaying, haunted objects which exert their own will. However, in a Zone of

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<sup>47</sup> Certain scrap collection activities continued during the day-time, and were very open, unlike the traces of activities from night time operations. I was informed by a tour guide that these were conducted on behalf of the management agency of the Zone. At least, this is what the guard at the entrance to Pripjat had said about the presence of these workers. Whether the metal collection was permitted for the purposes of safe disposal, or scrap metal value or simply that the posted guard had been cut-in on the activities this time, I could not ascertain.

invisible, intangible radiation, spectral encounters may be quite different than the ghosts of ruins one might expect.

In order to examine this meaning-making as it takes place in a ruin as yet exhausted of (cultural, historical, sentimental) value nor folded into interpretive frameworks of heritage I move to provide a short review of the work on 'tourist encounter' as set out by David Crouch, largely as a contrast to the more common metaphor of performance within tourism studies. In doing so, this is a move towards a phenomenological register; a move which enunciates the practices of tourist subjects as they traverse, sense and engage with the materiality of the ruins. Yet I aim to hold Crouch's focus on the tourist subject in (productive) tension when confronted with the agency of objects and the extra sensual worlds of radiation. Such agency I suggest can here be thought of as the uncanny qualities of the ruins and radiation. Though the uncanny is indicative of the cognitive dissonance of the simultaneously strange and familiar, I suggest that it too is indicative of the agencies of a world unwilling to fully reveal itself to our phenomenological capacities.

Part of this engagement and practice is the work of history and memory. I suggest this is in part is a form of metaphorical 'archaeology'; the practices of searching for objects through which one can make connections, to bring forth and make absent others more present in the imagination of visitors. But it is also the affective *mémoire involuntaire* of triggered thoughts and memories where objects and spaces become the fulcrum of thought. Such practices might be thought of as *salvage*; a political practice of re-membering and working through disaster. Three modes of salvage are explored; firstly the salvage of a 'human affect' through imagined histories and partial readings of *vestiges* of Others; the discarded (abandoned) but as yet undisposed objects in Pripyat. Secondly, that in salvaging ruins one encounters a host of ghosts and spectres, not all of which are benign, inviting or welcoming<sup>48</sup>. In the previous chapter I argued for a post-apocalyptic sensibility that opens up the thinking of histories and futures anew. The focus here is on how such histories and futures are thought, rather than an in depth investigation of what these are. This is the work of salvage which assumes specific, material, approaches to pasts and futures and produces new, differing forms of politics and memory.

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<sup>48</sup> Contra Edensor. For he suggests that ghosts 'motivate us to celebrate the mysteries, heterogeneous sensations, and surprising associations of the past in the present and encourage a wanton speculation towards objects and places.' (2005b: 845) The rupture of past disaster into the present through the ghosts of radiation is far from a motivation to celebrate surprise (the urgent clicking of the Geiger counter a reason for concern, not celebration) nor does it entice a sensual engagement with objects. As I will show, it provides reasons to be wary of tangible engagement.

## Encounters

### Making sense through encounter

The 'tourist encounter', writes David Crouch (1999), is tourism envisioned as process and practice rather than product and consumption, and takes seriously the practices of knowledge and 'making sense' (or 'lay geographies' (2000)) as practised by tourists. This is a move away from an otherwise predominant consumption / textual analysis model of tourism theory. This work on encounter is certainly not alone in bringing embodied, phenomenological and non-representational approaches to tourism studies<sup>49</sup>, but the theory of tourist encounter serves as a useful spring board with which to begin.

Encounter 'takes the individual as a focus for tourism, suggesting that encounters with both place and other people are productive of a lay geographical knowledge.' (Crouch and Desforges, 2003: 8) Within this work on tourism, embodiment and the senses, the encounter is situated quite firmly in the realm of phenomenology<sup>50</sup>. Encounter is enunciated in more detail in a later paper, where it is written that;

'central to our thinking about the tourist in terms of agency, practice and space is the notion of negotiation, that is the world of the tourist is not prefigured, but figured and re-figured in the process of being a tourist.' (Crouch et al., 2001: 254)

Such negotiations take place between people, between bodies, between bodies and objects, and it is through encounter and performance that tourism spaces are produced<sup>51</sup>. It is in such encounters, I argue, that one finds Hetherington's haunting agencies. Encounter also highlights the importance of knowledge production; discursive and material practices which indicate a world not quite fully yielding to the senses or the intellectual realms.

Touring Pripyat one finds many such moments of encounter and it is in these moments of chance encounters, unpredictable arrangements and sensory punctuations that visitors find ghostly reminders of the lives of others. This was often most apparent within school number 3. School number 3 is approached by climbing over a waist-high wall and pushing through thick vegetation. It cannot be seen from the road (as shown in images 27 and 28):

*Simon: "The fact that the main streets, would have been boulevards and now some buildings you couldn't even see when you got out of the bus. That school, wouldn't even have*

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<sup>49</sup> See Chapter 1.

<sup>50</sup> Crouch relates encounter to Tim Ingold's (2000) work on dwelling (after Heidegger). Though I find Crouch's use of encounter useful as a starting point here, related as it is to embodied knowledge production, I do not follow dwelling further. Instead I address the question of 'being' (in the Zone) in the next chapter through the work of Melreau-Ponty as inflected by a reading of Luce Irigaray

<sup>51</sup> A 'performativity of place' (Coleman and Crang, 2002b: 10)

*known that school were there, so wouldn't have even gone there if we didn't have a guide to tell us you turn right as you go out and then you jump over the fence, Lara Croft style.”*  
(#i29)



*Image 27: The school, as seen (just) from the road (#p0918)*



*Image 28: The entrance to the school (#p1499)*

The visit to this school is a deliberately unscripted situation. Yuri has often expressed that what he particularly enjoys about being a tour guide are the varying and multiple experiences of visitors, and he tries to foster this, stating in an interview that “an empty day: no emotions and no impressions, it's boring for me.” (#i25) It is for this very reason that this school is visited; in particular it affords a space for exploration, encounter, emotion and impression. Fostering these experiences is best done through a *lack* of direction and choreography. So at the school there is little in the way of staging, or even formal guiding. In all visits to the school visitors were informed that they had somewhere in the region of half an hour to an hour to wander and explore as they wished.

Yvette and her partner Graham discuss the destruction and looting with Brendan, a man from the US in his early 30s.

*Graham: “I think also it would be interesting to see, also, I suppose, if you visited say after 5 or ten years and visiting again, now, 24, 25 years. It's changed a lot, even the looting and the plants, if you go again I'm sure it would be quite interesting. I was speaking to Maxim, [asking] is it the same everyday, and he says “no, no, I'm always noticing new things.” I imagine that would keep it quite interesting.”*

*Brendan: “I was definitely struck by the scale of looting. I kind of thought the Exclusion Zone would be more exclusive in the sense that they kept people out. But obviously it's hard, that much to do that, you don't think about that then you come and you see, yeah there's environmental destruction, but clearly people have been in there, stealing anything of value.”*

*Yvette: “And also the scale of destruction that was in there. You saw me, at one point you're clicking, clacking through all this broken glass and at one point I sort of stomped down on the tile, because the crunch of it was such, just this destructive feeling took over some way, made you want to chuck stuff around.” (#i29)*

On every visit I would wander around the school, talking with visitors. Visitors would head off in different directions as couples, small groups and individuals. Discussions were sometimes loud and exclamatory, others hushed, some visitors remained silent. Sometimes I would find myself talking with the same group of people for the whole time we were here, other times moving between groups as I wandered. Many rooms and objects would feature on multiple trips, but on each visit here something I hadn't seen before was pointed out to me; either something new, or something encountered, interpreted, made meaningful differently. Of all locations the school most invited tactile engagement; the feel of broken tiles or the leaves of old books. Although this was always somewhat apprehensively, mindful of the

radiation. As visitors walk through the Zone, possible histories of the place are discussed and thought of, as well as relations to own histories made.

As I move with and between small groups of visitors, we come across the familiar, the alien and the uncanny. Woodwork classrooms are met with pleasant surprise as recognisable tools and machines (dismantled for salvageable parts) bring back memories of school. Piles of exercise books filled with the same arithmetic exercises prompt discussions of algebra. English language text books invite attention, as do the wall displays of students' work. One visitor remarking how completely recognisable this all is; a student history project up on the wall, except this is Lenin not Lincoln. Here another visitor points out the potted indoor plants which lie dead as green growth pushed through broken windows and through holes in the roofs. One visitor peers into a room through the space left after a wall has fallen down (image 29)<sup>52</sup>, bits of concrete now litter the tables and chairs. To get a closer look, people pass through the door anyway.



Image 29: Inside Pripyat School 3 (#p1302)

Reflecting on this school later, Jack recalled with another respondent, Emilie, a visitor from Finland who was on vacation in eastern Europe and who chose to visit Chernobyl after having decided to visit Kyiv, not knowing there were tours available before then. Emilie recol-

<sup>52</sup> Another school has been taken off of the possible visiting locations because its roof fell in.

lected the disaster from her childhood. Imagining herself as a young child, when the disaster happened, the school triggered thoughts about the responses of children in Pripyat.

*Emilie: "then seeing all the school stuff and all the books, then we get to think of the people who actually lived there, and the kids that have to go [...] probably they don't know why [...] what's the matter. And that's something [voice trails off]...*

*[...]*

*Jack: There was this one room full of bright children's paintings as well, sort of really brings it home, it was behind one of the tipped-over bookcases, a whole bunch of looked to be year 7, year 8, just bright kids' paintings like you see in any school, in any western school. While the other things were typically Soviet, and that was interesting. You know, like pictures of Lenin on the wall and stuff you are not gonna get in an Australian school, but you will get brightly coloured kids' paintings." (#i30)*

'The exhaustion of things outlives their physical demise' (Trigg, 2006: 138) and their lives continue, although displaced from their historical context they are encountered otherwise, in other lives, and ask of us differing forms of understanding. Books and drawing acted as triggers; moments of reflection and connection. Talking to visitors at the end of the day, many of these encounters became the source of narratives whereby visitors worked through the day's activities, making sense, producing knowledges. Here encounter pays attention to the tourists own subjectivity in the making of meaning. But objects do not give themselves fully to tourist encounter. They do not align or ally with any reading a visitor may wish to project. This is the uncanny property of encounter in the Zone. In many ways such objects act as props in various stories being told by tourists. But props are not mere lumpen things to be animated: For although such objects *were* and *are* props, and they are animated by tourists (and – as we shall see – others), they are also not ever fully given to being known, intellectually synthesised nor playfully enjoyed.

## The secret lives of gas masks, dolls and birch trees



*Image 30: Children's NBC masks, canteen floor, «ПЦМ #3» (Middle School No. 3), Pripjat. (#p0924)*

The floor of the canteen area in school number 3, Pripjat is almost entirely covered in discarded Nuclear Biological and Chemical (NBC) masks. These are children's versions of the common civilian issue GP5. These masks feature prominently in professional and amateur photographs of the schools in Pripjat, including exhibited and published works such as those by Robert Polidori (2003) and John Darwell (2001, 2006). Often used as part of a metaphorical montage for such photography situated in juxtaposition with (now decaying) objects of everyday childhood such as a kindergarten playroom replete with dusty dolls and a rusting toy tank.

The masks were some of the many items regularly relocated, positioned, framed and photographed as tourists practised their own metaphorical inscriptions of the Zone. Featuring as a part of still life montage and enrolled as metaphor, these masks play an important role as signifiers. Their enrolment in these practices meant their placement was never taken-for-granted as accidental, and I was asked on a number of occasions by respondents if I knew if one of the tour guides had placed the gas masks here, or if maybe it was a photographer previously. From their use by tourists and photographers and the explicit assumption by some that they were purposely placed to used as such, one could accurately refer to them as a number of the many props used throughout the staging of tourism *performance* in Pripyat.

In such photographic performances, then, the masks can be used to tell the familiar 'story' of Pripyat: tens of thousands of people; men women and children, forced from their home, little time to spare, leaving belongings behind but taking with them a legacy of exposure. The photographs of Darwell (2001, 2006) and Polidori (2003) tell this story in differing ways; Polidori's<sup>53</sup> empty rooms and wider angles stand in contrast to Darwell's fixation on everyday objects. Yet both indicate an absence, a loss. Much could be written about such photographic practices; not just that of renowned photographers; but also of the increasing number of professional and semi-professional photographers visiting the Zone<sup>54</sup>, and the too often maligned tourist snaps. I wish to indicate that there is more to these masks, more to the Zone and its ruins than mere props or backdrops. Visitors in the Zone encounter places and objects with lives of their own.

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*Sven: "I think that some of the stuff over there is fabricated by the guides now, or like the gas mask hanging in the building and that sort of stuff, perfect picture opportunities."*

(#109)

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<sup>53</sup> A comparison of Polidori's Chernobyl photographs with his *After the Flood* (2006) collection is worth exploring here. For whilst similarly devoid of people; there is a clear visible presence in New Orleans after hurricane Katrina: Whether still engulfed or indicated by growing mold, or the brown, horizontal marks that cut across many of the photos; the water has left its traces. Radiation does not appear on photographs; photographs remain haunted not only by absences but the uncanny, invisible presences.

Indeed, in photographs of the Zone, Barthe's photographic *punctum* (2000) the 'wounding detail' of a photograph is that which is necessarily *not* present in the photograph; an uncanny presence in that it defies Barthe's reading of the photographic referent as *necessarily* real (ibid.). Further disrupting the drive to documentat, Sontag contrasts Walter Benjamin's 'fastidious work of salvage' with the photographic impulse to document everything; for photographers, she writes, 'suggest the vanity of even trying to understand the world and instead propose what we collect it.' (1979: 82) In the radioactive Zone, the collector's impulse is rendered vain.

<sup>54</sup> A simple search on websites such as Flickr will indicate the increasing interest of photographers – amateur or otherwise – in the Zone (and, indeed, the photogenic qualities of the Zone were often cited as a draw). During my research I interviewed a small number of professional and semi-professional photographers, however, the more discerning photographer was more likely to book an extended 2 or 3 day long trip, and such visitors were rarely part of my research.

Again we meet the assumption of staging; props left in photogenic configurations. Although I was certain that the tour guides were not in the habit of 'dressing' Pripjat and that the photogenic placement of many objects were the result of photographers, not guides, I nevertheless asked Yuri about it, to find that this is no new phenomenon:

*Nick: "People always ask me about the objects, if they are put there by the tour guides?"*

*Yuri: "All this was done by reporters before us, especially in the middle of the 90s [...] I recognise installations everywhere, very famous, dolls and gas masks. [There is] this old doll in the middle of the square in Pripjat, always changing pose and position, like it walks by itself. And, for example, [I am asked] about this birch tree [which grows on the top floor of the hotel], did you plant this for the tourists?" (#i25)*

Objects have lives of their own, and in Pripjat this includes their many obvious uses as props, staged by photographers not guides. But an analysis of 'performance'; of assumptions and analyses of staging only gets us so far, and in doing so ignores alternative lives of, and encounters with, objects in Pripjat. The doll may only walk when propelled by photographers but that birch tree is a result of wind and leaking roofs, and the pile of gas masks? Props on occasion, but this is only one small part of their lives.

There is an absence in the photo of the gas masks (other than the absent presences of the children, which I will return to). Each and every gas mask, to the last, has had the filter canister removed from the end of the connecting hose. A meticulous, significant operation by those who enter Pripjat to strip it of materials which retain a value on scrap markets. This explains their placement, strewn as they are across the floor<sup>55</sup> rather than in the wooden boxes they were once kept. The exact reason for the lack of filters was, like much of the knowledge that comes from the touring Zone, never fully clear, evidenced or apparent. No one I spoke to knew what it was about the cannisters, specifically, that made them worth removing en masse. The presence of silver in the filters was mentioned on occasion, and it is possible that the activated charcoal in the filters had been impregnated by silver, or maybe it was that the filter canisters (being of a standardised dimension and thus usable in contemporary designs) had some market value. Whatever the exact reason, the filters had been removed – illicitly – because they were deemed worth salvaging. The removal of filters is just one small example amongst many of processes of scrap collection and salvage in the Zone.

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<sup>55</sup> Not, as occasionally surmised, a function of last-minute panic. The evacuation, though 24 hours too late, did not involve civilian use of protective gear.



*Image 31: "this old doll in the middle of the square in Pripjat" (#p0983)*

Often such traces were easily missed. One tell-tale sign was the piles of radiators that would appear on one tour, to be gone the next day (image 32). Neatly stacked and awaiting transport these piles attested to ongoing scrap collection. The 'vehicle graveyard' was often also mentioned: An area used to park all of the vehicles which were too heavily irradiated to be used again. Stripped of engines and parts which could be cleaned (or were worth cleaning) these rusting hulks are another icon of the Zone. Yet visitation is now banned; ostensibly because of the high levels of radiation (ground contamination from precipitation and resultant oxidisation), yet I was occasionally told (in hushed tones) by workers in the Zone that – in reality – that a greedy Ukraine Government was cutting them apart to be sold to the Chinese scrap metal market<sup>56</sup>.

<sup>56</sup> They may well have also been being removed to designated waste storage areas, as officially claimed, or still be there rusting; for I was as much under the ban as anyone else.

Much of the decay of Pripyat is actually due to these practices of resource salvage, rather than the often initially assumed damage from water and plant growth (although this is substantial in places). Most damaging are the aluminium window frames that have been ripped out, letting in rain and snow. There are even tales<sup>57</sup> that an old military helicopter, abandoned due to the levels of irradiation, was targeted for salvage by those wishing to theme a bar. Pripyat is not, as many expected, a town untouched by people since abandonment. The objects left for tourists to encounter in Pripyat are those, such as the posters we began with, which are of little value to the scrap collectors.



*Image 32: Radiators arranged for later collection by scrap collectors (they were gone the next week). Next to the entrance steps to the swimming pool, Pripyat. (#p1051)*

Tourists were known, on occasion, to 'collect' objects themselves, their own form of salvage, from Pripyat; though not as often as may have been the case were these places not irradiated. Many professed to have thought about 'pocketing' a book or other item, but thought better of it. Only the once, back in Kyiv, was I shown a hastily snatched item; an old school text book. Yet despite a lack of collected items, objects in Pripyat were encountered in many

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<sup>57</sup> From those who work in the Zone, again, unverifiable.

similar ways to Navaro-Yashin's (2012) collection of objects from Nicosia's Zone. I agree here with Navaro-Yashin's objective to deal seriously with the relations to the debris of ruins which pays attention to subjectivities, yet at the same time asserting the affective powers of objects. For the qualification of such things is:

wrought by the tangibilities themselves ... their dilapidated state, the rust, the dust ... the decrepit state of the environment ... that many of them belonged to other people who would have missed them. It is these qualities of the objects, in relation to their viewers' knowledge about their context, that evoked ... feelings of uneasiness among those who came into their presence. Objects and a material environment can generate affect, then, but only as they get entangled in forms of human mediation. (ibid.: 214)

The 'props' of the gas masks, as well as dolls and radiators and abandoned helicopters, tell multiple stories as they are mediated in different manners, but they too relate through a haunting affective agency. I first trace out the uneasiness of encountering such objects; here I claim such uneasiness is a factor of the uncanny formations of Pripyat's ruins. Secondly I pay attention to the mediation through imaginative engagement; the memory work of the vestiges of the other, claiming that this is in part an archaeology, and in part the work of salvage; not of material, commodity chain value, but of a salvaging of meaning. However, I attempt to retain a fidelity to the haunting agencies; the affective power of the ruins and its debris; finding such knowledge production that is not projected onto the ruins, but produced through encounter and negotiation.

## The Uncanny

### Kopachi and spectral remains

On the road leading to the ChNPP complex, tourists encounter a site of actual 'first burial'<sup>58</sup> (Hetherington, 2004). When passing the village of Копачи (Kopachi), tourists are informed that it was demolished and buried by the liquidators in a moment of experimental disposal.<sup>59</sup> But this first burial, this unfinished disposal has left traces; the location of houses marked by small mounds, cherry and apple trees indicating the mark of past acts of cultivation amongst the new growth of shrubs, trees and tall grass. Much like the school, these

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<sup>58</sup> The 'holding process' by which objects become waste. In first burial their value (sentimental, use, exchange) is undetermined. Only through an exhaustion or translation of value do objects enter second burial; the 'representational outside'.

<sup>59</sup> The danger to those demolishing the village meant that this was an experiment which was not followed up on. The Zone is dotted with small, empty, villages, still standing. Given the current problem besetting the management of the Zone of radioisotopes percolating with rain water and threatening contamination of the underground aquifer, that this experiment was not followed up on is no bad thing.

traces suggest a location haunted the ghosts of other peoples and times. But in Kopachi, maybe more than in Pripyat, one encounters these traces of absences along with a different kind of haunting, a different ghost. Upon these mounds and amongst the vegetation stand small, yellow and red signs indicating the presence of radioactive materials.

Hetherington's work on second-hand objects highlights the incompleteness of much disposal, and in the radioactive Zone one encounters the impossibility of *any* final disposal, any complete exhaustion or translation of value that would move from first to second burial. If incomplete disposal leaves traces, ghostly remainders expressed through haunting, then the radioactive traces of matter in the Zone produces a haunting of a much different kind. Exhaustion and translation of value incomplete here, rather, it is impossible. Radioisotopes, although anthropogenic, are located far outside circuits of commodity within which they may be made meaningful. Any sense to be salvaged from Kopachi will be within what Williams refers to as 'valueless times' (2011: 41) that sit outside the commodity chains of modern capitalism.

The village of Kopachi, though no longer here, no longer a village— like so much of the contaminated Zone in its undisposed, unexhausted state — nevertheless retains an undeniable, material presence. The absent village is still present and this presence is attested to by the clicking of Geiger counters and the sharp-relief of radiation warning sings against a green backdrop. We find that in radiation and irradiated materials, with unknown future outcomes of exposure, sensually inaccessible and affecting on the molecular level that which haunts in full indeterminacy, entirely inarticulate and problematically hybrid. In radiation we find that which encompasses all that is uncanny about Pripyat and the Zone.



Image 33: Tracing Kopachi (#p0223)

## Unheimlich

*“A place that was inhabited but is now defined by the absence of people [it] has an interesting contrast between your presence and all the people that used to be there.” (#io7)*

The Freudian *unheimlich* (Freud, 2003) is rooted in the German *heimlich* which is simultaneously the familiar and concealed. Freud found his formation of the *unheimlich* within literature, but near the end of the essay briefly considers what the uncanny may be in experience. In experience as in literature he states, the uncanny 'can be traced back without exception to something familiar that has been repressed.' (ibid.) The examples given are that of the return of infantile complexes or of things that '*actually happen*' which affirm superstitious

'old, discarded beliefs' (ibid.). The uncanny as I find it in Pripjat's ruins (drawing on the work of Dylan Trigg (2006), Joseph Masco (2006) and others) differs somewhat from Freud's reading; returning to a formation of the "unfamiliar-in-the-familiar". Yet there remains a return of the repressed; but here not superstitious beliefs. Rather the repressed here are the lively agencies and ambiguity of the world that has been split into (repressed by) modernist binaries of inside outside, body and world, animate and inanimate, living and dead.

The disruptive moments of these encounters with haunting and haunted objects in Pripjat often occurs as a result of a certain uncanniness. Encountering vestiges of the Other in Pripjat is a fundamentally uncanny experience for many visitors, an experience which disrupts boundaries between the 'known and unknown' (Edensor, 2001a: 48). Modern ruins have a certain *unheimlich* quality that romanticised older ruins may not, precisely because of this boundary disruption, situated between the familiar and unfamiliar, the quotidian and the extraordinary. Confronted with this uncanny quality, the familiar found far outside its quotidian context, others, found their imagination taken elsewhere. In an echo of Freud's uncanny within fiction, and of the cinematic referent for some experiences in the Zone, Ishmael remarked:

*"it's not somewhere I would go on my own, at night time. Some of the gas masks and things like that, very much reminded me of a horror film, and that was the instant comparison I made. So while we were in a group, walking around, you can use your imagination and think of things that aren't so pleasant, based on the environment."* (#129)

The power of the uncanny ruins in Pripjat lies in its fundamental disruption of any notion of durability. 'In Pripjat,' Dylan Trigg writes; 'the normalization of decay is such that what becomes unhomely is the claim to durability: [...] When the presence of reason has departed, gravity takes hold' (2006: 206). Pripjat is slowly suspended from its source in the modern, urban technological rationalities and their contingency. Moreover, Pripjat is haunted by the memories of unknown Others. Salvaging meaning from, and making sense of, such haunting leads to new, partial, understandings as visitors encounter vestiges of the Others.

Joseph Masco (2006) has referred to the extra-sensory, boundary disrupting, genetic alteration capabilities of radiation as the 'nuclear uncanny'. He writes that 'nuclear materials produce the uncanny effect of blurring the distinction between the animate and the inanimate, and between the natural and the supernatural,' (ibid.: 30) and that this blurring allows a 'proliferation in the realm of the imagination,' (ibid.: 32) and is experienced as 'material effects, psychic tensions and sensory confusion.' Pushing this further, Masco states the importance of the nuclear uncanny for the experience of space, stating:

if the nuclear uncanny is a disorientation of self and environment, then we also need to acknowledge that experiences of self and environment are culturally specific. Consequently, I offer the nuclear uncanny here not simply as a figurative device, but as an ethnographic category (ibid.: 34)

The nuclear uncanny as it found in the specificities of tourism in the Zone and Pripyat filters through to all encounters attempts to make sense of the ruins. For what, indeed, could be more unhomely than the body inhabited by radioisotopes? It is the denial of classificatory regimes that separate bodies and worlds that the spectral implies (Holloway and Kneale, 2008).

The Zone's ruins are found to be uncanny because of the presence of spectral radiation. Encountered largely through the crackling of Geiger counters, radioisotopes haunt the Zone, their presence causing visitors to hesitate before they touch or pick up objects. Textures and forms of undisposed objects in ruins are said by Tim Edensor (2005a) to invite tactile engagement, but such an invitation is met with hesitation and wariness in the Zone. One respondent noted that it was a shame he felt so disinclined to pick things up due to the possibility of radioactive contamination of objects “when usually part of the fun of abandoned buildings is playing with things.”

It is in this uncanniness of radiation, and the possibility of contamination, that makes touch so problematic in the Zone. A comparison with Hetherington's work on Praesentia (2003) indicates a way to highlight this issue. For his description resonates a little with radiation's uncanniness: 'Praesentia involves a presence of something absent – something that we cannot behold but which touches us and which we can touch.' (ibid.: 1940) The uncanniness of radiation is found when that which as it touches us denies our touch in return. The response is not a withdrawal of some form back to a representational, visual mode; that will help little. For radiation is more akin to Hetherington's enunciation of the ghostly:

'The language of ghosts is a language before the subject. We cannot speak it ourselves. The issue is how we can best recognise it and bear witness to it when we do.' (2001: 36)

In his own experiences of Pripyat when confronted with the limited power of representation, Dobraszcyk comes close to the disrupting power of radiation, for in Pripyat;

'the ruined city becomes part of the observer, continually frustrating and overwhelming any attempts to resolve or understand its spaces. Pripyat is uncanny because it is a familiar place in which one feels homeless—helpless in the face of forces beyond one's understanding.' (2010: 387)

Despite such difficulty in representation, despite the impossibility of a resolution of understanding, this does not mean there is no attempt to 'make sense'. The nuclear uncanny

is simultaneously a flowering of imaginative engagement (Masco, 2006) and the inherent impossibility of any such representation to surmount, define and exhaust of meaning the materiality of the ruins of Pripjat.

It is this realm of the imagination that I turn to next; imagined histories, imagined others as produced not by a tourist subject apart; consuming, taking. An imagination of a subject that is, necessarily, engaged with irradiated ruins and discarded objects. In Pripjat the ghosts of others that speak a language prior to the subject are joined in chorus by another invisibility. An invisibility that is similarly pre-subjective and uneasily disposed to representation, the spectral traces of radioisotopes. Extra-sensory and outside of easily representation and sense-making, radiation is a more ominous haunting than that suggested by Hetherington (2001, 2004). I will put many of these thoughts on hold for the time being, as the issues raised are explored in more detail in the following chapters. Nevertheless, it is worth stressing this 'background' to any and all encounters in the Zone.

The ruins become part of the observer. Here Dobraszczyk could be referring to the manner in which bodies in ruins are porous (Edensor, 2005c). But there is, of course, more at stake here. For this porous body is more than one variously open to, or recoiling from, *sensual* stimuli that Edensor describes. It is a body unwillingly, unavoidably open to that which is beyond the sensual, on the edges of the representable. The pleasure and possibility Edensor finds in bodies performed differently in modern ruins must be compared to bodies as performed in the radioactive ruins of Pripjat. Any encounters in Pripjat are fraught with awkward, cautious movements as visitors hesitate and falter instead of succumbing to the freed embodiment Edensor finds in ruins.

Phillips' (2004) work with those affected by the disaster stresses the importance of embodied meaning-making and, though not wishing in any way to suggest comparability with visitors, this observation rings true even for a day trip in the Zone. In the mode of salvage visitors produce partial knowledges of the Zone, we have found an agency expressed in haunting. For salvage is 'not the dwelling places and movements of a fluid multitude but our resistant will and resistant, wilful things.' (Williams, 2011: 71) But extra-sensory radioisotopes complicate the materialities, textures and texts of haunted objects. In haunting absent presences we have found our resistant wilful things, but in radiation that agency finds itself expressed in a fully disruptive uncanniness.

## Imagined History Making

### The 'second chances' of objects

The ruins of Pripyat are replete with a host of 'valueless' items abandoned and discarded, and they resemble. Soderman and Carter's (2008) description of the auto salvage yard, possibly the archetypal space of salvage:

the home of contingency visually read through the scatter of discarded parts [...] the endless reminders of breakdown, bad luck, and "bad breaks." What remains outside of and excessive to the system—chance, contingency, accident—appears on display in the auto salvage yard. (p.24)

The 'bad breaks' of automobile breakdown are hardly comparable to nuclear disaster, but both leave us in the remaining excess of the system of rationalised, technological systems of modernity. A system which Soderman and Carter argue *ejects* human subjectivity, a human subjectivity to be salvaged from its contingent excess. Both Soderman and Carter (2008) and Williams (2011) make an important distinction between types and forms of salvage; and has relevance for comparing the scrap collectors and tourists in Pripyat. For the salvage of radiators, NCB filters and broken automobiles for scrap is a process which 'recirculates that which has broken down' (ibid.); it is a form of repair or maintenance (see Graham and Thrift, 2007) that aims to reproduce the same modern system. On the other hand are the objects which are invisible to this process of reproduction and recirculation are *vestiges* of a cultural system, and here that – in Williams' ethos of salvagepunk – one may realise 'the eccentricity of discarded, outmoded, and forgotten things' (Williams, 2011: 41); of things which offer a 'second chance to recuperate a human affect spit out by the failure of the technical.' (Soderman and Carter, 2008: 28)

Part of this second chance of value, which Soderman and Carter refer to as 'sentimental value' (2008), is that of an imaginative engagement with the Other, who may be absent but whose vestiges remain. Such vestiges afford an imaginative engagement with the cultural other, whereby they argue; 'one can *partially* read the vestiges of the other as vague parts in *some* imagined story.' (ibid.: 30). Here the salvage of vestigial objects is of 'an affective value, a value of feeling.' (ibid.: 30) Soderman and Carter turn to work by Gregson and Crewe (2003) on second-hand commodities and although focusing on second hand items from charity shops, car-boot sales and so forth, which are quite unlike the undisposed objects in the ruins of Pripyat, some of their reflections on the imaginative affordances of objects are worth considering here. Terming it '*imagined history making*', Gregson and Crewe suggest this engage-

ment with objects is 'largely based around romantic and fantasized visions of the lives and times of imagined others.' (ibid.: 147) Observing that these stories 'are steeped in melancholy and musings for the variously imagined (and unauthenticated) [...] lives of others.' (ibid.: 154) Such musing is readily recognisable in tourist engagement with the lives of the ex-residents of Pripjat through their encounter with the everyday and exceptional objects now found amongst the ruins.

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Salvage of imaginative meaning takes place in Pripjat as tourists encounter various objects of other lives, other cultures and other times. Many visitors arrived in Pripjat with recollections of the Soviet Other, or rather, recollections which they now understood to be rooted officially sanctioned imaginaries of the Soviet Other. As they constructed partial readings, the 'second chance' of recuperating vestiges of the Other in Pripjat often focused on varying understandings of what everyday 'Soviet' life may have been. These imagined histories, often romanticised, were to both disrupt, and occasionally reproduce, taken-for-granted notions of 'everyday' Soviet life amongst respondents. Reflecting on urban spaces in his Mexican home, Milos noted that:

*"It looks like many of the 70s cities I've seen, not just in Eastern Europe but in many of the countries of the world. And secondly [...] you know when you grew up outside the Soviet bloc, it was pretty much dark to you, kind of what you expected was that the people were all dressed in grey, unhappy. And, you know, we were taken to a swimming pool, that looked pretty nice to me, and a basketball court, and then you had the amusement park [...] they were average people [...] And I'm pretty sure each one of us you could close your eyes for a second and try to imagine the city or the pool [...] filled with kids or filled with families just having a good time. And it... What was [then] striking to me is that; what each one of us would do in our current lives if you were told, you need to leave within two hours? And you don't know then if you are not coming back." (#106)*

This construction of varying histories of the town and the desire to 'imagine back then,' was expressed by many visitors. More often than not, it was consciously put in contrast to perceptions of the Soviet Other acknowledged to derive from Cold War sensibilities. This 'imagined history making' was often practised in deliberate contrast to derived stereotypes. Emilie's boyfriend, Jan, with whom she was travelling, a fellow Finn, recalled the manner in which Soviet culture, in the form of fairytales and toys entered into their childhood in Finland. For him, the Soviet was a handed-down cultural knowledge of a "big powerful brother [who] wasn't so kind," (#130) which he was openly working to imagine otherwise. Wanting to reconsider this childhood experience and understanding of Soviet peoples, he noted how he

found it “interesting [to] see how people lived their everyday life.” (#i30) For Alan, a Canadian man travelling with Ben through Russia and Eastern Europe who was in Ukraine because of a Ukrainian ancestry, visiting the site was motivated by a desire to get beyond the absurd rhetoric of the Cold War depictions of Soviet Others:

*“I’ve wanted since I remember to go there [the USSR] and see what it was really like because I’ve heard so much about [it]; life was terrible, everyone was told exactly what to do at every moment; the rhetoric was so absurd on our side of the curtain that I couldn’t believe it. And it was a place I could never go, as a kid, could probably never go there, so that made me want to go even more.*

*So when I finally get to go there, [I was] just really trying to get a sense of what life was like, and I felt like I got some of that. A lot of it actually [there are] swimming pools and schools, and it’s kinda like everywhere else.” (#io8)*

These attempts to imagine back are similar to the musings Gregson and Crewe encountered. Though romanticised and fantasised, these reflections are moments of making sense out of the ruins. Put in purposeful contrast to official stories, these imagined histories often sought to find an everydayness of human affect amongst the ruins of Pripjat. However some of this imagination work struggled against a certain alien quality to the ruins and the Soviet Other that was imagined to have lived there.<sup>60</sup> Yet Pripjat remains a space where different, varying stories of the past may be produced, and although not always, nor necessarily, disruptive of certain narratives of Otherness, these stories of imagined histories remain multiple, heterogeneous and never complete, keeping the past of Pripjat open to multiple imaginative engagements.

Imagined histories are the product of encounters with various objects; the vestiges and remains of Soviet others and nuclear disaster, rather than the ruins as aesthetic or in totality. These encounters by tourists elicit emotional responses and provide moments to learn (Gibson, 2009: 5), and it is through such encounters that tourists make sense of the spaces they visit (Crouch et al., 2001). Salvage, then, is this practice of *making* sense, not of passively consuming and experiencing, but actively producing (partial) knowledges. Though it may start with an encounter, salvage is a process of working with and through, of finding, searching and discarding. A practice involving the agency of tourists and of decaying objects, of partial understandings and (re)configuring networks. In Pripjat itself, these stories and histories are produced through encounters with objects. Often such encounters, and certainly the imagin-

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<sup>60</sup> The style of construction of Pripjat was found to be a sign of Otherness for many North American visitors, often resulting in a fundamentally unfamiliar feeling (and thus never quite resulting in the *unheimlich* of the familiar disrupted). European visitors, on the other hand, were often struck by the very close similarities of Pripjat to much late 20<sup>th</sup> Century urban and suburban areas.

ative products of these encounters, are not expected or even specifically sought after. Much of the story-making that visitors engage in Pripyat arises out of chance encounter.

Such chance encounters are not sought after for their affordance, their value, in providing imaginative histories as may be the case in second-hand purchases. Rather, the value is in 'the eccentricity of discarded, outmoded and forgotten things still marked by the peculiar imprint of their time of production' (Williams, 2011: 41) This does, occasionally and in contrast to William's salvagepunk ethos, wander into the realm of the kitsch. Indicators of 'propaganda' and overtly Soviet objects drew lots of attention from tourists.

Chance encounters, though triggering moments of surprise and moments of reflection and thus the work of imagined history making also indicate the material world exerting its own forces. For the history-making, knowledge production in the Zone was closer to a combined effort than entirely a flight of the imagination. It is in this combined effort through encounters with vestiges of the other where abandoned objects exert a 'human affect' that there is the possibility (if not guaranteed) of post-apocalyptic histories and sensibilities (William's 'salvagepunk ethos') that, as in the previous chapter, hold a fidelity to the uniqueness of the event.

## Archaeology

### The Radioactive Playground

*Yuri: "What's interesting is not the architecture, the same as in any place, we can find a lot of such buildings. What's more interesting are objects of those times, newspapers and books, which are reminiscing us of those times. Like archaeological." (#125)*

Archaeology as a form of storytelling has become recognisable within the 'Experience Economy' (Holtorf, 2009). However I suggest archaeology as a metaphor; practised by and for tourists, in a creative engagement with the haunting materialities of the ruins of the Zone. In part, then, archaeology in Pripyat is a discursive regime of the careful examination of spaces and objects in order to 'read' them and garner information about the town as it existed prior to catastrophe. Often very closely linked to practices of photography. Related to the imagined history making, this 'being archaeological' is apparent as many visitors are specifically looking for objects and spaces that are overtly Soviet in nature; for the remains of a no longer existing empire. Such careful examination does not always yield complete results; process of decay and degradation and unfamiliarity with the spatial regimes of Soviet city spaces often

means a great deal of ambiguity remains. Moreover, the radiation in the Zone means most tactile engagement holds potential risk. It is also a process which is as much guided by the affective spaces and materialities of the ruins as it is by tourists. I wish to suggest that archaeology is a negotiation rather than a projection of the imagination.

### Investigation and Being struck

We had recently left the Pripyat hospital; not a regular stopping point on the tours (partly for being a little too far out of the way and partly because it tended to be very difficult to get people to leave<sup>61</sup>), but the size of the group required a split. This was one of the later tours I attended and, as in the case of many of the later tours, I had been drafted in to assist as tour guide due to the size of the group<sup>62</sup>, although I wasn't alone this time and was assisting Maxim. The van dropped us off at the 'cultural centre' in the main square; a building usually travelled through on the way to the amusement park with the ferris wheel. Near the back of the building, on the way out, there is a small swimming pool<sup>63</sup>. The entrance to this swimming pool has become treacherous; floorboards have disappeared, become loose or splintered due to weathering in places, and due to having been pulled up for access to the metal piping for scrap in other places. An alternative route is via the shower and locker room

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61 This is a perennial issue of guiding tours; one reason they tend to be so tightly choreographed. Tours in Pripyat tended to allow for more elasticated experiences and guides would vary the time in each location according to the varying speeds of different groups. In taking the role of guide I learned early-on to keep an eye on keen photographers, for these visitors were amongst those who tended towards the back of a route. Most often a gentle reminder of limited time was enough. However, the twisting corridors of hospitals are difficult to navigate at the best of times; no less so in the ruins of Pripyat. Moreover, the hospital was often far *too* alluring and engaging a space to take tours; stuffed full as it was with moments of surprise encounter, intriguing and unfamiliar objects and dense atmosphere of affect and emotion.

