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BOMBS AND RUINS:
APOCALYPTIC AND POST-APOCALYPTIC AUDIOVISUAL NARRATIVES FROM THE COLD WAR AND BEYOND

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PREFACE

I was born in 1987. The late eighties were the final years of a post-Second-World-War period in which it never seemed as though the conflict had ended. I was born during the last breaths of the colossal and broken Soviet Union. I was too young to be truly aware of the fall of the Berlin Wall, or the reactions to Gorbachev's policies, or the renewal of "Western" and "Eastern" relations. Growing up, I knew the Soviet Union only as an almost funereal concept out of which Russia and a bunch of other Asian and European countries had been reborn. I knew the United States as a geopolitical power that was then – in the mid-1990s – stronger than ever. And I knew nuclear power as a source of horror that people talked about with a distinctive graveness.

And that last thing, nuclear power, was something particularly fascinating. I read and heard about it as if it were an invisible – almost ghostly – enemy of humanity and our planet. People were understandably afraid of nuclear weapons, and more interestingly, people were terrified of nuclear energy. It felt as if the Cold War had never ended, as if people never stopped fearing the reaches of nuclear power, as if a simple mistake – or an arbitrary action – could bring about the end of our times. I was born just over a year after the Chernobyl NPP accident, so my generation watched documentaries about it in science classes at school, and also grew terrified of nuclear power plants, bombs, or anything nuclear.

Today I understand the general sentiment in a deeper way. We are afraid of things that we cannot see, of things that come close to us and harm us on an atomic level. As a consequence, we fantasise about those things, we talk about them enthusiastically, we create stories about them. For years I have been fascinated with nuclear power and how we interact with it, from our social fear of clean – but delicate – nuclear energy to our grim imaginations about nuclear wars. I have read, watched, and played stories about nuclear disasters, and that interest has only grown in more recent years. Investigating it academically is the result of a long time avidly exploring media about this subject, and this research contains much of that avidness and some of the curiosity from those early years and those science classes.

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Depois de quatro anos escrevendo em inglês, é hora de tirar uma curta folga e escrever em minha língua materna. Assim fica mais fácil agradecer a quem me deu apoio durante esse tempo todo. Quatro anos é um tempo surpreendentemente transformador, e muitas pessoas passaram por esses quatro anos, algumas ficando e outras se indo a deixar marcas importantíssimas. O valor do que fizeram por mim neste duro processo de doutoramento fica registrado nestas páginas. São muitas pessoas, e espero incluir todas aqui.

Como se trata de um doutorado, é natural que eu agradeça à Coordenação de Aperfeiçoamento de Pessoal de Ensino Superior (CAPES) por fomentar minha pesquisa durante todo o processo. Viver longe de casa pode sair bem caro, e ter o incentivo financeiro foi essencial para que eu conseguisse chegar ao fim de minha tese, para que estudar e escrever fossem meu foco por tanto tempo em um país que tanto ignora pesquisa e educação. Sou também muito grato pelo suporte constante do pessoal do PPGI, especialmente Valdete, por ter me auxiliando tanto nos últimos procedimentos da defesa.

Gostaria de agradecer ao meu orientador José Soares Gatti Júnior pela tutela, pelas sugestões e indicações, pelos aprendizados e diálogos, pelo apoio e compreensão, e por aquele almoço lá em 2016 no qual conversamos sobre Guerra Fria e cinema; uma conversa que me deu uma perspectiva nova sobre o meu estudo. Você foi um mestre exemplar, apesar de minha teimosia ter lhe dado a impressão de que eu me incomodava com as suas correções e propostas. Aprendizados às vezes doem no orgulho da gente, e foi um prazer aprender com você.

Gostaria de agradecer a todas as pessoas com quem tive aulas durante o doutorado: Eliana Ávila, Anelise Corseuil, Maria Lúcia Martins e Cláudia Junqueira Costa. Sair do escopo da tese e ler sobre outras áreas de conhecimento foi bastante enriquecedor. Igualmente, nesta reta final, agradeço às pessoas que integrarão a banca na ocasião da minha defesa: professor Daniel Sá, professora Renata Ferreira Gomes, professora Alessandra Brandão, professora Patrícia Iuva, e professora Maria Teresa Collares. Suas presenças no dia decisivo serão fundamentais para o desfecho de minha escrita, a última influência que terei sobre o meu texto antes de deixá-lo nas mãos da sociedade.

Jéssica Soares Lopes, minha companheira e melhor amiga. Obrigado por estar ao meu lado, por me suportar e me auxiliar, por me amar e por me deixar te amar através de todas as dores destes quatro anos. Foram longos anos que acompanharam minhas mudanças e as mudanças do nosso relacionamento, e o apoio que você me deu fez com que eu não me perdesse em momentos de frustração e tristeza. As histórias, os risos e sorrisos, o amor e a compreensão. Parte do que você me proporcionou está aqui, neste texto que surgiu com tanta luta e que você viu surgir de perto.