Maxim, who I was with this day, expressed a number of times – including later on in this particular tour – his dislike for having to hurry people along. He knew it was his role and expected of him, and understood the need to make sure that certain spaces were visited in the limited time available, but he was of the opinion that rushing through Pripyat was not particularly in tune with what he always maintained was a wonderful sense of peacefulness in this space. I concurred, though for me it was due to an affinity with those who would take longer to traverse through a space due to the time spent on photography.

We spent the best part of two hours in the hospital this day; including half an hour spent trying to find visitors and guide them back out to the awaiting van. The somewhat elastic attitude to the timed structure of the tours (bar the need to be out of the Zone by 5pm) did not make this a major problem, and might have even spent the rest of the day there were it not for the fact that this was the first stop and one cannot leave Pripyat without a photo of the ferris wheel...

62 Twenty people was about the number that could fit into the mini vans. It also coincided with the limit to the number of people it is reasonable to act as guide for in Pripyat: 20 seemed to be the point of critical mass where the likelihood of losing members of the group, or the time needed to make people stand around whilst waiting for others to catch up increased exponentially. When two mini vans were required for the number of booked visitors was usually the point at which I was asked to step in and assist in guiding.

63 Not the large, separate pool near to school #3 which is more well known.

for the pool, an area with no windows. This provides for a moment of theatricality that Maxim in particular liked to employ. Not, in many ways, all too dissimilar to the 'dark entrance to the unknown' as employed by the 'Experience Economy' take on archaeology (Holtorf, 2009).

*Alec: "What's through here?"*

*Nick: "Just head straight on through, it's a small swimming pool."*

*Maxim: "There's no light, sorry."*

*Kieron: "Come on, get the lights on!"*

*Maxim: "No one believes me that it's the way to the swimming pool!" (#r154)*

The swimming pool contained, at the bottom of one end of it, reels of old film. These old film reels were scattered around the cultural centre. There was a cinema screening room in this building, we passed it almost every trip, yet despite looking for it, I could never find the room that must have been the archive that once stored these reels. Their small size enticed close scrutiny (images 35 & 36), yet the reels within the swimming pool (image 34) were rarely examined. The extra action of jumping into the pool itself (dry as it was) remained understandably offputting to many. The swimming pool was not especially deep; but the cracked tiles, loose bits of metal, wire and other debris were hardly inviting. Not to mention the ever present trepidation with which *any* tactile contact was made for fear of somehow accidentally, unwittingly, coming into contact with contaminated objects. The reel of film was



*Image 34: A daring visitor jumped into the pool to look at the film reels (#p1039)*

not immediately interpretable; out of context, out of place and degraded by time, sunlight and water, it took some work. Moved for uncertain reasons, a relic from an uncertain past and decaying into unclear forms the reel of film was 'neither *artefact* or *ecofact*, but both – a dynamic entity that is entangled in both cultural and natural processes' (DeSilvey, 2006: 324 original emphasis).



Image 35: Having a closer look (#p1040)

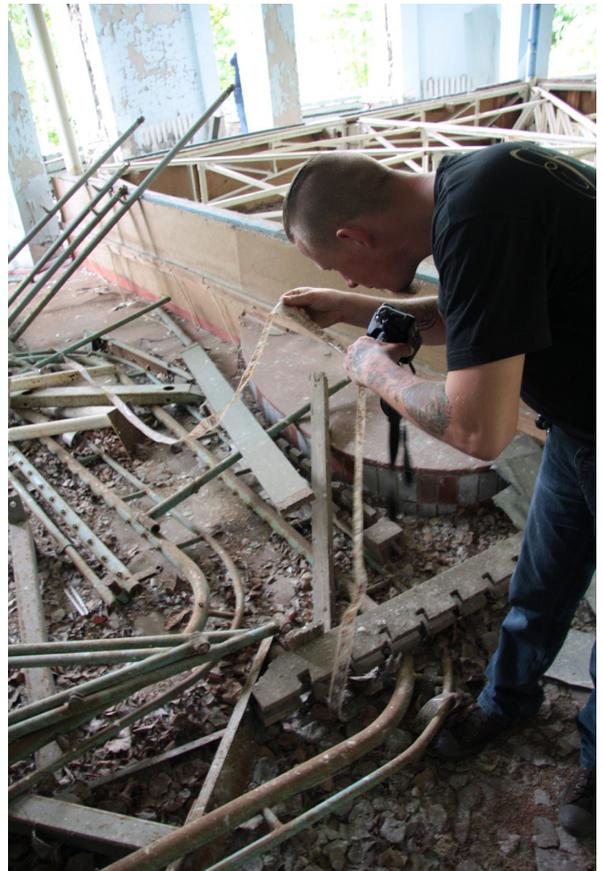


Image 36: Reels of film are scattered about the cultural centre (#p0421)

Kieron: "It's film."

Nick: "Yeah, but I'm not sure what. Some of it you can make out figures and portraits. Yeah, there's some over on the window that's a bit more visible, but nothing."

Adam: "Oh here we go, huh, it's Tower Bridge."

Nick: "Yeah? Yes, it is."

Adam: "Definitely Tower Bridge."

Alec: "What is it?"

Adam: "Tower Bridge. And that's Westminster. Probably some educational film of the evil British!" (#r154)

It was not my intention, earlier, to ever suggest that *all* engagements in Pripjat subvert stereotypes; they are played with, referenced humorously as much as they are explicitly and deliberately disrupted. At this point Maxim signalled to leave the room and to head onwards.

*Maxim: "Okay, everybody's here?"*

*Nick: "Yep. I'm last."*

*Maxim: "I would like to show you the amusement park, we have to go left."*

*\*I begin to talk with a visitor\**

*Nick: "So what's it like being here?"*

*John: "Yeah, it's a bit surreal, almost."*

*N: "Yeah, in what kind of way?"*

*John: "Well, you know that there were people living here, but they're not here any more. And everything else is still here. I suppose it's how you imagine it. But it's through coming to the place that you grasp the humility of it. You can just picture people doing their thing. And now they're not here, obviously. Even while we were in the school there I could kind of imagine the kids running around."*

*N: "Yeah?"*

*John: "They're not there, but everything else is still there. Obviously not in that good a state but yeah, you can see how they've just left everything how it is and packed up straight away. You can really see that."*

*John: "When I saw the hospital I saw there was a room of cots and the bays. And when I saw that I thought, 'shit', you know, because all of these people died and it really hit home. I think sometimes you just take it for granted what actually happened and absorb the buildings and how it's all quite interesting, but at the end of the day all this is where people just died. That's why I stopped speaking when I saw the cots." (#r154)*

The partial readings are produced through a practice of archaeology that encompasses imaginary, discursive and embodied engagement. Here the cots provide the impetus, the moment of 'being struck.' The imagined histories where visitors "try and go back" do not simply utilise objects in the ruins as source material for fantasy engagements. Unlike the consumers of second-hand objects, visitors in Pripyat are not necessarily seeking out value in objects in their affordances for flights of the imagination, for often these imagined histories are the fragmentary processes and products as tourists attempt to make sense of these encounters with the not-quite-familiar; the uncanny remains. Here, then, lies a different interpretive framework to the 'tourist gaze'; an embodied, material encounter, of the not-quite-known, the half imagined, the half understood. An openness to being affected by decaying objects was most apparent in these moments of visitors 'being struck by' the sight (or sound or even touch) of decaying objects. This is not necessarily an openness in mind or disposition, but

rather a testament to the powerful agencies of half decayed, out of place, indistinct objects; not despite these qualities, but because of them.



*Image 37: Pripyat Hospital; operating theatre (#p1571)*

Archaeology too suggests a substantive knowledge, and it was on my fourth trip, early on in my fieldwork, that Maxim took us to an old garage and yard; knowing that a number of motorcyclists were amongst us. This scrap yard was introduced by Maxim as a place that he was new to; his friend had recently 'found' it; a sense of discovery and unearthing that tour guides shared. The motorcyclists proceeded to spend a few minutes eagerly identifying as many crushed motorcycle hulks as they could; one being surprised to find one of German origin. Picking through the metal hulk (image 38) exclaiming "That might be an ignition switch" (#r028) and "Look! The mud-flap you've been looking for" (#r028) here familiarity was being found in moments of surprise amongst the uncanny ruins. This sense of discovery interspersed with deliberation, interpretation, some hesitancy and a modest openness to being surprised by, and guided by, the decaying objects of Pripyat's ruins is a practice of knowledge production that suggests possible – if not necessarily – different histories and memories to be found. Nuclear and Cold War era sites offer an unusual form of archaeology, where amongst ruins and abandoned spaces, one may find opportunities to unearth 'artefacts of the future' (Vanderbilt, 2002: 47). In these spaces, one finds the possibility of engaging with a history which imagined different futures to our current present, and where one can imagine futures as yet unknown. In referring to this as the 'realm of archaeology' (ibid. p. 43), this is an orientation of archaeology not towards an unearthing of the past, but an unearthing of

that past's possible futures. An ethics of salvage in regards to ruins takes *ruination* as not the monumental 'leftovers' but, rather, what people are 'left with,' the 'material and social after-life of structures, sensibilities, and things.' (Stoler, 2008: 194) Here the focus is not on 'inert remains' but on their 'vital refiguration' (ibid.) as takes places when one encounters ruins. It is here, then, that I suggest that the archaeological metaphor works for a certain mode of discovery. Possible futures; Vanderbilt's 'artefacts of the future' are not discovered outright; it takes the political work of salvage to turn mould the realm of archaeology into a truly future-orientated modality.



Image 38: is that a... ? (#po468)

## Salvage

### Artefacts of the future

Here I build upon Evan Calder Williams' work on *salvagepunk*. Developed in view of a cinematic influence, transplanted to the Zone as a site of tourism this conception of salvage opens up new possibilities for grasping the knowledge produced in urban ruins. In describing salvage as 'a world of stealing from the ruins' (Williams, 2011: 70) this is clearly, as we shall, far from unproblematic, but if tourism in the Zone is more theft than consumption (and, in the case of the few objects surreptitiously put into the bottom of bags, occasionally quite literally so) it is still unlike the scrap collectors, for salvage here is a theft that from ruins that nevertheless is 'a refusal to secede from that world' (ibid.). In attempting to grasp 'how to relate to what has been ruined, yet persists' (ibid. p.43) salvage recognises the excessive multiplicity of fragments that heritage might otherwise disguise and organise.

The modern ruins of Pripyat sit in contrast to sites of heritage, even if they are similarly engaged through tourism practices. Imagined histories, possible futures, haunted spaces, ghostly radiation and memories which are not one's own produce new, fragmentary knowledges. When tourists engage in the Zone they salvage meaning from the ruins. We have seen that, in Pripyat, visitors' preconceptions of the Soviet Other, often acknowledged as fed by the rhetoric of the Cold War, sit in contrast to the fragmented stories and memories of a lives which are not one's own. Often this is because visitors find themselves willing to be open to such contrasts: A visit to Pripyat is often conceived in advance as a space and chance for encountering that which would destabilise received histories. We have seen this already in the previous chapter through the 're-membering' of Soviet Others contra to Cold War imaginaries. The kind of imagined histories, and memories of other lives which are not ones own produced during visits to Pripyat engages in 'an ethics about confronting and understanding the otherness of the past, which is tactile, imaginative and involuntary' and which 'cannot pretend to be imperialistic.' (Edensor, 2005c: 330)

If Pripyat is the 'modern Pompeii' (Dobraszczyk, 2010), uncanny for its traces of the everyday, it is also different for it has not yet entered the realm of heritage, of deliberately preserved ruins (ibid.). How, then, if not as heritage site, might Pripyat be open for salvaging? These imagined histories – however much they may be built upon romanticism and fantasy – are a political moment. Salvaging a human affect from the vestiges of others in Pripyat is a political turn by visitors, and guides, to challenge received understandings. But salvage as a political practice which guides and tourists alike engage in, spurred on by the

spectral temporalities of radiation, is finds its target not only in a temporally and culturally distant Soviet Other, located somewhere in the past, but also in exploring and constructing possible futures.

Pripyat's ruins, then, are indicative of the kinds of 'ruination' Navaro-Yashin (2012) describes of Nicosia, and bear many similarities. Placed in contrast to Deleuze and Guattari's paradigms of roots and rhizomes, Navaro-Yashin writes that ruination is:

both and neither. A ruin is rhizomatic in the sense that it grows in uncontrollable and unforeseen ways. [Losing] its painted surface over the years, with rain and wind and lack of maintenance. The objects inside the house are looted; its windows, windowsills, and doors are removed to be used elsewhere ... But a ruin is also about roots, because it is sited as a trace of a historical event ... It leaves marks in the unconscious. (2012: 171)

Pripyat is still rooted, still a historical site, as with Nicosia. Pripyat is a site of multiple activities of salvage both of scrap metal and of meaning-making. It is here then, amongst the rooted and looted, that visitors might think their own futures differently; reading not a static history but reflecting that rootedness upon their own lives (see also DeSilvey, 2006). It was not uncommon for visitors to relate to me that they spent time wondering what it might be like were they ever to be forced to leave homes at short notice. Those visitors who lived near nuclear power plants expressed the manner in which a heretofore banal, largely invisible (possibly thought of as benign) presence within their own communities became a pause for reflection.

The most overt and strategic form of salvage that took place amongst visitors to the Zone was by a group of parliamentary members of the Green party of northern European state. They had explicitly arranged a visit to the Zone as part of ongoing debates about the future of nuclear power. By and large they were already set against nuclear power and were visiting the Zone in order to confirm suspicions; none of which they found so easily confirmed. In discussing the day afterwards, there was a general sense that the Zone would not provide the material they needed. This was not with a sense of disappointment, however, for they spent the evening recounting the vast body of new knowledge they were to leave with. Knowledge that, as if to prove the cliché correct, they garnered for 'seeing it for themselves'.

It is this sense of leaving with newly formed knowledges that I take to be the work of salvage. For having located the post-apocalypse in the Zone, the work of salvaging what remains may begin (for, contrary to the usual assertion; the apocalypse does have a remainder). Not remaking or reforming; not carving out a static sense of history or past events, but an openness to forging anew. This is part of the role of knowledge production through tourism in the Zone; a role played not just by tour guides, not just by imaginative tourists, but also by

decaying, in-process, objects. Watched over and occasionally curtailed, by the ever present spectre of radiation. This is not a smoothing over, nor a setting into place, but an uncertain, hesitant co-production of knowledge and memory between visitors and the ruins.

### Competing salvages

However, despite the encounters I have discussed so far, it was not uncommon for respondents to find that their encounter with Pripyat was made all the more difficult by the 'looting' (as it was often referred to by respondents). Here, the salvage of touring and guiding stands in contrast to the salvage of materials, indeed acts of scrap collecting are found to be problematic for any desire to salvage meaning and a political purpose from the ruins of Pripyat. It also shifts the framing of the ruins and engagements therewith. In reflecting on his own visit to Pripyat, Dobraszczyk notes that;

once you are made aware of the fact that Pripyat's ruin is largely the result of systematic looting, rather than the accident or natural decay, its meaning is irrevocably bound up with violent human agency rather than technological failure or the return of nature. (2010: 381)

Such comments are closely aligned to a sense amongst many visitors that the decay of the ruins through scrap collection, whether they were informed of this or found it clearly apparent, informed much of their sense making. As Yvette noted, it made it almost impossible to imagine anything else;

*"because of the destruction it very much removed the sense of place [...] It was sort of a non-place. You could imagine that people were there. But, the way it was just ripped apart. Those [the scrap collectors] were the people I imagined even more than the people before them, because the most recent people were there shredding and kicking windows out."* (#i29)

Tim Edensor suggests that such acts of 'destruction and vandalism' that are part and parcel of the systematic looting tend 'towards the carnivalesque' (2005a: 27). This may be the case for the 'sheer pleasure in smashing things up' which is described as 'radical engagement with the material world, a desire to fracture and fragment, and to enjoy the delicious destruction of a variety of shaped matter is surely more than merely anti-social behaviour.' (idib. 27) However in Pripyat it is indeed more; such actions are part of commercial ventures of commodity flows; windows smashed for their aluminium frames rather than out of sheer joy. As such, tourists practising playful archaeologies and modes of salvage that would attempt to produce knowledge of, and make sense of, Pripyat are often confronted with ongoing scrap

collection and lack of state support. Even the excesses of tourism that might make imagined histories difficult.

I do not wish to decry scrap collection or the dynamics of large tour groups as outright bad. As if these activities are 'getting in the way' of some possible unfettered access to the past. Edensor's sense of the carnivalesque is predicated upon the 'status of the ruin as waste' (2005a: 28); and here is a crux of the issue; for Pripyat is not clearly demarcated as waste. It is not the focus of major waste management in the Zone<sup>64</sup>, and because of this it tends not to receive a great deal of attention from the responsible government agencies (radioactive waste management taking precedent to heritage). I refer back to Hetherington's work (2004) from the beginning of the chapter; Pripyat has not been fully disposed of, not yet fully exhausted of meaning (else there would be no room for salvage, no space for archaeology and no openness to being remembered otherwise). Without such accepted status as waste, openly destructive actions in Pripyat become ever more contentious. There is a body of interest that does deem such acts of scrap collection undesirable; I refer here not just to those responsible for the Zone's borders and controls over the movement of materials, but to those who would attempt to preserve Pripyat. Late on in the research was made aware of a group of people for whom certain practices are understood to curtail the work of re-membering. And so, in the next section, I want to look at the arguments behind keeping Pripyat as a 'museum city.'

### Museum city

In Delphine Bedel's (2008) examination of tourism and memory politics the site of Prora; a Nazi (and later secret Soviet military base) holiday resort is explored. In introducing the book, Latour notes that 'the tourist industry is unable to decide what to do with this over-size monstrosity' (Latour and Bedel, 2008).<sup>65</sup> Pripyat's ruins are approached with a similar uncertainty and ambivalence; for vastly different reasons they remain sinister reminders of difficult pasts. In 2011 visitation to the Zone was curtailed. Based on a legal challenge by the Ukraine judiciary against the Ministry of Emergencies (it was deemed that the access protocol breached legal rulings), the reasons given amongst political commentators and in news reporting were of politicians responding to the now noticeable rise on tourism to the Zone. These responses were said to range from those not wishing Ukraine to become 'known' for Chernobyl nor for the site to be treated without respect due to tourism to those who wished

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<sup>64</sup> Indeed much of the interior spaces of Pripyat are largely free of excessive contamination from fallout, protected as they were by being indoors.

<sup>65</sup> A monstrosity that nevertheless is 'what must have been the most boring holiday camp ever.' (Latour and Bedel, 2008)

to define and delimit tourism access so as to more better monetise it (ostensibly as part of the economic development of the region as per the UNDP (2002) report). By December 2011 visitation was again permitted and a new protocol put in place; yet the question of 'what to do' about the Zone (as a tourist site) remains. Here I briefly address one suggested response<sup>66</sup>: That the Pripyat should become a “city-museum”. Gary is a medical student in the United States, he was visiting Ukraine with another college student friend, Eddie. Both are visiting Russia and other parts of the ex-USSR during this trip and visited Chernobyl as part of a longer visit to Kyiv. Gary saw the Zone as a memorial to the Soviet Union:

*“I saw it as also a kind of museum [...] it's kind of a monument to the death of communism, or the USSR [...] this is a ruin of the Soviet Union, which doesn't exist any more [...] a monument to the Soviet Union.” (#114)*

Read as a “kind of monument to the USSR,” Pripyat is somewhat problematic. Yet whilst the accident of 1986 has been memorialised in a number of familiar forms, with various monuments around the Zone and elsewhere and a museum in Kyiv, it has also been suggested that Pripyat might form a ‘museum city.’ Not as a monument to the USSR, though:

*‘An abandoned city is defenseless before the looters and lovers of extreme tourism. The project participants are struggling to [get] Pripyat [to be] considered a museum city and placed under protection. [...] PRIPYAT.com - is a place for everyone who loves [the] City. Its short blooming youth, its terrible fate, the present undercurrent of loneliness and its future.’*

From <http://pripyat.com/en/about.html> [Accessed 16/08/2011]

This ‘museum city project’ was explained to me in greater detail by those involved with the website and campaign:

*‘For the past several years, the site administrators have been focusing efforts on trying to get museum status for Pripyat. The purpose for this goal is to stop the looting and destruction of the city that continue to this day. As you can imagine, people who used to live and work in the city are horrified by all the looting and damage that currently takes place. If the city was designated as a museum, there would be much better security than what currently exists.’*

*(#140) Personal correspondence with English language section administrator for Pripyat.com*

Preservation and protection; here we are find very similar sentiments to much of the heritage industry, an industry that I have shown to be in contrast to visitor experiences in

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<sup>66</sup> Most significantly driving this idea are the editors of the memorial website 'pripyat.com' who both organise trips to the Zone and who are well known to (even if the relationship is often ambivalent) some of the tour guides.

Pripyat. When explaining the museum status campaign and bemoaning that he sees “everything slowly disappearing from there,” (#i25) as a result of looting and scrap collection, the long-serving tour guide Yuri focuses on the uniqueness of Pripyat, that; “you’ll never meet such a place anywhere in the world [...] that’s why it’s very interesting and a good experience for everybody.” (#i25)

I discussed this sense of uniqueness earlier in Chapter two within the UNDP report on the Zone (2002). Hardesty (2001) finds little *necessary* tension between toxic sites and heritage sites, but rather focuses on its role as historical material and as idea or symbol. He recognises that such decision often rests upon how nature is conceptualised; toxic waste sites as anathema (at best as ‘warning’) to those who maintain an ideal of wilderness without human interference. Yet in the Zone it is not necessarily the conceptualisation of nature that is the problem; its vital liveliness becomes that which must be negotiated with most urgently.

What this protection to keep Pripyat as a city-museum would entail is not made clear. Options range from greater security to deter looters to attempting to somehow protect the structures from further decay and ruination. The latter is something Sergei was sceptical of. He recognised the ongoing maintenance – usually invisible but made visible in Pripyat by its absence – which would be required.

*Sergei: “Well technically it’s impossible. First to protect the building you’ll have to put a good roof in [...] and then you’ll have to put heating in, because if you don’t have heating in the fall time it’ll get wet, in winter time it freezes. So it’ll soon fall apart.” (#i25)*

*Yuri: “First of all it’s necessary to close it. It could collapse any time [...] all these activities they destroy Pripyat more and more. Just [give it] a chance to collapse itself; naturally. Because to use it again as a living place is impossible, and to fix it, no point, it would destroy such spirit of Pripyat as we have now.” (#i25)*

Varying between protection from decay, or simply protection from human actors who would aid its decay, the Pripyat city-museum campaign is driven by a certain urgency, albeit with some resignation; that which must be salvaged must be salvaged *now*, before it is gone. one finds a perfect opportunity for the possibility of ‘observed decay’ (DeSilvey, 2006) in Pripyat’s spaces and ‘materials that lie at the fringes of conservation practice, or with things held in a state of limbo before more formal arrangements around preservation and public access take hold’ (ibid.: 335). These are modes of interpretation attuned to the shifting properties of unfixed, in process, objects. For it is in the salvage work that takes place outside regimes of accumulation and commodity cycles (the kinds of salvage work I suggest tour guides and tourists are engaged in with the ruins of the Zone) that there remains greater possibility (if no necessary certainty) for the kinds of interpretive memory-work of observed decay that

DeSilvey suggests (or 're-membling' or 'ecology of memory'). As such, without the possibility of complete preservation there nevertheless remains the possibility of an interpretive and engaged encounter that produces an engagement with histories and futures otherwise; outside of heritage formations.

In Pripjat observed decay rather than an attempt at static preservation is the order of the day. This does not mean there is any less of a desire to utilise the Zone as a means of education, not only for remembering the events of 1986 and their consequences, but for dispelling myths, fears and falsehoods of Chernobyl, and fostering certain other stories grounded in encounter. Yuri most commonly expressed this in the desire to allow people to “see it for themselves”, to:

*“have a look with their own eyes that it's not a nuclear desert or something like that, [it's] a place where people work and people are staying and for a lot of people it's a normal job and a normal place and they are not monsters.”*

*“I like to visit schools, it contains a lot of memories. My friends also go to this place, and together we are visiting schools to find some stuff, not to take, for the emotions. It's history, and it's nice to touch this history, like different old pictures. Sure, it's the private life of someone, but it's also interesting to remember those times” (#125)*

This is a focus on emotional, embodied engagement which guiding practices in the Zone often aim towards, above and beyond simply ‘providing the facts’. In contrast to a certain form of heritage (as we have seen critiqued by Tim Edensor in relation to ruins) and in light of the ethical and moral concerns of some Dark Tourism literature, the desire here is that Pripjat must be open to visits and must be accessible as a site of chance encounter and of embodied knowledge production. For as much as there may be the occasional morbidly fascinated visitor, or bored sightseer, this was over-riden by a desire to keep Pripjat accessible. Not only literally but also in the face of scrap collection and as expressed by Yuri, accessible to the kinds of encounters which would harbour thought, engagement, memory and emotional response.

### Contra Detroit

Camilo Vergara – who came early to the now burgeoning industry of Detroit ruin photography – proposes a suggestion bearing some similarities to the Pripjat city-museum goal with his dream of a 'Smithsonian of Decline' (1999) which would protect the ruins of Detroit to form an 'American Acropolis' (ibid.). This is in contrast to the work in Atlas of Love and

Hate, (Ernsten et al., 2009), another project of history-making in Detroit<sup>67</sup>, where the absence of a heritage industry that would commodify the ruins and which works to hide wounds is welcomed. For without this, one finds the struggle over history is a lot more apparent.

Detroit is, of course, a vastly different modern ruin to Pripjat. In Pripjat there remains no option of return or re-habitation; but evacuation alone is not enough to render it a museum city. In accepting the necessary flux of Pripjat's ruins, unfixable as museum city, DeSilvey's 'anticipatory histories' (2012; see also DeSilvey et al., 2011) suggests an alternative engagement that is more aligned with the actual activities of guides and tourists.

Just as the 'museum city' is a long-shot in the face of processes of change, DeSilvey (2012) writes of heritage sites where narratives of ongoing, long-term conservation have to confront changing, even disappearing, landscapes. The problem with 'timeless' landscapes, DeSilvey writes, is that they foreclose a thinking-through of uncertain futures (ibid.: 35). Pripjat is not a comfortable fit for a narrative of timelessness, one visitor remarking that they had "hoped to see a moment of time frozen" (#i31) but were "disappointed" (#i31) by the changes wrought through salvage and plant growth. Where narratives of timelessness fall apart in the face of changes there opens a possibility of 'anticipatory histories' which are 'attempts to unsettle the narrative foundations that stabilize landscape and block reflection on future change' (DeSilvey, 2012: 36). Anticipatory histories shy away from offering authoritative chronologies (DeSilvey et al., 2011) but are, as I have been here, attentive to the various ways historical narratives are produced and mobilised (ibid.). After DeSilvey et al. (2011) and Crouch (2000) I have offered accounts of 'lay knowledges' that take seriously the production of historical narratives 'in place' (DeSilvey et al., 2011: 15). 'Hands off' tour guides unconcerned with offering interpretive frameworks or site design along with engaged tourist subjects suggest practices of salvaging of meaning – a human affect – amongst the vestiges of others. Practices which are in contrast to desires to stabilise (and possibly commodify) as museum city or Acropolis or the heritage drive towards conservation (of meaning as much as material). A salvaging which is a history in the ruined landscape of Pripjat as much as of it. A salvaging which, too, which locates narratives of the past in present practices that are orientated towards thinking the future differently (Williams, 2011; DeSilvey, 2012) suggests a thinking-through of the future.

Within Pripjat one finds props that tell multiple stories, uncanny encounters and spaces; hybrids that disrupt easy classification tourists doing the work of the archaeologist and the salvager, all the time in a tentative negotiation with haunting objects and extra sens-

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<sup>67</sup> Drawing inspiration from the work of the same title by radical geographer William Bunge (1969).

ory radiation and of re-membering. Except what is discovered in Pripyat is far from banal; the uncanny ruins of the Zone never feel fully familiar. What is unearthed is, for many visitors, vestiges from the past of Others which defy easy understanding; indeed, sometimes such items are sought out explicitly to defy received wisdom about the Soviet Other. What is found is far from easily recognised, inviting imagining of other lives. What is looked for is looked for tentatively – or not at all – as radioactive places are negotiated.

The Zone ruins, in their contingencies, defy the preservative impulse of heritage and do not easily foster the ever present spectre of Dark Tourism literature; that of the rubber-necking tourist of 'sites of suffering'. Rather, in asking of us an engagement, in instigating encounters but offering no easy interpretation (and in the absence of such interpretive framework enforced by the tour guides), the ruins of the Zone are encountered with space for reflection, imagination and embodied engagement. Here, then, is the work of knowledge production in tourism. Not necessarily as overtly political as Williams' (2011) vision of salvagepunk, this is nevertheless a politics of meaning in the making, of tourists not as automatons blindly consuming, blindly repeating representational norms, but of moments of surprise and disruption, discovery and negotiation; practices of knowledge production.

In focusing on the role of the tourists, the constant assertion of the haunting agency and wilfulness of the ruins has been somewhat underplayed. I am aware that the focus on embodiment here belies the fundamental disruptive power of radiation. The ever present technologies of translation (geiger counter, camera) have taken a back seat. Finally, there has been much emphasis on cognitive effort; on 'imagined histories' here. Less of the agencies that are part of these encounters, hinted at in the uncanny 'background' to these encounters. The next three chapters address this.

# 4. EXPOSURE

## The failure of experience

### Of Prometheus and his brother

The tour bus stops for a few minutes on the south-eastern corner of the Chernobyl reactors 1 to 4 site and parks by a small footbridge that connects to the canteen for the power-plant workers. Visitors are allowed to wander at their own pace around the nearby, well kept and small memorial garden (image 39) which also contains a bronze statue (image 40) of a triumphant Prometheus<sup>68</sup>. The Titan here depicted having stolen fire from Zeus to bestow upon humans<sup>69</sup>. The irony of this statue at its current location is not lost to the visitors.

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Bernard Stiegler (1998) finds that the figure of Prometheus in the work of Heidegger (as well as phenomenology more generally) is accompanied often by a forgetting of (the forgetful) brother of Prometheus; Epimetheus. Stiegler recounts from Plato's *Protogoras* the role of Epimetheus as the one who takes on the charge of distributing powers to the animals and, at the end of this task, realises that he has forgotten humans and run out of powers to distribute (an English translation of Hesiod's *Theogony* (1936) has Epimetheus's epithet as 'the scatter brained'<sup>70</sup>). Thus it was for this reason that Prometheus was prompted to steal fire and art from the gods to bestow upon humans. From this arises in the Greek language ideas *promētheia* (forethought) and *ēpimētheia* (realisation too late, comprehension after the event) and from which Stiegler finds it 'astounding that this figure of deferred reaction, of the *après-coup*, of *return through the failure of experience*, of *ēpimētheia* [...] not only is *not* at the centre of the phenomenological thinking of finitude but is starkly excluded from it.' (1998: 186 emphasis added).<sup>71</sup> Reactor 4 is possibly *the* site of the *ēpimētheia* of nuclear

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68 The statue once stood in Pripjat's central square but was moved here to prevent it being stolen.

69 No chains or eagle in sight.

70 Noting that Hesiod's cosmogony in *Theogony* and *Work and Days* recount a quite different myth of the acts of the brothers than Plato's recounting.

71 Stiegler's concern in this section of *Technics and Time. 1* is with a 'being-toward-the-end'. Here it may seem that his assertion of (classical tragic) *anthropogony* as a *thanatology*; as the origin of humans being in the mortality (as opposed to godly immortality or animality as a living without knowledge of death) might be made to speak to the work on the thanatological and tourism (see Seaton, 1996; Stone and Sharpley, 2008) and of tourists coming to terms with death and morality. Especially if I were to follow Stiegler's assertion that the multitude of prosthesis in the everyday and in labour are 'marks of mortality' which might at first hand seem to resonate with respects to the Geiger counter. However, such a concern with death and mortality is simply not present in the empirical data I have gathered, and so for reasons set out in the introduction Chernobyl tourism not easily rendered as 'thanatourism', and it is thus with respects to the empirical material that I turn towards issues of vulnerability and passivity rather than death and mortality.

power; not only revelation (apocalypse) where 'Chernobyl revealed to us the limits of humanity's techno-scientific power and the 'backlash' that 'nature' has in store for us.' (Félix Guattari, 2000: 43) but also lessons learned. (Where lesson one for Ulrich Beck being that the 'worst-case scenario is possible and real' (1995: 63)).



Image 39: Having a wander in the memorial garden by reactor 2. (#p0132)



Image 40: The statue of Prometheus. (#p0623)

For visitors the Zone too is also a site for reflexivity and knowledge after the event, an *ēpimētheia*. Not so much a reflexivity of nuclear power but rather, and more importantly, an *ēpimētheia* of embodied, sensory experience as configured by exposure through irradiation. Taking knowledges to be the product of experiences and practices (as Stiegler (1998) does) what I will show exposure questions is the centring of intentionality within embodied practice as the driving force of knowledge practices. Comprehension after the event, a reflection too late; these are the modalities of exposure rather than a positive, (co-)constructed knowledge. Exposure is of the order of *ēpimētheia* as that '*return through the failure of experience*' (ibid.: 186 emphasis added). Moreover; more than simply reflective, the figure of Epimetheus suggests a 'reflexivity lingering in the empirical' (ibid.: 199).

It is this reflexivity that suggests the core focus of this chapter. Here I suggest that lingering in the *slippage* of the empirical, the incompleteness of and / or uncertainty in experience and observation of radiation is a reflexive moment. I will argue reflexivity as a return (which entails a change, a reformation, a reconfiguring in understanding if not also mode) to ones own *embodied* subjectivity as always already exposed. Reflexivity is transformative.<sup>72</sup> I first find this impossibility of a return-to-the-same in a formation of what I term "the Chernobyl sublime"<sup>73</sup> as distinct from the Kantian tradition but with relations to what has been referred to as the 'nuclear sublime'.

### Gazing on the sublime

Back in the bus for a very short trip that circumnavigates the eastern then northern edge of the CNPP complex and the tour stops in direct view of reactor 4 and the sarcophagus. Here there stands a memorial sculpture and an area similarly well kept as the memorial garden with the Prometheus statue. As the door of the bus swings open there is no small amount of trepidation here, intermingled with expectation and excitement. Even already, protected within this metal box on wheels, the small yellow or grey boxes have begun to chirrup with a bit more urgency. Although soil removal and newly laid tarmac have reduced ground contamination, the proximity to the molten material (despite the sarcophagus)<sup>74</sup>

<sup>72</sup> In contrast to Karen Barad's (2007) critique of reflexivity in which she suggests it is merely reflection. A reflection that presumes the possibility of a full knowledge of positionality. Though Barad's work is influential in later chapters, here I argue that reflexivity is not purely reflective but involves a transformative return to the self where the assumed givenness of an (embodied) subject to return to is at question.

<sup>73</sup> A somewhat deliberate misnomer; in that what I explore is the failure of various formations of the sublime to apply to experience in the Zone, even as such experience may ostensibly seem to be in the order of the sublime.

<sup>74</sup> Yuri noted that, a couple of years before I began my research they had patched the (large) holes in the roof of the sarcophagus that were the effect of rust. Immediately the readings on Geiger counters

means the levels here are not insignificant, 3 to 7  $\mu\text{Sv}/\text{hour}$  depending on the weather. As such, before the door is opened, we are warned that there will be no more than ten minutes here and that visitors should not move onto and beyond the road that lies between the memorial and the fence (the sarcophagus being another couple of hundred of meters beyond – see image 4)

This site, with the memorial by Reactor 4 is *the* “photo-op” of the tour, yet there's often a sense of hesitation here. Tourists do not all pile out, swift and eager to get to the photo spot. Those that do head directly to take a photo will often stall half way there, turning back, unsure if they have wandered too far. Others still will not begin to walk forward until they are accompanied by a tour guide or another visitor wielding a Geiger counter, curious as to the levels and its variation as they walk closer. The invisible barrier, as defined by guides, lies just beyond the location that image 41 was taken. This photo made me realise; in other locations the presence of the Geiger counter and its readout may have acted to impart further information, here, with that iconic chimney stack and the hulking sarcophagus in the background such information as the relative intensity of the radiation dose seems somewhat extraneous, even unnecessary.

In writing about the tourist experience at Auschwitz, Keil (2005) notes that, beyond the bookstalls and café (in blocks that once held prisoners), stands the iconic gate. This is the 'moment when modern visitors truly enter Auschwitz [...] as they pass through the Arbeit Macht Frei gate, well within the original confines of the camp, a liminal moment, marking the descent into memory, and triggering the clicking of innumerable cameras.' (ibid.: 484) Visitors to the Zone experience moments similar to this (see the beginning of the next chapter), yet all of these moments are only partly liminal. Radiation offers no clear threshold, though this does not stop such thresholds being practised (this road here, that moss there, those fences...)

Edmund Burke's (1909) formation of the sublime presupposes a safe distance from the object of 'terror'. As described by Ruston (2007) Burke's formation is one where 'Protected from real danger by being at a safe distance, the viewer experiences a kind of mental blockage at the immensity of, say, the mountain or ocean, and the experience momentarily obliterates the viewer's sense of their self' (ibid.: 48). The sarcophagus over reactor 4 is neither a natural object nor does the location the bus stop offer an easily presupposed 'safe distance'; at least not in an immediately apparent way.

Without any liminal threshold to cross, and (so) without any given 'safe distance' the very premise of the sublime as a function of separation is problematic. The Geiger counter, in this area had reduced by about a third.



Image 41: Photo taken at the edge of the area tourists are permitted to move within. (#p1355)

held aloft for photographs, is a testament to the object of the sublime as not easily placed on a subject-object (self-world) distinction defined by an exteriority or separation. The obliteration of a sense of self is still present, attested to by the hesitation and trepidation in movements and the awe at the immensity of this structure and the 'mental blockage' of irradiation. This not-quite fitting application of the sublime is where this chapter begins. Drawing on the argument that the sublime is a return to (and a reboasting) of the self in the face of an immensity I develop a reflexive "Chernobyl sublime" as a sublime situated in the *ēpimētheia* of embodied experience and that does not assume a subject-object separation.

Recent work in what might be called post-phenomenological accounts in geography have tended to emphasise the embodied subject as neither a-priori nor as distanced or separated from the world. In this vein, and drawing on the later work of Merleau-Ponty, Wylie (2005) suggests that vision can be thought of as a 'seeing with'. Though Wylie's work was an early inspiration for this chapter of the thesis I see this as a problematic way of thinking-through vision in the radioactive Zone. To ask "what are tourists looking with" might lead us to cameras and Geiger counters, but in what way and how "with" radiation? Though the tourist does not see radiation, she is very much *all too with* radiation as she moves with her gaze through the Zone.<sup>75</sup> It is the excess of this *all too with*-ness that I explore in the third

<sup>75</sup> The tourist and his gaze has been a prominent figure ever since Urry's seminal work on the subject (1990). My addition here is a challenge the all-too-often assumed possessive formation of this idea: 'The tourist's gaze'. (A formation, I note, which does not appear in either the title of the 1990 book (*The Tourist Gaze*) nor as a presupposition in Urry's later work.)

part of this chapter, and excess beyond both the sensible and the wilful. Here I work through Merleau-Ponty's writing along side that of Luce Irigaray as it shifts from a wilful embodied subject, to a sense of subjectivity which fits more closely with the Chernobyl sublime as the always-already exposed nature of being.

Running through this chapter is the theme of exposure, and of the vulnerability that entails. Here I begin with Harrison's (2008) argument that – too often – analysis of embodied experience in geography is centred on a concern with intentional action in the production of meaning; a tradition of thought that (after Derrida) casts the human as attributed 'a positive *capacity* or *power*, in terms of 'being-able-to' (ibid.: 427). What I develop in this chapter is an inherent susceptibility that is formative of irradiated embodied experience; a vulnerability and a *passivity that is a necessary part of action* and of an entirely unwilling (and unwanted) receptivity that is the key to being-in-the-Zone. This, though, is not to write exposure as a failing; there is no lack in exposure for exposure could not be otherwise, even as it may to a greater or lesser extent be mitigated.

## The Chernobyl sublime

### The sublime

To refer to the Zone as a site of the sublime is both inherently problematic, yet not entirely unfitting. An attempt to write the Zone within Edmund Burke's (1909) definition helps to make the point. To refer back briefly to Chapter 3 on the post-apocalypse, I turn to Burke's suggestion that London's destruction would be no small tourist attraction:

This noble capital, the pride of England and of Europe, I believe no man is so strangely wicked as to desire to see destroyed by a conflagration or an earthquake [...] But suppose such a fatal accident to have happened, what numbers from all parts would crowd to behold the ruins, and amongst many who would have been content never to have seen London in its glory! (ibid.: §15)

Burke makes two arguments in relation to the sublime; firstly to make the point that no 'art of imitation' could ever match the real thing. This is supported by the regular assertions that tourists wished to 'see it for real', to find the post-apocalypse in reality (and to find it so very different from silver-screen imitation).<sup>76</sup> Secondly to assert that immunity is not the

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<sup>76</sup> There is no small amount of sarcasm when Nye writes 'How valuable, then, the few experiences that cannot be entirely prepackaged, that 'must be seen to be believed!' (1994: 237) I do not share this disdain; tourism remains an important activity for collectively dealing with trauma (see Keil, 2005) as well as (and not contradictorily so) being an interesting and fun day out.

*cause* of an experience of the sublime. Safety from immediate danger is necessary (else the experience would more aptly be referred to as terror), but immunity is not, argues Burke, the *reason* for the experience of the sublime. Indeed, safety must not be absolute; there must be the possibility of threat, reduced by distance or other mitigation. Such lack of immunity can be found in this short remark made when a visitor from Finland reflected upon his own home town. Travelling alone on a short holiday to Kyiv, in his early 40s, Leif thought back to his own home at the time of the disaster.

*“my home town is twenty kilometres from a nuclear power plant ... So I started thinking what it would look like if the same thing had happened there twenty years ago.” (#121)*

Much in the same vein, a number of other tourists talked me through how they imagined such a disaster might play out in their own home towns. Safety or immunity from the source of terror (the necessary prerequisite for the sublime) is, at best, temporal or a function of distance. I say 'at best' for it is not the case that such immunity is evidently present whilst in the Zone. Being a visitor, though avoiding the danger presented by chronic exposure, does not make one immune to radiation; neither through contamination nor exposure. Returning to the photo-op by the sarcophagus; safety is both temporal and spatial (not too close, for not too long) but not evidently, not empirically, obvious.

The perspective of distance that permits a view of the whole immensity of a mountain that is the perspectival view-point of the sublime is not entirely comparable to the perspective from a distance at the sarcophagus. One can stand by the small memorial in this well kept parking area just to the north-west of the enormous expanse of steel that is the sarcophagus and one is afforded the distance which provides the perspective which reveals the immensity of the structure. So far so sublime. But the clicking of the Geiger counter – the shrill alarm of the Geiger counter if I have not temporarily disabled the alarm<sup>77</sup> - is a constant reminder that such distance is illusory. The sarcophagus may look to be over there, but it is also here.

For Kant, the sublime is an experience bound up in reason and detachment; the sublime object is fearful without causing the viewing subject to be afraid (Kant, 1914: §28). The detached onlooker gazes upon the terror of the volcano or wild fire on the horizon, the viewer at a safe distance, or the sheer (mathematical) scale of the mountain which evades immediate comprehension. The sublime here is a disruption; a threat to the cohesion and coherence of the viewing subject and a reminder of the inexpressibility in language of the world. Masco (2006) argues that, for Kant, to experience the sublime proper is to bolster, to reinforce and to return to, the (detached, rational) subject through the act of naming. Through 'containing the infinite within a conceptual category' (ibid.: 56); an intellectual

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<sup>77</sup> Usually set to somewhere about 5 µSV/hour by guides.

compensation for the traumatised psyche. Not that naming necessarily suggests or is productive of understanding. The resolution through naming is 'via a false sense of intellectual control' (ibid.: 57). In the Kantian formation we have a principle separation of subject and object which, though challenged by the sublime, is returned to. As Wylie states; 'in experiencing the sublime he or she simultaneously undergoes an energizing apotheosis: the event of vision begins and ends with a cleaving apart of subject and world.' (2005: 242) Although the 'he or she' of the (Kantian) sublime experience of landscape belies a thoroughly masculinist sense of vision, self, body and world which is 'the narcissistic assertion of the self through what is seen.' (G. Rose, 1993: 107)

Through Burke, Kant and latter the Romantic tradition the sublime arises as a means of thinking the apprehension of the world that not only presupposes a fundamental mind-body-world split, but also asks (for the sublime proper) that they be orderly, managed: 'both nature and body must behave: nature must not be so violent, that is so life-threatening as to distract from the sublime; the body must not be in so much pain as to disable contemplation of nature.' (Michael, 2000: 110) By now it should be clear how troublesome it might be to refer to experiences of the Zone as experiences of the sublime. Appropriate in some respects, but also lacking a certainty of safety and lacking too an easily assumed or empirically stable separation of subject and object.

### The sublime tourist in Chernobyl

It is here that I wish to move to more recent theories of the sublime. Of note is the paper by Goatcher and Brunsdon; *Chernobyl and the Sublime Tourist* (2011) in which they analyse photographs taken from the website *pripyat.com* of a trip to the Zone during 2004. They argue that these photographs are indicative of the sublime. A sublime found in the inability of photographs to capture the embodied, sensual experience of place. They note too, that in this inability to capture the sensed experience there is further lack;

there is an extra level of un-representability here, because the significance of Chernobyl/Pripyat is not even fully amenable to the human senses. Its 'uncanny-ness' transcends or exceeds human sensual capacities and capabilities. Writing about the immediate socio-cultural effects of the Chernobyl incident, Ulrich Beck observed how the event rendered aspects of our experience immune to empirical grasp. He called this a 'disenfranchisement of the senses' (Beck, 1995a,b). This 'disenfranchisement' is a kind of material manifestation of Lyotard's concept of the post-modern sublime. (2011: 127)<sup>78</sup>

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<sup>78</sup> Conincidentally, I had been referring to radiation as 'not amenable' to senses myself, before finding this paper. In comparison, Goatcher and Brunsdon's focus is on the slippage of the sensorial; a lack of

In following the discourses of Dark Tourism, Goatcher and Brunsden turn to theorists writing on the holocaust, specifically Adorno and Lyotard, for their thinking-through of the sublime. Chernobyl is not all that much like Auschwitz,<sup>79</sup> and it is for this reason that I find a more useful sense of the sublime amongst the “nuclear criticism” of the 1980s.<sup>80</sup> However their conclusion is worth recounting. For Goatcher and Brunsden the photos of Pripyat are not 'mere' tourist snaps; they are – and they state this quite emphatically – works of art:

Beck says there is now an unbridgeable divide between the subject – via its sensible selves and senses – and certain dangers, risks or phenomena in the post-nuclear, post-Chernobyl world (Beck, 1995). For Adorno, the aesthetic shudder of the sublime in art ‘once again cancels the distance held by the subject’ (Adorno, 1997: 349), it lifts us out of ‘the world’, the sensible world of natural necessity. The Chernobyl/Pripyat photos can be read as attempts to bridge this divide. That is why they are art. They are the product of aesthetic experience and subjectivity. The tourists are trying to cancel the distance between their (sensible) experience and the technological disenfranchisement of their (positive) senses. (2011: 129)

Figuring tourists as active, creative agents, not dupes of an industry, I cannot help but agree with this statement that would demand such attention to and appreciation of a set of relatively dreary photos of an overcast day amongst broken windows and peeling paint. Photographing the unphotographable, representing the unrepresentable; responding to this cannot figure tourists photographing the Zone as anything other than creative practice.

Though no doubt a creative act, I am not convinced of this particular reading. At least so far as it draws on Beck's argument around the disenfranchisement of the senses.<sup>81</sup> For Ulrich Beck (1995), this disenfranchisement is a lack in the senses understood through novel (anthropogenic) ecological change. It is suggestive of a certain romanticism for a time when our senses had a more complete grasp of and relation with the world. A time before our sensual disenfranchisement forced a giving-over of knowledge of the world to technocrats a result of modern, 'universal' contamination (ibid.). In contrast to this, the Chernobyl sublime suggests a questioning of whether our senses have *ever* served us all that well. Of a revelation of that which always exceeds our capacities, even as we enter into relation with it. Here the camera and the Geiger counter, or, moreover, photos taken of tourists standing, holding Geiger counters (or in my case, photos of tourists photographing tourists holding Geiger coun-

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capacity. My assertion of radiation being 'not amenable' was rather to suggest a wilful refusal of radiation to providing an account of itself. This wilfulness is explored in more depth in the next chapter.

<sup>79</sup> Only meaningfully comparable for a categorical impulse that would label certain places sites of “death and disaster” and visitors “dark tourists”.

<sup>80</sup> Which we have already bumped into in Chapter 3 via a core text of that era; Derrida's *No Apocalypse, Not now* (1984)

<sup>81</sup> For some more on this, see chapter six.

ters (image 42)) are not so much technocratic responses to modern contamination but rather indicative of prosthesis as the epitome of the human ever since Prometheus (Stiegler, 1998).



*Image 42: Photo of tourists photographing a Geiger counter (#p1637)*

An unbridgeable divide between the embodied, sensing subject and 'certain dangers' is key to the sublime as it is classically known. As a technology of / for walking the Geiger counter actively works right in centre of the tension of the Chernobyl landscape as / as not sublime. A product of reason and the needs of scientific observation it might reveal a fearful world, but it does so in a manner which also provides the means to rationalise, to mitigate; the perceiving subject bolstered with knowledge of the world, unafraid in the face of the fearful beyond. Alternatively, the constant clicking (slow and metronomic to urgent and cacophonous) and the flickering LED readout bouncing from the decimals to the hundreds serves as persistent reminders to the perceiving subject that they are not-quite-knowingly, uncertainly (probabilistically), unavoidably (inextricably) bound up in world that exceeds their grasp as it engulfs them. Thus the unbridgeable divide becomes all too bridged; a divide that was never there in the first place. Contradictory but not incompatible, these roles of the Geiger counter highlight the problem of accepting or rejecting the Zone as a site (sight) of the sublime.

The Geiger counter, then, is both the promise and the failure of the Kantian return through the sublime. For all its techno-scientific form in the hands of those whose understandings do not under-score the LED readout with any certainty (the hands of visitors, tour guides, my hands) it lacks the easy rationality of naming and categorising. The Geiger counter is not a technology of / for smoothing. With incessant clicks, rising crackle and punctuating alarm it constantly asserts itself; mediating, translating, *intervening*. Firstly, the intervention here is to destabilise the (false or otherwise) sense of intellectual control that naming provides even as it provides that name; audibly, visually. What does it mean to say that the exposure here is “just” 6  $\mu$ SV/hour; a tiny fraction of the 100+ Rems recorded at the same spot in April 1986, and a disappointment to many of those who come on the tour with a background in nuclear physics. What does it mean to say that this is the highest reading likely to be recorded on the tour and that time here is limited; not more than ten minutes? Secondly to destabilise the very self (as distanced and distancing) to which the Kantian sublime might return: No reassertion of the self in the face of such inextricable submission. This is not a disavowal, no destruction of the self; that would be the threat of the terror in the sublime. To return to Burke's formation of the sublime; 'we love the beautiful as what submits to us, while we fear the sublime as what we must submit to.' (Burke in Ferguson, 1984) To submit to the sublime in the Zone is to always already in the grasp of that which is sublime. It is to inhabit and (more so) be inhabited by a sublime landscape. In this situation an interesting embodied subject emerges; not erased, nor rendered totally ineffective. An embodied subject both passive and active; or rather passive *in* its activity emerges here. Before developing this argument further, I turn to a slightly differing sense of the sublime; the nuclear sublime.

### The Nuclear Sublime

The phenomenological power of The Bomb is laid out clearly by David E. Nye. In *American Technological Sublime*, he writes:

Burke had argued that “the sublime is an idea belonging to self-preservation.” But atomic weapons challenged the possibility of self-preservation and therefore transformed the conditions of consciousness. ... The atomic bomb undermined that sense [from Husserl] of the world as “always already there.” Nature and human existence ceased to be “pre-given” and became contingent. (1994: 229)

Nye is right in noting that that the becomming-contingent of nature and human is a shift in perspective, a perspective shift also engendered in the Zone. Nye's later short take on nuclear tourism is worth assessing. He suggests that tourism to see bombs may seem 'im-

plausible', though recounts the interest that sprung about. Alongside mushroom cloud post-cards and "Atomic Blast Bounce" boogie-woogie numbers and "Miss Atomic Blast" beauty contests Nye recounts the experiences of viewers in Hawaii, concluding that 'despite the government's attempts to make atomic energy seem acceptable, the bomb remained a source of sublime terror, as it had been from the first.' (ibid.: 234) This is contrasted by a fairly scathing account of tourism at Three Mile Island ( a 'curious irony'). This critique is aimed at the management of the tour, where 'Visitors are told a reassuring story [...] where nuclear power is fully under control' (ibid.: 237). No such story is offered in Chernobyl tours thus where tourists are described as in 'awe' (ibid.: 237) - rather than fear, having had such doubts quashed - at entering the cooling towers of Three Mile Island, no such awe is easily found at Rector 4; it remains sublime. Thus I follow Nye's assertion that 'For Burke and Kant the sublime was a constant, but history has shown that it seeks new objects' (ibid.: 237) even as I reject his dismissal of such seeking being found in tourists 'on the lookout for novelties'.

The spectacle of the bomb is considered by Kirsch (1997) who argues that it is the *photographs* of the mushroom clouds of the bomb that are intimations of the sublime. For Kirsch it is only by stabilising the bomb (as opposed to the reality of drifting fallout) through rendering it as object (glossy photograph) that it can be considered sublime. An awe from a 'safe distance' behind the pages of magazines, such photos served to disconnect the image from the 'geographical place' of the explosions and thus foster consent for the atomic programme (ibid.: 245). Some arguments can be brought together here. For Goatcher and Brunsten (2011) the sublime is found the very unrepresentability of so much the landscape of Pripyat and tourists artistic practices that aim to bridge this gap. This follows Kant's (1914) formation of the sublime as that which, in the immediacy, evades comprehension but is later resolved through a return to (and a bolstering of) the observer-subject through comprehension as 'sublime tourists, attempting to create an attentive representation' (Goatcher and Brunsten, 2011: 132). For Kirsch (1997) the resolution of the sublime (as undertaken by the US government to manage representations of the bomb) is also a modality of representation, one which more forcefully renders a distance between subject and observed spectacle. Though the emphasis is quite different both involve a return to a representing subject through the disruption of the sublime. I am less convinced by this form of return. By Reactor 4 there is no doubt that the landscape exceeds comprehension, and it does so not from any easily ascertained 'safe distance'. This excess is both sensual and representational. If the Kantian sublime, as Wylie (2005) argues, begins and ends with a cleaving apart of subject and world than the sublime of Reactor 4 (and the Zone in general) follows a different trajectory. Exposed by Reactor 4 there is an undermining of any possible presumption of subject-object separation.

The response is most certainly one of a striving towards a subjectivity (rather than, as I will argue, a passive emergence) but is not completed as a reassertion of a subjectivity as a (detached) vehicle of representation. A different formation of the sublime that I will develop as the “Chernobyl sublime” begins with what has been referred to as the “nuclear sublime.”

In the *Nuclear Criticism* special volume of *Diacritics*, Frances Ferguson sets out the prospect of a 'nuclear sublime' (1984). Beginning with a recognition of the sublime as 'particularly important in attaching one to consciousness of oneself' (ibid.: 6) Ferguson suggests that this is entirely compatible with a nuclear holocaust; for 'to think the sublime would be to think the unthinkable and to exist in one's own nonexistence.' (ibid.: 7) It is here, in the vision of nuclear holocaust, that Ferguson finds that tension of the sublime recounted earlier; for the nuclear sublime 'suggests precisely the world that the evocation of the sublime is supposed to shield you from: the accident that tells one how radically he/she is subject to-or object of-conditions, circumstances.' (ibid.: 7)

The subjective realisation of existing as object-of is the intimation of the sublime I wish to follow up here. Though I do so at a departure from the position of the 'nuclear sublime' within nuclear criticism. A heritage in literary criticism wherein 'the test had already been texted.' (Ruthven, 1993: 33). Instead I remain concerned with an evaluation of the embodied subject. This is not to ignore discourse and language, though it is to poke at the limits of *logos* as constituting knowledge and the failure inherent (the stuttering function of) the *lexis* (the moment of naming, of categorising that is the return to the subject) of the Kantian sublime. A departure too, for the history of the 'nuclear criticism' is tied closely to the history of 'the bomb'; of the politics of the Cold War and the threat of annihilation. Having previously rejected a comparison with Auschwitz I do not stand by a comparison with another (nuclear) holocaust, even as I declare the Zone post-apocalyptic.

However Ferguson's nuclear sublime neatly highlights the *problem* of the sublime as applied to the Zone. Wilson (1989) states this more clearly when he writes about the 'post-nuclear'; returning us to the 'lived condition' (see chapter two) as opposed to future threat. Here he contrasts the sublime after Kant (and Hegel) as 'a dialectic between some 'quantitative magnitude' of nature and the mind's resistance to such prepotency of force through verbal and cognitive strategies of transcendence' and the nuclear sublime as 'the mingled awe and terror of a thermonuclear force that seemingly cannot be bounded nor sublated' revealing 'a force of atomic energy so vast and final in its disclosures of power that it renders the vaunted 'supreme fiction'[s] of the romantic imagination ludicrous'. (ibid.: 408) This, then, is the nuclear sublime as found in lived experience as much as (more than) the threat (hope, fantasy) of annihilation. A sublime that renders the subject as object, denying the return to

the “I” of the rational, transcending and transcendent individual; a sublime not of thinking the unthinkable, but of encountering that which bears no care; offers no malleability to thought, consciousness, reason nor subject.

### The Chernobyl Sublime

Early on in the documentary an eye witness; a “machine operator” in Reactor 4 describes the explosion and fire:

*Exterior. Chernobyl power plant (model) from a distance, Reactor 4 bloc in centre of view.*

*(SFX) Noise of explosion. Reactor cap jumps up and lands. Fiery explosion and smoke.*

*Plume of fire begins to rise.*

#### NARRATOR

*An ultra-powerful stream of radioactive vapour releases Uranium and graphite over hundreds of meters around the plant. From the gaping hole a spray of fire charged with radioactive particles in fusion [sic.]<sup>82</sup> shoots a thousand metres into the sky.*

*Interior. MACHINE OPERATOR sits at small wooden table in a kitchen*

#### MACHINE OPERATOR

*There were a lot of colours, and they were really bright. Orange. Red. Sky blue. Colours like blood; a rainbow. It was beautiful.*

*(FX) Fire fills screen*

*Exterior. Reactor 4 with plume of fire viewed from a distance.*

– Excerpt from *The Battle of Chernobyl*

In describing the nuclear sublime, Joseph Masco (2006) sets himself against Nye's assertion in *American Technological Sublime* (1994) that the sheer terror of nuclear weapons means that they cannot be experienced as sublime. Masco analyses the embodied, sensual experience of nuclear weapon scientists during test explosions to highlight the power of the nuclear sublime where 'the weapons scientist's body was the primary register of the explosion [...] assaulting the human senses and demonstrating the fragility of the human body when

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<sup>82</sup> Fission. Fusion is the process of combining nuclei, fission the process by which they decay. Nuclei heavier than Fe (Iron) are endothermic in fusion, and heavy atoms above the mid-50s in weight (i.e. Uranium, but also heavier transition metals like Gold) cannot undergo fusion, but instead can partake in neutron capture. It was this process of neutron capture that was first used (and still is the main process) to synthesise Plutonium. The early experiments bombarded Uranium isotopes with <sup>2</sup>H (Deuterium; a stable isotope of Hydrogen that contains 1 proton and 1 neutron in the nucleus. The vast majority of Hydrogen contains only the proton). Nowadays individual neutrons are used.

confronted by the power of the bomb.' (2006: 59) Here Masco draws upon experiences of Los Alamos researcher during the early decades of bomb testing; experiences and descriptions that bear similarity to the description from the machine operator as above.

Masco's argument runs that, once nuclear weapons tests are moved underground (after 1963) this opportunity for the sublime – a political opportunity – had been lost behind a series of machine sensors, computers and monitoring screens, fundamentally changing the 'techno-aesthetic' of conducting the tests. An argument found also in Kirsch's (1997) analysis. Chernobyl visitors neither see the beauty recounted by the machine operator nor the 'full sensory experience' that Masco describes of the bomb exploding. However Masco's resolution is that the moving underground of bomb testing, the 'techno-aesthetic' of computers and monitors is a shift to Kant's mathematical sublime described as involving 'a flooding of the senses with overwhelming scale and complexity, rather than physical fear.' (2006: 71). The role of the Geiger counter is more complex than this; for Masco the (mathematical) nuclear sublime is found in 'simply a number, not a visceral understanding of the destructive power of the bomb in relation to the human body.' (ibid.: 74)

Holding the Geiger counter out for photos by the sarcophagus over reactor 4, it proffers neither a 'simple' number nor a visceral understanding. Here a short engagement with John Wylie's (2005) response to Mike Michael's (2000) work on the role of the walking boot helps set out some parameters of the discussion. Michael writes that the role of the boots, at their best, is to 'quietly expand the capacities of the body' (2000: 115) (albeit still never a neutral role, for their reduced noise and intangibility). What sets the boots apart, however, emerges out of pain; disruptive experiences that 'throw into relief the inter-objectivity of human bodies and natural environment.' (ibid.: 117) For Michael the walker in pain is not just the body in pain, it too is an experience of the self as distanced from the body (ibid.: 115). Wylie's response is that within Michael's account, pain is internalised and as such 'the surrounding environment is wholly eclipsed in the shadows of the footsore body.' (2005: 244) Wylie locates the pain, instead, 'as neither 'in me' nor 'in that' – the externalized body – but 'between me and it', in this step, this next step. And so the landscape emerges as malignant.' (ibid.: 244)<sup>83</sup> It is from this that Wylie argues that walking in pain, then, is found not of the walking subject, and not in a separation of self and body and world, but in 'resonances of things as a whole' (ibid.: 244) and 'forces anterior to the subject-object distinction' (ibid.: 244). Thus the

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<sup>83</sup> Quoting this now reminds me that I used to (only half jokingly) refer to the Zone as a malevolent landscape. If malignancy is the process of getting worse with time and action, then malevolence stands as a wilful malice. This appeals to a certain sense of paranoia invested in wilful actors of the world (rather than plotting persons) and a reading of the body-world relationship as fundamentally antagonistic. It's also narcissistic. The reality is that radionucleids have, at best, only a passing interest in the actions of humans (even if <sup>137</sup>Cs owes us its existence on this planet).

“I” of the “I am in pain” is not ‘a pre-given ‘I’ [that] experiences pain, but that a certain corporeality-in-pain emerges as a problem and an issue from within a perceptual zone of painfulness that is pre-subjective; a ‘world of hurt!’ (ibid.: 244)

Radiation exposure – even possible contamination – to the extent that a visitor to the Zone will experience will very likely not result in pain<sup>84</sup>. Being extra-sensory (a few rare accounts by visitors when near reactor 4 of phantom sensations such as tingling aside) there is no analogy to the ‘perceptual zone of pain’. Nevertheless there is a radioactive zone (the Zone) from which a “corporeality-in-exposure” emerges; even if this zone is not a perceptual one.<sup>85</sup> Thus the Geiger counter plays no small role in the translation and formation of the *meaning* of such exposure.

Radiation does not care whether the subject (the “I” of “I am exposed”) does or does not pre-exist it streaming through your body as many thousands of subatomic wave-particles. It is a force that does not rely upon, has no need for, any subject-object distinction; properly exterior to this distinction rather than anterior. Yet if radiation can be taken to be a worldly force exterior to a subject-object distinction, it is not correct to say that exposure is of this same exteriority. Indeed, for exposure to be meaningful, it must be posterior to an embodied subject as distinct from the world. For a “corporeality-in-exposure” to *emerge* from the Zone, there must be a more-or-less coherent “I” - an existing (unexposed) embodied subject – to have *entered* the Zone and thus be exposed; otherwise exposure has no meaning. This tension runs through this chapter and the next two. On the one hand it is the very inter-objectivity of relations (and translations) between embodied subjects, radiometric technologies, radiation and ruins that makes exposure meaningful. Such relations must be between entities which pre-exist their relations (in some manner); for else it makes no sense to be exposed (to). On the other, *exposure is to have already been exposed*; to not have been otherwise and thus to undermine the very distinction that exposure rests upon. This is not a temporal sequence; one does not need be aware of one’s exposure to have always already been exposed for that would be to hand to subjective knowledge the power to bring about its own (lack of) ground. It is a simultaneous tension: It is incorrect to place exposure to the Other as either anterior or

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84 With the usual proviso I give when asked “is the radiation safe?” Which is “yes, as long as you don’t wander too far from the route of the tour and do not go out of your way to get irradiated.” And by “out of your way” I mean running off into the Red Forest and rolling in the mud or something similar. This proviso is usually appended with “the broken floors, shards of glass and tangled metal in the ruins of Pripjat are a different matter. Be very careful.”

85 It is entirely conceivable (if highly improbable) for a person to travel into the Zone unwittingly without their exposure ever being known to them or others, without exposure ever being known to a subject and it would be an absurd solipsism to then suggest said person now leaving the Zone did not emerge exposed.

posterior to a subject-world distinction; it is the very condition that makes what Derrida (in M. Rose, 2006) calls 'dreams of full presence' impossible.

Thus the meaning of exposure through the Chernobyl sublime may be the revelation of the *always already exposed* nature of being (in the Zone), and it is this meaning I here refer to as the Chernobyl sublime. The Chernobyl sublime may (also) be an attempt to bolster the body and self in response; but as such I affirm that this is not the sole preserve of reason, language and transcendence (as traditional formulations of the sublime would have it) but is an engaged practice that might only serve to further increase a sense of exposure. To summarise, the Chernobyl sublime is not that of Burke's (1909) awe at a 'safe distance', though it is to recognise that it is a feature of his description of the sublime as (uncertain) safety but not immunity. It is also to recognise that 'no art of imitation' (ibid.) could ever match it, which is to say that it defies being translated into a (detached and detaching) representational modality. In this sense it differs from the Kantian sublime which begins and ends with subject-object distinction and distance through a return of the rational subject as that which represents (and so negates) the sublime. The condition of exposure as the lack of immunity proscribes any assumption of separation. The inability to render the Chernobyl sublime entirely within a representational modality (the slippage of the grasp of the camera or Geiger counter) negates the return to the rational subject. Moreover the Chernobyl sublime is not only a problem for representational modalities but also takes place in Stiegler's (1998) slippage and failure, the *ēpimētheia*, of phenomenological experience. Such a failure is indicative of exposure as passivity. It is here that the Chernobyl sublime aligns with Ferguson's (1984) 'nuclear sublime' as being one which renders the subject understood as necessarily object-of context and conditions. If there is a return to the subject, as in the case of the Kantian sublime, it is through an effort, a 'striving' (M. Rose, 2006) rather than a given emergent property, but not the striving of a rational, categorical impulse but rather in negotiation with an Otherness and laterity. It is also a return that engenders change (thus a reflexivity) a change which is a recognition of the always already exposed nature of Being. The Chernobyl sublime does not deny *any* subject-object distinction. As I have argued, exposure requires that some such distinction exists. It rather works to question the means by (and by whom, what) which any distinction is determined and considers such distinctions always in the process of being reconfigured.

This negotiation with other agencies is the core of the next chapter, whilst chapter six pays attention to difference and its (re)production and reconfiguration. The rest of this chapter offers a re-narration of one particular moment during a tour of the Zone. Alongside a close reading of Merleau-Ponty and Luce Irigaray I offer a conceptualisation of exposed, em-

bodied subjectivity that neither presupposes absolute indistinction (from which subjectivity emerges) nor presumes given dimensions of separation. Exposure is developed further as a necessary passivity for all and any action and develops Merelau-Ponty's (asymmetric) reversibility of the flesh.

## The Red Forest

### Gesturing towards the invisible

Having taken photographs from beside Reactor 4, it is now time to head towards Pripyat. Our driver circumnavigates the power plant site (an alternative route is to head directly to the west via an old factory site), passing next to the cooling ponds and bearing west, the road takes us past the site of the power plant to our right and a field of transformers to our left. Sitting at the front of the bus – today tour guide for one of the two minibuses – I pick up the microphone to let everyone know that they can take photos again<sup>86</sup>. Soon we enter a large crossroads, at one junction stands the iconic Pripyat entrance sign (image 15). Time permitting (which is not very often) the tour may stop here, providing some time to take photos of the sign. This is one of those such times and the driver pulls to the side of the road, I briefly repeat the warning from earlier; avoid the grass verges on the side of the road, for the radioactivity levels are greater there<sup>87</sup>. After everyone else is out, I jump off the bus and pause for a moment. Even though this not a regular stop as there is little to 'do' here other than take a snapshot of the sign, I've always quite liked this spot. It is quite wonderfully unprepossessing. I stretch my arm out, and with my index finger I point towards the west; directing the attention of a few nearby tourists. I gesture past the railway line that runs north-south along the road towards the trees in the distance, perhaps 400 meters or so away.

No one lifts their camera; for what is there to take a photo of?

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86 The power plant site has restrictions on photography and is regularly patrolled by the Ukrainian military. One exasperated tourist's exclamation of "we paid good money for this trip" was met by the tour guide with a curt "explain that to the power plant guards."

87 Early on in the tour we always stop on the main road that follows the edge of one of the cooling lakes and leads to the power plant in order to take in (and, of course, photograph) the view of both the reactor 1-4 complex, but also the half-built shell and its rusty cranes of the unfinished reactors 5 and 6 site. Despite being warned about the ground-level radiation in the grass, most tourists with geiger counters first measure the (rusting) road-side corrugated guide rail. The idea that oxidised metal would be a significant source of radiation is a very common one; vehicles, handrails, dodgem cars and so forth are all avoided for this reason. Reasons for this I can only surmise for although often observed, when questioned, many visitors were not even aware that they had been selecting objects to pass the Geiger counter over in this way. It may be that rusted metal is an immediate signifier of decay, it may be prior knowledge of locations such as the 'vehicle graveyard' or many other reasons, or it may be that, Geiger counter in hand, metal things become obvious, visible 'objects of study' (as opposed to the diffuse 'grassy verge').

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For Merleau-Ponty the gesture of pointing is an exemplar of the 'categorical attitude':

In exactly the same way as the act of naming, the act of pointing out presupposes that the object, instead of being approached, grasped and absorbed by the body, is kept at a distance ... treated as representative of its previous appearances in me, and of its simultaneous appearances in others, in other words, subsumed under some category and promoted to the status of a concept. (*Phenomenology of Perception*, Merleau-Ponty 2002, 139)<sup>88</sup>

Such a presupposition of distanced objects and viewing subjects is the position that Merleau-Ponty's work – especially his posthumous *The Visible and Invisible*<sup>89</sup> (1968) – is set against. It is this sense of 'weaving' and 'intertwining' that appeals to an examination of the exposed subject, even if that exposure is not always in the register of the visible. Central to his philosophy of embodiment is that such gestures (or the "I can" of pointing, naming, memory, thought and language) whether categorical or ideational are not productive of either perception or the world (see McLane, 2008). Indeed, the fabric of the real, 'does not await our judgement before incorporating the most surprising phenomena, or before rejecting the most plausible figments of our imagination.' (Merleau-Ponty, 2002: xi) Instead, such gestures of the "I can" are taken to be an *openness* to the world; an openness Merleau-Ponty often writes as a 'plunge': 'to look at the object is to plunge oneself into it' (ibid.: 78) or, as in this passage:

As I contemplate the blue of the sky I am not set over against it as an acosmic subject; I do not possess it in thought, or spread out towards it some idea of blue such as might reveal the secret of it, I abandon myself to it and plunge into this mystery, it 'thinks itself within me', I am the sky itself as it is drawn together and unified, and as it begins to exist for itself; my consciousness is saturated with this limitless blue. (ibid.: 249)

Here, then, is Merleau-Ponty's anti-Cartesian move: No detached, objective subject 'with no terrestrial weight' (ibid.: 249). Always embodied, always already part of the 'closely woven fabric' (ibid.: 249) that is the real. This is Merleau-Ponty as he is most well known; resolutely non dualist, the Merleau-Ponty who, if not always in the role of touchstone, often "haunts" (see also Cresswell, 2003; Whatmore, 2002) the work on embodied geographies and knowledge production. Yet here too are the beginnings of the problem with a full embrace of Merleau-Ponty's work for a Being-in-exposure. For in 'plunging' into the blue of the sky there remains a sense of intention in this openness, and the perceiving embodied subject as the centre within which the world is drawn together, unified.

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<sup>88</sup> Hereon abbreviated to *Ph.P*

<sup>89</sup> Hereon abbreviated to *TV&I*

In describing the Chernobyl sublime I have described the experience of irradiation whilst visiting the Zone that finds some of its meaningful expression in conscious awareness, but is predicate upon experience that does not require said subjective apprehension. This is a dissociation of experience from both sensibility and intelligibility; I neither have to hear nor see (via mediating technology) nor know of the mechanisms of ionisation and wave-particles to be irradiated. Fundamental to the Chernobyl sublime is that embodied experience precedes conscious reflection; becoming aware of my exposure as an always already exposed is not a solipsist retroactive move. Atoms in my cells were being ionised long before (and despite whether-or-not) the chirrup of the Geiger counter alerted me to this. Thus the experience of irradiation (the ionising effect of charged particles and wave-particles) precedes subjectification. It is from this argument, then, that I move to examine Merleau-Ponty's work, for it suggests a way out of a dichotomous precondition of subject-object distinction, and yet maintains the primacy of embodied experience for subjectification. This, however, is not to suggest this is an unproblematic route.

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I am pointing towards the forest to the west, the tree line beginning at what is about 400 meters away<sup>90</sup>, and name this section of the landscape to which I bring attention to. "That there" I declare out loud "is *The Red Forest*". In naming it so I am relying upon at least some recognition – a 'simultaneous appearance' – amongst the visitors to whom I address. For Merleau-Ponty (2002) the gazed-upon sky is blue not by virtue of an idea sent out towards it, but through a saturation in the consciousness of the perceiver. The Red Forest might be said to saturate the perceiver in another manner; for, unlike Merleau-Ponty's blue sky, the Red Forest is not red.

At least, not any more. The Red Forest (*Krasnyi Lyes*) is known as such for the period immediately after the 1986 disaster. With the winds blowing towards the west, the plumes of smoke from the fire at Reactor 4 deposited their invisible payload over the nearby pine forests. With the radioactive fallout quickly killing off the trees, they turned a reddish brown colour, hence the name. These forests became, and remain, some of the most radioactively contaminated areas in the Zone – indeed anywhere. Eventually liquidators bulldozed much

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<sup>90</sup> I have never been a good judge of distance by eye, but it seems to me to be in the order of a few hundred meters. Checking a satellite image later, a distance of 600 meters would be more accurate, possibly less due to tree growth in the years since that image.

of the dead pine forest; the dead wood being a major fire hazard, and buried the dead pine<sup>91</sup> underneath a layer of sandy soil, and planted new saplings.

It is these saplings, now mature, that I pointed to from the side of an otherwise fairly dull spot at a quiet road junction of wooded northern Ukraine. As I gesture, as I point at the horizon and name, I am the figure of the Kantian subject of the sublime giving expression to the excess of the sensible through naming, through the categorical impulse. Visitors turn to look at the forest, not least – I assume – because I am, in the capacity of tour guide, pointing at it.

Still no one takes any photographs.

### In what sense a *Red Forest*?: Of Red Forests and Red Dresses

When I do concentrate my eyes on it, I become anchored in it, but this coming to rest of the gaze is merely a modality of its movement: I continue inside one object the exploration which earlier hovered over them all, and in one movement I close up the landscape and open the object. ... to look at the object is to plunge oneself into it (*Ph.P* Merleau-Ponty 2002, 78)

Here, we have the Merleau-Ponty of the residual humanism of phenomenology; the Merleau-Ponty of the presupposed subject (Vasseleu 1998 in Wylie, 2002). Part of this presupposition is also of a certain intentionality or, at least, disposition; the openness of the gesture. There remains, at least in *Ph.P* a hierarchy to this intentionality too; bounded clearly within the human subject, for, Merleau-Ponty continues: 'to look at an object is to inhabit it' and as for the objects in peripheral vision; 'they remain abodes open to my gaze' (2002: 19). There is here the suggestion of a passivity of world and activity of the viewing subject. This approach, Harrison writes, 'preserve[s] and reinforce[s] the *primacy of purposeful activity* in the genesis and maintenance of meaning' (2008: 429 original emphasis).

In what sense, then, a *Red Forest*? On one hand this could be taken as the 'status of concept' we met earlier in the act of pointing, the assumed distance of the categorical (the modality of the Kantian return of/ater the sublime). It was once red, a moment in time of cultural significance, and so remains red, though only as far as anyone points to the forest

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<sup>91</sup> These trees, as with much of the buried radioactive material in the Zone, are of concern as the radioisotopes percolate the ground towards the underground water reservoir that feeds into nearby rivers. That so much of this buried material is unmarked and unrecorded only exacerbates the issue (see Large and Associates, 2006 for one of the more in depth reports (in the English language) on this problem).

and gives to it the concept of red through naming it. This is a very different red of the forest than the blue of the sky. That being said, in *Ph.P.* Merleau-Ponty highlights the importance of intersubjective experience; of (through dialogue) shared thoughts and a 'common world' (2002: 413); of a social world not as object (or set of objects) in thought, but as a field not unlike the field of the visible and otherwise perceptible. This provides for a simple, and not entirely agreeable, depositing (as (n)either relegation or promotion) of the red of the Red Forest within an immersion in history, culture, language: Landscape as a way of seeing.

It is Merleau-Ponty's later work in *TV&I* (1968) that such differences between blue skies and red things otherwise are given further attention, and through which a very different philosophy of body-world arises.<sup>92</sup> Here I follow John Wylie's (2002) insistence that the latter work suggests a very different conception of subjectivity and meaning. The difference here illustrated with Merleau-Ponty's 'red dress' whose redness is not in the order of *qualia*; not of the order of world as spectacle, body as mechanism, mind as impartial (Merleau-Ponty, 2002: 60–61). Rather, for Merleau-Ponty's view on the dress' colour;

this red is what it is only by connecting up from its place with other reds about it, with which it forms a constellation ... A punctuation in the field of red things, which includes the tiles of roof tops, the flags of gatekeepers and of the Revolution ... And its red literally is not the same as it appears in one constellation or in the other, as the pure essence of the Revolution of 1917 precipitates in it, or that of the eternal feminine, or that of the public prosecutor ... A certain red is also a fossil drawn up from the depths of imaginary worlds. (Merleau-Ponty, 1968: 132)

The red of the dress, here, is found amongst a constellation of red; here not the 'pellicle of being without thickness' of the quale in consciousness, neither a datum for sense, a position on the spectrum. Rather, the red is a red amongst the constellation of reds, which too includes the reds of history and of culture, the reds of other dresses and other things. The redness here is presubjective but not (and importantly) therefore, presocial. Elizabeth Grosz explains it so:

In returning to a prereflective sensible, however, he is not seeking a pure datum uninfluenced by the social; instead his goal is to find the preconditions within sensibility itself, within the subject that makes the subject open up and be completed by the world. Neither subject nor object can be conceived as cores, atoms, or nuggets of being, pure presence; not bounded entities, they "impenetrate," mingle. (1994: 96)

Or, as Catherine Vasseleu puts it;

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<sup>92</sup> His working notes at the end of *TV&I* clearly state 'The problems posed in *Ph.P.* [...] are insoluble because I start there from the "consciousness"- "object" distinction.' (1968: 200)

This revision of phenomenological thought gives Merleau-Ponty a way of describing corporeality textually, as an engagement comprising multiple historico-cultural, ideal and libidinal dimensions rather than as something separate from or inadequate to them. (2002: 24)

In standing on the road, loose gravel beneath my feet, pointing at green trees in the distance, beyond the dry grass, and naming it the Red Forest, there is a very hazy sense of “over there”; no easy distancing. For sure, the trees are over there – at some distance or other – but the green trees make not the Red Forest. Somewhere over there (even less easily judged than the tree line) is an intensity of redness transmitted not by photons of light and spectrum but photons of a different wavelength;  $\gamma$  (and its cousins  $\alpha$  and  $\beta$ ). Maybe not even entirely over there; the readout on the Geiger counter of about 3 or 4 times “Kyiv levels” suggests no easy distancing. In the Chernobyl sublime we find the always already exposed nature of being (in the Zone). Merleau-Ponty's project of opening the subject up to be 'completed by the world' becomes – when taken travelling to the Zone – one of an undeniable (pre)condition, but nevertheless deeply unsettling. This unsettling moment also unsettles a philosophy of embodiment that derives from Merleau-Ponty's later writings. Moving beyond (or before) any subject-object distinction finds – in radiation – an unsettling moment that requires a thinking through of not just the presupposition of subject-object, but also of intentional action, agency and just how entirely weird (Other) things can be.

What of Merleau-Ponty's focus on vision? The invisibility of radiation, indeed its total insensibility, make any kind of occularcentrism a difficult (if not impossible) position to maintain. Rather than discard *TV&I*, and without recourse the old argument that tourism is somehow a pre-eminently visual practice, I want to here suggest that Merleau-Ponty's theory of the reversibility of action through his concept of the flesh, and his relation of vision to the experience of touch bears some fruit in examining the emergence of the exposed subject. But this is not without reservation; what I want to offer here is a reading of Merleau-Ponty's *TV&I* alongside Luce Irigaray's critique of Heidegger in *The Forgetting of Air* (1999) as well as one of her shorter text *Elemental Passions*<sup>93</sup> (1992) leading into Catherine Vasseleu's *Textures of Light* (2002). I will examine Merleau-Ponty's imaginary of the reversible – which I note remains asymmetrical – and ask, via radiation, what it might be to reverse this reversibility? As such, in Merleau-Ponty's disavowal of a separation of the subject from object in the form of the flesh, Irigaray finds little space for alterity, an alterity which is necessary to begin a think-

<sup>93</sup> Where *Marine Lover* directly deals with Nietzsche and *The Forgetting of Air* with Heidegger, *Elemental Passions* – though part of the same series on the elements – does not directly purport to be a response to any writer in particular. It is written as an antagonistic love letter, the recipient never divulged. I feel certain that it is, in part, a response to Merleau-Ponty's writings, at least I certainly use it in this way here. Whether that utility is a result of reading them in tandem or of underlying intention, I could not say for certain.

ing of radiation. Here too I take seriously Irigary's claim of animism inherent in the philosophy of the reversible. Embedded in the reversing of reversibility are issues of intentional action in embodied experience and here Irigary's critique of an increasingly hidden yet persistent intentionality in Merleau-Ponty's philosophy of the flesh is examined. This leads to a realisation of passivity as inherent in subjectivity, and of a subjectivity not predicated upon positive attributes is explored.

### Reversing the reversible

Pointing still to the woods I make mention of and gesture towards some younger saplings. To the right of the view, here, a series of saplings cluster around a clearing at the edge of the Red Forest. Over there, these saplings are less densely spread and planted in neat rows. I tell visitors (as I myself have been told by other guides) that about a kilometre from Reactor 4 and at the northern edge of the forest (Pripyat sits between the Red Forest and an expanse of forest that crosses over to Belarus) various research projects use the land and plant trees in order to collect data on the effects of radioactive soil contamination in conifers, birch and pine. Here? Over there? Our feet, lined up against the edge of the road, avoiding the grass verge, form a kind of boundary. Possibly. For all the reading I had done prior to this trip which draw on and develop approaches to embodied being that complicate or simply deny an easy a priori separation of body and world, the viewer and the visible, it is a little yellow box clicking away that provides the confirmation of this inseparability.

Standing on the edge of a grey, gravel covered road waving a little yellow box in the direction of a green Red Forest, I don't feel very Kantian. I certainly do not feel as if my faculties of reason have aided my transcendence. If the Kantian sublime is a false sense of intellectual control borne out of categorisation without understanding (Masco, 2006) then I am all too aware right now of how false that control is. I feel pretty gormless as I stand by the road, at a nondescript road junction, pointing at an equally nondescript bit of woodland. If sublime, in that it offers the 'psychic trauma' of denying self-world distinction, The Red Forest is not anything like a volcano or a mountain or a vast river. Even as forests go, it's rather boring to look at. Having had my psyche traumatised by this boring bit of forest, to what subject do I return to through naming it?

No photos are being taken; if anything people seem to be getting a bit bored.

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Irigaray writes of the solid, earthly foundation that underlies metaphysics; for 'Metaphysics' she writes, 'always supposes, in some manner, a solid crust from which to raise a construction.' (1999: 2) As opposed to air, on which, Irigaray continues 'air never takes place in the mode of an "entry into presence" [...] the philosopher can think that there is nothing but absence there, for in air he does not come up against a being or a thing.' (ibid.: 9)

These remarks, from the opening section of Irigaray's *The Forgetting of Air* are part of her critique that begins with Heidegger's clearing in the woods; the *lichtung*. This clearing what would bring about the disclosure of the world is predicated on the forgetting of air, for:

The clearing of air is a clearing for appearing and disappearing, for presence and absence. At least that is how one can – one could? – think of it when forgetting the materiality of air. The power of which materiality techno-physics assumes the responsibility of recalling. By means of the effect produced by the splitting of the atom, for example... (Irigaray, 1999: 9)

The clearing to which I am pointing is an absence only in the realm of the sensible; filled not least with the materialities of air, but also of radiation. This clearing is no space for disclosure for the clearing to which I am pointing is an absence only in perceptibility. One cannot properly speak of radiation as an absent presence; it is *far too present* even if it escapes our sensibility.

Merleau-Ponty's flesh seems to arise from what he sees as a fundamental problem in *Ph.P* which began with the presupposition of subject and object (Merleau-Ponty, 1968: 200). The concept of flesh, and (importantly) the *reversibility* of the flesh is worth summarising here. For it is in this that, for a thinking-through of the exposed embodied subject, both the promise and the limits of Merleau-Ponty's philosophy arises. The prime example of the concept of the flesh and its reversibility is found in the touching; of his hand:

while it is felt from within, is also accessible from without, itself tangible, for my other hand, for example, if it takes its place among the things it touches, is in a sense one of them, opens finally upon a tangible being of which it is also a part. Through this crisscrossing within it of the touching and the tangible, its own movements incorporate themselves into the universe they interrogate, are recorded on the same map as it (Merleau-Ponty, 1968: 133)

In touching and being touched, touching hands are simultaneously subject and object; 'the subject is implicated in its objects and its objects are at least partially constitutive of the subject' (Grosz, 1994: 101) The move for Merleau-Ponty is to apply this this reversibility of touch to that of vision, of vision as a form of *palpation*. The flesh then 'not matter' rather 'It is the coiling over of the visible upon the seeing body, of the tangible upon the touching body' (Merleau-Ponty, 1968: 146)

This reversibility is not simply a claim that other subjects can see the seer, but that (in some manner) the world itself sees the seer in being seen. This is not, Grosz notes, a form of animism. Merleau-Ponty himself notes that 'reversibility is always imminent and never realized in fact' (Merleau-Ponty, 1968: 147), made clearer in his working notes which state 'The flesh of the world is not *self sensing* (*se sentir*) as is my flesh--It is sensible and not sentient—I call it flesh, nonetheless ... in order to say that it is the *pregnancy* of possibles' (Merleau-Ponty, 1968: 251)

Despite this assertion, Irigaray offers this critique

This reversibility is Merleau-Ponty's hypothesis. As if the *seen* enveloped me in its vision? Isn't this a sort of animism in which the visible becomes another living being? ... This reversibility of the *world* and the *I* (which Merleau-Ponty refuses to dissociate, to separate into two) suggests some repetition of a prenatal sojourn where the universe and I form a closed economy, which is partly reversible ... In this indivisibility of the seer in relation to the visible, does some trace of animism remain (*An Ethics of Sexual Difference*, Irigaray, 2005: 144)<sup>94</sup>

For Irigaray this forgotten animism is suggested to be maternal and of the same intrauterine life of pregnancy that she shows Merleau-Ponty to have forgotten (see here also Irigaray, 2012) even as he mobilises its grammar. Irigaray points out that were it not for the focus on the invisible Merleau-Ponty's flesh seems not unlike intrauterine life. I agree the similarities are there, and thus arises the problem in fully embracing the concept of the flesh in describing the experience of radiation. What I find here is not an animism which would be of prenatal life, for the issue I draw out is what seems to be one key to the problem of the concept of the flesh for thinking radiation; the closed economy of 'the universe and I' that Merleau-Ponty describes. Nevertheless there is a fruitfulness in affirming an animism of the flesh that is neither maternal nor godly, but properly Other. I take this further in chapter six where I consider difference but here I attempt a breaking down of the closed economy of the flesh without returning to a priori separation of bodies and objects. A breaking down that leads to – with radiation – the possibility of an asymmetrical reversibility reversed from that proposed by Merleau-Ponty.

In the two hands touching-touched the subject-object are found to be intertwined for it is the touching-touched that becomes the predicate for any subject-object distinction. Yet this touching-touched of the flesh remains a flesh that is of the one touching (1968). This, Irigaray writes, is 'an enclosed world where the intertwining remains between himself and himself, between himself and a world which is already situated within himself' (Irigaray, 2004: 397)

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<sup>94</sup> Hereon abbreviated to *ESD*.

This enclosure, envelope of oneness of the flesh is described by Grosz's reading of *TV&I* alongside *ESD* wherein she writes that the world of the flesh is 'world [which] remains isomorphic with the subject' (1994: 107) an isomorphism that renders Others (as objects of sexed others) 'versions or inversions of himself, reverse three-dimensional "mirrors,"' (ibid.). Summarised as 'a subject with a proprietorial relation to the visible, the tactile: he stands over and above while remaining also within *his* world' (ibid. emphasis added). Opposed to this closed economy with no space for alterity, *ESD* develops a response which would make the distinction of subject object in the touching-touched of touching oneself impossible (Vasseleu, 2002). But this is not to further promote a oneness of Being, but rather assert the never reached unity of self. This is to further blur active / passive dichotomies (Colls, 2011a). Colls summarises this fluid morphology of mucous as;

exemplified by the lips of the mouth and labia, allows for other forms of touching relations ... Both lips exemplify a morphology that express a 'lack of oneness' and does not have 'a graspable unitary form' (Robinson 2006, 101), thereby challenging Merleau-Ponty's (1968) description of the two lips belonging to the same sensible. (Colls, 2011b: 180)

Irigaray's mucous offers a conception of receptivity to relation that is neither predicated upon the material world as a unitary flesh nor a receptivity to experience that is predicated upon a 'going forth' or intentional beginnings otherwise. In Irigaray's work we find an affirmation of alterity and Otherness that would not simultaneously erect barriers (of skin, of thought (Irigaray, 1999)) and return to a priori distinctions.

I gather you up in this place that I am for you. I contain you, whole, in this envelope that I am – for you. In this way I am able to keep you and you are able to remain in me. And I can return, restore you to what you are, I have this power. You even left me this power on condition that is serve to rediscover you, reconstitute you (Irigaray, 1992: 45)

Here we find what seems to speak to Grosz's analysis of Merleau-Ponty's philosophy that would have 'the subject open up and be completed by the world.' (1994: 96) In the passage from *Elemental Passions* above, Irigaray's project of mimesis works a space for vocalising of a world (which is read to be the forgotten maternal feminine) which is permitted no Otherness even as it is co-opted. The opening up of the subject to be completed by the world is not taken to be a radical passivity that it might be. Rather, in returning to the envelope of the flesh of the world (found also in *ESD*) there remains a sense in which the completion of the subject by the world is a project of and for the self. In the envelope of the flesh we can only ever return to ourselves.<sup>95</sup>

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<sup>95</sup> This awareness of the far too accessible formation of the world as flesh occurs in Wylie's later work where he too acknowledges this limitation in the philosophy of the flesh. Though it seems to me that Irigaray provides a conception of the excess of being-in-relation-with rather than an absent presence

Exposure in the Zone denies this return. There is no restoration of that which I once was; in opening up (unwillingly, despite my best efforts; always already opened up) I am not completed by the world. In the all too present presence of radiation I am not reconstituted; rather there is no longer a forgetting, a sublime reminder that 'we are never in some way definitively born as forms, never incarnated in an unchanging manner. ... that we co-belong to the flesh of the world' (Irigaray, 2004: 401) and in this co-belonging I do not find myself amongst mirrors of my sensibility. The touching-touched of exposure is not between that of the same sensible.

Merleau-Ponty's touch that would find itself as an other; the other of my hand which is touched and is touching, is a touch which though reversible never truly allows for alterity. Irigaray's critique here is that the touching-touched of the two hands is a closed system; the flesh as a world of the one:

Nature, and even less so the other, cannot simply be "on the inside" ... And we are not providing them with appropriate hospitality when we reserve for them, within us, an "echo" or an internal equivalent [...] We only thus make ourselves, at best, a mirror for the world, for the other, without questioning the death we then give to them and to ourselves. Reflecting the world and the other amounts to fixing them according to our perception: a solipsistic and narcissistic attitude once again. (Irigaray, 2004: 398–399)

But rather than finding the other which is touched as separate entity, Irigaray returns to a similar if subtly different language of the flesh. Rather than a flesh of which the embodied subject and the world is one; of the same flesh. The other is said, for Irigaray, to 'inhabit' us (2004);

My inner space is [...] modified by the things [...] whom I encounter. It is inhabited in multiple ways, and the manner in which I look cannot be reduced to the mere perception of the visible external to me. I co-look with that which already inhabits me, outside all representation.

Our body is not only set down or situated in space, placed side by side with other bodies, or other things. It is also intertwined with them, and interlacing of those within it. ... But this is not simply due to the fact that it is a body; it is rather because it always is in relation with. And that which philosophy lacks, even more than a thought about the body, is a thought about our body-soul as being essentially relation-with. A being-in-relation-with which is modulated differently according to whether the relation is with an other human, an other living being or a fabricated thing, be it material or mental. (Irigaray, 2004: 403)

An ethical statement by Irigaray, for she affirms the need to accommodate the other. Yet this is an affirmation that is somewhat more unsettling in the Zone. There is in Irigaray's that occurs in Wylie's reading of Derrida (Wylie, 2009)

work a sense of alterity maintained in the co-constitution of the subject in the flesh that does not find itself an Otherness predicated upon assumptions about fixed, unitary embodied subjects and their object Others. We are, for Irigaray, constituted by Others through a relation-with rather than through a necessary sharing of mirrored sensibility.

However exposure as a being-in-relation-with is a very one-sided affair. Radiation asserts a very different modulation to the 'relation-with' than often occurs. Our relations with the Other come with an ethical import that is difficult to transfer to that of radiation where erected boundaries serve (hopefully) more than psychical separation. Thus, Irigaray's critique and re-working of the flesh offers a sense of co-existence in relation with that affirms the alterity of the world whilst not relying upon unified subjects pre-existing said relations. We have seen above how such being in relation with radiation modulates a heightened sense of self as insufficiently bounded. There remains one last assertion here: That in an exposure as a being-in-relation-with, it becomes all too clear that said relations are not (can not) be enacted or instigated by the self. Indeed, the being-in-relation-with that is exposure or the Chernobyl sublime is the failure of experience; of *ēpimēthei*. For Merleau-Ponty the embodied subject emerges through perception; what then if perception fails? What to make of such relations where perception and even sensibility fail; what subject emerges exposed to / from this failure?

**Being-in-the-Zone as the 'unrealized in fact' of feeling being felt by radiation Or:**

**Are we trees to the world's painters?**

Grosz uses Merleau-Ponty's example of the painter and trees in enunciating how Merleau-Ponty avoids at worst an anthropomorphism of the world and at best an animism. In claiming that the painter sees the trees and that, in some way, the trees see the painter is not to give the qualities of sense to trees (the flesh is not self-sensible) but rather to assert to the seer's mode of material existence as a reversibility where; 'Although [...] all sensible existence, entails a reversibility based on the belongingness of the material subject to its material world, this reversibility is asymmetrical' (Grosz, 1994: 102)

This asymmetry poses problems when attempting to think through the radioactive landscape. The first of which is a residual intentionality at the core of all sensibility or subjective action. Exposure can never be in the order of the intentional. Thus Irigaray's critique not only of the oneness of the flesh, but also of the asymmetry which would make the world of and for the body opens up the need to recognise the alterity in / of the world. Thus I am

left with an affirmation of tension that would not annul the alterity by drawing the world into one. The practices of this annulling of the other is found in *Elemental Passions* where Irigaray writes: 'A body becomes a prison when it contracts into whole ... Standing on and in a world. To which it is connected by a network of relations but which it unifies.' (Irigaray, 1992: 17) Although the body-prison may be desirable when faced with exposure, it is an impossible dream. Thus, the unifying role of the body that can be found in Merleau-Ponty's writing is a role which would nullify the alterity of radiation. So the tension arises from an affirmation of Irigaray's morphology of mucous which finds a radical openness to the world and its alterity rather than any separation. Following Irigaray affirms no separation of embodied subject from object even as it affirms the possibility of Otherness, or rather, no unitary oneness. An Otherness which radiation demands a recognition of; for it is an impossible task for the body to unify that which exceeds its capacities even as it effects it. Thus there is no suppression of the self here (even as there is no nullifying of alterity); rather it is to affirm that the constituting of the self is – in exposure in the Zone – to be constituted in part by a radical Otherness which remains otherwise. To be constituted by but not coincident with suggests a passivity inherent on embodied being, and it is to this which I next turn.

There remains one last question with respect to Merleau-Ponty's reversibility of the flesh. This question is predicated upon the earlier assertion that the experience of exposure cannot be predicated upon conscious awareness. The flip side of which this must be the assertion that radiation experiences tourist bodies in the Zone (even if it doesn't care too much about them). The assertion of experience without awareness is not some form of panpsychism, though I would suggest a modest form of animism; an agency located beyond the confines of human thought and action. This is in no way a claim that radiation somehow perceives our bodies or is sensate in some manner, but that it is both active and Other such that its existence cannot be subsumed into a world existing entirely and only of / for Being. I follow Irigaray's critique of Merleau-Ponty's flesh, which states that the flesh finds the world not only too accessible but and moreover, a world only of and for the embodied subject. Instead we might find a world as the harbour of alterity for the subject, and in doing so we find cause to reverse the asymmetry of the reversibility of the flesh. For Merleau-Ponty the asymmetric reversibility of the flesh asks that the tree's vision of the painter who sees the trees is never 'realisable in fact'. In my reversal of this, then, *are not embodied subjects in the Zone the never realised in fact irradiating of radiation as radiation irradiates embodied subjects?*

**A necessary, not cultivated receptivity: How radiation does not need our  
receptivity to be a creative one**

I take the plunge.

Geiger counter in hand I begin walking towards the tall grass at the side of the road, intending to provide a bit of spectacle, but also to demonstrate a salient point about how radiation levels can change dramatically over small distances. I use this point to stress the need to stick to the route and not wander off when in Pripyat. (Although this is stressed as much for my own benefit as tour guide than anything else; as much as I shared the desire to explore Pripyat at leisure, time constraints and the constant threat of someone falling through floorboards without anyone noticing (or other such danger in the ruins) meant keeping the group together as much as possible and made guiding all the easier.). Taking a plunge into the unknown/unknowable one might expect a striding forth. The knowledgeable, experienced fellow engaging in dangerous pursuit for the spectacle of onlookers.

For a whole range of reasons I was never going to cut that (usually masculine) figure going forth. Nor do I stride, but rather awkwardly shuffle into the grass. Not only can I not see where my feet land in the long grass, the weight of the long grass serves as affective resonance to the ever frequent clicking as reminder of that other, invisible, weightless friction.

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my body does not perceive, but it is as if it were built around the perception that dawns through it. (Merleau-Ponty, 1968: 9)

In the philosophy of the flesh Merleau-Ponty refuses to locate perception within the body. Thus he asks of the body; 'Is my body a thing, is it an idea?' answering that 'It is neither, being the measurant of the things.' (1968: 152) This is to affirm the body as not the physiological body of biology, but rather an ideality of experience never accessible to conscious reflection; the body as hinge, fold or *entre-deux* (Vasseleu, 2002). For Merleau-Ponty:

it is not the body which is responsible for the double touching. ... The body is a term within flesh – it participates in so far as it becomes perceivable only through its structuration as perceiving/perceived. The body never perceives itself independently of the language of perception, as a thing itself. It cannot exist independently of a thing perceived, but nor is it reducible to that thing ... More importantly, instead of posing the body as the origin of perception, he poses the origin of the body as an ontological question within

the terms of perception. At issue is existence as a being that expresses itself corporeally, or in its 'self'-production. (ibid.: 26-27)

Nevertheless, there remains an intentionality at the root of perception of the flesh, even if there is a refusal to locate that intentionality in a body. This can be seen in referrals to perception as a 'plunging' which is found in *Ph.P* and echoed in *TV&I*: Taking the example of one hand grasping the other, Irigaray finds a remaining sense of purposefulness; here are echoes of the 'plunging' found earlier. For all its reversibility, the flesh of perception remains predicated upon intentionality of some form.

The inherent openness that Merleau-Ponty's flesh suggests is divided into various modalities through action. The receptivity of the gaze is a result of the body which 'is part of the visible in which it opens forth' (Merleau-Ponty, 1968: 154) and (following the asymmetry of reversibility) this receptivity is, as Grosz (1994) summarises, a 'creative receptivity'. Such creativity is found as an attribute or potential proper to the (human) body. The active / passive relationship of the flesh is complex but can be found where Merleau-Ponty writes that the 'vibrations' of the visible 'makes me *follow with my eyes* the movements and contours of the things themselves' (1968: 146 original emphasis). Yet this ability of the visible to make happen to the seer is tempered, for the flesh is a 'pact between them and me according to which *I lend them my body* in order that they inscribe upon it and give me their resemblance' (ibid. emphasis added). This lending of the body is realised as an active giving over and giving to, for it is 'through *a labour upon itself* the visible body provides for the hollow whence vision will come' (ibid.: 147 emphasis added.) This, then returns us to the passage from *Elemental Passions* earlier which critiques the power of the world to inscribe, to complete the subject which is opened up to it as a power that the subject has bestowed upon the world, a power given (for Irigaray a power given to a forgotten maternal) where: 'You made me powerful to let me pay you back' (Irigaray, 1992: 45)

Catherine Vasseleu finds a kind of narcissism in the vision and the sensibility of light from Merleau-Ponty whereby "[e]verything given to me within light appears as given to myself by myself' (Derrida (1978: 92) quoted in Vasseleu, 2002: 78). This is taken to be the 'egoism of intentionality is based on the establishment of a sense of being at the centre of a panoramic objective world. The reflexivity of 'lighting' is a dual projection and enveloping of the world' (ibid.: 79).

Irigaray notes this underlying intentionality bound within the gazing subject of the flesh in *Elemental Passions*. This returns us to an earlier quote from *Ph.P* with regards to the blue of the sky; the plunging into the blue of the sky as a movement of intention towards; where 'You journeyed towards the blue.' (Irigaray, 1992: 40)

You have transformed my eyes into matter for your sky. A density which holds your light. A blue which illuminates you steadily without dazzling. Flesh offered and abundant always available as a horizon for your contemplation. The iridescence of my gaze bearing, in its colour, *the spreading of your sunlight*. ... And, you are enveloped in that airy and radiant house with neither door nor windows. A body of air filled by palpating blue. (Irigaray, 1992: 39)

The passage above indicates what seem to be two critiques developed in *Elemental Passions*: Firstly, that there remains within the concept of flesh a potency / potentiality of intention located in the flesh that is / will be the perceiving subject, not the world. Thus the sunlight is *of* the flesh that perceives<sup>96</sup>. Secondly, that this underlying intentionality renders the flesh of the world as enclosed, as a world only ever *for* the becoming subject in mirror form. This enclosure denies both an engagement with others as well as an Otherness that might be of the world and unassimilable for the subject.

The failure of experience that is exposure in the Zone asks that the hollow of the body is a result of no labour; at least no labour of the subject. Indeed, precautions and perform-activities of skin, breathing and bodily boundaries suggest quite the opposite. This is a lending of the body that could not be otherwise. And, moreover, a hollow from which no vision will ever come. Thus, in looking for a vulnerability that is lacking in studies of embodied practice, Paul Harrison (2008) suggests that Merleau-Ponty's philosophy is too closely concerned with intentional action. However, I do believe that there remains a sense in the philosophy of the flesh that – especially in the working notes to *TV&I* – is much more about a *necessary* passivity at the root of all possible perception.

In reality there is neither me nor the other as positive, positive subjectivities. There are two caverns, two opennesses, two stages where something will take place-and which belong to the same world, to the stage of Being' (Merleau-Ponty, 1968: 263)

There is here a very different conception of the flesh than the solipsist figuring that Irigaray critiques. This critiqued solipsism is a result of Merleau-Ponty reading vision as an inhabiting of the world by the body (Vasseleu, 2002). But here, and in the earlier references to the body as hollow (and in working notes which refers to the body as 'abode' for the world), we begin to get a sense in which the inhabitation might be taken to be *of us by the world*. In a later essay, Irigaray develops her critique of Merleau-Ponty's active / passive relation found in the asymmetry of the flesh. She writes; 'The seen is in some way active, and the seeing partly passive to the extent that seeing corresponds to being touched by something or by someone – first of all by light waves.' (Irigaray, 2004)

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<sup>96</sup> There is here, indicated later, a suggestion that this too might be a response to what Merleau-Ponty terms the 'rays of the world', drawing on Husserl.

This statement does not differ greatly from Merleau-Ponty; rather it is a shift in emphasis. The touching-touched is found to be initiated less by the body (or a labour of / on the body) but initiated by a (complex) world which exceeds us (for example; through the forgetting of both air and light as present but unperceived medium). Here I follow Irigaray's critique of the problematic active / passive duality of body / world that remains in Merleau-Ponty's philosophy of flesh, even as I recognise that this begins to dissipate in his later writing. What I suggest is the more important critique in relation to exposure in the Zone is that body as abode for inhabitation by the world (Merleau-Ponty, 1968) seems to be only ever at the behest of the body. Lorraine argues that Irigaray offers a differing perspective which;

references to a natural, cosmic rhythm [that] point to the broad range of processes against which and within which human life plays out. That is, processes that *always go beyond any human intervention into life ...* and are always much larger and more complex than the human processes they encompass. (Lorraine, 1999: 95)<sup>97</sup>

In having taken the plunge I find I have always already been plunged: The world engulfs *not* through virtue of a intentional giving-over-to but because it could not be otherwise. But this engulfing, this co-constitution is not a co-incidence; nor does it provide access. Even engulfed there is no easy grasp, no availability: we are abodes for that which exceeds.

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Having plunged / been plunged I remain somewhat sure this is not yet the deep end.

I have done this before; wandered off into the grass at this junction. I remain uncertain, but these (fallow) pastures are not entirely new. Last time it too was a function of a curiosity born of boredom (mine, though; not of those I am supposed to be engaging for / with). Quite how much and over what distance would I find the readings change? (A lot, fast.)

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The feeling-through of this wander off the road is a difficult thing to write. Irigaray's foray into air, light and fluidity are never fully adequate as metaphorical hooks. There is a consistency to this walk; a drag not unlike a paddle at the sea's edge<sup>98</sup>; though this may just be the weight of tall, thick grass. If radiation is rather a medium, as Irigaray (1999) takes air to be

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<sup>97</sup> This affirmation becomes difficult when faced with these complex processes which exceed us being the result of human action as they are in the Zone. This difficulty is a result, I believe, of an affirmation of a humanism in Irigaray's work (especially prominent in 2004) and a human / nature split. Rather it seems to me that processes within which subjectification happen always exceed the subject *regardless* of whether said processes might be 'natural' or 'human'.

<sup>98</sup> Grosz (1994) notes that Merleau-Ponty utilises the image of the sea and the strand in a more fluid account of vision.

(of both vision and speech) then, though I find myself in it, I remain unaware of what message – if any – there may be. Light might seem more apt, but in reading *Elemental Passions* I am consistently more drawn to the evocation of night within it than that of the Sun and day. If light, then maybe the perhaps of light as cannot be seen when viewed side-on through a vacuum. Though this cumbersome setup seems a poor metaphor for the ease in which radiation refracts through my body.

I remain at an impasse when working through either description or metaphor for what the Zone 'feels like'. I was often asked by prospective visitors to describe what it felt like and began to ask this question routinely in my interviews. Many interviewees seemed to find a similar impasse in describing how the Zone 'feels'. This impasse can be seen in this quote from Claas, a Norwegian man in his late 30s who was on holiday with his friend in Ukraine. They had chosen to visit the Zone as a historical site; the location of Europe's worst nuclear disaster. Claas was specifically interested in "trying to figure out what it means to the people when they have to leave their hometown and they never come back". Claas commented that:

*"Yeah, I've been thinking a lot about what it would be like when I eventually would be there, but I was not sure how I would feel ... but today I thought it was different, I couldn't really find, I tried to find for myself the right words to describe the words for what I feel and I couldn't find the right words."* (#i20)

When the 'feel' of the Zone was expressed it was often in terms of unsettling, strange, unreal. Conflicting, dissonant is how the Zone 'feels';

*Gary: "Yeah, I mean I think that it definitely adds more to the feeling of your own, sort of like, the powers that are greater than people. Because there's multiple things about Chernobyl that are a threat. There's the radiation but also nature. ... it just adds, it creates more things that, like, you feel like could destroy you. It could be like the wolves, or it could be the radiation, or it could be something else you don't know. And then, I think... I just... I... It was so peaceful."* (#i14)

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The Geiger counter begins to crackle with some urgency now. At the current reading it would – usually – have begun to sound an alarm. I've disabled this functionality temporarily, for there's something quite affective about that recognisable crackle of higher intensity readings from the speaker attached to the Geiger-Müller tubes. Something even theatrical. I slow down. Partly I don't want to wander too far from the group standing on the edge of the road,

but mostly because I'm not willing to expose myself to any higher risk (even though the current levels are – for this short duration – far too low to be of any danger<sup>99</sup>)

In the always already of exposure and the passivity that underlies both perception and its excess I am not rendered useless. Being necessarily given-to is not a giving-up: The revelation of our necessary passivity is not to circumscribe subjective action. Inching forwards, heavy shoes and long jeans; performed boundaries serve a purpose. In relation-with that which exceeds me I am not rendered incapable of asserting myself as a somewhat bounded existence. But this *is* an assertion; not a taken for granted, not a given. It is also a tentative and ongoing assertion. It is not the assertion of the plunge, of the going forth; it is the assertion of the self in the careful placement of feet, of the awkward, stilted steps as I stay fixed on the readout of the yellow box. Hesitant.

Some onlookers begin to head towards the bus.

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Out of Merleau-Ponty and Luce Irigaray emerges an embodied subject that is at once both active and passive, or, more pertinently, *passive in its activity*. This becomes most clear in the working notes at the end of *TV&I*, where Merleau-Ponty states:

The chiasm, reversibility, is the idea that every perception is doubled with a counter-perception (Kant's real opposition), is an act with two faces, one no longer knows who speaks and who listens. Speaking-listening, seeing-being seen, perceiving-being perceived circulatory (it is because of that it seems to us that perception forms itself *in the things themselves*)--Activity = passivity. (1968: 264–265 original emphasis)

This is an active passivity. In exposure, passivity becomes the *archē* of activity, even if it is not necessarily the *archē* of the subject. Exposure is of the subject as an incomplete yet existent Being, for 'The subject is not reducible to what it experiences and is equally unable to withdraw itself from anything that it experiences.' (Vasseleu, 2002: 61) Thus, where Harrison (2008, 2009) turns to fatigue and dreamless sleep the passivity here is very much a necessary part of activity; even the kind of activities where the intentional purpose is to bound the body. The passivity of sleep may be the predicate for action, but passivity before action is more than this, for even in the moment or event of all and any action there is a necessary passivity.

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<sup>99</sup> Chernobyl tourism has occasionally been called "extreme tourism" (referencing "extreme sports" as a leisure activity) in various media reports. This is woefully incorrect for the risk is neither significant nor anywhere near the kind of visceral thrill of, say, white water rafting.

Returning to Irigaray's (2004) affirmation of the being-in-relation-with this can be read alongside the affirmation that it is not the body that unifies the relations with which it is entered into (not enters into). In *Elemental Passions* Irigaray writes against the assumed unifying role of the body. In relation to skin, this unifying role is, for Irigaray, predicated upon such boundary work:

your skin is hard. A body becomes a prison when it contracts into a whole. When it proclaims itself mine or thine. When a line is drawn around it, its territory mapped out. ... When it is there, stays there, is erect there, standing on and in a world. To which it is connected by a network of relationships, but which it unifies. (Irigaray, 1992: 17)

The failure of this unifying move in the Zone is the affirmation of a receptivity that is inherent, not cultivated. The necessary passive receptivity that is the root of all action is countered with a unifying endeavour; a retention that is an endeavour in the face of possible dissolution amongst the mixture.

To return to Harrison on vulnerability;

In their sensate materiality bodies become over whelmed. Abilities to comprehend, invoke, and summon signification can and often do fall short, collapsing in ways which do not revert to and can not be converted into a positive meaning and in so doing demonstrate or expose nothing more and nothing less than the their material being as "the soft tissue of living things" (Caputo, 1993, page 196). (2008: 425)

The collapse of comprehension, the excess of intelligible and the consistent falling-short of exposure is not only a realisation of our material being. It is this that is the mark of the Chernobyl sublime. In being overwhelmed we find no positive, unifying subject, but rather a subject which *strives*. There is a reflexivity in the falling short of apprehension; albeit a reflexivity that does not returns us to a unified and unifying embodied subject.

For if the flesh is taken to be reflexivity (Grosz, 1994: 100) there is a reflexivity in my grasp that fails to hold radiation; the reflexivity of failed experience, of a Being as hollow by necessity (not labour, effort or intentionality) that, even when filled, no vision (or perception otherwise) will come. Such experience is not to remain forever outside of the intelligible; rather it is a reflexivity through the failure of perception; through *ēpimētheia*. This failure, however, is not of a reflexivity that has never left the subject. I do not reach out from a subject and in failing to grasp return to the subject in a closed loop.<sup>100</sup> For that failure to grasp radiation is also of the ease with which radiation has no problem grasping hold of me. The

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<sup>100</sup> This is where it is important to state this is reflexive, not reflective. In that it engenders change to embodied subjects. It is a return to the self, a self changed through that process. This is in contrast to Barad's critique of reflexivity as only ever merely reflective and representational (2007).

*ēpimētheia* of radiation is a denial of locating the 'creative receptivity' that is the flesh within a human intentionality.

Thus, though I have located a passivity in Merleau-Ponty's flesh, this is not without an acknowledgement of the remaining intentionality. I have critiqued what is deemed to be a 'creative receptivity' with a suggestion of inherent, unwilling receptivity or openness to exposure. It remains that these two things are, for Merleau-Ponty, often taken to be of a different order. Catherine Vasseleu describes it as such:

A body's vulnerability in its aspect for an other as an object in perception is of a different order to that vulnerability being felt as exposure to the possibility of bodily interference. This is the experience of intentionality being stripped away or the tangible reduction to a no-body. (2002: 58)

What I suggest here is that there is not a great difference in modality or order; that exposure to 'bodily interference' is not so much a 'stripping away' of intentionality as it is the precondition of intentionality. Irradiated subjectivities indicate the necessarily inherent exposure to the world that is not a lack, a failing or a loss. This is not to say that this is not compensated for. As I have stated a given-to is not a giving of oneself. Exposure is a passivity that is not met by further passivity. Rather performative practices of boudning occur as a subjectivity strives with alterity. This is the focus of chapter six. What I indicated here is that, before all possible action there must be a necessary passivity, a necessary exposure to the world.

### Sublime exposure

To reiterate. The Chernobyl sublime is, after the nuclear sublime, a realisation of the subject existing as object-of that which is sublime. At its core the Chernobyl sublime, experienced through exposure, suggests both a disruption of any givenness to subject-world distancing and radical lack of intentionality in our relations with the world. Although it is not to render subjective endeavour fruitless, for the response to the sublime (referring back to the Kantian model) is a striving towards subjectification (rather than a passive emergence; again, see here chapter six). In denying such a cleaving of subject and world I argue that Merleau-Ponty's philosophy of the flesh offers further grounds for analysis. However this is with some reservation as to a certain intentionality in Merleau-Ponty's writing. As indicated by the 'plunging' this is a subject *of* the world (rather than in it) but where that *of* is an intentional giving-to rather than a given-to. I have offered a reading of Irigaray and later parts of Merleau-Ponty's work as a response to this. Working through an autoethnographic re-narration and thick description of embodied practices of knowledge and experience I have shown

exposure to be of a necessary passivity that is prior to any intentionality. I have offered, in the main, two readings of Merleau-Ponty in response to this. First the asymmetrical reversibility of the flesh that Merleau-Ponty writes is the 'never realised in fact' of trees seeing the painter (even if vision is understood as reciprocal) I suggest should be reversed such that embodied experience is that which is 'never realised in fact' with respects to, in this example, radiation irradiating. In having offered this reading I argued that the 'creative receptivity' (Grosz, 1994) of the flesh cannot be a creativity that is located within embodied subjects. Exposure is a receptivity that is not a giving-to of 'plunging' but neither is it a given as a 'basic fact' of being-with-radiation. Rather it is a given-to by virtue of active agencies whose creativity is not modulated by the human subject.

Having offered a conception of landscape-self relation that is predicated upon a decentering of subjective agency as a driving or structuring force two points of departure emerge that the next two chapters respond to. First, how best to examine a creativity not bound up in human intentionality? In the next chapter I examine practices of radiometric knowledge production as a relation-with trickster agencies. Secondly, how to consider difference. I have argued that exposure requires a certain existence of a subject to be exposed. Here I have followed Rose's (2006) alignment with alterity as a driving force and a subjectivity that 'strives' rather than emerges from a given worldly vitality. Rather than expanding upon the constitutive effect of alterity for subjectivity in the work of Derrida<sup>101</sup> I examine the (re)production of and productive capacities of difference in chapter six where I turn to the work of Butler (1993) and Barad (2007).

### The Narrator Exposed

The use of "I" thus far in this thesis, and specifically in this chapter bears a moment of reflection. The multitude of 'first-person verbing' sentences here seems somewhat at odds with the claims of dispersed intention that I have been making. Thinking back I cannot remember a moment of deliberative choice for this mode of writing beyond a sense in which I could not imagine this writing otherwise. A detached second person account would not have remained true to the situatedness of this knowledge<sup>102</sup>. For all the reasons laid out in the second chapter, such second person accounts not only jar entirely with a participant ethnographic approach but also build towards a distanced authoritative knowledge. A third person

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<sup>101</sup> See Reynolds (2004) for a reading of alterity as a feature of Merleau-Ponty's chiasm of the flesh.

<sup>102</sup> Although this is not to situate knowledge as "of", "in" or "by" me. It is to locate it in a specific set of relations and experiences (G. Rose, 1997 and also much of the next chapter via Donna Haraway)

account would only served to have been more true to the experience of my super ego as inner critic (“What *are* you doing Nick?”) and be as similarly distanced.

This “I”, should not be mistaken, however, for something entirely coherent, even as there remains a fidelity to that “I”. Here I want to briefly engage with John Wylie's language of an 'emergent' subjectivity, or if not emergent, than a 'precipitate' (2005) insofar as it helps me to formulate a final point to this chapter and indicate further development. To reiterate my claims from earlier as to exposure; unlike Wylie's claim to have described something anterior to himself as narrator (ibid.: 245) my exposure in the Zone is predicated upon myself as narrator pre-existing said exposure: to emerge from the Zone exposed, one has to enter the Zone unexposed. Yet said exposure is the denial of any such simple subject-world dichotomy. This is where I wholeheartedly agree Wylie's description of the narrator-subject as no-thing 'discrete' or 'monadic' (ibid.): the “I” that emerges from the Zone exposed is not (cannot be) coherent or bounded. Rather, the exposed-narrator-subject I have drawn together here is indicative that we are but 'embodied creatures living in a world that incessantly impinges upon us, and any self that we are able to stabilize out of this ever-changing movement of which we are but a part is completely implicated with what surrounds us.' (Lorraine, 1999: 45)

This distinction is found in Mitch Rose's comparison between Deleuze and Derrida when he states:

In Deleuze's work, subjectivity is thought to 'arise' through a synthesis of elemental sensations actively combining towards higher orders of self-perception and awareness, eventually producing various subjectivity effects. [...] For Derrida, however, subjectivity is an active response to alterity. Derrida also presents an animate, becoming world, but the engine for that process is not its own self-affirming vitalism but a silence. [...] Thus, although subjectivity is similarly elemental and differentiated in Derrida, it does not so much 'arise' but rather 'endeavours' or 'strives' in response to the anxious unpredictable present 'nonpresence' of alterity. (2006)

Exposure is not entirely within the realm of the subjective, even as I hesitate to call it pre-subjective for the necessity for some embodied subjectivity to be exposed for exposure to be a meaningful term. Exposure is of the realm of the unravelling of subjectivity; thus as much as it is not pre-subjective neither does it a-priori assume embodied subjectivity as positive state of being. The embodied subject in exposure is a subject not so much a given set of potencies, capabilities or attributes as it is a state of constant slippage and deferral. Subjectivity is not as a secretion or precipitation but as Mitch Rose terms an 'endeavour' in the face of alterity. Thus exposure to radiation is not in the order of the sensible or even entirely the intelligible; it becomes known only in part, only ever as probabilities, but though it is neither sensible nor fully intelligible it is nevertheless experienced.

In the Chernobyl sublime and the necessary passivity that is inherent in all activity there is a subject not predicated upon a set of positive attributes as a-priori differentiated from the world or objects. But more than this: there is less an emergent becoming as there is a constant “not quite” of irradiated subjectivity; neither a positive subjectivity nor a precipitated outcome but a constant project of awkward relation to the Other. Of a subjectivity not becoming as much as constantly slipping away.

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Eric Wiley's (2002) analysis of 'Alligator Annie' and other Cajun swamp tour guides provides a wonderful examination of this kind of performer-narrator role built up over years of experience and repetition.<sup>103</sup> The staged encounter between guide and alligator is the climax of the script and it is through this script that the 'tours' production of “Cajun swamps” morphs everyday stuff, such as trees, rocks and clouds, into “Cajun trees” and “Cajun rocks” and “Cajun clouds.” (ibid.: 129) I cannot hope to provide anything resembling this performance-production of place. Indeed this venture into the grass owes less to rehearsal and more to improvisation when confronted with the silence of bored tourists milling about on a bit of gravelly road by an old sign. There's nothing much to do here, so I have taken the opportunity to engage in a bit of spectacle, and a bit of information. The reason we asked you to keep clear of the grass verge earlier? This is why.



*Image 43: Yuri has stopped the minibus to step out and highlight how contaminated the red forest is. Visitors are instructed to stay within the bus. (#p1282)*

I shuffle further into the grass, now holding the Geiger counter a bit below knee level, walking in a somewhat stooped manner. I'm not too certain how far into the grass I'm willing to go. In part I am taking my cue from the previous times (only twice) that I have seen Yuri offer a similar performance (image 43). I vaguely recollect Yuri telling me that when working with scientists they would always wear body suits going beyond the train tracks (still at least a dozen meters away from where I stand) where the radiation is measured in milliSieverts, not microSieverts.

As such, I am acutely aware that it is not me who is rendering this grass radioactive. Very much unlike the Cajun swamp tours it is not I who morph the banal stuff of grass and forest into radioactive grass and radioactive forest. Radioactivity is not a function of my intention; neither my receptivity a function of creativity. As I move into the grass the Geiger counter begins to emit increasingly excited crackling; I'm keeping a close eye on the LED readout and begin to slow my pace; the levels are still far too low to be of any risk for the few seconds I'm spending here but caution prevails. Standing here, now in knee-high grass, awkwardly bent at the knees so as to better get a near as reasonable ground-level reading I am aware that it is not an action or agency of my own – no matter how much I point, gesticulate and narrate – that makes the forest red. The reading, I tell the onlookers as I hold up the little yellow box, is greater here than it was when we stopped off just by Reactor 4.

Some visitors take a few photos.

# 5. TRANSLATIONS, RESISTANCES AND TRICKSTERS

## Outlines

### A sheet of glass coming down from the sky

The first indication that you are entering a radioactive area is at control point 'Dityatki' (Кпп Дитятки), situated on road Р02 out of Kyiv at the southern border of the Zone (image 44). Dityatki is still sometimes referred to by guides as the entry to the '30 kilometer Zone,' although the borders of the Zone no longer conform to the basic circumference of 30km centred on reactor 4 that was drawn in the immediate aftermath of April 1986. The borders of the Zone now work a winding course that takes into account the distribution of radioactive contamination after the fallout. Except for the northern edge, which cuts through some of the more contaminated areas, subservient to a reality that postdates the explosion; the breakup of the Soviet Union and the formalisation of the Ukraine / Belarus national borders (image 45).



Image 44: Waiting for passport checks at Кпп Дитятку (#р0892)

The checkpoint is a spatialising practice of border and boundary. Its symbolic and cartographic warnings, security and bureaucracy, separate the area into hazardous and non-hazardous spaces. But take a Geiger counter out,<sup>104</sup> here at the control point, and it will not be reading above 0.2  $\mu\text{Sv}/\text{hour}$ .<sup>105</sup> On many days it might well be even less than the 0.16 to 0.18  $\mu\text{Sv}/\text{h}$  readings recorded in central Kyiv before leaving.<sup>106</sup> It will be some kilometres before this ambient reading changes.<sup>107</sup>



Image 45: Close up of the map of the two central Zones (note the pink inner-Zone) which stands at Knn Dumyatku (#p0487)

104 The Geiger counters most common during tours in the Zone, and the model I own and used for this research & to compile the map which accompanies this chapter, is the Ukraine-made *Terra-P*. These are fundamentally geographical devices; in that they provide localised measurement of dose rate by default, with total exposure as a secondary measurement.

105 Micro Sieverts per hour. Sievert is the standard measurement for 'dose equivalent' or 'effective dose'. An older dose measurement, the 'roentgen equivalent man'(rem) is occasionally used by people who work in the Zone and is referred to as 'rems' or (inaccurately) just 'roentgens'. One sievert is equal to 100 rem. An 'effective dose' means that rather than a measurement of the activity or energy output of the mass of radioactive material (the Becquerel) the Sievert unit is the dose measurement (Gray) weighted both by the type of radiation ( $\alpha$ ,  $\beta$  and  $\gamma$ ) and the tissue type under exposure. The Sievert is indicative of the 'slippery' quality of radioactive realities for it is primarily a statistical device used to best understand stochastic systems.

106 These readings in Kyiv are well within normal ranges due to background radiation sources. For comparison; the same Geiger counter in the Durham University office in which I'm writing this reads 0.1  $\mu\text{Sv}/\text{h}$ , which is at the lower end of that expected due to background sources (cosmic, Radon, building material, global dispersals of fallout etc.)

107 Here I mean ambient in that the reading is not a result of a significant, localised 'hotspot.' As we shall see, such hotspots are scattered throughout the Zone, take many forms and fundamentally shape place-making practices.

During the height of summer of 2010 and the middle of my fieldwork Ukraine and parts of Russia were experiencing drought conditions. Just across another border, in the Russian oblast of Bryansk, the wildfires of 2010 had begun to spread into areas with significant  $^{137}\text{Cs}$  and  $^{90}\text{Sr}$  contamination (Reuters, 2010). Besides fire fighting, one of the other more important aspects of radiological contamination monitoring in the Zone is to keep track of the depth to which radioisotopes, being heavy metals, have sunk into the soil as rain percolates the ground, threatening underground aquifers (Large and Associates, 2006).

In the event, the wildfires did not spread to the Zone, but the absurdity of such borders being somehow indicative of a safe, unsafe binary can be found in the poetry of 'lapsed physicist' Marco Petrucci (2006), in which a discussion between an army officer and a local resident is narrated thus:<sup>108</sup>

This side of the fence  
is clean. That side  
dirty. Understand?

You must forget  
that soil is like skin.  
Or interlocking scales

on a dragon. Dirty  
Clean – is all that matters  
here. Imagine a sheet

of glass coming down  
from the sky. It's easy  
no? On this side

you can breathe  
freely. Your cow can  
eat the grass. You can

have children. That side  
you must wear a mask  
and change the filter

every four hours.  
You ask – What if my cow  
leans over the fence?

Personally I say  
it depends which end. But  
we have no instructions

for that. It is up to you  
to make sure your cow  
is not so stupid.  
- Fence (Petrucci, 2004: 27)

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<sup>108</sup> Petrucci's Chernobyl poetry takes inspiration from journalist Svetlana Alexievich's collection of interviews *Voices From Chernobyl* (2005) and is used as narration in *Heavy Water: A Film for Chernobyl* (Grabsky and Bickerstaff, 2006)



Image 46: Radiometric maps of the Zone in the briefing room at the Chernobyl Interinform offices, Chernobyl Town (#p0194).



Image 47: Tour guide using radiometric maps to describe and narrate the Zone (#p1771)

A few kilometres down the road, now within Chernobyl town itself (and finally out of the minibus), visitors are first introduced to the Zone via a series of radiometric maps (see Images 46 & 47). Each depicts the bloom of radioisotope soil contamination with its characteristic westward elongation. During the introductory talk these maps aid in the orientation of visitors, enrolled as navigational aids and as instructional material. At a distance one would be forgiven for thinking these were maps of a peak in a topographical projection of a lone volcano.

With powerful allies found in fire, wind earth, and water, radioisotopes have no reason to care for invisible sheets of glass, imaginary or otherwise. (And invisible sheets of glass can be found so often in our worldly imaginaries.) As the last chapter shows, this is not simply a transgression or a transition by radiation and radioisotopes, but a bypass as if maybe these distinctions were not there in the first place to be disrupted.

The radioactivity of the Zone is not a function of gradated coloured scales nor of wire fences and passport checks. These practices of knowledge cannot easily be said to bring into being the realities of radiation. In highlighting radiation's power to defy borders (territories of Zoning, territories of binary thought) as if they were 'not really there', this should not lead to an understanding of the maps and borders of the Zone as simply (only) political and social constructions of space. Whether 30km in circumference, or winding from one part of the Belarus border to another, mapping practices are contingent, but they are contingent practices which involve all sorts of human and nonhuman actors, *including* radiation and radiometric technologies. Maps work to spatialise; practices of mapping 'constitute spatiotemporal worlds' (Haraway, 1998: 135), but this is never because maps exist as straightforward and 'nontropic' (ibid.) translations of reality, but because they are the product of negotiation and translation between an array of heterogeneous agencies (biological, technological and otherwise). In their use, maps of hazards are vital and important navigational tools (November et al., 2010) which highlight the negotiation of not a flat, topological world, but a topographical terrain. But not a static topography, awaiting (re)presentation, but folding and undulating as it is traversed. Co-productive (albeit arguably asymmetrically in favour of radiation, and certainly not as part of an easy alliance) in practices of place-making.

This chapter is an examination of the agencies of radiation as they are negotiated with by myself, guides and tourists. If we take places to be nexuses of relations (Massey, 2005), and thus that tourist practices produce tourist places (Edensor, 2001b; Coleman and Crang, 2002b), and acknowledge that tourist practices are fundamentally networked in form (Bærenholdt et al., 2004; van der Duim, 2007), what of those relations which exist that are not instigated by tourist practices? In a relational account of place there must be space for

that account to include the possibilities of actors and relations which are not enrolled through human action. Not only not enrolled, but not fully accessible to our practices of knowledge production, and not always willingly negotiated with. I argue that radiation is an example of the wilful agencies of place-producing capabilities that hint at the topographies of place in an otherwise topological account of relations. I begin with the map that accompanies this thesis and suggest that maps and cartographic practices – both studies of their use and as methodological and analytical practice – can begin to offer insight into these networked practices of place-making, even as they themselves make places otherwise. Moreover, as central as maps have sometimes been taken in debates around a 'realist / social construction' divide, using, making and studying them, maps actually offer us a way out of – or rather a bypass of – such dichotomies. I then move to examine practices of negotiation through guiding and offer a more focused account of the role of the Geiger counter. I conclude with an examination of work by Bruno Latour, Donna Haraway and others to offer an account of the agencies of radiation. An agency that, when faced with attempts to fully know delimit and define, *resists*.

### Cartography

#### Cartographic anxiety

The choice of mapping as both descriptive presentation and analytical approach requires explanation for 'cartographic anxiety' (Gregory, 1994) cannot be easily dismissed. Nor is it necessarily a practice which, at first hand seems to bear a fidelity to a situated, networked approach. So I wish to respond to these two concerns; firstly to draw upon and expand some arguments that there remains space and purpose for critical mapping practices. Mapping as a networked practice and representation offers an alternative to Latour's more commonly used metaphor of 'tracing' (1996a). I draw on the work of Valerie November et al. (2010) and others with regards to a possible cartographic practice of 'navigation' rather than measurement.

Maps, as any good student of Human Geography knows, reproduce positions of power in their claims to knowledge; they are just one of a whole host of techniques of 'disinterested science' which constantly works to make its own culture natural just as it brings the natural into the cultural. For 'it is precisely to the extent that the map culturalizes the natural that the cultural production the map is must be naturalized in turn this is to make it easier to accept – as natural – the historically contingent landscape the society that wields the map has

brought into being.' (Wood and Fels, 1993: 79) It is this kind of argument which holds maps as archetypal examples of the kind of practices which fetishise the representational products of scientific (which is to say cultural) knowledges. A fetishisation which takes maps to be 'metaphor-free representations, more or less accurate, of previously existing, "real" properties of a world that are waiting patiently to be plotted.' (Haraway, 1997: 135)

This being said cartographer Mark Monmonier begins his *How to Lie with Maps* (a guide aimed at map-makers), with a frank admittance that '[n]ot only is it easy to lie with maps, it's essential. To portray meaningful relationships for a complex three-dimensional world on a flat sheet of paper or a video screen, a map must distort reality.' (1996: 1). Maps, then, are necessarily selective and incomplete. Later, in comparing maps to paintings and speeches as authored works Monmonier gets towards the necessary partial and situated knowledges of maps.

This thesis includes a map which accompanies this chapter. This map is very much a 'necessary distortion' of reality, taking its cues from city maps aimed at tourists. But this distortion is not a distortion of an otherwise 'patiently waiting' reality. It is a negotiation through networked practices and mediators. It is a negotiation with that which resists representation; distorted or otherwise. I begin with mapping practices and the methods use to create the map included in this thesis. I will then compare and contrasting these practices with networks of guiding to offer an evaluation of place-making in the Zone.

### The radioactive playground

The radiometric data used for this map was collected during my very last trip. But builds upon all the earlier trips with the days spent touring, guiding, walking, talking and waving a little yellow box around. I made the decision to undertake this mapping task as a result of hours spent wandering the asphalt plains of the abandoned amusement park in the centre of Pripyat. Though a late endeavour, the trigger for this line of thought began with my second trip to the Zone. Until the visit to the amusement park during this second tour, the Geiger counter had seemed to be very little more than a device for spectacle, a prop for photos (see images 48 & 51). Of course this is not an unimportant role that the Geiger counter played, however there was more to it than this. This 'more to it' was never a case of simply revealing or translating radiation. Later, in the visit to the amusement park area, the guide stopped by a large patch of moss (Images 51 and 50, area ③ on the map) in the middle of the asphalt. We were introduced to this moss as if it were a famous spot in Pripyat. This visit was one of a handful I attended which were accompanied by a television crew. This time here

from a European travel channel producing an episode on Kyiv. Members of this crew, it turned out, had already been asking about this specific patch of moss. This is a well documented patch of moss, being a fixture of pretty much all visits to the Zone, and had been for some time.



Image 48: Geiger counter being used as prop during my second tour of the Zone (#p0142)



Image 49: Geiger counter in Pripjat with Reactor 4 in the background (#p0144)

Taking visitors to this unassuming patch of mossy ground, the guide kneels down to show the counter raise and the clicking gets more frequent in that characteristic manner. Photos are taken, video gets filmed. Quite why this patch of moss had been chosen I never really found out. Not that I was beyond using it for exactly the same purposes of spectacle when, in later tours, I myself was working as a tour guide. I found out in later tours that this was not the most radioactive space in this area. On a number of occasions I had noticed Maxim warn visitors visitors to avoid a certain area of the park. After asking why he informed us that there were patches with high levels of beta radiation near to the small shrub that had just been passed. It was clear that this largely featureless expanse of asphalt and moss was – despite how flat the area might *look* – by far one of the more varied places that featured in the tour.



Image 51: The famous patch of moss (#p0432)



Image 50: Maxim brings attention to the moss with a Geiger counter (#p1194)

This variation can be seen on the map. Presented as data points rather than the area coverage of the maps in the briefing room there are clear areas of relatively high intensity radiation.<sup>109</sup> The clusters that appear are a result of attempting to map, in higher resolution, certain areas of highly localised intensity. The asphalt plains of the amusement park have a topography of their own. Not one of inclines, steep terrain or mapped isolines, but an embodied topography nonetheless. A topography of contently chirruping and then urgently

<sup>109</sup> I did not have the correct data to utilise the kinds of models used to produce the maps in the briefing room. Moreover, such models are not intended for use at the scale offered in my map.

chattering Geiger counters, bent and squatting bodies, clicking cameras and walking around certain areas.

It was also one of the few sites (the other usually being the school) where tourists were permitted time to move about as they pleased without having to follow a tour guide. A moment for the self-directed experience guides tried to permit time for. The rationale behind this was clear from the point of view of the tour guiding: It was a fairly well defined area (the grass too tall, the trees too thick to suggest leaving by any other route than the pathways), contained a number of recognisable landmarks and was near the pick-up point where the bus would take visitors to whichever stop was next on the tour. All this can be seen in the map; the light grey area being the traversable area (asphalt) which was mapped, along with the Ferris wheel to the middle and the bumper car structure to the left, surrounded by trees and tall grass.

Here in the amusement park there was (especially during the bright summer days) an affective atmosphere that encouraged a sense of less heightened hesitancy (no need to be wary of glass, metal or stinging nettles) and, in some ways, a certain sense of play. A tentative and cautious one, often experimental and certainly curious. Tentatively enjoying the feel to the touch of the rusted metal of the Ferris wheel. Cries of astonishment with not a small amount of concern as visitors with Geiger counters (owned, rented, borrowed) came across high levels (40  $\mu$ Sv/hour plus, over ten times higher than that recorded during photos by Reactor 4).

But this was not entirely unstructured; orchestrated by shouted warnings from a guide when tourists wandered too far or too near irradiated areas or, possibly embracing the playful affectiveness of the space, tried to get inside the dodgem carts, or into the cabs in the ferris wheel. Directed too by the lenses of cameras to more pleasing spots from which to take a photo, and guided by the use of a Geiger counter (especially if one were in possession of one or could hear one). Even so one might find moments of the playful aspect of being in ruins, as expressed by Tim Edensor (2005a: 25–30), in contrast to the more hesitant and less adventurous caution of much movement in the Zone.

It was clear, after I had begun to act as a tour guide, that here in the amusement park was a place that allowed for a particularly tight focus on the nexus of networked practices of tourist place-making in the Zone. It was also the sense of somewhat experimental playfulness that led to the choice of a mapping project; the possibility of a tourist map of Pripjat originally began as a passing joke a number of visitors made. It was, then, these senses of playfulness, of dissonance with regards to expectations of tour guiding, and experimental, tentative

engagements with the existing radioactive landscape that led to the map which accompanies this chapter. The format of the tourist map – the street map or the illustrated map overlaid with tourist information, photographs and adverts – is a recognisable representational device with a certain grammar. Bringing that grammar to bear upon the Zone, and in doing so find it to be disrupted by it is an attempt to highlight both the importance of paying attention to the forms of landscapes which pre-exist (and therefore exert their own agency over) tourism activities, as well as provide a cartography of practices and networks that is not suggestive of topographical diagrammatic technique.

### Map-propriation

There is good reason to be wary of maps, yet I disagree when Monmonier (1996) worries about the rise in easy-to-use (and increasingly free-to-use) cartographic software. These concerns of a map maker and cartographer defending his craft find an odd alliance in this diatribe against one of the more common and recognisable agents in this 'new mapping':

Consider Google Earth, which allows users outside the military to appropriate a form of control through visual transcendence, a dominating subjectivity ... The perspective is one of a totalizing, objectifying transcendent gaze, and allows one to transcend the subjective world ... Its power as knowledge is derived from its position above and beyond subjectivity, and as Cosgrove asserts, it is "implicitly imperial," (Harris, 2006: 119)

Visual technologies, tools of representation; these are far from neutral agents. But it is a step too far to suggest that cartographic technologies *necessarily* reproduce imperialist god-tricks. So, beyond critique and deconstruction (and even just dismissal), it has been suggested that an appropriation of the techno-cultures behind mapping is called for.<sup>110</sup> Such an appropriation appears in Kuletz's work on nuclear landscapes in North America, where she argues that;

Naming and mapping the nuclear landscape opens a space for other critical narratives about science (and what constitutes objectivity), power (and the representations used to legitimate it), racism, and cultural marginalization. It provides an avenue to explore some of the ways human culture and politics transform place and "nature" (1998: 7)

But the Zone is not the irradiated areas of nuclear testing sites and downwind. Here my mapping project, then, is somewhat different. Though I too aim at a certain critical address

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<sup>110</sup> Mei-Po Kwan, for example, has written much on the promises (and pitfalls) of potentially 'critical GIS' (2002, 2006).



*Image 52: The asphalt plains of the amusement park (#p1682 through #p1689)*

of objectivity, the aim here is not to explore the way human practices constitute places and natures, but how places and 'nature'<sup>111</sup> transform practices of humans.

Moreover, I avoid a stance on mapping that *demand*s an 'appropriation' of cartographic grammar and technologies in order to turn them back against a specific formulation of the power of maps. Here I briefly mention two recent examples. Firstly that of radiometric monitoring around the Fukushima Dai-Ichi power plant. Drawing on data from the organisation Safecast ([safecast.org](http://safecast.org)) the map compiles reported radiometric readings for Japan. In responding to Harris' (2006) dismissal of Google Earth, Kingsbury and Jones (2009) wonder if that, whilst maps are surely inherently political, they have to be understood as always political in a certain direction (towards control, conquest). The example of Safecast is not a use of maps directed back at forms of techno-power. It happily incorporates official measurements, believing 'that more data – freely available data – is better.' Not aiming 'to single out any individual source of data as untrustworthy, but rather to contribute to the existing measurement data and make it more robust. Multiple sources of data are always better and more accurate when aggregated.' (Extract from <http://blog.safecast.org/about/> [accessed 01/02/2012]) This is no appropriation of maps aimed at some cartographic power nexus. Safecast exists as a strategic mobilisation of recognisable cartographic grammar and representational forms for collaborative knowledge production.

Such collaboration, and some appropriation, takes place in the work of Christopher Nold (2009) and his 'bio-mapping', and I draw some inspiration from these projects. As well as being a participatory project aimed at (literally in some cases) drawing subjective cartographic representations, the more innovative feature of his mapping work is the use of biometric data. Tools of surveillance otherwise, here ownership over the translation of and meaning associated with this data is in the hands of those from who the information has been gathered. In these maps, 'the participants are carrying out a type of co-storytelling with the technology ... The Bio Mapping tool therefore acts as 'performative technology.' (Nold, 2009: 6)<sup>112</sup>. The Geiger counter too might be seen as a performative technology, but one which participates in story telling *with* radiological actors.

The map here is not aimed at a 'subjective' depiction of spatiality as with the bio mapping of Nold or similar work by Boyd Davis which aims to re-affirm and bring into cartography the sense in which 'the shape of the world changes depending on who you are and

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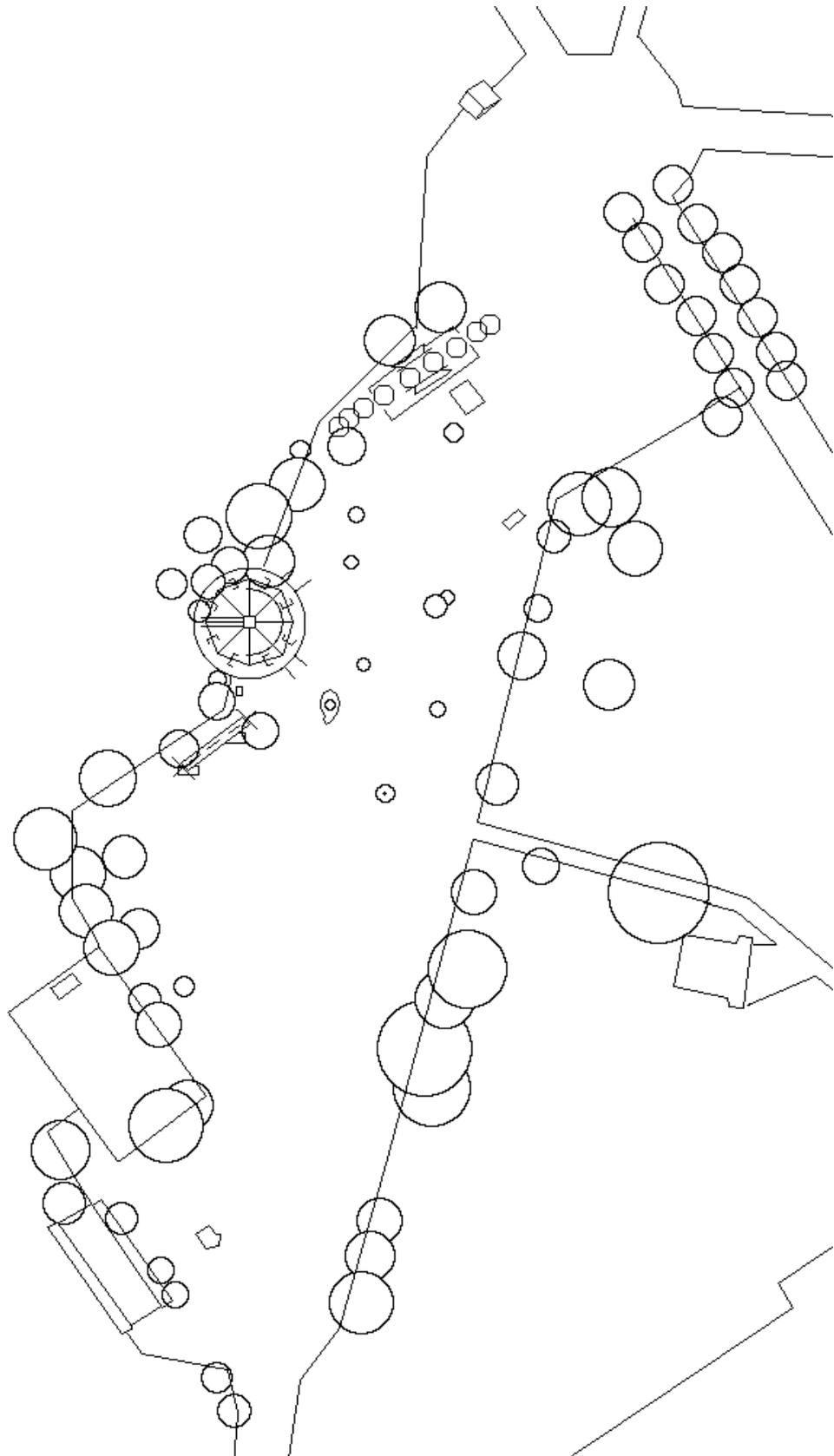
<sup>111</sup> The problems with anthropogenic, transuranic materials being associated with 'nature' as clearly self evident.

<sup>112</sup> Nold continues: "This vision of Bio Mapping as a performative tool which mediates relationships is very different to the fantasy of Emotion Mapping that many people approached me about: such as marketeers' intentions to metaphorically 'slice people's heads open to see their innermost feelings and desires'."

what you do' (Boyd Davis, 2009: 42). Indeed, what I am aiming for is a map of a world which *does not* change merely depending on who one is or what one does, but rather shapes and configures the practices of subjects. So though I draw inspiration from the understanding of technologies as active participants in mapping and drawing-in the practices of people, I am not aiming for maps that introduce place as subjectively produced. The map is an attempt to consider places as relationally produced but which do not place the human subject as the arbiter and structure of those relations. A map neither of the world as mute matter to be 'non-tropically' plotted nor of the world as brought into being through (and for) human subjects. This is a world-shape not amenable to our whims. Here, instead of heart rate or galvanic skin response I take radiometric readings. Instead of a collaborative project aimed at primarily working with human subjects those agencies participating in this project are nonhuman.

Rather than highlight the necessary subjectivity of representation, and the primacy of personal (phenomenological) experience, this map is an attempt to tease out the world as processual and relational in a manner which insists that the world is not only so much more than 'we' experience it as, but shapes (rather than merely being shaped by) who we are and what we do. This isn't to replace the subjective renderings of space that emerge out of work such as that by Nold and Boyd Davis with a putatively objective mapping of a world 'out there' waiting to be plotted. It is a constant acknowledgement that any knowledge of such world making capacities is necessarily situated, partial, and always incomplete.

Geiger counter, chalk, camera and measuring tape



*Image 53: Tracing of the amusement park, based upon satellite imagery. The same tracing forms the basis of the final map. North is not at the top of the image.*

The actual process of data collection for the radiometry took place over about 4 hours during my the final trip to the Zone. Here I was permitted to be left alone in the middle of Pripyat, keeping in contact with Yuri via 2-way radio as the tour continued through other sections of Pripyat. By this late stage in the fieldwork gathering and obtaining more recognisably cartographic equipment was largely out of the question. Previous experience with GPS devices had made it clear that the accuracy rates would not collect location data in enough resolution to account for the significant changes in radiation measurements over distances of the less than a metre. That being said, my suspicions as to the possible use of a satellite location device became somewhat mute when it was apparent that there were no possibilities of borrowing, renting or (for any kind of reasonable sum) purchasing such a device that could be of use. And so it was about noon on a hot September day that I found myself left alone in the middle of the amusement park with a Geiger counter, a 10 metre tape measure, a pack of chalk, a camera, a pen, one of my fieldwork notebooks and a few copies of an A4 tracing of the outline of the amusement park (Image 53)<sup>113</sup>.

For the purposes of methodological record, the research was originally planned thus: A grid of 10m interval – not running along the cardinal points, but shifted so as to be aligned with the south-eastern edge of the amusement park – was decided upon, with each intersection being a data point. This related to the measuring capabilities (a 10m measuring tape) as well as provided a manageable total of 60 readings. This grid can be seen on the map, with some variation due to terrain. Within this grid, smaller areas that included locations of high radiometric readings were recorded at a higher resolution. These smaller areas were measured more accurately than the satellite imagery could provide, and reference photographs were taken. Recordings within these areas took place (as terrain allowed) on a grid based system, although positioning of this was be determined by the particular form of radioactive surface; whether the source be related to asphalt, moss or otherwise. Each reading was be taken at a height of 20cm (to obtain exposure rates that would reach bodies and to avoid contaminating the equipment by placing it on the ground<sup>114</sup>). I did not have the equipment to measure radioactive energies in Becquerels as appears on the radiation maps of the Zone, although I would not have chosen this measurement even if it were possible, intending to produce a map not just of radiation, but of radioactive practices.

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<sup>113</sup> Adapted from satellite imagery ©2012 GeoEye ©2012 Google

<sup>114</sup> Additionally, in an earlier tour, the guide Maxim went to pains to get visitors with Geiger counters to use them at roughly this height. I never did manage to find out why.

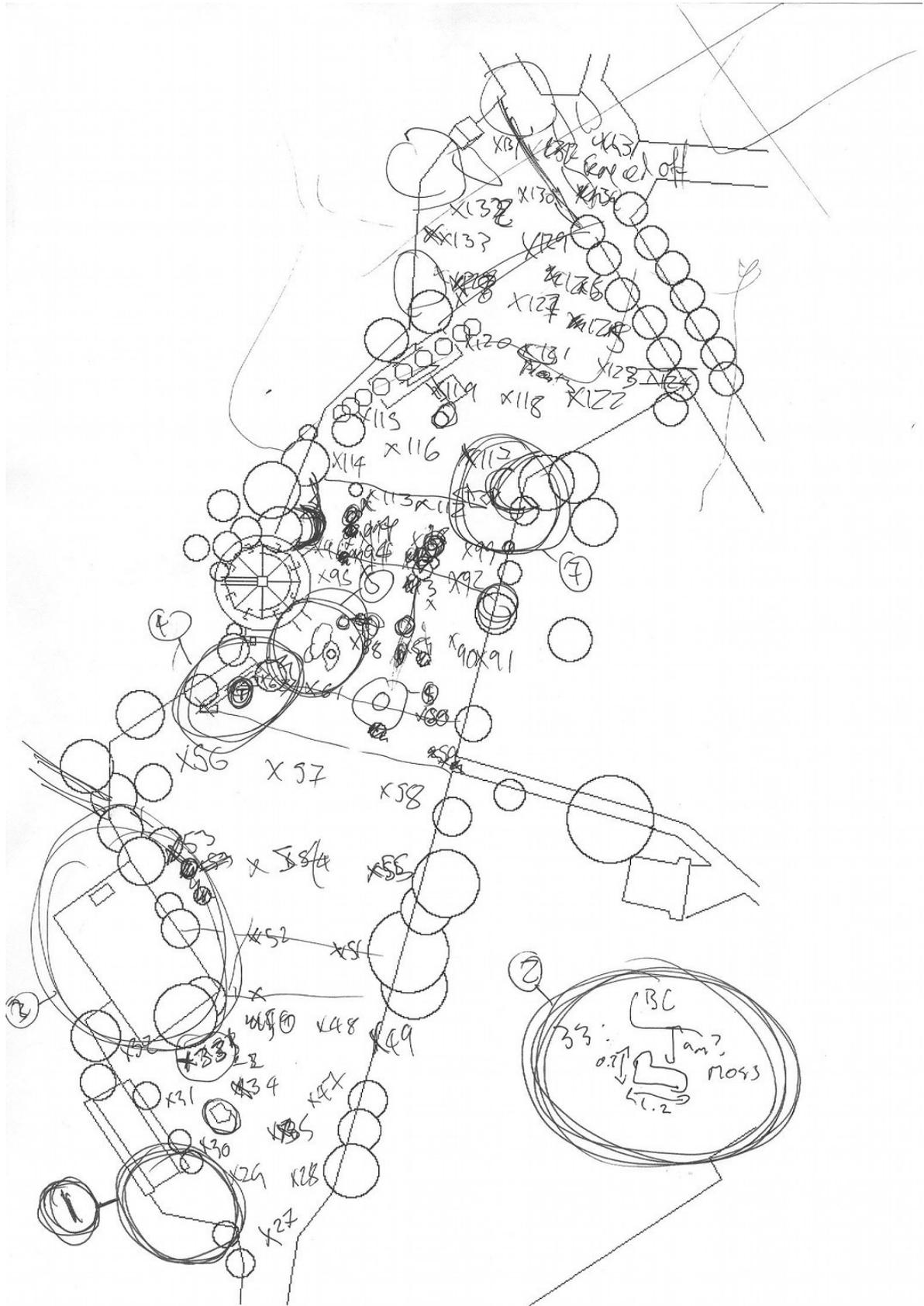


Image 54: The previous image after annotation with the location of readings. Smaller areas (labelled 1 to 7) appear on other sheets, measured more accurately than the locations on this map (as seen in section 2 which appears on this image)

The methodology above makes it seem more straightforward than it was; the actuality was a whole lot messier. The first problem was anticipated, but not quite to the extent it proved to be an issue. The Geiger counter, in providing readings in  $\mu\text{Sv}$  per hour, does – of course – take some time to produce such a reading for the simple and obvious reason that for a per hour value, a few seconds of data does not suffice. Each new reading came within ten seconds to a minute during which the LCD readout blinks. This was a feature to the device to indicate that the given reading is inaccurate as it has recently recorded a significant shift in radiation intensity and is calculating a new per hour average.<sup>115</sup> After this blinking ceased the reading would still vary over time, sometimes more widely than others (though never by more than  $\pm 10 \mu\text{Sv}/\text{hour}$ ). The recording for each point of data, then, is the median of the range (from the highest and lowest values which appeared) recorded over a 30 second period. The median was chosen as opposed to the mean firstly as it was unlikely – and there were no indications from observation – that the readings for each point were along a normal distribution. Secondly, recording multiple readouts by hand over a short period was more straightforward if these readings were just two readouts; the highest and lowest observed in that period to produce a range. In addition, the *Teppa-II* model used comes with a specification of a  $\pm 25\%$  error margin<sup>116</sup>, and in almost all cases the upper and lower limits of the range recorded for each point were within 20% of one another.

Another issue arose from the higher-detail areas where greater numbers of readings were taken. Measurements were taken along with photographic reference points. On the photos on the map that contain vertical bars of relative radioactivity levels you can see chalk marks at each recording point. Though the measurements worked well for these photos, they did translate well to the scale of the map.

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<sup>115</sup> Other Geiger counters and radiometric devices provide data that is not a rate (absorption or otherwise), however these models are a) expensive and b) never used by tourists or guides to the Zone. As lengthy a process it may have entailed, the use of my bright yellow *Teppa-II* – the most commonly used device by guides and tourists in the Zone (being the cheapest and most readily available model) – meant that the same actor was involved in the spatialising cartographic practices as the place-making practices of touring in the amusement park. And anyway, this chirpy little thing had been a familiar enough companion, so it was only fitting that it might assist during this mapping attempt in this final visit.

<sup>116</sup> The next model from this manufacturer adds a whole extra Geiger-Müller tube to bring the total to two tubes and in doing so raises the accuracy all the way to  $\pm 15\%$ .

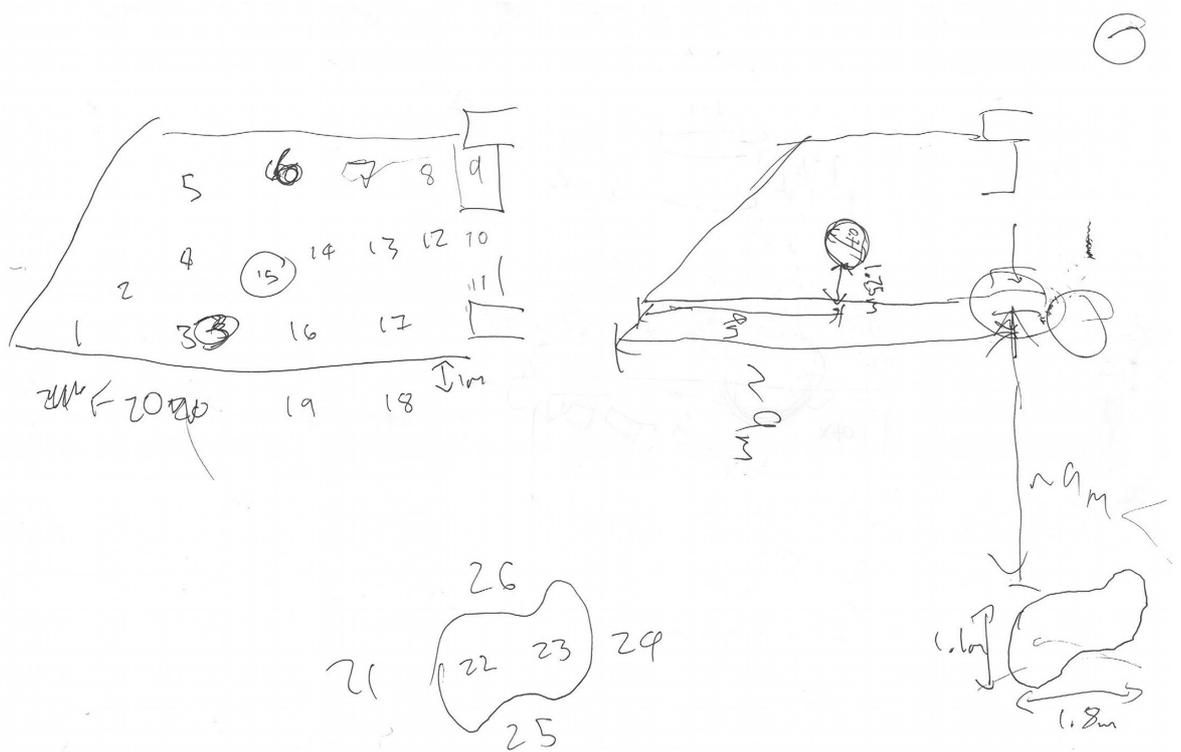


Image 55: Details of recording point locations in area **i** on the map near to small building to the west of the amusement park. Readings 20-26 are by the 'famous' patch of moss.



Image 56: A photograph of part of area 'i' on the map with some chalk marks of reading locations visible. p1793

Collecting this data confirmed a number of things; firstly that the locations of significant radiation sources were closely associated with specific patches of asphalt (recognisable in many cases where moss and small shrubs grew as one type of asphalt met another); patches often around manhole covers. The covers are not the source of some buried or hidden radioactive material as some visitors had suggested. Here I turn to Yuri's explanation, as appears on the printed map, despite the uncertainty he expressed it with (so much of what happened in the few years after the accident remains heresy at best). The small building near map area ① was said to have housed a range of monitoring equipment, the supply to which and possibly also the data cables to the monitoring outpost stations around Pripjat, ran under the amusement park. It is in laying these networks that the contaminated asphalt was introduced to the area. Secondly that the structures of the dodgem cars and Ferris wheel were relatively clean; which was somewhat unsurprising given that rainfall will have 'washed' these structures.<sup>117</sup> And thirdly that I still had no idea why that particularly famous patch of moss (as opposed to the other patches of moss, or other indents in the asphalt) was such a significant source of radiation.

This data – as it exists and as it may or may not represent some of the practices which find their nexus at the amusement park of Pripjat – is both a product of visits to the Zone and in turn is aimed at producing a cartography that brings these practices back to the fore in representing this space. In part, then, this is yet another attempt to bring into the realm of the visual, or otherwise cognisable, the extra-phenomenological relations with radiation. But it is also a modest attempt at a 'cartography [the purpose of which] is thus not to signify and communicate but to produce assemblages of enunciation capable of capturing the points of singularity of a situation.' (Félix Guattari, 1995: 128) In doing so I have relied upon a host of mediators. Precisely because radiation exceeds (is 'more-than') not only representation but many of the ways in which we might be cognate of it, this mediation must not be ignored. This is the work of the little yellow box called *Teppa-II*, not acting alone but along with chalk, cameras and tape, and along with guides and visitors and their stories heard, jokes made, concerns raised. This work plays a crucial role in any practices through which we might claim to know the world; knowledge practices that also begin to re-configure places, even as current configurations of place inform those knowledge practices.

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<sup>117</sup> Pools of water *within* the bumper carts where rainfall has collected are highly contaminated because of this.

## Tracing and mapping

Standing at the top of the World Trade Center, Michel deCerteau (1984) finds the experience voyeuristic: Up there, leaving the city behind, he writes, one is 'an Icarus flying above these waters, he can ignore the devices of Daedalus in mobile and endless labyrinths far below. His elevation transfigures him into voyeur. It puts him at a distance [...] the fiction of knowledge is related to this lust to be viewpoint and nothing more.' (ibid.: 92). This god-trick, deCerteau argues, is a drive associated with mapping; the voyeur god 'whose condition of possibility is an oblivion and a misunderstanding of practices.' (ibid. 93) But, as I have argued, rather than discard mapping practices, to reach beyond a (albeit still necessary, still vital) deconstruction of maps as powerful (and dis-empowering) texts, here I attempt to map practices. Map practices in the Zone involve more than the work of this erstwhile cartographer; maps feature as important allies, agents in their own right.

In contrast to Monmonier's (1996) realist cartographic lie / truth dichotomy, Pinder (1996) shows how the alternative mapping practices of Guy Debord 'approaches maps not as copies or tracings of the real city, as forms of overcoding structures which can be judged in universal terms of 'truth' and 'error', but as things that work, that perform' (424) Maps perform, then, but not as traces of something external to the map. Deleuze and Guattari's take on mapping, an approach tentatively aimed at here, is set against the act of tracing where "what distinguishes the map from the tracing is that it is entirely orientated toward an experimentation in contact with the real. [...] It is itself a part of the rhizome.' (Deleuze and Guattari, 1987: 13).

Despite Bruno Latour (1996a) using the metaphor of tracing (networks are that which are traced (ibid.)), there are similarities when he re-affirms a core insight of ANT; that any diagrammatic, analytical or representational practice is a 'growth' of the network (there is nothing outside the network). Actor-networks connect and 'by connecting with one another provide an explanation of themselves' (Latour, 1996a: 375) and as such, explanations, even descriptions, are not external to the network. This, in turn, allies itself with methodological desire to learn from agents; for actors to enunciate their own relations, rather than 'enact[ing] a specific set of metaphysical assumptions' (Law, 2006: 150).

Each network, by growing, "binds" the explanatory resources around it, and there is no way they can be detached from its growth. One does not jump outside a network to add an explanation – a cause, a factor, a set of factors, a series of co-occurrences; one simply extends the network further. Every network surrounds itself with its own frame of refer-

ence, its own definition of growth, of referring, of framing, of explaining. In this process the frame of reference of the analyst does not disappear. (Latour, 1996a: 376)

And so here the map is a Daedalus device; not Icarus' bird-like view. A product of a networked practice that belongs to that 'crooked labyrinth of machinery and machinations, artefacts *and daedalia*.' (Latour, 1994: 30). Serres (2009) contrasts ancient mapping to a Cartesian spatilaity that is a totality. Here my map is akin to 'the cartography of antiquity [which] expresses the danger of the journey, the multitude of obstacles, the difficulty of seeing globally when one finds oneself deep in a varied countryside.' (ibid. 267)

This is the insight of ANT, which insists against a separation of representations and their objects that we encountered earlier in the diatribe against those who would separate the fish from its representation. In part this comes down the principle of symmetry whereby any mediation affects all involved. Not that these effects need to be of equal magnitude: My mapping practices bore little long lasting change to the radioisotopes of the Amusement park. But, even so, the act of observation and measurement is never a detached one; more negotiation than observation, more mediation than seamless exchange. What is never quite so clear is quite how radiation relates to us in the absence of these machines/machinations of mediation. For it does, and it does so with no need for the stories we tell, measurements we take, or maps we draw. Nevertheless, in mediating radiation in the amusement park, the map (itself the product of even more mediation, even more negotiated networks) is not apart from that network; no oblivion of practices, for I have attempted to highlight those practices of production and place-making against deCerteau's categorisation of the map. Moreover, in drawing out the practices of knowledge production, this is a small manoeuvre towards Donna Haraway's (1991a, 1992) demand for an objectivity of negotiation. For situated knowledges and partial connections are not a recognition of some kind of veil that remains over our engagement with the world, but helps get towards a fidelity to the contingency of the real and therefore, the necessary contingencies of our experiments with it.<sup>118</sup>

### Cartographic practices

An analysis of maps prepared by authors in various academic disciplines fails to show any rational or standardized procedures for the selection of class intervals. Evidently intuition, inspiration, revelation, mystical hunches, prejudices, legerdemain and predetermined ideas of what the class intervals should be have characterized the work of most map-makers .... Apparently many authors believe that maps are an art-form which allow

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<sup>118</sup> See here also Strathern's *Partial Connections* (2004)

liberties not admissible in verbal or tabular presentation. (Jenks and Coulson 1963, 120 cited in Evans, 1977)

Developing a chromatic scale with useful class intervals to use on the map was no simple task. There is now a wealth of literature and debate on such decision making, much of it based upon statistical analysis of data distribution, with representational intent, message communication and, lastly, aesthetics, behind this. For the purposes of this map, the chromatic scale was chosen first settling upon the blue to red “heated body” scale, partly because it is the same as that which appeared on a few of the maps pinned to that briefing room wall, and partly because such a chromatic scale was recommended for similar purposes by text books on the subject. The class intervals were first based upon the number of intervals it was possible to separate the scale into and permit easily distinguishable points of colour. Rather than an evenly distributed scale, percentiles were chosen for the class intervals due to the skewed distribution of the data. These were then adjusted slightly upwards so that the intervals fell on integers or single decimal points to make the scale more easily readable.<sup>119</sup> After all this, and despite attempts to rationalise each step, I felt akin to those authors who, possibly unfairly, were dismissed by Jenks and Coulson as treating class intervals as an art form.

The photographs and quotes, then, act to bring back into view those self same practices that Michel deCerteau thought lost in the lust to be viewpoint. For the place of the Amusement Park is much more than a terrain of differing intensities; those intensities<sup>120</sup> mediate practices of the Amusement Park (see images 17 & 18). The map, as mediator-guide<sup>121</sup>, as something to be worked with and in turn a product of a working with, begins to show how, if we are to see place as a nexus of relations and practices, we must be attuned to a whole range of relations and practices which exist, quite happily, without us and may still exist (and effect us) without our awareness of them (Not that representing them, mapping them or ‘-graphy’ otherwise is somehow going to provide access to this world without us; for in mediating our practices these technologies translate and transform). Here, in apeing the tourist map, the aim has been to suggest a need to look at the constituting of tourists (and their practices); the subject-ing of place and landscape.

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<sup>119</sup> In doing so reducing the number of points in higher intervals, and thus providing a somewhat more closer reflection of the data distribution in the class intervals that would otherwise be lacking in equal-numbered intervals of percentiles.

<sup>120</sup> Here radiation. The heat during the day I spent collecting the suggested certain other intensities. As did the occasional interruption of the otherwise near-silence (wild boar, patrolling police?).

<sup>121</sup> Even if it's unlikely to ever be used in the Zone.



Image 57: Two visitors to the left of the image explore a small patch of highly irradiated asphalt (#p1138)



Image 58: (Close up of patch of asphalt in above image) In comparing my counter (right) with that held by visitor (left) which has had the  $\beta$ -particle barrier removed, it is clear that the patch of asphalt above is almost entirely a source of  $\beta$  radiation (meaning it is likely  $^{90}\text{Sr}$  in the asphalt, though also possibly an isotope of Plutonium) (#p1762)

## Navigational practices

This map stands as an experimental possibility in the practice of navigation tool (though there are no plans to take it to the Zone). As navigational tool I draw grammar from tourist maps and partially from hazard maps as pinned to the wall of the briefing room. In writing on hazard maps, November et al. (2010) remark that the difficulties associated with cartography<sup>122</sup> of human and social forms are not absent when making maps of the 'natural' for:

mountain, rivers, valleys, capes, and promontories do not sit well in this Euclidean space either. If you do not know where to put 'humans' on the map, you should be just as concerned about what to do with the nonhumans. No one and no thing ever resided in the virtual image of the map (2010: 594)

As navigational tool, as guide and map-in-practice and map-of-practice the map here begins to show the processes that are otherwise hidden in the 'mistake' of maps-as-fetish-whereby 'maps are fetishes in so far as they enable a specific kind of mistake that turns process into nontropic, real, literal things inside containers.' (Haraway, 1997: 136) So here 'Maps now strike you not as what represent a world 'out there' but as the dashboard of a calculation interface that allows you to pinpoint successive signposts while you move through the world.' (November et al., 2010: 595)

Rather than to aid navigation of the undulating territory of the asphalt plains of the amusement park, the map here has been used to navigate the various negotiations and practices of place-making. Key here are two things; firstly that maps can work to include the kind of practices found lacking in the dream of the god-view (deCerteau, 1984). Maps may be of that dream of a non-tropic representation of a patiently waiting reality (Haraway, 1997) but not necessarily so. The map here embeds various networked practices into its representation as well as being an extension of those networks (Latour, 1996a) rather than a schematic of them. The description of the process of map-making have added to the sense of the map as the product of practices of negotiation. Secondly that these practices cannot be thought of as structured and determined by human subjects. The decision to map may be mine but the map itself is not a map of subjective space, neither is it a map of objective reality. It is a product of networked practices and indicates a *topographical* space. I alluded to this earlier and this requires explanation. Networked understandings tend towards a topological conception whereas the very idea of topography points towards stable and passive 'features' of landscape. The 'hotspots' and (radiological) variabilities of the amusement park suggest topo-

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<sup>122</sup> An obsessive coding of latitude and longitude akin to ANT's obsessive coding of heterogeneous relations (Latour, 1996b)

graphies, but (as indicated by the map and mapping methodology here) these cannot be understood as a passive reality. The topographies of the amusement park map are of place-making relations which pre-exist tourist practices (to which they are 'exposed'). Tourist practices may make tourist places (Coleman and Crang, 2002b; Bærenholdt et al., 2004) but these practices are not to be understood as brought into being and structured by tourist subjectivities. Exposed, embodied tourist subjects come together with the mediating agencies of Geiger counters to negotiate *with* radiological topographies. I use topographies not to describe a stable euclidean space to be navigated across, but instead to describe the effect of nonhuman practices and processes which structure networks. Topographies do not determine networks and are (re)produced through networked practices; the map here is a re-configuration of place in this manner. Topographies are (re)produced through practices of mapping but they are not the product of maps. Topographies are not the shape of the world but rather the capacities of worldly agencies to shape practices of place-making. Topographies highlight the manner in which maps cannot be purely subjective representations for the subject that represents is affected by topographical agencies. The map is re-configuration of topographies of place that takes form through a host of mediators (not least the Geiger counter in this case). Mediators who in turn shape negotiations with topographies. These mediators will be part of the focus of the next section, as will the negotiations in which they are part. I go on to argue that negotiation shouldn't be understood as a 'navigating around' otherwise stable materiality nor as a relation entered into fully. Negotiations with radiation are negotiations with a trickster agency that is never fully constituted by *intentional* negotiations.

## Guiding and Geiger counters

### Technologies of guiding and fortuitous assemblies for stuttering conversations with chameleon tricksters

One of the first stops of the tour is what is now left of Chernobyl's outdoor athletics and sports stadium. In this field stand some vehicles that were used during the liquidation work of 1986.<sup>123</sup> Cleaned and standing on concrete blocks this space is referred to as an 'outdoor museum'. Only the caterpillar tracks remain radioactive and it is here visitors are introduced to the manner in which radiation dissipates over distance; the Geiger counter crackles,

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<sup>123</sup> A feature of earlier tours was the "vehicle graveyard". For a bit more on this see chapter three.

the reading rises, when placed near to the tracks, much higher than readings from the grass just a few metres away (see image 59).

I went on to ape this practice in my own guiding. By the time I was guiding, it was increasingly common for visitors to have arranged to rent a Geiger counter for the day. As these little yellow boxes were more numerous I would invite those holding them to join me in first taking a reading from the grass, then the hull of the APC and then over the caterpillar tracks. Resulting in a chorus of agitated clicking. Enrolling the Geiger counter in a moment of theatre, I would advise visitors to pay attention to these large variations of small distances. Though bringing attention to it radiation is not a product of these practices (including my foray into the grass in chapter four) as well as the radiometric maps on the walls of the briefing room and my own map.



*Image 59: Having just measured the radiation levels in the grass just a couple of meters away, Yuri shows how the levels are much higher near the source of radiation; the caterpillar tracks contaminated with radioisotopes (#p1314).*

Later, at an old monitoring station for the cooling lake, Yuri shows the visitors a deer antler that was shed earlier in the year. This is a lucky find for, using this antler and his Geiger counter, Yuri can show that, although not a source of  $\gamma$  (gamma) decay radiation – the default radiation type most Geiger counters used by guides and visitors in the Zone measure – the antler is a significant and very localised source of  $\beta$  (beta) decay radiation, detected, depending on model type, by either removing a small 'shield' on the back of the Geiger counter or

simply flicking a switch. The culprit here is the Strontium-90 ( $^{90}\text{Sr}$ ) isotope.  $^{90}\text{Sr}$  is anatomic chameleon; behaving as if it were Calcium, and treated as such by organisms, it is secreted in bone tissue. Whether scanners or Geiger counters, radiometric technologies are essential mediators. Mediators in the above example of an odd, fortunate, assemblage of habitual practices of nonhuman organisms, radiometric technologies and chameleon isotopes, allowing a moment of conversation with 'the world as coding trickster' (Haraway, 1991a: 201). Mediators, not translators (despite such terms often appearing as synonymous), for their role is as an 'in between'. Although this 'in between' role is not necessary for radiation and tourist bodies to meet, it is necessary for negotiations to proceed. It is out of these negotiations that knowledges are produced and in this production mediators (maps, Geiger counters, tanks, antlers, guides) are never neutral nor passive in their roles.



*Image 60: Antler with  $^{90}\text{Sr}$  contamination showing  $\beta$ -decay radiation, but not  $\gamma$  (#p1267)*

The border checkpoint we passed on the way in serves again as boundary practice on the way out of the Zone this time it is not passports that are to be checked, but tourist bodies and their belongings. When leaving the Zone one must pass through one of a bank of scanners (see image 61).<sup>124</sup> Get a green light (figuratively, literally) and one is clean, and is permitted to leave. Vehicles are not exempt either. It was a disgruntled driver who took us back to

<sup>124</sup> These are the same scanners as those used at the exit and entrance to the power plant when it was operational (including those reactors kept operational after the 1986 disaster). The official line is that they are needed to ensure that no radioactive material leaves the Zone, rather than focusing on the safety of visitors. Long term visitors may visit a facility in Kyiv where internal scans for contamination are possible.

Kiev the day the carpet flooring was ripped out of his minibus for having set off mobile detectors. Heiko, who I interviewed along with Milos and another respondent, was visiting the Ukraine from the Netherlands. He had been drawn to the Zone as a photographer. In reflecting upon the odd liminality of these scanners, Heiko recalled them as somewhat anti climatic, not-quite providing an expected moment of clarity;

*"[the guide said] so much about the radiation dust, and when you go in the houses, and it's dusty and all your trousers and shoes are full of dust. And then you got through the check-point and nothing. Everything is fine. It was a bit, like, strange." (#io6)*

In the absence of conclusive conscious observation, or phenomenological experience it is up to to the Geiger counter-based body scanners to collapse the wave-function of the radioactive-or-not Schrödinger tourist. Technological actors, then, not only help tourists become aware of radiation, they fundamentally shape and informs the range of knowledges produced; of radiation, of the landscapes of the Zone and of their own bodies and selves.



*Image 61: Body scanners giving the 'all-clear' to visitors as they leave the Zone at Кпп Дутятку (#p0573)*

## Actors and networks

In what manner to engage in an analysis of practices of guiding, mapping and tourist place-making in a radioactive landscape? Here it is that I turn to the work of Bruno Latour. I pick up on the key terms of mediation and translations, as well as the lesser recognised one, that of resistance. Resistance has an ambivalent position in Latour's work, sometimes ap-

pearing as a useful description of the real, sometimes as an impoverishing one. Beyond this, I have no wish for this chapter to exist as a 'by-the-numbers'<sup>125</sup> ANT analysis, despite the rigorous and not-so-rigorous methodological outlines that exist (compare, say, the methods described by Latour (2005a) with Law (2006))<sup>126</sup> for the categorisation of heterogeneous actants and their relations. Such an obsessive following of codifying structures sits in contrast to the intentions of ANT as ethnomethodological practice which aims “to learn from the actors without imposing on them an a priori definition of their world-building capacities.” (Latour, 1999: 20) Here, then, I take the spirit of that aim; to learn from radioactivity, if not necessarily through a dogmatic use of ANT vocabulary.

In drawing on work by Bruno Latour I pick up the trail from the middle; eschewing a chronological overview from early works nor jumping in at the deep end with the most up-to-date writing. ANT has, famously, 'four things that do not work.' (Latour, 1999: 15) These being 'the word actor, the word network, the word theory and the hyphen!' (ibid.: 15) Latour argues that actor-network in hyphenated form brings to mind the old structure / agency dualism, even the natural / social dualism Latour would rather just bypass. This bypassing and ignoring of modern dualisms is most apparent in Latour's development of Michel Calon's principle of generalised symmetry in and nature-cultures in *We Have Never Been Modern* (Latour, 1993) whereby the 'appearance of explanation that Nature and Society provide comes only in the late phase' (ibid.: 95); a phase which has required the cleavage of otherwise stabilised things. The intention of the hyphen, then, was to draw the two together; as Latour points out in earlier work 'no net exists independently of the very act of tracing it, and no tracing is done by an actor exterior to the net. A network is not a thing, but the recorded movement of a thing' (1996a: 378). Second: the concept of network is now a familiar idea and suggests immediate, unmediated transport 'without deformation' (Latour, 1999: 15). In clarification, networks were intended to indicate a set of mediations, tests of strengths, resistances and alliances: As actors form relations with one another, those relations – the network – are fundamentally transformative and productive, and always involve translation.

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<sup>125</sup> Probably more accurately described as 'by-the-adjectives'.

<sup>126</sup> Interestingly Latour makes a direct comparison between ANT methods and cartography when he states: 'In itself ANT is not a theory of action, no more than cartography is a theory on the shape of coast lines and deep sea ridges; it just qualifies what the observer should suppose in order for the coast lines to be recorded in their fine fractal patterns. Any shape is possible provided it is obsessively coded as longitude and latitude. Similarly, any association is possible provided it is obsessively coded as a heterogeneous association through translations.' (1996b: 374-375)

## The price of translation

Latour refers to ANT as the 'sociology of translation' (Latour, 2005a) whereby translation necessitates transformation and interpretation. Here we see the between Latour and the semiotic tradition<sup>127</sup> (for more detail see Latour, 1996a) although each interpretation between objects is not, necessarily, the product of human labour. However it is the work of an actor; and so any connections made between actors requires another actor to do the work of translation.<sup>128</sup> Translation is a transformation leading Latour to argue that his 'sociology of associations' reveals that 'there is no society ... but there exist translations between mediators that may generate traceable associations.' (2005a: 108). A network, then, is that which is traced by such translations.

It may seem that Geiger counters act to straightforwardly translate the energies of radiations into a language of Sieverts, Roentgens, LCD screens and audible clicks. However, no translation is neutral, cleanly converting from one state to another, reliably passing on form. If translation 'is the process or the work of making two things that are not the same, equivalent.' (Law, 1999: 9) then this is a process of explaining one thing through another that 'always has a price and always risks failure.' (Harman, 2009: 15). Guides and Geiger counters work, and expend effort, in order to translate radiation energy into clicks and Sieverts, but in doing so there is a necessary, inevitable slippage.

The 'primacy of irreducibility' is that 'nothing is, by itself, either reducible or irreducible to anything else' (Latour, 1993: 113). The stress should be on not by itself, for 'never by itself, but *always through the mediation of another.*' (ibid.: 113 added emphasis) Here Graham Harman's (2009) writing on Bruno Latour is useful here for highlighting the slippages that such mediation necessities. In *The Prince of Networks*<sup>129</sup> Harman (2009) summarises this dual aspect of the principle of irreduction thus:

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<sup>127</sup> 'for a long time it has been agreed that the relationship between one text and another is a matter for interpretation. Why not accept that this is also true between so-called texts and so-called objects, and even between so called objects themselves?' (Latour, 1988: 166)

<sup>128</sup> Graham Harman (2009) takes issue with translation here. To summarise: If all negotiations and connections require a translator as mediator, what acts as the mediator between the translator and that which it translates. The problem is similar to that of Zeno's paradoxical race of  $\frac{1}{2}$  the remaining distance at a time. Harman concedes that it is possible to continue on a practical basis for social methodology and the problem remains one for a metaphysics. There is no aim in this thesis to provide a coherent metaphysics (if anything it is to highlight the necessary partiality of any such knowledge claims). Nevertheless Harman's way out, through his philosophy of 'vicarious causation'; that all relations between actors take place within another actors, bears some attention (which it will receive, albeit briefly, in the following chapter). Latour's later work on 'plasma' in *Reassembling the Social* (2005a) provides an alternative address to this and other issues. Though here my aim is to draw out existing tensions in some of his work to show the problem was never there.

<sup>129</sup> A close reading of *Irreductions*, part of *The Pasteurisation of France* (Latour, 1988).

We cannot reduce a thing to some privileged inner core by stripping away its inessential features. But at the same time, *anything* can be reduced to anything else, provided the proper labour is done. [...] to establish this connection involves theoretical labour [...] It also requires a willingness to modify our approach if reality resists it in any way. Finally, a successful reading [...] will pay a price even when successful: namely, it will suppress all additional features of their actions, leading inevitably to distortion and oversimplification. [...] Nothing is pure calculation, nothing follows directly from anything else, nothing is a transparent intermediary. Everything is a mediator, demanding its share of reality as we pass through it toward our goal. (ibid.: 18-19 original emphasis)

The Geiger counter (as well as maps, cameras, tour guides, moss and asphalt) transforms radiation as it translates it. An actor in its own right, the radiometer allies with the calculations behind dose rates, ionising atoms in Geiger-Müller tubes and others to form an equivalence between radioactive energy and dose rate: A commensurability born out of calibration<sup>130</sup> and labour; not as neutral conduit but as a mediator taking its own slice of reality. However, if the act of mediator in demanding its share of reality may be to oversimplify and to impoverish our accounts of the paths of actions of others, what is the 'price' ('even when successful' (Harman, 2009: 18)) of translation? How can the question of price be meaningful if it is not to be measured against a fidelity to an inner core of substance or an 'out there'? I'm not sure that a price is being paid for it suggests a lingering possibility of complete, transparent reduction or unbroken, unstuttering chains of equivalence. The price paid (if anything) is the cost of both realism and relativism that would hold to either the possibility or impossibility of connecting with essential substance. What we are left with are negotiations through translators and mediators. The Geiger counter, the guide and the map offer the 'proper labour' of reduction, but in doing so inevitably play their own part in the re-configuring of radiation.

But what then of radiation? Clearly it is not simply constructed from nothing out of this mediation, even as it temporarily may ally and align itself with chromatic scales distributed across maps (until fire or water excites it enough to move). In transforming biological actors and translating tourists into Zone visitors, radiation itself is an important mediator in its own right; demanding its own slice of reality. It may ally with radiometric technologies, cartography and even photography. But it does not find them necessary; radiation is capable of entering into relations with visitors without the help of radiometry. Latour mentions the non-necessity of humans for networks as he notes that 'if you missed the galloping freedom of the zebras in the savannah this morning, then so much the worse for you; the zebras will not be sorry that you were not there, and in any case you would have tamed, killed, photo-

<sup>130</sup> 'all measures, in hard and soft science alike [...] construct a commensurability that did not exist before their own calibration.' (Latour, 1993: 113)

graphed, or studied them. Things in themselves lack nothing' (Latour 1988, 193 quoted in Harman, 2009). To this argument based upon distance a corollary can be added; a network does not require human awareness (representational, phenomenological, affectual or otherwise) even as those human are enrolled in the network.

## Resistance

### Not withdrawal

The deer did not have to be aware of radioisotopes for  $^{90}\text{Sr}$  to transform its antlers into a source of  $\beta$  radiation. Indeed, such transformation was predicated upon  $^{90}\text{Sr}$  resisting such an awareness, actively playing a chameleon trick; resisting the awareness of the organism and tricking the processes of cellular regeneration. Similarly tourists do not have to be conscious of radiation for their cells to be ionised. Radiation mediates other actors in the Zone, including tourists, regardless of whether it is translated / transformed through measurement or otherwise. But the manner in which it acts as mediator transforms once it allies with (and resists against) measurement, as it too transforms those acts of measurement and knowledge production.

Radiation does not give itself fully to negotiations through technologies and practices of radiometry, cartographic or otherwise. This is not radiation withdrawing; radiation is holding nothing in reserve as it courses through bodies and ionises molecules in cells. This sense of withdrawing or holding in reserve comes about in Graham Harman's response to the problems that he sees arising out of a privileging of relations (2002). If nothing is in reserve, and all is explainable by current configurations of relations, Harman asks, then wherefrom change? This is a problem only if we consider current configurations as traceable in some kind of entirety; yet the world is always more abundant than that which becomes knowable, traceable or cartographical. And so just as zebras in the savannah withdraw from our experience as we eat breakfast, radiation withdraws from experience of the Zone. Except this time, as it withdraws from our experience and resist our attempts to know it, it simultaneously enters into an array of relations with tourist bodies and practices. The problem of this sense of withdrawal comes from this focus on human experience when Harman also draws on Heidegger, and writes 'the object has an inner life of its own that withdraws from all human awareness.' (2005: 270). Yet withdrawal from awareness should not be understood as a withdrawal from relations and it is because of this I remain unconvinced by Harman's suggestion of withdrawal to explain the reserve or excess of relations. Radiation requires an account of

the asymmetry of relations. Not withdrawal from relations, not a holding in reserve, not entirely non-relational.

So here, and as with Steve Hinchliffe's garden(s) (2010), the amusement park of Pripjat is multiple. Yet where Hinchliffe suggests Harman's (2009) sense of withdrawal leads to a richer understanding than a seemingly single-world, inert relational approach might suggest I remain unconvinced by world in withdrawal. Rather a world of trickster spirits and hesitant negotiation, often wilfully resistant is also suggestive of the excess of the relational. Here I align with Hinchliffe's assertion of the partiality of all relations and the mutliplicity of all practices and things (after John Law and Annemarie Mol (2002)). It is this sense of the richness of the multiple and yet the necessary partialness in all relation to which I move next.

### Radioactive reality as resistance

So if not withdrawal, then how to account for this excess to traceable relations? I suggest that (bar even Latour's later work on plasma (2005a)) the excess can be found in the necessary partiality of all relations. The reduction through mediation and chains of equivalence is tempered by a sense in which all translations and mediations are negotiations, as the actors engaged may resist such mediation even as that mediation re-configures them. Resistance appears, albeit briefly, in an endnote within *Laboratory Life*, which states that

if reality means anything, it is that which “resists” (from the Latin “res” - thing) the pressure of a force. The argument between realists and relativists is exacerbated by the absence of an adequate definition of reality. It is possible that the following is sufficient: that which cannot be changed at will is what counts as real. (Latour and Woolgar, 1986: 260)

Latour, railing against relativists and social constructionists, writes; 'Those who wish to separate the “symbolic” fish from its “real” counterpart should themselves be separated and confined' (From *Pasteurising France*, quoted in Harman, 2009: 26). But this is also meant as a rally against realism, or at least a realism that searches for objective, finite, knowable properties of an otherwise external world as if technological production of knowledge did not mediate that world. Drawing on a number of examples of fish-knowledges, Harman summarises this stance on knowledge so:

What is shared in common by marine biologists, the fishing industry, and tribal elders telling myths about ichthyian deities is this: none of them really knows what a fish is. All must negotiate with the fish's reality, remaining alert to its hideouts, migrational patterns, and sacral or nutritional properties. We cannot begin by denouncing tribal elders

as naïve dupes who project their primitive superstitions onto an objective underlying biological fish-animal. The fish resists all efforts to reduce it to a known set of traits. (2009: 26–27)

Resistance offers a different language of relation to alliance or enrolment. Resistance appears as a property or function within relations that challenges all and every attempt of translation as one of exacting equivalence or reducibility. It emphasises translation and mediation as 'displacement, drift, invention [and] creation' (Latour, 1994: 32).

However, resistance sometimes appears in Latour's work as a synonym for strength and obduracy (see 1996a). In this vein, resistance is a function of 'careful plaiting of weak ties' (ibid.: 370); it is the manner in which actant-networks gain obduracy, each tie a set of weaker ties. We have seen that our engagement with the world requires mediated relationships with that which may well resist our attempts to connect, or at least certain ways of connecting. For Latour this is a model of truth; for truth is that which has negotiated with the world to be durable, and not vulnerable to the resistance of other actors (see Harman, 2009: 22–23). This model of truth is most apparent in Latour's vision of a 'Parliament of Things' (1993: 142–146) and Dingpolitik (2005b).

Let's return to Harman's reading of Latour where in explaining resistance Harman compares the work of a theorist and historian to that of an engineer 'digging a tunnel through the mountains near Barcelona':

[T]he engineer must *negotiate* with the mountain at each stage of the project, testing to see where the rock resists and where it yields, and is quite often surprised by the behavior of the rock. (Harman, 2009: 18 original emphasis)

Yet an earlier passage from Latour offers a critique of this understanding of negotiation with resistant matter;

'[T]he poor portrait usually given of matter [...] To exert a determinate and obstinate blind force, to be there as the mere support for human fanciful ingenuity, or simply to offer some 'resistance' to human action, these are the only three roles given to things in the constructivists' scenarios. [...] The third conception of things differs from the former by simply adding some resistance for no other reason but to provide the creator with some surprise while he retains full power over matter (2003: 6–7)

Latour provides us with a riposte to Harman's resistance, whether that is the resistance of fish or rock. For this is a passive resistance; a resistance to be negotiated around rather than *with*. But there is something to be fostered in another sense of resistance; a reluctance to easily enter into relations that would try to bring the world into cognition.

Radiation is not amenable to our attempts to grasp it, contain it in representation or audible clicks. It is not amenable to our senses<sup>131</sup> in that it actively, wilfully refuses to be provide an account of itself. This is a reluctance and resistance that is wilful, not passive. It is not the lack of total accuracy in the Geiger counter that makes the mediation costly. It is not that the map doesn't complete the desires of the fetish. It is not that a lack of the right equipment, the lack of a certain depth of engagement. Instead it is that the labour of mediation meets resistance. Translations are never complete. Guides, Geiger counters and maps works as mediators for the purposes of knowing radiation. To trace these networks is not to render a static world (Harman's critique) for a complete tracing is impossible. Traces of fallout and traces of tourists are rendered as stuttered lines through the intermittent clicking of Geiger counters. The labour of mediation behind these traces is not entirely human, nor humans and technologies, but is shaped by (and in turn re-configures) the topographies of radiation. These topographies cannot be thought of as inert shapes which must be negotiated around in the manner of Harman's engineer. Nor can radiation be thought of as withdrawing from relations. Rather the mediated negotiations which produce maps and guided tours of the Zone are to be understood as negotiations with radiation as a resistant reality.

### Partial connections with a trickster world

Here I turn to the work of Donna Haraway and her writing on the figuring of the world as 'coding trickster' or 'coyote spirit.' This offers a better conception of the manner in which lively actors never fully give themselves up to, indeed wilfully resist, our attempts to bring them into the realm of the known. What Haraway's writing on partial connections shows is that translations and transformations – whether they are successful or not – are the result of negotiations *with* a world. A world which often resists and toys with us as we attempt translate it; as active mediator in its own right. The world too is engaged in practices of coding itself, and it does so, Haraway argues, in the form of the trickster spirit, a theme central to her essay on *Situated Knowledges* (1991a: 183–201).

Haraway develops the figure of the trickster spirit with regard to the provisionality of knowledge, arguing that 'across the former divide between subjects and objects and between the living and nonliving, meaning-in-the-making – the physiology of semiotics – is a more cyborg, coyote, trickster, local, open-ended, heterogeneous, and provisional affair.' (1997: 127) This is an objectivity of situated knowledges through partial connections (*ibid.*). We have

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<sup>131</sup> I have been stating this in presented papers since early on in the thesis. Goatcher and Brunsten (2011) use the same phrase, though I do not think the same meaning is intended.

seen in the work of Latour that translation is never smooth, never complete. But instead of a focus on a chain of equivalences, Haraway's writing suggests these translations – even if 'successful' – are messier, fractured, incomplete and partial. Mediating, translating connections that are 'stuttering and the partly understood.' (ibid.: 195)

'How should one be positioned in order to see in this situation of tensions, resonances, transformations, resistances and complicities?' (ibid.: 195) This, Haraway writes, is the problem of 'coming to linguistic terms with the nonrepresentability, historical contingency, artificiality, and yet spontaneity, necessity, fragility and stunning profusions of "nature"' (1991b: 21) This is, in part, connected to the problem of language; the problem which, in both Latour's and Haraway's work, stems from agency not being a product of language-bearing actors, but rather finds agency in those 'without language' (Haraway in Penley et al., 1990: 9). The result is a need to look for 'figures to describe an encounter in knowledge that refuses the active/passive binary which is overwhelmingly the discursive tradition that Western folks have inherited.' (ibid.) This figure, for Haraway, is the metaphor of 'the coyote, or trickster figure' (ibid.).

What Haraway suggests is that those stuttering, partial connections with worldly and world-making others takes place with the 'object' of knowledge as trickster spirit. This means 'acknowledging the agency of the world in knowledge' which 'makes room for some unsettling possibilities, including a sense of the world's independent sense of humour.' (1991a: 199) This humour is signified by 'The Coyote or Trickster, embodied in American Southwest Indian accounts [which] suggests our situation when we give up mastery but keep searching for fidelity, knowing all the while we will be hoodwinked.' (ibid.: 199) As trickster spirit, radiation can only ever be partially accounted for, never fully grasped and known. Moreover, although translated into codes and representations, radiation itself – not least because its ionising, molecular interactions may alter DNA structure – is engaged in its own coding practices. This is knowledge production *with* – not *of* – radiation, where those knowledges are as much about tourists, guides and Geiger counters as they are radiation. As a vital actor in practices which re-configure the Zone (specifically, for the purposes of this chapter, Pripjat's amusement park) as a place, an attention to these knowledge production practices begins to provide the possibility for an account, albeit a fundamentally partial and situated one, of the world making capacities of radiation.

Here, the manner in which  $^{90}\text{Sr}$  plays practical jokes on organisms in the Zone suggests this sense of humour may occasionally be a dark humour. In the amusement park, with the constant flitting of the Geiger counter between differing variables; sometimes clear, sometimes unclear areas of high intensity, often inexplicable, rarely definable. I couldn't help but

feel that, if not necessarily malevolent, that radiation was playing a practical joke on my (admittedly somewhat naïve) attempts to map with it. It is these trickster spirits which tourists come to (partially, locally, provisionally) know, and which take centre stage in the production of that knowledge, and in the mediation of tourists. As material-semiotic agents radiation and radioisotopes as 'the object of knowledge' take 'an active part of the apparatus of bodily production, without ever implying immediate presence of such objects or, what is the same thing, their final or unique determination of what can count as objective knowledge' (Haraway, 1992: 298). No immediate presence, no full / final determination: Radioisotopes, whether in antlers, on caterpillar tracks or elsewhere are encountered in moments when we might engage in 'revisioning the world as coding trickster with whom we must learn to converse.' (Haraway, 1991a: 201)

In producing knowledges of radiation tourists are as much engaged in producing knowing tourist bodies. And here, a final note from the *Situated Knowledges* essay. Haraway argues, with regards to bodies, that 'boundaries are drawn by mapping practices; 'objects' do not pre-exist as such. Objects are boundary projects. But boundaries shift from within; boundaries are very tricky. What boundaries provisionally contain remains generative, productive of meanings and bodies. Siting (sighting) boundaries is a risky project.' (1991a: 201) In the Zone we have a world that is wilful, mediating and coding trickster, embodied in radioisotopes and radiation. Engaged in radiation, tourists, tour guides technologies of radiometry, mapping practices and guiding practices (etc.) come together to bound radiation and tourist bodies. As these boundaries are formed, topographies of radiation figure as key mediator as trickster spirit.

Negotiations through the stuttering manner of the intermittent Geiger counter clicks, stumbling over invisible topographies are fraught. But they provide the possibility, or maybe just the promise, of an account of worlds where the wilful, coyote world takes centre stage. Not in a deterministic fashion; not a reductionist account, but an account which acknowledges both the partiality of knowledge whilst striving for a fidelity through negotiation with a resistant reality through a host of nonhuman mediators. And so one of the main results of a radiological guide is to attune us to the unseen and insensible, yet formative, textures and topographies of the world.

This is not a demand for a topography of the 'out there'. No longer part of an inanimate landscape to be mediated by cameras or by practices walking and guiding, but as active, vital and resistant actor in its own right. A practice-focused approach must not focus just on a knowing, conscious human subject. It should take us further than the technologies and prac-

tices by which the subject comes to know the world and herself, but at that very world which transforms and translates the (tourist) subject.

Radiation holds the promise of a thinking of a world without recourse to invisible sheets of glass. Exposure challenges the boundedness of bodies. Topographies, as active and agential forces, offer a means of understanding the constitutive effect of worldly agencies on subjectivities. Radiation does not withdraw from relations but instead resists being given fully to relations that are instigated by humans even as it draws humans into relations beyond the sensorial. This is a trickster (1991a, 1991b) reality of (wilful) resistance (Latour and Woolgar, 1986). Despite this shattering of invisible glass, there remains a sense in exposure and topography of a necessary difference. Topographies exert a force upon subjective endeavour. Exposure relies upon some existence of embodied subjects prior to exposure. Not a difference of externality and separation, but a difference nonetheless. The next chapter focuses on difference and brings together a number of strands of thought that cut across the previous chapters of this thesis.

# 6. DIFFERENCE

## Pulling together

### Different cuts

Chapters two through five have, each in their own way, dealt with questions of difference. For though each chapter begins with different questions and vary in their theoretical approaches the question of difference cuts across them. Even as binary formations have been questioned and boundaries blurred, difference remains as an active force that structures experience in the Zone.

Chapter two introduced thought experiments of a world after people, and noted that one of the outcomes in these books and documentaries is to highlight the near-impossibility of any such existence. Anthropogenic effects echo through the future-histories of the planet even if, for whatever reason, humans vanish. Central to these thought experiments are the most evocative of future echoes; the ruins of cities. Ruins appear (in a theme shared with Romanticism) as the ghosts of civilisation, and here the story of the urban / natural is at the fore. The story told once again as the slow yet inevitable return of cities to a wild state. Much has been written within human geography on urban / wild and, more generally, human / natural binaries. For example the call to 'bring back' accounts of the nonhuman in cities (Braun, 2005) through 're-turns' to the processes and excesses of the more-than-human (Whatmore, 2006) highlight the centrality of 'nature' to geographic thought (Castree, 2005). This can be seen as part of a wider move towards post-humanist accounts (Castree et al., 2004) that refuse to begin with a-priori hierarchies and relational schema between the human / cultural and the natural. I lack the space here to do full justice to the human / nature debate, neither to provide a comprehensive overview nor offer fulsome responses. As such I limit myself to a very specific question that is tied to the overall concern in this thesis with tourist experience. Drawing on chapter two for the cultural and historic positioning of Pripjat's modern ruins and chapter three's focus on the exploration of these ruins I pick up on an empirical strand not fully developed in chapter three; the navigation and negotiation of and urban / wild space. The first question of this chapter is how; is the urban / nature difference experienced by tourists? Is it even experienced as a difference, as a split, or are the ruins something else entirely than urban + wild?

Following on from this I move to address a second question that arises out of the first. To examine the navigation and negotiation of ruins is to ask about the relation of bodies and

(ruined) cities. Questioning the (human) body in radioactive ruins is a result of the experience of bodily boundaries disrupted (the nuclear uncanny as described in chapter three) and necessary exposure of Being as described in chapter four. Linking the primacy of exposure with the embodied materialities of ruins touches on the boundedness (or not) of bodies and the responses to this. This brings in the boundary practices of body-scanners at checkpoint Dityatki and the rules and regulations of bodily comportment and configuration introduced in chapter five. To return again to tourist experience, the second and third questions this chapter addresses is: How are bodies performatively expressed as bounded entities? What work is put into creating boundaries as a response to the Zone which challenges an a priori assumption of bodies as sealed entities? Here I examine the performative practices of both the management of tourist bodies by tour guides and the self-management of tourists. Bodily boundaries suggests the problem of borders, a feature of chapter five. In answering the question of performative bodily boundaries I compare this with my own problems in bounding the Zone.

The chapter ends with a consideration of Karen Barad's (2007) theory of apparatus, which draws on work by Niels Bohr as it applies to the Zone. This is a response to the need to interrogate the difference of radiation and radiation's difference. I have described this as an aspect of the Otherness of the world that (Irigaray argues) Merleau-Ponty loses (see chapter four). I have described it as a resistant, trickster actor in the networked practices of knowledge production. Throughout the thesis there is a sense that radiation's Otherness cannot be understood as a physical distance or separateness. Barad's theory of apparatus, I argue, permits an understanding of the production of radiation as difference and that difference as productive.

## **Bodies, cities, natures, ruins**

### **Something more like a chimera?**

we know more about rainforest ecology than urban ecology [...] The most urgent need, perhaps, is for large-scale conceptual templates for understanding the city-nature dialect. Here boldness may be a virtue. What would happen, for instance, if we simply erased from the blackboard all the differential equations (representing the “work” performed by humans on the environment) on the city side of the interaction? Indeed, what is the “underlying” urban nature without human control? Would the city be gradually (or catastrophically) reclaimed by its “original” ecology, or by something else, possibly more like

a chimera? “Dead cities,” in other words, might tell us much about the dynamics of urban nature.

(Davis, 2002: 363)

we are all chimeras, theorized and fabricated hybrids

(Haraway, 1991a: 150)

*“I don't know, I felt not like in a city and not like in a forest. But. I don't know” (#i35)*

Davis' possible answers highlight the problem with which the manner in which he first poses the question of the ecology of dead cities. If the 'conceptual template' for the city begins with a city-nature dialectic than there can only be one possible outcome of 'dead cities'; the eventual (catastrophic or otherwise) reclamation to an original (natural) ecology. The very possibility of a chimeric, hybrid city questions any simple city-nature dialectic. Davis (2002) turns to ruderal ecologies<sup>132</sup> to examine this, yet Pripjat offers another example. An example that inspires parts of *The World Without Us* and related media which begin with similar questions; the removing of those differential equations of the human imagined as the immediate (unexplained) disappearance of all people. Whether concrete structures rising out of the forest, buildings collapsing one-by-one or contamination measured beyond the scale of the human (see Krupar, 2007), Pripjat's role in these narratives is to highlight that what is left after the 'work' by humans is over<sup>133</sup> is not simply a return to an originary nature and in no short time span will it be. What remains is necessarily hybrid, chimeric in form.

Davis' (2002) use of the figure of the chimera in relation to cities, and Haraway's (1991a) use in relation to cyborg bodies raise important questions as to how hybrids are constituted and imagined. Both pay attention to boundaries and categories; between the urban and the natural environment, artifice and nature, human and non-human. Whether the Chimera of Greek mythology and later medieval art (see Moffitt, 1996) or the fusing of two zygotes to produce an organism with cells that contain different, distinct genetic sequences chimeras can be understood as individuals that do not conform to pure forms. For Davis the Chimeric city begins to address the need to re-introduce conceptions of nature into studies of cities. A re-introduction that insists that there is nothing 'unnatural' about cities (Harvey, 1996). This

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<sup>132</sup> Ecologies of disturbed spaces; the early growth after building demolition etc.

<sup>133</sup> What I have shown that these narratives miss is the work of salvage that, when it involves removing window frames and the like, becomes an ally of wind, rain and snow in opening interior spaces for ruderal species.

is a re-introduction where nature figures as more than resource for urbanisation; it intervenes in cities in a range of both catastrophic and mundane ways.

A range of sustained engagement with this (re)introduction of the natural as vital force in the formation of the urban can be found within geography. In an overview of this work, Braun (2005) notes that the importance of Haraway's figure of the cyborg for this work must recognise her understanding of the cyborg as trickster figure. Yet he also worries that the 'cyb-org', based on the image of the organism, promotes organismic metaphors for cities, and offers little as a spatial metaphor. However I argue that chimeric forms (such as the cyborg) offer potential analytical purchase of spatial forms through their being indicators of the lively, trickster agencies of the world. I have described the uncanny experiences of Pripjat, and argued that radiation is very much an indicator of the wilful, independent 'sense of humour' characterised by the trickster. What I show in this chapter is how Pripjat's unique ruined landscape is experienced as disorientating and multiple; as trickster.

I do not aim, however, is for this to easily speak to the work on urban natures. For although this work was an early influence on this thesis (particularly Amin and Thrift, 2002; Hinchliffe et al., 2005; Kaika, 2005), I feel that Pripjat's ruins tell us very little about the 'metabolisms' or 'machinic assemblages' of cities. Moreover, my empirical focus on tourists means that any attempt at a sustained engagement with the agencies of nonhuman *organisms* here will necessarily be an impoverished account. An account that would risk subsuming such agencies to a hierarchy of action (with humans at the top) or find their existence a facet of human experience: The very kinds of approaches which this work has sought to challenge (see Whatmore and Thorne, 1998). These are the kinds of relations that the antlers as beta-radiation source (in the previous chapter) hint at, but which would lack a fulsome account here. Rather what I aim to examine is hybridity. Braun writes that the 'rhizomatic biogeographies' that emerge from the accounts he examines serve to 'confuse the purified spaces of the city and confound our attempts to divide space, bodies and organisms into 'here' and 'there', 'this' and 'that'.' (2005: 647) This confusion can be understood as the experience of the uncanny in Pripjat (see chapter three). Cities do not need to be ruined to problematise the purified divisions that characterise urban space; but it helps. In such realisation of rhizomatic forms there are performative practices which aim to cleave, practices which are the focus of the next section. But, for now, I will examine the experience of a chimeric city-space and consider its hybrid formations in order to question the status and position of the human in accounts of hybridity.

### The view from the tower, the view on the ground

Let's begin by returning to deCerteau's (1984) view from the top of the World Trade Centre (WTC) towers as introduced in chapter five. The view from the top of the WTC, deCerteau argues, is a dream of pure vision. One that is blind to the practices of the 'labyrinth below'. Though I argued that cartography *can* hold a fidelity to the labyrinthine practices below, the view is still beguiling. And misleading. At the top of Pripyat hotel (image 62) the city seems to rise out from the trees; monoliths of concrete growing upwards. As if it is these buildings that are reaching desperately for the sky having seeded themselves in the forest, and not vice versa. Interviewed during a series of one-to-one interviews during the bus ride home, Jim, a man in his late 30s from San Francisco, but who lives in Prague was one of the few respondents I spoke to who had deliberately travelled to Kyiv to visit Chernobyl. He spoke about his many Russian and eastern European friends, for whom Chernobyl was a major event in their lives, and he wished to learn more. Despite his friends knowledge of the event, he was not prepared for how dense the vegetation in Pripyat would be, stating:

*"I was really surprised at how there was vegetation everywhere that kind of covered everything. It was like, you know, buildings inside a forest rather than a city." (#i33)*



Image 62: Buildings inside a forest (#p0387)

From the top of hotel the labyrinth can't even be seen. The view offers no god-trick perspective. What vision it does offer is confusing. The process behind the obscuring of the labyrinth is, in Prip'yat, not a function of distance. The maze of trees, the thick shrubs and

bushes and the patchy moss-covered concrete have reconfigured previously ordered spaces. The labyrinth obscures itself.

*“Yeah, just, yeah it's amazing, it's literally like, it's almost like you can't imagine it was a city. Because no one's here for a start and there's all these trees, it's like the middle of nowhere. But then you see all these big buildings and then you remember that yeah, it used to be a city.” (#r154)*

Amongst the trees the city is forgotten. From the top of the hotel the tops of buildings, occasionally breaking the tree-line horizon, exert some ability to recall themselves. But these disturbances of the tree line highlight another shift in comprehension. The forest is vast. Looking to the north there is a single apartment building, two thirds the height of the hotel, and then trees. To the horizon. Somewhere in the distance, though with no cue from the visual landscape, is the border of the Zone where it meets Belarus. To the South there are more buildings, but they too seem diminished by forested area. Somewhere in that direction is the Red Forest. Buried and re-planted it now meets Pripjat and no easily discernible border can be seen from here. This shift is not entirely a function of distance. Again, the forest shapes the spaces of the city. The forest forces a shift in the experience of scale. Up here it seemed to visitors both more expansive and smaller. Up here it seemed to visitors both more expansive and smaller. As Heiko and Milos commented:

*“For me it made the town look really small. You know, I commented that this looks small, but once you get to the top of the hotel you realise how big it is and when it was thriving how populated it was, so when you're down on the ground floor, it didn't look very big to me. Not so much.”*

[...]

*“And it makes it smaller. Even from the rooftop of the hotel. And you see, wow, it's a green city. But finally, it looked very different probably from before. So it looked rather nice, even. And the tour guide, she went, 'oh, I love this place, I love to be here' etc. Because it's so calm, it's so peaceful” (#io6)*

These two comments, though not in agreement about the scale as seen from the top of the hotel, do show one thing clearly: That this sense of scale shifts once we are back on the ground. Here it feels much smaller, lacking the sense of scale associated with urban space, whether it seemed more or less expansive from the top. Of course a change in height shifts perspective, but that's not all that's happening here. The view from the top of the hotel is not one that is all but distance, viewpoint, offering a flattened, topologic map of the city. This view does not obscure practices, but is rather part of them. Contrary to deCerteau's World

Trade Centre view, the views from here are part of the labyrinthine forest and practices with and therein, and the shifting sense of space and scale that the forest affects.

The labyrinth obscures itself, and so the city feels smaller. If it is felt at all, forgotten often, hiding itself behind the trees. The amnesic properties of trees are the cause of a number of moments of remembering that “yeah, it used to be a city” that come from seeing through the trees.

*Sven: “One thing about Pripjat as well, was it was a lot greener than I had expected. A lot greener, I mean, sometimes you feel like you are in a forest and then, you know, you see parts of a building through the trees.” (#109)*

But there is more to this than trees as an obscuring veil on the city. The chimeric formation of Pripjat is not simply city plus trees as if the trees might be lifted and the city returned. The trees fragment the city, like the concrete they drive their roots through. A fragmentation exacerbated by the format of tours in the Zone; a number of short bus trips join the various locations visited in Pripjat.

*Brendan: “It feels disconnected, because you know you’ve only been driving two minutes or whatever, you go here, you turn a corner and then because you don’t know the city, you kind of lose track of where you are.”*

*Graham: “It did feel like a series of independent areas because of mother nature taking over. It would have been great to see a map of the city, and maybe shots of the city before, like what it would have looked like.” (#129)*

This sense that the overall tour offered a fragmented experience of space was echoed in an earlier interview by Jason:

*“What would have been really nice would’ve been sort of a little map of the town so that we could see the roads were where we were going. I could feel something like the school that it was definitely a school, but because sometimes we do, like you said, wandering through the overgrowth to get to the next building, I couldn’t see the connection there. There was also the hop on the bus, hop off the bus, and we didn’t go very far, but it was enough to disorient me so I didn’t know where one building was in relation to another, so to get back to your question of the orientation of the city kind of thing I would say that I don’t really think that I have a good sense of what the city was like, just because I’m not exactly sure where I was and I can’t connect the places.” (#112)*

What is clear is that maintaining orientation, building a “mental map” of the relative locations of different visited places, was difficult or impossible. The ruin-forest of Pripjat is a fragmented space. Experienced as not-city, momentarily remembered as such after glimpses through trees. But experienced too as not-forest, or at least not as the kind of tranquil ‘wil-

erness' of forest as leisure space. As I will come to later; organic growth in Pripyat comes with a certain threatening appearance as it becomes associated with sources of radiation. It is this fragmentary experience that I referred to in chapter three as the uncanny experience of Pripyat's ruins. Of previously understood borders and boundaries; inside and outside, city and forest, body and world, animate and inanimate are all transgressed and broken down.

Thus Pripyat can be said to be multiple. A multiplicity that is not as simple as one form in addition to another. A multiplicity more like a chimera. Chimeric in being a product of multiples but something other to those primary forms in its own right. Chimeric not as organism metaphor, but chimeric as trickster. The uncanny experience of Pripyat a function of a lively, agential world that exerts its own influences on embodied subjectivities.

### Of bodies and cities: Decaying, not dead

The body, however, is not distinct from the city for they are mutually defining (Grosz, 1995: 108)

I begin this section with this assertion from Grosz's *Space, Time & Perversion* for whilst I would broadly follow with Grosz's statement, there is a question to be asked here; what would it be to be defined mutually by a decaying city.

Decaying, not dead. I realise here that "urban decay" and "urbicide" as descriptives have their own trajectories (see Graham, 2004), and my assertion of decay over death is outside of those classifications. Rather, insofar as it refers to Pripyat as urban/city *specifically*, I would chose decay as a more fitting adjective over death. For to call the city dead also runs the risk of writing it as little more than lumpen matter. The city as silent, unmoving, in stasis, without use, yet all these things are not true. Alternatively, one might suggest that Pripyat is just no longer a city in any meaningful way, hence to call it dead is to refer to it as uninhabited (uninhabitable); no longer capable of functioning as a city.

This ceasing of one function is not the ceasing of all functions, thus in recognising process over form, I would refer to Pripyat as decaying. This is not, then, to point to the verdant areas and the birdsong as a rebuke to the silent, concrete corpse imaginary. It is to reflect the processes at hand. For despite the productivity of the processes at hand (the liveliness, the relevant nature, the reclamation) the city is in decay; Pripyat is unravelling, it is (slowly, surely) in the process of becoming not-city. This is a process, a process of becoming-different. In becoming non-city Pripyat is changing and as such, an assertion of 'becoming-through-decay' over the alternative of just 'dead' hints towards other worlds unravelling too. As the anthropogenic built world of Pripyat falls apart, so too do the built world of tech-

nogenic isotopes and trans-uranic molecules. Such molecules too decay, become different. Pripyat is falling apart in sympathy with  $^{137}\text{Cs}$  and  $^{90}\text{Sr}$ .

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Having been to see the armoured vehicles at the 'open air museum,' the minibus drives along ул. Ленина, (Lenin Road) a road on the outskirts of Chernobyl town. It's the first day of August and the heat is making this one of the more uncomfortable journeys in this minibus which is not helped by the very poor condition of this road (although it's not as bad as some others). As we bump along, the driver swinging the bus side to side to avoid the same potholes he's passed many times before, Maxim informs us that we are heading for the last standing synagogue in Chernobyl<sup>134</sup>. Historically part of the Pale of Settlement, Chernobyl was a significant Jewish centre in the region<sup>135</sup> and the synagogue stands as one of the oldest remaining buildings still accessible in Chernobyl. Although it had been many years since it had functioned as a place of worship, having been converted after the October revolution into a regional 'military commissariat' replete with military prisons.

It was the basement of the building that had been converted into prisons that we were taken this day. We carefully traverse through here, in a line, following a thin beam. The floor sags either side, floorboards having fallen away. At the front of the group there's commotion as someone falls through a hole in the floor and is helped back up again.

*Nick: "I keep meaning to bring a torch, and I keep forgetting. That, ha. That floor doesn't feel particularly stable."*

I stamp my foot on the thin beam we are all carefully balancing on.

Behind me a fellow visitor loses his balance

*Jason. "Do you want a hand?"*

*Nick: "There's a beam, here in the middle."*

*Jack. "Wish I'd brought a camera with manual flash controls"*

I lose my balance

*Nick: "Woah!"*

*Sue. "On the floor, there's posters on the floor, but you can't really tell what it is."*

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<sup>134</sup> By this stage I hadn't started formally taking on the role of tour guide, and so what locations would form part of the tour on any given day was unknown in advance. I think I had only stopped off at the synagogue once before now.

<sup>135</sup> 5,527 (60%) in 1897 (Slutsky and Spector, 2007)



Image 63: "Kinda freaky" (#p1150)

*M: "Okay? It's not okay? Let's go outside."*

*Jack: "There's the hole!"*

*Nick: "You alright?"*

*Sue: "Yeah, this is kinda freaky." (#fn12 and #ro94)*

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Death implies the metaphor of organism for thinking and conceptualising cities. A problematic conception, and one I want to move away from *despite* my assertion of Pripyat as chimeric. What is needed, then, is not to assert the city as chimera in order to offer organism metaphors for the city of Pripyat, but to return to the metaphor of trickster. Pripyat's spaces are disordered, fragmented, uncanny; its ruins lack the purifying ordering associated with cities. Chimeras are tricksters and it is in this disordering and disorientating spaces that chimera works as a spatial analogy despite Braun's (2005) reservations. Here my use of the chimera is not unlike Gandy's 'cyborg urbanization' (2005) which too blurs boundaries between 'city and non city'. For Gandy cyborg works to bring into focus, as I have done here, bodily ex-

perience but in doing so problematises assumed conditions of those bodies. Cyborg, however, does indicate a certain focus on technological assemblages (ibid.) and though technologies (camera, Gieger counter) are certainly part of embodied experience of Pripjat, they are not necessarily at the fore. Chimeric space is a spatiality that disorders boundaries and in doing so is to be understood as in its own hybridity. That which is 'underlying' (Davis, 2002) cities is revealed through ruination not to be a return to a pre-human but a heterogeneous, 'trickster' space that obscures and confuses any attempts to be tied down to one end or another of a human / nature axis. As amnesic, uncanny, disordering, boundary transgressing and fractured, the radioactive ruinous landscape of Pripjat exerts its own agencies; its own wilful sense of humour.

To return to Grosz (1995) body-city model which is developed in contrast to two others she sees as broadly dominant: One being an isomorphism between the body and the city whereby organisational features of one are reflected in the other. This is the metaphor of the city as a body. The other is of a *de facto*, external relation in which cities are reflections of human endeavour. In response, Grosz argues the city affects 'the subjects' understandings of and alignments with space' and 'corporeal alignments, comportment, and orientations' (ibid.: 108).

Pripjat affects a certain careful comportment. Decay (of city, of radioisotopes) disorders previously ordered spaces and this requires an adjustment of the mobile tourist's embodied alignment. As a city, Pripjat 'helps to orient sensory and perceptual information, insofar as it helps produce specific conceptions of spatiality.' (Grosz, 1995: 109) And in doing so it does not produce ordered bodies from ordering spaces. Disordered spaces bring the body into disorder, disrupt flows of embodied movement.

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Discussing the basement mentioned above, visitors found this indicative of a lack of management for safety. More surprise at the lack of 'site design' in Pripjat. Ted and Sue are both from the United States, though they are not travelling together. Like many other visitors they are students taking a long vacation through parts of eastern and northern Europe. They had been to areas such as Sweden and the Balkans and knew they were coming to Kyiv. Having heard about Chernobyl, they had both spent some time finding out information about it on the internet. It was through this internet search that they had found out about the possibility of tours to the Zone, which had piqued the curiosity of them both. The following discussion took place between them as part of a larger, group interview after the tour:

Nick: *"When you're in the basement, what kind of things were you doing to make sure you were walking safely?"*

Ted: *"Just being careful and not putting all my weight on the foot in front of me before I knew it was okay and the floor wouldn't."*

N: *"So you could feel the floor where it was okay?"*

Ted: *"I walked a bunch of random buildings and I always looked for beams, some areas were so dark you were trying to feel with your hands where the walls are, I also used my flash a couple of times to get a view of what's going on, to see what's in front of you."*

N: *"So you can just get an idea of what's right there, yeah."*

Ted: *"They should tell you to bring a flashlight"*

N: *"Okay, yeah?"*

Sue: *"No that takes away from everything!"*

Ted: *"Still, you walk in a basement, I was afraid the floor was going to collapse, this thing wasn't stable at all."*

N: *"Did it feel like the floor might collapse?"*

Ted: *"Yeah, I was like 'this is so rotten, some will fall through', and I mean, it's cool to leave it the way it is, but you've also got to take into account.."*

Sue: *"Safety" (#117)*

Without any safety-conscious work to re-order Pripyat's disordered space visitors develop a careful comportment. Recognising that the ruined spaces are as potentially dangerous as they look (and as they don't, given the radiation), navigation of Pripyat is careful and considered.

One particular focus whilst walking was the vegetation in the Zone. Having been told to keep clear of grass verges by the road (see chapter four) and an awareness of the 'radioactive moss' (see chapter five) would often mean a deliberate avoidance of green growth. Though, after a while, worries would sometimes fade, or simply dissolve in the face of the extensive growth in Pripyat. Previous association of radiation with growth of plants and moss leads to an associated avoidance of plants. Until, that is, we leave the cultural centre. For many visitors this point is a realisation of the absurdity of attempting to avoid any and all contact with grass and moss. For the steps we take, having passed through the small swimming pool with the old reels of film, are covered with moss and tall grass.

Ben: *"Yeah, I avoided the moss, he stepped on it. Again, when I read all those write-ups of the tours, I remember people putting their Geiger counter down on the moss and the grass, and then I saw the guide walking on the grass himself."*

*Alan: "But we did right, just to get into the synagogue we had to walk through a pile grass. There was no avoiding the grass."*

*Ben: "I didn't really think about it that closely, It's not like I was really watching every single step. but if there was a large pile of moss and I could go around it, you know. Especially after that radioactive moss in the amusement park." (#108)*



*Image 64: The stairs taken from the cultural centre to the amusement park (#p1547)*

Some visitors, confronted with the amount of grass and moss in Pripyat, would cease avoiding any and all contact. Others remained more vigilant. Another effect of reorganised bodily comportment in Pripyat's ruins, whether walking or (see image in the case of the image below, taking photographs. Here certain aspects of the landscape have been coded as dangerous, albeit somewhat unintentionally. The processes that make grass verges relatively radioactive to the road are down to precipitation, not something innate to the plants. The same applies for much of the moss which offers high readings to Geiger counters. Coded in this way, by guides and Geiger counters, the landscape is more than visual matter for the practice of photography, it shapes those very practices.

*Gary: "my shoes are as thin as hell, so I spent a long time looking down at my feet, looking where I was stepping. I also tried to avoid brushing up against bushes, probably the most I've ever, I think the only time I've spent more attention to walking was down the aisle at graduation."*

*\*laughter\**

Gary: “Other than that, it's probably the most attention I've paid to my footing ever, you know.”

Eddie: “Yeah. I think, I was a little, less, because I wore boots actually. But I actually wore the boots because I was expecting this kind of thing, yeah, I was. For me it was, you know, you're not, like, I would, I kind of walk through any normal town, kind of, just absorbing what's around me and just kind of being there but in Pripyat I was just kind of looking at things very intently and I found, kind of like, piece together what it was like, I was trying to imagine what it was like as a working city, which is something you don't have to do when you're in a working city because it's actually there.” (#i14)



Image 65: Moss is carefully avoided in positioning for a photograph (#p1782)

You cannot be a *flâneur* in Pripjat. No idle strolling, no easy blasé attitude of Simmel's urban life (1950). Attention must be paid to each step, whether because of radioactive moss, broken glass and broken floorboards. The bodily comportment of careful steps, a concentration on walking and avoidance is the effect of the ruined, radioactive city on corporeal alignment. Such alignment is recognised in the extract above to be different from that of a normal city. No more 'just being there' but rather a deliberate, conscious effort placed on walking.

*Brendan: "You were looking harder because you were proceeding more slowly because broken glass everywhere and crap everywhere, so maybe you notice more. Maybe you notice more and think about it more." (#129)*

Whether green growth coded as dangerous, the trees that obscure the city, or the broken glass, broken floors and other ruinous decay, Pripyat engenders an attentive, conscious movement. A study of walking here would be a study of conscious, deliberate practice, not the pre-conscious, pre-subjective modality it might otherwise be taken to be. Such attentiveness to bodily movement brings a greater attentiveness to the ruins. The kind of attentiveness examined in chapter three.

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When Grosz states that the body is not distinct from the city, it is not to deny talk of a body-city relationship, but rather to challenge the terms by which that discussion begins. It denies an a-priori exteriority and a given hierarchy by which bodies mould cities. Rather city spaces are active in the re-configuration and re-production of embodied subjects. So what of the embodied subject mutually defined by a *ruined* city? As chimeric, trickster space of uncanny border transgressions and fragmented experiences, the embodied subject in Pripyat's ruins is defined as awkward and vulnerable. In turn the city-ruin is defined as fragmented, malevolent.

I introduced the acknowledgement of ruins as rendering bodily boundaries indistinct and porous earlier (Edensor, 2005a; Dobraszcyk, 2010). To examine the manner in which bodies and cities are not distinct – especially in a city-in-decay – is not to deny bodies and cities as existent entities, but rather to question the terms by which we think of bodies and cities. Not as given, discrete, but as (re)produced and (re)producing. The open, porous of the tourist body in Pripyat is produced by the disordering, trickster agencies of the ruined-city spaces. If bodies are thought of not as given but as (re)produced, then we can consider a body-city relationship, as I have shown here, that is not predicated upon given forms. Part of this (re)production and re-configuration of bodies-in-ruins is the performative practices of boundary-making, to which I turn to next.

## Boundaries

### Performing & bounding the tourist body

After the short visit to the memorial and Prometheus statue (mentioned in chapter four) the tour moves towards a near-by bridge. Rail tracks and sleepers on the bridge make this somewhat cumbersome to walk along, even though it is now solely used as a footbridge to connect the site of reactors 1 to 4 to a nearby canteen for those who still work to maintain and monitor the reactors and buildings. Upon gathering on this bridge, a loaf of bread (usually purchased from the small store in Chernobyl town) is broken up and distributed amongst the visitors to feed the cat fish. Though the sediment in these concrete-bottomed bodies of water is known for being heavily contaminated with radioactive materials, the cat fish are both numerous and large. Questioning jokes about the size of the fish as a 'super-power' result of irradiation are always made. The truth being fish fed a constant diet of carbohydrate in the form of bread by both tourists and power plant workers. Being bottom feeders, these catfish are the descendants of those bred in order to keep the artificial bodies of water clear of vegetation.

I am almost always asked to check the local radioactivity levels as we exit the bus, I point out that it's really very low (rarely more than  $0.3 \mu\text{Sv}/\text{hour}$ ) given our proximity to reactor 4. This low level is a function of two metres of soil having been excavated from the area surrounding the power plant and buried elsewhere, of cleaning and of there being a series of large concrete buildings (reactors 1 and 2) between us and reactor 4. This work was undertaken to provide safer working conditions for those still working in the power plant complex. The scene is oddly relaxing; warm sun (at least during the course of my research in summer), still water, fish to feed, neatly mown grass, herons flying over the cooling pond.



*Image 66: Feeding the catfish. The rusting hulks of the half-built reactors 5 & 6 with still standing cranes can be seen in the background. (#p0633)*

Jokes about radiation-bequeathed superpowers are not limited to cat fish; the occasional joke about hoping to leave the Zone with new found abilities was a deliberately ironic drawing on comic book tropes in acknowledgement of the transformative potential of exposure.<sup>136</sup> The irony arises from the accompanying adherence to various performative regulations and practices of the body that are aimed at purposefully mitigating this transformative potential. We have already seen (in chapter) three the importance touch plays here; the avoidance of certain textures and tactile experiences. The kind of tactile experiences Tim Edensor (2005a) espouses as the inciting yet otherwise foreclosed possibilities of ruins, and the kind of experiences tourists recounted as both enticing but simultaneously threatening. This practice is found in tandem with a range of (differently applied and differently emphasised) performative regulations about clothing and bodily action as policed – or just casually advised – by tour guides (including myself). Regulations of clothing and comportment feature here. Thus the second question of this chapter. If the Chernobyl sublime is a reflexivity of a return to the embodied self, and in returning that embodied self is not / no longer figured as a given, what embodied selves – what tourist bodies – are produced through the performative practices of touring and guiding in the Zone.

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<sup>136</sup> On the potential outcome of spending so long in the Zone, one visitor quipped that “spider man got formed here” (#r152) alluding to possible superpowers I might go home with. I have also lost count of the number of times I have had been asked whether I now glow in the dark or what appendages I may have gained.

The cyborg 'is a dream not of a common language, but of a powerful infidel heteroglossia ... It means both building and destroying machines, identities, categories, relationships, space stories.' (Haraway, 1991a: 181) Pripjat as chimeric is not to deny all boundaries. As Braun (2005) argues it problematises such easy partitioning but does not suggest a move towards a border-less sensibility. Rather than assemblage and rhizomatic forms as a means of thinking the city-ruin space of Pripjat, I deliberately focus on borders and boundaries. Not as priori states of separation, but as the desired product of performative practices of bodily bounding. It is this boundary (re)making that Haraway mentions, not simply boundary disruption, that is at stake in this section.

Doreen Massey (2006) comments on this tendency towards a *de rigueur* in social sciences of unsettling things; on an emphasis on movement, process rather than entity (or becoming rather than being) and flow rather than territory. Whilst this remains an important move, she notes that;

it is necessary to recognize, more frequently than is the case, that this is a conceptual issue. Of course, in the practical conduct of the world we do encounter 'entities', there is on occasion harmony and balance; there are (temporary) stabilizations; there are territories and borders. (2006: 40)

This, then, constitutes the reasoning behind the focus on boundaries here. The world is not necessarily experienced as constant flow and process. Even when it *is* experienced as such, in the forces and flows of Pripjat which permeate bodies, it is not necessarily desired to be so. I understand boundaries not just as acts of naming, for in acts of labelling complexities are lost (Law, 1999). Performative practices of naming and labelling are only one means by which boundaries are made, unmade and remade. Boundaries are performative, material and semiotic.

**"Keep your arms and legs inside. No smoking, eating, drinking"<sup>137</sup> and "You should now put on gumboots or stout shoes, a coat done up to the neck, a hat or headscarf and some gloves"<sup>138</sup>**

The Zone attracts a number of artists, film-makers and photographers each year. Very often the output will include a photograph of the crew / group in the Zone (usually Pripjat) wearing white, plastic jump suits. Possibly with NBC masks. Only in one instance was there

<sup>137</sup> From safety dialogue, "mission control" on the *Space Mountain* ride, Disneyland.

<sup>138</sup> From *Civil Defence Information Bulletin No. 6: What do do immediately after an attack* (Home Office, 1964).

clear need for this garb; the collective “Plan C” who constructed a swing-ride in Manchester, UK (called *The Liquidator*) made from scrap metal extracted from Pripjat. These images seem to be in contradiction to practices of tourism where no such garb was ever worn.<sup>139</sup>

Bodily regulations when visiting the Zone are surprisingly few, yet they do exist. Though no masks or jumpsuits are not usually involved, regulation and performative enactment bound the body of the tourist in the Zone. As for the regulations, I know these; for each visitor must sign a form stating they will abide by the rules (which also serves a parallel task of being a waiver of liability). As described in chapter one, not only have I signed this form 25 times, I would often be asked to read it out loud (this being quicker than waiting for each visitor to read it in turn.)

*“Rules the foreign or domestic delegation is to comply with during their visit to the Exclusion Zone and the Zone of Absolute Resettlement. Authorisation to visit the Exclusion Zone may be provided to individuals who have reached 18 years and who have no contradictions for coming into contact with sources of ionising radiation. Personal radiation, or dosimetry control, shall be performed in the premises of ChernobylInterInform Agency, state funded enterprise at dosimetry control checkpoint when leaving the Exclusion Zone and also additionally en route by the officer responsible for the escort of the delegation in support of the visit.*

*When visiting the Exclusion Zone all foreign and Ukrainian nationals shall be obliged to comply with the radiation safety rules and follow strictly the approved programme of the visit as well as to move around only according to the prescribed routes. Availability of the passport shall be required to cross the border of the Exclusion Zone at the police and dosimetry control checkpoint.*

*During the visit to the Exclusion Zone it is totally prohibited to: Carry and kind of weapons, drink liquor or take drugs, have meals or smoke in the open air, touch any structures or vegetation, sit or place photo or video equipment on the ground, take any items outside the Zone, violate dress code; so no open-type shoes, no short trousers and no skirts, or stay in the Exclusion Zone without the officer responsible for the envoy.*

*All instructions of the envoy officer who is responsible for the visitors' radiation and physical safety shall be binding for visitors. Photographing and filming on the designated route shall be subject to the authorisation of the envoy officer. Foreign or Ukrainian nationals who visit the Zone for any purpose shall be aware of the fact that while staying in the area of the Exclusion Zone they will be subject to external and internal exposure as a result of radioactive contamination of the environment: Air, soil, water, objects and also buildings, etc.*

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<sup>139</sup> Bar the one visitor mentioned in chapter one who was given one of these plastic jumpsuits after turning up in sandals and skirt.

*Accordingly I, participant of the delegation coming to the Exclusion Zone on a study tour of June 6<sup>th</sup>, 2010, agree that the State Department, Administration of the Exclusion Zone, shall not be liable for possible further deterioration of my health as a result of the visit to the Exclusion Zone. If my private car or photo or video equipment get radioactively contaminated I will lodge no claims against the State Department, Administration of the Exclusion Zone therefore.*

*Agreed and accepted, I undertake to observe the above stated rules.”*

– *I read out the rules of the Zone, largely verbatim. (#r050)*

Despite the wordy nature of the sheet, the rules are not particularly strict. Or, at least, they were occasionally a surprise to visitors who expected something more regimented. The only regulations visitors are made aware of before arriving is the inelegantly translated “clothes & shoes, which maximally protect body”. Translated into practice this becomes a simple stipulation that visitors do not wear open toed shoes or shorts or skirts. As for photography and filming, this was only ever restricted when on the grounds of the power plant complex. Though not overly-strict, and rarely followed exactly (smoking was rarely denied), the need to sign away legal recourse, indeed, the need to sign *anything* that amounts to an agreement on safety regulation sets the Zone apart. For, as well as recognisable instructions, they also highlight the difficulties of navigating; the difficulties of moving (hungry, clothed, thirsty, guided, photographing) bodies, in a radioactive landscape. As such, the bounding of the tourist body begins with these regulations. But this bounding is not a matter of regulatory framework, it is a project (one which has no easily determinable 'end product') of the performative moments of navigation, bodily comportment, regulatory letters and self-regulation.

These rules, however, are often the first indication that serves to highlight the difficulty of bodily permeability in the Zone. They are an early indication, read at the first stop after having passed through checkpoint Dityatki, that things have changed. For though work on tourism has begun to stress that tourism practices are part of wider practices such that the quotidian might be found in tourism (Franklin and Crang, 2001) the rules serve to introduce the Zone as an exception to the everyday. Although not to an extreme extent. For though bodies are experienced differently in the Zone, this is not comparable to other leisure activities, such as 'extreme sports' where Merchant (2012), in the example of scuba diving, finds a radical “re-arrangement” or “reorganization” of proprioception. Rather than a fundamental shift, being-in-the-Zone instigates more-or-less subtle shifts in habitual performativities of walking and bodily comportment, shifts which are indicative of boundary-making projects.

In one interview, I spoke with a visitor who was somewhat agitated about having fallen over early on after we arrived in Pripjat. They had a Geiger counter with them on the trip, having rented its use. I was speaking with this visitor on the return visit to the Zone checkpoint. The final 'scan' at the checkpoint on the way out had proven to be of some relief, and I asked him about this experience back in Kyiv:

*Nick: "So did you go to check it [with the Geiger counter] after you had fallen over to see what it was?"*

*Jim: "Like I had it on and it was over a hundred and when I fell over it was over two hundred. And I had a bunch of dirt on my side and I was a little worried about that."*

*Nick: "OK so what what were you particularly worried about then?"*

*Jim: "I don't know I just thought that can't be good."*

*\*laughter\**

*Jim: "If I good do it over again I wouldn't fall over. But, err, I don't know I guess it's all good. I passed the test right!?" (#i33)*

The reading of rules, the wearing of trousers not shorts, shoes not sandals and the use of large body scanner are means of dealing with the worries of (radioactive) moss and dirt. In the Zone even the simplest of things; moss, dirt, can be threatening.

The manner in which the ruined city informs bodily comportment and corporeal alignment was shown in the previous section. This section examines practices which attempt to affirm bodily boundaries in the face of the porous, mutually implicated experience of being-in-radioactive ruins. Visiting the Zone is full of multiple, often not grand but rather small, sometimes unthought moments of practice and performative repetitions that aim to bound the visitor-body. In the effort placed in appropriate clothing, walking, consumption and other practices, it is difficult to find in the Zone any a priori assumption of a bounded body. Rather there is a heightened awareness of our leaky, open, exposed and vulnerable existence. An awareness that is responded with – quite understandably – practices which aim to mitigate against this openness. Bounding the body is associated too with a bounding of the environment (as a split from the human, social or technological). One of the first things visitors are warned against is walking off into the grass verges by the side of the roads. The grass generally captures much larger quantities of the heavy radioisotopes that wash off of the road surfaces. A study of the visitor-body in the Zone is necessarily a study of the practices that re-configure the boundaries of bodies and a study which renders absurd any priori assertions of delimitation (whether as physical boundary or delimitation as 'analytical unit' of study).

I retain an emphasis on reconfiguration rather than creation; for reasons that relate to the problem of exposure from chapter four. To recap: Exposure is *of* something, someone, which can be said to have been previously unexposed (else exposure has no meaning). It is for this reason I shy away from any description of the embodied subject in the Zone as 'secreted', 'precipitated' or any other synonym for 'emergent'. Exposure is in the order of difference; it is a being-with-Otherness. Albeit no easy delimitation is proffered, no certain externality assured. Though exposure is a productive effect of difference, it is in the realm of the immanent, for it denies any transcendental distinction between self and other, body and world, techno-social and natural.

Such distinctions are difficult to make. The visitor who fell over remained uncertain as to their safety, regardless of Geiger counter readings, large scanners and assurances from others that it was likely to be okay. We have already seen the careful positioning of footfalls, and this is certainly part of these boundary practices. What the visitor standing in the small circle of ground not covered by moss (image 65) shows is that such boundary practices are of *both* bodies and (radioactive) landscape. The body is performatively configured to be as bounded as possible and in doing so various aspects of the landscape are similarly bounded as more or less safe.

### Breathing and breezes

On one trip we were accompanied by a journalist who was there to produce a short feature for a French magazine. Working only with a hired translator he carried a video camera and interviewed visitors on the minibus as we travelled from location to location in the Zone. It gets quite hot in the minibus that transports visitors from Kyiv to the Zone and then from location to location within the Zone. Fairly cramped when full, without air conditioning and also no ability to open windows (apart from the front ones) makes for a fairly sweaty, uncomfortable journey on busy and hot days. We are driving towards Pripyat and are stopped at the checkpoint to the city. The *militia* on duty asks to see our passports. Maxim says he's not seen this particular officer before, so maybe he's new and is taking his job seriously, I wonder if maybe he's just bored. Never before (or after) were we asked for identification at this point during the course of my research. We hand our passports forward and wait; deprived now of even the minor relief of air buffeting through the open windows we sit in the bus, getting hotter and stuffier. The driver gets out to smoke a cigarette, in the middle of the minibus I can just about feel the breeze coming through the open door. A few (long) minutes later we're off again, passports back in hand, the officer satisfied.

Taking the usual route up Lenin Boulevard (the tree growth here is so thick that it's difficult to see the apartments that are set about 10 meters back from the road) we arrive in Pripyat's central square. The bus door swings open and finally we can jump out. There's a fairly gusty breeze that's stirred up and there are audible exhalations and a sense of relief as people step off of the bus. "Oooh... That breeze is nice" says one woman, vocalising what many of us are feeling. The journalist has hesitated before leaving the bus and as he emerges, ducking to get out of the bus, I see he has put on a surgical face mask. I ask him why he decided to bring one and why now. The breeze, of course: He was informed that it would be fairly windy today and so is wearing a face mask under advisement and in the hope that it might avoid the inhalation of the various radioisotopes that persist in Pripyat.

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Writing on chemical and nuclear contamination, Ulrich Beck notices that 'normal perceptual tools break down.' (1995: 50) This is the power of hazard which 'forces one to rediscover human being as natural entities.'

Social praxis is predicated upon natural assumptions about life, whose social organization one becomes conscious of only when those assumptions are endangered. To reduce it to a truism: there can be no social praxis without breathing. To the best of my knowledge, breathing is yet to be discovered as a social activity by sociologists and social theory. (ibid.: 50)

For Beck, this becomes the source of what he terms the self-expropriation of the senses; the giving-over of knowledge about one's own experience to technocratic decisions.

Contamination, then; what Beck (1995) sees as the universalising of the hazard, serves as a reminder of 'natural' life that is the necessity of social activity. Importantly this reminder arises out of what seems to be a contradiction. We are reminded of our natural lives by the very limits of our natural existence. It took that which is not natural (chemical, nuclear contamination) and the associated failure of 'natural' experience (the limits of the sensual realm) to bring such a natural state into social consciousness.

For Irigaray (1999) breathing exemplifies that Being is always already unbounded. Breathing is the necessary *given to* of Being. In this sense breathing plays the role of Beck's truism. But this is not to enforce a hierarchy. That breathing, as natural process, is part of the foundation of the natural that underpins the social. Indeed, that is what is suggested by the very endangerment of 'natural assumptions about life' (Beck, 1995). What is at stake is not a natural state, a foundation, at risk, but the assumptions made about such a natural state (and, thus extrapolated, about social practice built upon it). This is not to state that there is

no risk, or that the risk is merely symbolic, but rather that the risk highlights the contingencies of embodied experience.

As Colls (2011a: 10) writes, 'A body is provisional; a 'coming together' of a range of pre-personal and inhuman forces. Moreover, it is actualised by and is contingent upon the nature and context through which forces emerge.' In the Zone such contingencies are a heterogeneous forces not least those of radioisotopes and decay radiation. In being central to the (re)production of bodies they necessitate an understanding of bodies as not easily bounded entities. It also requires that social practice; in this case tourist practices of walking, photographing, breathing, is not understood as 'built upon' assumed natural processes. Radiations affective agencies are part of the 'constitutive outside' (Butler, 1993) to citational performativities through which the effect of bodily boundary is produced. Not external, such processes are necessarily part of the contingencies through which bodies and embodied practices come to be.

## Borders

I have spent some time editing and contributing to the Wikipedia page "The Chernobyl Zone of Exclusion". Mostly it was an exercise to see what I could write under the Wikipedia guidelines (specifically of no original research and proper attribution & reliable sources). What stood out in this exercise was that I was unable to find specific sources on where the borders of the Zone lie. The page lacked a decent map (containing only a replica of a poor radioactivity map of the area originally published by the CIA), and so I began researching official documents, published studies and mapping websites to determine the borders of the Zone. I was – at the time – fairly confident I knew this Zone. It was a certain shape I had seen many times on maps used by tour guides (including myself) in the Zone. Two could be found in the briefing room prior to setting off on each tour, and the website of Sergei's tour company included a page with a map of this border and various locations of interest. What I was not sure of was the western portion of the map; sometimes the border cut off at this end, in other depictions it encompassed more of the western area. I soon found out that this was a regional border; that between the Kyiv and Zhytomyr Oblasts. Given that administration of the Zone was clearly the responsibility of extra-regional bodies, this seemed strange. What threw me further, however, was the newly developed website that replaced chernobyl.info, from the now renamed *International Chornobyl Research and Information Network* which includes maps derived specifically from various Ukrainian legislation on the various regions

(Exclusion Zone, Zone of compulsory resettlement and so on). Regions which were only a rough match of the 'shape' I had come to recognise.

In the end I have not been able to confirm the exact borders of the Zone. Which is why chapter one lacks a map as part of the contextual material. I am left with an approximate 'shape' and various configurations around it. 'The demarcating of lines', Sorlin (1998: 274) writes 'take on a political significance, as was the case in April 1986, when radioactive clouds from Chernobyl hit Switzerland, Italy and Belgium but stopped short of the French border.' Yet more than political, the demarcation of borders performatively shapes spaces and bodies. To call the boundaries of the Zone uncertain, untraceable is not to say that they are not there. Nor is it to say that such tracing is only social, political, cultural in a representational sense. In this manner the Zone's borders are no unlike those of tourists' bodies.<sup>140</sup> Border checkpoints and banks of body scanners are part of the performative practices of boundary making (visitors and the Zone) which reconfigure self and landscape.

In her seminal text on purity and ritual, Mary Douglas concludes with the contradictory nature of the yearning-for and impossibility of enclosure;

Those vulnerable margins and those attacking forces which threaten to destroy good order represent the powers inhering in the cosmos. ... Most of us indeed would feel safer if our experience could be hard-set and fixed in form. ... the yearning for rigidity is in us all. It is part of our human condition to long for hard lines and clear concepts. When we have them we have to either face the fact that some realities elude them, or else blind ourselves to the inadequacy of the concepts. (Douglas, 1984: 162–163)

What I have not tried to do here is critique a search for an a priori boundary, rigidity and demarcation of the human body. My own small rituals that included the washing clothes after leaving the Zone, of tapping booted feet against hard surfaces to knock off the accumulation of heavy metals and adhering to delimited spaces of food consumption were not simply the product of rote adherence to agreed health & safety practice on institutional forms but hold within them a small hope that such repeated habits, performative moments, *worked* in bounding my body, however partially. Having examined the (re)production of difference, I want to move onto one last aspect of radiation's difference. One which argues not only that difference is produced, but that it is also productive. In doing so, I deal directly with radiation through the work of Karen Barad (2007).

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<sup>140</sup> Albeit said with reservation, given the problematic history of landscape as analogy for bodies (G. Rose, 1993).

## Difference

### Exteriority within

A number of questions have arisen from the analytical output of this thesis that deserve some consideration. The use of the figure of the trickster, and an assertion of lively, wilful, worldly agencies. I have been somewhat vague in who, what or where those agencies might be found, and deliberately so. For radiation denies an easy 'thingness'; it is not readily recognisable vessel (representational or material) into which we might package up parcels of worldly agencies. Instead such agencies are the product of heterogeneous assemblages, or, as I refer to them after Barad (2007) (drawing on the work of Niels Bohr) *apparatuses*.

Barad puts forward a 'diffractive' reading of Judith Butler alongside Niels Bohr. In doing so, a relational agency can be found that, like actor-networks, hybrids and chimeras, speaks to heterogeneous forces and forms, but is capable of explicitly broaching Otherness and *unassimilable* difference (see Law, 1999). Barad's project is distinctly both anti-reductionist and anti-relativist in this manner. Barad (2007: 41) recognises Haraway's work in rendering boundaries unstable, but pushes it further by insisting that 'realness' cannot be associated with 'thingness' (ibid. 56); with bounded entities, however unstable those boundaries. Thus Barad proposes an 'agential realist ontology that [...] does not take separateness to be an inherent feature of how the world is [but] neither does it denigrate separateness as mere illusion, an artifact of human consciousness led astray.' (ibid.: 136) As I have made clear in this chapter 'difference cannot be taken for granted' (ibid.: 136). There cannot be assumed states of separation, exteriority, but, at the same time, difference works, it is a productive force, a relational struggle through which embodied subjects and trickster spirits configure themselves as physical entities and existent phenomena: 'difference matters' (ibid.: 136).

I will now turn to Barad's agential realism in order to finalise some issues that cut through this thesis. From the disruptive effect of the uncanny in chapter three, exposure as the embodied subject developing as a Being-with alterity in chapter four, the negotiation with resistant, trickster agencies in chapter five and here, in this chapter on the performative re-configuration of boundaries I have examined the (re)production of difference. I have avoided ascribing agencies to pre-given, assumed relata, or in defining embodied subjectivity as a given ordering and hierarchy that structures relations. At the same time, however, I have used a language of exposure and negotiation, of Being-in-the-Zone as a Being-with resistant, wilful forces. Such a language suggests not so much an exteriority (not least because such exteriority is immediately problematic when dealing with irradiation) but an alterity that

shapes relations and shapes subjectivities rather than a product of the becoming or configuration of embodied subjects. It is these tensions that need to be addressed.

In part this is simply an acknowledgement of the temporary stabilities of actors and subjects that do exist (Massey, 2006). Empirically it makes sense, for example, to write of the Geiger counter as a mediating agency, a given actor in the networks of radiometric knowledges production, guiding and tourism. Beyond this it is an argument for the exposed subject as (after Rose (2006)) one that comes to be through a striving response to alterity rather than the productive affirmation of a given vitalism. Though I would deviate from Rose's assertion that landscape beckons us to care and would instead argue that it often offers us no choice in the matter. In order to address this last issue; the need for difference as a productive force in the process of becoming rather than as that becoming's product without reverting to assumed subjectivity and separation, I turn to one specific feature of Barad's work; that of the 'exteriority within' (2007: 140)

In her description of apparatuses and agential realism, Barad's ontology offers a sense of a world in the constant flux of becoming. She describes intra-actions<sup>141</sup> as the 'enactments through which matter-in-the-process-of-becoming is sedimented out and enfolded in further materializations' (2007: 170). There is little sense here that such sedimentation and enfolding is particularly difficult, or that such enfolding is resisted by various sedimentations, or that such sedimentations even shape their ongoing enfolding. To reiterate; for exposure to be meaningful the embodied self can be understood as not-given but nevertheless existent in relation with an alterity (albeit one not so easily thought of as external). Moreover, the embodied self *and* a constitutive alterity make their own marks upon subsequent (re)configurations rather than existing as passive material for the endless flux of enfolding and becoming. Or to return to the Geiger counter, which exists as mediator for difficult negotiations with resistant, trickster spirits that at no point give themselves fully or willingly to their (re)configuration or mutual enfolding. So in addition to the (re)production of difference, difference emerges as a productive force. My emphasis here does differ somewhat from Barad's work, what I propose is a particular enunciation of the 'exteriority within' that addresses the concerns raised in this thesis.

Having asserted no given separateness, Barad proposes that apparatuses<sup>142</sup> are the means by which an 'agential cut' is enacted. Here apparatuses are understood not as net-

<sup>141</sup> A core theme of agential realism which asserts that agency is not located in existing relata, but rather enacted through relations. Relations which always precede relata.

<sup>142</sup> A term based upon her reading of Niels Bohr. The reason Barad's work has not appeared earlier in this thesis is that a more full account requires a following of her argument based upon this 'diffractive reading'. In doing so the spectre of quantum physics co-opted to explain social action was always present.

works of existing objects but rather specific, open-ended material-discursive boundary-making practices that are 'not located in the world but are material configurings or reconfigurings of the world that re(con)figure spatiality and temporality as well' (2007: 146). The Geiger counter alone is not an apparatus. Rather the apparatuses of chapter five might be understood as the intra-active practices through which guiding agencies (maps or tour guides), guided subjects and topographic landscapes for navigating come to be. The phenomena of radiation is not a 'thing-behind-phenomena' (ibid.) but an apparatus that provides 'conditions for the possibility of determinate boundaries and properties of "objects" within phenomena, where "*phenomena*" are the ontological inseparability of objects and apparatuses.' (ibid.: 128 original emphasis) What the agential cut entails, then, is not an external exertion upon phenomena but rather an enactment of the 'condition of *exteriority-within-phenomena*' (ibid.: 140 original emphasis). This is the property of an alterity that is neither a given nor assumed separateness but is the possibility *within* an ontological inseparability to enact difference rather than an external force. The (non-deterministic) enactment of the agential cut is *of* the world rather than effected upon it.

The enactment of the agential cut materialises reconfigurations of bodies, objects, subjects and agencies. Such reconfigurations are, in turn, a factor in the iterative processes of enfolding where 'the specific nature of material configurations [...] makes a difference in subsequent patterns of mattering' (ibid.: 180). Or; difference, differently produced makes a difference to differentiation. Or; the always already exposed subject non-deterministically reconfigured and reproduced is made different by the difference which is its exposure. Exposure, as a necessity for all possible subjective action is not an ontological separation; to be exposed is to always already have been exposed. Instead it is an expression of difference as a difference within the conditions of possibility of the exposed subject rather than a difference given as an (external) structuring schema. To which; the difference of exposure makes different bodily and boundary reconfigurations. The exteriority-within means that practices of boundary making (the agential cut) are not understood as external effects upon the (ontologically) inseparable, but an expression of internal capacities. The products of such boundaries, or cuts, having been made, in turn effect their iterative enfolding. This is where I differ in emphasis from Barad's work, the difference that difference makes to processes of iterative enfolding is to make such enfolding fraught, contestable and resisted. Or; radiation (as a reconfigured/reconfiguring enactment) resists being enfolded (reconfigured) into a map.

## Knowledge practices

In chapter one I asserted that tourism practices of knowledge production mattered for an enquiry into the landscape of the Zone. The aim of this thesis was to explore these visitor experience in the Zone. In doing so I have developed accounts of landscape and knowledge production that pay due attention to the productive capacities of both tourist subjects and other, heterogeneous nonhuman agencies. The (re)production of difference and difference as a productive force that I have put forward in this chapter offers a conception of difference as not only an emergent property but a productive force in its own right. What needs to be said is that this thesis, the research it is built upon and the various conceptual approaches and ideas which have influenced it is as much an 'apparatus' as networks of guides, Geiger counters, ruins, radiation and visitors. The apparatus that this thesis is cannot easily be thought of as 'mine', the practices of knowledge herein not entirely a product of my (human) agency. Which is to say it involves a host of other human and nonhuman actors, but more than this, these practices of knowing are part of the 'world in its differential becoming' (Barad, 2007: 185) rather than the product of a knowing Being placed at a distance or otherwise removed.

This is not to deny any responsibility on my part, although it is to differently define the parameters of that responsibility. As a differently enacted difference (which is in turn exposed, and then re-configured differently) my own agencies are nevertheless central to the 'cuts' of this thesis. These cuts have differently enacted the 'agential cut' (Barad, 2007) of apparatuses. Led by guides and Geiger counters, in fraught negotiation with resistant, trickster spirits and unfolding amongst exposure to radioactive ruins these cuts are not entirely of my choosing. My responsibility lies in being 'agential part' (ibid.: 178) of larger arrangements that enact cuts. For Barad this approach requires an ethics that is not predicated upon a 'radical outside' (ibid.: 178) and as such my responsibility lies not only to the visitors and guides who participated but to the many nonhuman agencies which have been enacted (and have also themselves been part of the enactment) of the cuts of this thesis. The constitutive alterity-within<sup>143</sup> necessarily includes the non-human whereby 'human embodiment always already entail "an exposure to the Other"' (ibid.: 392). This necessary exposure is, after chapter four, not one of an intersubjectivity, instead it is an ethics and responsibility borne out of an acknowledgement of being 'always already open to, or rather entangled with, the "Other."' (ibid.: 393)<sup>144</sup>

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<sup>143</sup> Barad draws on Levinas here and refers to this as 'having-the-other-in-one's-skin' (2007: 392). A greater engagement with Levinas and the ethics of the other as it might apply to exposure is one of the many directions that this thesis did not eventually take. In Barad's quite the applicability to radiation and exposure is clear.

This exteriority / alterity-within runs the risk of a return to the world as existing *for* Being, the enveloping of the world by the embodied subject that I introduced as Irgaray's critique of Merleau-Ponty. What makes this different, however, is that the exteriority-within is not a within of the subject but rather within the possibilities of the subject. It is within the field of intra-actions which is made by difference and which difference makes. This has the effect of placing ethics and responsibility, like knowledge, not inside the conscious decisions of a human subject (Barad, 2007: 393). In chapter four I argued for the "I" ("me") of the narrator as, to some extent, pre-existing exposure even as exposure re-configures the subject. This pre-existing is not in a given, assumed and static form but is rather a constitutive effect of one agential cut for further cuts. Thus the responsibility lies not in the "I" of "me" as narrator but neither is it dispersed to the extent that I am not accountable. I am accountable to the entanglements which I (in part) configure and through which I am re-configured. My accountability is as much to topographies of trickster radiation as it is to the guides and visitors who gave their time as it is to Geiger counters and vestiges of others found amongst the ruins. Throughout this thesis I have met this accountability through a close attention to the many ways both humans and nonhumans co-constitute one another. This attention has consistently avoided any given hierarchy, sometimes focussing on human embodied subjects, other times on the affective forces of nonhuman technologies and agencies. This thesis has made a difference in that it has enacted various (and variously) 'agential cuts'. By embedding it within the multiple relations that make tourism in the Zone, rather than as a view or analysis at a distance and by permitting radiation's disrupting difference to irradiate the conceptual 'apparatus' with which I have approached I hope I have met these responsibilities.

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<sup>144</sup> Barad continues: 'the other is not just in one's skin, but in one's bones, in one's belly, in one's heart, in one's nucleus, in one's past and future.' (2007: 393)

# 7. CONCLUSION

## Five cuts

### Overview

In this thesis I have examined practices of tourism in the Chernobyl Zone of Exclusion. Each chapter has taken a different 'cut' through tourism in the Zone, through the ethnographic material upon which this thesis is based and through theoretical approaches. A number of key themes have emerged from this thesis, and I reflect upon these and the ways in which various theoretical approaches have helped. In doing so, I offer reflections on the implications and contributions of this thesis, weaknesses that exist and further avenues of inquiry.

The thesis began with a deliberate focus on *what* tourists do in the Zone rather than why they were visiting. I argued that tourism, as a global network of cultural (re)production, was an important area of study. In order to study this it necessitated that tourists were figured as active, engaged agents in productive practices of landscape and knowledge, as opposed to passive consumers. Moreover such practices were shown to be necessarily embodied, neither entirely – or even mostly – visual nor always representational. Set against the work on 'dark tourism' I described how the Zone (as tourist destination) should not be understood and analysed as the product of management and design but rather a contextual and contingent process of tourists, guides, technologies and landscape. Though a number of authors who have studied tourism have featured as influences in this project, I have offered an account that speaks less to the traditional concerns of studies of place production, management, consumption and issues of interpretation and instead offers more to debates about landscape, subjectivity and knowledge production. As such the work herein has implications beyond work that focuses solely on tourism.

My aim, as stated in the first chapter, was to explore tourist experiences in order to develop accounts of landscape and knowledge production that were attuned to the various agencies involved. Though throughout the very terms of landscape, agency and knowledge have been questioned. Over the course of the thesis I have built a greater sense that the productive capacities of tourists that are the focus of the thesis' aim are necessarily undertaken as a co-constitutive endeavour with heterogeneous agencies. Moreover, in such undertakings tourist (and guide, and researcher) subjects are necessarily re-configured. In order to accomplish this aim I developed a methodological approach that would best illuminate and exam-

ine these practices. Such exploration required me to be part, occasionally a central part, of the experiences and practices examined, for the thesis has questioned the very idea of an exteriority that would figure me as anything but a participant. The thesis has been built on an ethnographic approach that involved direct participation and multiple roles for the researcher. Throughout I have been open about this participation and my engagement with the practices examined, though often highlighting how this engagement was not always on my terms. Though each chapter draws from fairly distinct literature, a number of common themes persist across the thesis. Each chapter built upon the last with respect to the themes of landscapes, knowledges and subjectivities. These themes encompass the major contributions of this thesis to geographical enquiry.

## Lines across

### Landscapes

In chapter one I put forward a review of the work on 'landscape' within human geography. In particular I focused on recent debates that problematised a Cartesian cut between bodies and landscape, self and world. It was understood that landscape could not be considered a modality of vision and posed problems for an emphasis on purely relational accounts of place. What emerged was landscape as a tension. Not between opposites or other binary pairs, but as a heterogeneous, unresolved in-the-making. A key tension across the thesis was between a relational account (through salvage and encounters, through networks) and an account that problematised any account of easily definable relation or separation (exposed bodies, the (re)production of boundaries). In chapter two I suggested that it was worthwhile to take seriously the Zone as 'feeling' post-apocalyptic. I offered a conception of landscape that was more than a visuality whose referent can only be found in cultural representations (art, cinema, literature) but instead held a fidelity to the unique events that shape landscapes. It was also to take seriously the engagement of tourists, considered more than just external observers but actively productive in the landscape imaginaries of place. This ethos was expanded upon in chapter three which considered the radioactive, ruined landscapes of Pripyat as understood through tourist encounters. Here the ruined landscape emerged not as a place of play but as a space of careful negotiation. The 'imagined histories' examined in chapter three further progressed a sense of landscape as not at a remove from embodied experience. Salvage offered more than a visual metaphor for landscape and here I have added to the study of landscape that pays due attention to the material engagements

that enact landscape where material objects are productive in their own right. This problematising of landscape as understood at a remove was given most attention in chapter four which began by offering a re-conceptualising of the sublime. The “Chernobyl sublime” destabilises the manner in which the sublime traditionally 'begins and ends' with a subject-objects distinction (Wylie, 2006). The visual modality of the Chernobyl sublime (exemplified when standing in view of reactor 4 and the sarcophagus) offered a conception of vision as one that is not at a remove. Here the sublime as I have put forward offers a contribution to studies of landscape that engage in the manner in which embodied subjects are part of landscapes rather than 'on' or 'in' and in being to are equally objects of landscape as viewing subjects. This line of thought was followed further in chapter five which put forward place-making practices as shaped by (as well as shaping) landscape topographies. Topographies here are to be understood as the manner in which place-making practices are affected by and (non-deterministically) structured by forces that exceed human intentionality, offers a means of examining landscape that is not entirely topological. My analysis of topography has its roots in the specifics of this research. It is situated, contextual and contingent. Nevertheless it is put forward as a contribution to understandings of landscape and, like the radioisotopes that inspired them, it is not fully bound to the borders of the Zone. One particular question arises here. Might topography as I have put it forward here work for the hills and rocks, valleys and hollows traditionally associated with topographies of landscape? Can such topographies be similarly understood as active, agential forces that pattern embodied subjectivities as they navigate and negotiate landscapes? I would suggest that they can and in doing so might offer a conceptualising of the 'matter' of landscape as far from inert terrain to be crossed (whether with difficulty or with ease) but instead a formative foundation for practices of landscape-ing.

## Knowledges

As is clear from my engagement with landscape as in-part produced by active, engaged tourist subjects I have argued from the start of this thesis that tourism practices are important for they should be understood as actively producing knowledges (rather than passively consuming products) (see here Crouch, 2000). Chapter two argued that the post-apocalypse could be understood as a sensibility towards unique events and possible futures that did not dismiss the recognised feeling of the after-the-end as merely reproduction of Hollywood spectacle. Chapter three pushed this further, arguing that tourists actively engage in processes of salvaging of meaning as they explore Pripyat's ruins. In particular, what chapter

three added was a sense that this production of knowledge through tourism practices was not simply a matter of interpretation. Certainly, interpretive modes of engagement were present, but these were also embodied, material practices that paid heed and were in turn shaped by the ruinous landscape. Chapter five focused on the role and enrolment of radiometric technologies in knowledge production through negotiation. In chapter six I drew these threads together and focused on what Barad (2007) has termed 'apparatuses' which are to be understood as the reconfigurations of the world rather than networks of pre-existing relations. I ended with reflection upon the responsibility and accountability of this thesis and my research in these contexts.

The contribution of these arguments has been to add to the arguments that tourists should be considered active agents in the making of knowledges and places. Inflected by the insights on landscape as laid out above this assertion has been tempered somewhat. In that rather than conceiving the tourist subject as bringing about landscape and place through intentional endeavour, tourists subjects (and guides and researcher) are to be understood as part of practices of negotiation with radiation as wilful trickster, refusing to be amenable to our various attempts to fully know, fully grasp. Thus tourist subjects as active agents is not to place them in a position above or over that which they come to know. In particular metaphors of salvage can work where there is need to examine 'imaginative history making' (Gregson and Crewe, 2003) in a manner that pays heed to the materiality of vestigial remains and does not dismiss such imaginary formations as merely flights of fancy but the result of the affective properties of discarded objects (Soderman and Carter, 2008). I have contributed to the work on practices of knowledge production which pay due care and attention to the manner in which knowledge is not easily ascribed as a property of human subjects nor as the result of solely human endeavour but emerges as networked negotiations.

## Subjectivities

In chapter three I introduced the experience of the uncanny, specifically in reference to ruins (Trigg, 2006) and Masco's (2006) 'nuclear uncanny'. The uncanny experience of Pripjat, I argued, was a result of 'homely' boundaries, of selves, worlds and urbanisms, becoming destabilised. This destabilisation has received greater attention in chapter six which has examined the (re)production and re-configuration of bodily boundaries. In such re-configuration, I have argued, landscape exerts its own agencies and influence as active and wilful. I have been careful to refer to this as a re-configuration and (re)production for the reasons set out in chapter four. Chapter four asserted that for exposure to be meaningful, config-

urations of embodied subjects must, in some sense, pre-exist moments of exposure. It is for this reason I avoided terms such as emergent, precipitated and so forth to describe exposed, irradiated, subjectivities. This is more than a matter of choice of adjectives, but speaks to chapter five in which I examined touring and cartography as practices of negotiation with resistant, trickster agencies. In such negotiation, and in chapter six on bodily reconfigurations, I have been careful to avoid a return to assumed states of body, city, nature. The work of Karen Barad (2007) helped develop an approach in which the agencies which were so central to chapter five are no longer embedded in assumed forms, but rather the product of intra-action.

What is at stake throughout this is a sense of Otherness as a key driving force for such processes. Through exposure I argued for a subjectivity that is always already open, beyond any willing intention, to a world as Other. But not an Other as an external; for irradiation cannot be thought of as a relation of externalities. Rather, as I argued in chapter six, this is a difference embedded in the very constituting of subjects. Building on work on the (post)phenomenological I have offered a conceptualisation of the subject as always already embedded in worldly forces that are in excess of his / her embodied experience. A passive / unwilled embeddedness that is the very possibility of action. I have argued against the subject as 'emergent' at least in the sense that this hides the manners in which subjects do (must) pre-exist certain relations such as exposure. This pre-existing is not to be understood as a return to a priori assumptions, however, and I have shown this through a focus on the production and productive effects of difference. How might exposure be understood without the presence of radiation? Here I would argue there is a fruitful direction to be taken in examining exposure as it relates to Serre's writing on skin and fog (2009) or Irigaray on breathing (1992, 1999). Exposure could offer a conceptualising of the radical openness of bodies and constituting effects of the Other that does not progress along the lines of an absolute exteriority of alterity. Here Others must be understood as something other than intersubjective relations. I have offered an understanding of the constituting Other as both prior and post the subjective and resolutely nonhuman.

### Further avenues

Questions, of course, remain. Not least a result of the limits of the thesis. The limits here begin with the borders of the Zone, however they have been variously configured in this thesis. I have offered, deliberately, a focus on just the Zone and in doing so have risked producing yet another case study report in a long line of case study reports of tourism destina-

tions (Franklin and Crang, 2001). This focus was for good reason, not least of which a realistic delimitation of possible endeavour given resources and time. More than this, however, was that I could never envisage anything along the lines of a 'comparative study'. As made clear in chapter two, I consider the events of April 1986 and the Zone unique and so justifies a close analysis of the specific contexts and contingencies. Despite this focus on a very specific site, the contributions of this thesis can still travel, in much the same way tourists return home with new knowledges, new experiences. The insights herein have relevancies beyond the borders of the Zone even if they emerge from its uniqueness.

Questions also remain not because of these limits, but of directions not taken, avenues of enquiry not explored. Here those unfinished, half-written chapters deserve a mention, as do the pages of unused interview transcripts where questions were asked that did not develop into lines of enquiry herein. Early on this thesis was envisaged as a means of examining attitudes to nuclear power. From the proposal stage to the writing of the last words of the thesis we have seen, in the European context, a period of expansion of nuclear power more recently tempered by the disaster at the Fukushima Dai Ichi power plant in Japan. Visiting Chernobyl offers ample opportunity for visitors to reflect upon these wider issues to do with nuclear power and questioning visitors about these attitudes remained a feature of post-tour interviews throughout the research. In part this was driven by a desire to bring back Chernobyl into the discourse of nuclear power. Albeit in a more nuanced way than a 'worst case scenario' to be wielded and instead to respond to the experiences of visitors. Here I was also intending to derive an analysis from the work on risk perception (such as Lupton, 1999) as it has been related to nuclear power (e.g. P. Abbott et al., 2006; Bickerstaff et al., 2008). In the end I found that a 'risk perception' framework was not a good fit for the ethnographic project of this thesis and that attitudes to nuclear power took the discussion too far away from the intended focus on tourist experience. Nevertheless, visits to Chernobyl are part of the wider debates on nuclear power day trips to the Zone are part of knowledge of nuclear power and risk that emerges from the Zone.

The reader may notice a lack of direct reference to the various appearances of the landscapes of the Zone in contemporary media. The music video mentioned in chapter two is but one of at least three to have been filmed in the Zone. Films such as *A Good Day to Die Hard* (2013) and *Chernobyl Diaries* (2012) have been set in Pripjat (albeit filmed elsewhere). Unlike Tarkovsky's 1979 masterpiece *Stalker* which was filmed in Estonia prior to the disaster but has been influential in the cultural imaginary of the Zone (Dobraszczyk, 2010). (Based upon the novel 1972 Russian novel *Roadside Picnic*.) Certain scenes within *Stalker* consist of slow, careful movement through a landscape wrought with invisible danger. The corporeal configura-

tions of the actors both mesmerising and evocative. Permitting no small amount of comparison with movement in the Zone. Further comparisons can be drawn with the novel and film which tell of (invisibly) dangerous 'Zones' which people traverse for the sake of curiosity and potential wealth. It seems no wonder, then, that when the novel was used as a basis for a computer game by a Ukrainian developer that the site was specified as the Chernobyl Zone. The *S.T.A.L.K.E.R.* series of computer games take the Zone to be much more than set-piece. Other games that have been (part) set in the Zone, such as the *Call of Duty* series, renders the landscape of the Zone mute backdrop for spectacle. *S.T.A.L.K.E.R.*, on the other hand, is driven by a tension in which the landscape emerges as the prime antagonist. Parallels can be drawn, the most interesting of which I found from visitors who, having experienced these spaces in computer games, found themselves navigating them during the tour (specifically #i31). Computer games seemed to offer an embodied sense of having been there before that neither film nor photos do. Throughout the thesis I found myself mentioning the *Stalker* movie and games set in the Zone as asides. This never seemed to do justice to the wealth of interesting experiences related through this film and these games nor provide enough space and framework to write what I wanted to write. In the end I decided that this particular aspect was best suited as a paper<sup>145</sup> (which will be completed after this thesis) rather than a constitutive part of the thesis as removing these references did not leave a significant 'gap'.

My engagement with the work of Graham Harman in chapter five points towards another line of flight. Object Orientated Ontology, through the work of Harman and, more specifically Ian Bogost (2012) offer an assertion of the existence of experiences other than human experiences that is not predicted upon an enrolment the endeavour of human subjective being. Alongside vitalist material philosophies such as that of Jane Bennett (2010) there is ample room for an examination of the lively agencies of the world beyond that which was put forward here. I have specifically in mind a planned and part-written chapter on the status of the human in post-humanist geographies (Castree et al., 2004) and a certain 'life-likeness' of vitalist philosophies that are problematic for considering radiations agencies that are neither easily understood as material nor life-like. I would argue that for a greater full decentering of the human (in which hybrids are not just the human and the nonhuman but non-human and nonhuman (Lulka, 2009)) object orientated ontology offers another means of affirming the 'trickster' agencies central to this thesis.

Radiation has been a disruptive force that has driven much of this thesis. The story of this thesis has been one of conceptual 'tools' and lines of enquiry found consistently lacking when faced with the excesses of a radioactive landscape. No doubt that these suggested aven-

<sup>145</sup> In doing so I hope to address the continued predominance of literature and cinema as the reference points for narrative media.

ues will not be as straightforward as given here and will be similarly disrupted and yet further questions will arise.

# APPENDIX

## Research dates & summaries

### Interviews (not conducted as part of tours)

Note: All interviews audio recorded and later transcribed unless stated otherwise.

Date	#	Description
17 <sup>th</sup> July 2009	#i01	Interview conducted at hostel “TIU Kreschatik” with two Finnish tourists who had visited the Zone the previous day. Conducted as a photo elicited interview where the respondents photographs structured the discussion.
21 <sup>st</sup> August 2009	#i02	Interview conducted at hostel with an Australian tourist who has visited the Zone the previous day. Structured as a photo-elicited interview.
22 <sup>nd</sup> August 2009	#i03	Interview with Sergei (director of SoloEast) in Kyiv. Recorded in writing.
20 <sup>th</sup> September 2009	#i05	Interview conducted at hostel with an Australian tourist who had visited the Zone the previous week. Semi-structured interview.
28 <sup>th</sup> August 2010	#i25	Interview with Sergei and Yuri (tour guide, employed by the state agency of the Zone). Conducted in the 'briefing room' of the offices of ChernobylInterinform in Chernobyl the evening after tour #17 (I stayed overnight in the Zone this day). Semi-structured interview.
3 <sup>rd</sup> September 2010	#i28	Interview with Maxim (tour guide, employed by the state agency of the Zone).
22 <sup>nd</sup> September 2010	#i40	Interview with Mark, the individual responsible for organising the English-language sections of the website Pripyat.com. Contact made by email previously and interview conducted via email correspondence.
11 <sup>th</sup> November 2010	#i41	Interview with Mark, conducted via Skype. Focused on the activities of the Pripyat.com website.









**t14 14<sup>th</sup> August 2010**      Fieldnotes: #fn14      Photos: #p1173 to #p1200  
    Audio recordings: #r109 to #r111      Interviews: #i19

I continue fulfilling the role of 'supporting' guide today as a larger coach and 46 visitors attend this tour. Visitor numbers continue to increase in future tours and from talking with Sergei and Yuri it is clear 2010 will have, in total, many more visitors than previous years. Possibly double the number. Ideas that will eventually become chapter two begin to take shape based upon recordings and 'go along' interview from this tour.

i19: One hour, 45 minute interview with five respondents post-tour.

**t15 21<sup>st</sup> August 2010**      Fieldnotes: #fn15      Photos: #p1201 to #p1244  
    Audio recordings: #r112 to #r118      Interviews: #i20

Yuri's use of the antlers to show beta radiation first happens during this tour. Fieldnotes include a working-through of the networked practices of radiometry and an assertion of materiality not as merely a name for the physical, but as a relational achievement.

i20: 35 minute interview with two respondents post-tour.

**t16 24<sup>th</sup> August 2010**      Fieldnotes: #fn16      Photos: #p1245 to #p1303  
    Audio recordings: #r119 to #r131      Interviews: #i21 to #i24

Fieldnotes and recordings focus on the use of the Geiger counter in particular. Used to develop ideas that had germinated in previous tours.

i21 to i24: Three interview conducted with one respondent each recorded on the bus during the return journey. 15 to 20 minutes each.

**t17 28<sup>th</sup> August 2010**      Fieldnotes: #fn17      Photos: #p1304 to #p1397  
    Audio recordings: #r132 to #r142      Interviews: #i26

Fieldnotes develop the sense of 'discovery' of encounters in Pripyat. The 'lives of dolls' and other observations from discussions with Yuri and visitors add to what will become the focus of chapter three. I stay overnight in Chernobyl in a 'hotel' built specifically for visitors and interview Sergei and Yuri that evening (#i25).

i26: Interview conducted with two visitors who were attending a two-day, private

tour and were staying in the same 'hotel' as myself. Data remains unused as these private visitors were difficult, in general, to recruit as respondents.

**t18 29<sup>th</sup> August 2010**      Fieldnotes: #fn18      Photos: #p1398 to #p1539  
    Audio recordings: #r143 to #r145      Interviews: #i27

After speaking with Maxim and Sergei about walking through Chernobyl town in the morning, they agree it should be ok. I take a stroll and explore some areas I'd only seen previously from the bus. After half an hour or so, Yuri pulls up in his car and takes me back to the offices, stating that visitors (of which I am one) are not permitted to unaccompanied, and he'd be getting in trouble if the local police found me.

i27: 30 minute interview with three respondents over lunch.

**t19 3<sup>rd</sup> September 2010**      Fieldnotes: #fn19      Photos: #p1540 to #p1551  
    Audio recordings: #r146 to #r149

A lot of material on the topographies of radiation in the amusement park are recorded in fieldnotes and audio recordings during this trip. Decision to map the park begins to form in more detail. I stay overnight in Chernobyl again and interview Maxim (#i28 above).

**t20 4<sup>th</sup> September 2010**      Fieldnotes: #fn10      Photos: #p1552 to #p1628  
    Audio recordings: #r150 to #r154      Interviews: #i29

During this tour Maxim takes us to visit the 'Jupiter factory' on the outskirts of Pripyat. This is a location I have heard of, but not yet visited (and this is the only time I will visit it). Fieldnotes include some description of encounters and the salvaging of meaning from industrial location. By and large I enjoy being a visitor again, excited by the experience of the unknown and unexpected. The recognition of Tower Bridge in the film reel takes place during this tour.

i29: One hour interview with six respondents post-tour.

**t21 11<sup>th</sup> September 2010**      Fieldnotes: #fn11      Photos: #p1629 to #p1667  
    Audio recordings: #r155 to #r159

Fieldnotes focus on the possibility of 'ghostly' geographies. In the end, I decide not to



## Quoted respondents

Fieldnotes, recording, photographs and interviews all build towards this thesis. In instances where quotes from specific respondents are used I have introduced each respondents in the main body of the thesis. (All under pseudonyms.) To avoid repetition any further reference to a respondent uses the same pseudonym but forgoes this background detail. The list below can be used to cross-reference names with the pages on which they are first introduced.

Alan – Introduced on page 128	Jason – Introduced on page 79
Ben – Introduced on page 76	Jim – Introduced on page 230
Brendan – Introduced on page 112	Leif – Introduced on page 151
Christiaan – Introduced on page 73	Mick – Introduced on page 79
Claas – Introduced on page 179	Milos – Introduced on page 95
Eddie – Introduced on page 140	Nigel – Introduced on page 105
Emilie – Introduced on page 113	Peter – Introduced on page 79
Gary – Introduced on page 140	Robin – Introduced on page 77
Graham – Introduced on page 69	Simon – Introduced on page 105
Heiko – Introduced on page 215	Sue – Introduced on page 236
Ishmael – Introduced on page 69	Sven – Introduced on page 108
Jack – Introduced on page 108	Ted – Introduced on page 236
Jan – Introduced on page 127	Yvette – Introduced on page 69

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