Agradeço à minha família pelo apoio e pelo acolhimento quando volto à minha cidade natal de Teresina-PI. Minha mãe Cynara, obrigado pela força e pelo amor expressos de diversas formas. Meu pai Alexandrino, obrigado pelas palavras que sempre me inspiraram segurança sobre a minha luta aqui e sobre o meu futuro. Meu irmão Rafael, pelo companheirismo que sempre tivemos e pela afinidade que espero sempre nutrir ao seu lado. Minha avó Ana Maria, pelo exemplo de caráter que me mostrou durante toda a minha vida. Minha avó Vera, pela voz carinhosa e o afeto acolhedor que adoro reviver quando lhe visito. Minha cunhada Nívea, pela proximidade tão grande e por me compreender tão bem quando conversamos sobre diversos assuntos. Meu avô Pedro, por me receber tão bem em sua casa quando aí vou almoçar e bater um papo. Meu primo Fellype, por ser quase um irmão e pelas coisas boas que compartilhamos crescendo juntos. Meus tios e tias, primos e primas, e todos/as os/as familiares. Muito obrigado pelas ocasiões nas quais me ajudaram, me compreenderam e contribuíram na formação de quem sou e quem quero me tornar.

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RESUMO

Este estudo investiga retratos audiovisuais de imaginários apocalípticos e pós-apocalípticos, com foco no período de 1959 a 2007, anos que compõem a era da Guerra Fria – de acordo com convenções historiográficas – e além dela – em obras posteriores que se referem à guerra. As obras escolhidas para esta pesquisa são: os filmes *The World, the Flesh and the Devil* (1959), *Dr Strangelove* (1964), *Stalker* (1979), e *Dead Man's Letters* (1986); e os videogames *Fallout* (1997) e *S.T.A.L.K.E.R.: Shadow of Chernobyl* (2007). A escolha por produções de cada década até os anos 2000 serve para examinar como filmes e videogames ilustraram cenários fictícios de desastre, bem como o resultado de um desastre. Particularmente importante para se entender tais produções é o advento da bomba de hidrogênio e os primeiros testes nos anos 1950, especialmente marcados pelas tensões diplomáticas entre Estados Unidos e União Soviética. O impacto e a imagem da bomba nuclear afetaram milhões, tanto geograficamente – como em Hiroshima, Nagasaki, as ilhas do Pacífico, etc. – e através de ansiedades sociais acerca de um possível mecanismo de fim do mundo. Energia nuclear em geral, e radioatividade em particular, tiveram um papel importante no surgimento de ideias sobre o poder de destruição em massa que foram prolificamente adaptadas a narrativas fictícias. O período da Guerra Fria foi marcado pela criação de vários filmes escatológicos, e as décadas após o colapso da União Soviética ainda revisitam tal período e as ansiedades sobre o fim do mundo que apareceram nele. O objetivo deste estudo é encontrar conexões e distinções entre os filmes e jogos eletrônicos escolhidos através de análises de suas narrativas, formal e tematicamente. O estudo investiga particularidades de espaço, tempo, enquadramento, composição e som nos filmes; além de interatividade, interpretação, mecânicas de *gameplay*, e narrativas ramificadas em videogames. Com tais elementos formais e temas específicos de cada obra em mente, esta pesquisa analisa como representações audiovisuais de desastre e pós-desastre foram produzidas em um período de quase setenta anos.

Palavras-chave: Narrativas escatológicas; ficção pós-apocalíptica; cinema e videogames; guerra nuclear; Guerra Fria.

ABSTRACT

This study investigates audiovisual representations of apocalyptic and post-apocalyptic imaginations, with a particular focus on the period between 1959 and 2007, comprising the conventionalised Cold War era and beyond – that is, later works that look back at it. The fictional works chosen for this research are: the films *The World, the Flesh and the Devil* (1959), *Dr Strangelove* (1964), *Stalker* (1979), and *Dead Man's Letters* (1986); and the video games *Fallout* (1997) and *S.T.A.L.K.E.R.: Shadow of Chernobyl* (2007). The choice for works from each decade until the 2000s serves to examine how cinema and video games portrayed fictional scenarios of disaster and the aftermath of a disaster. Particularly important in order to understand these productions is the advent of the hydrogen bomb and the first tests in the 1950s, especially highlighted by the diplomatic tensions between the United States and the Soviet Union. The impact and the image of the nuclear bomb have affected millions of people, both geographically – as in the case of Hiroshima, Nagasaki, the Pacific Islands, etc. – and through social anxieties about a possible Doomsday Device that can end the world. Nuclear energy in general, and radioactivity in particular, played an important role in rise of ideas concerning a mass destructive power that were profusely adapted to fictional narratives. The Cold War period saw the making of several eschatological films, and the decades that followed the collapse of the USSR still refer to that period and its anxieties about the end of the world. This study aims to find connections and distinctions between the films and games chosen for its corpus through analyses of their narratives, formally and thematically. It investigates particularities of space, time pressure, framing, composition, and sound in the films; in addition to interactivity, role-playing, gameplay mechanics, and branching narratives in the video games. With such formal elements and the specific themes from each work in mind, this study examines how audiovisual depictions of disaster and post-disaster were rendered within the timespan of almost seventy years.

Keywords: Eschatological narratives; post-apocalyptic fiction; cinema and video games; nuclear war; Cold War.

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CHAPTER ONE
INTRODUCTION

> "In order to increase their possessions they kick and butt with horns and hoofs of steel and kill each other, insatiable as they are."
>
> Plato.

Several media have dealt with images of the end of the world for centuries. From prophetic texts of the New Testament to representations of plague and warlike perdition in Mary Shelley's *The Last Man* or Albrecht Dürer's episodic woodcuts *Apocalypse*, authors and artists have been fascinated with cataclysmic narratives about civilisation. The gruesome details of the decaying communities have been delivered in numerous narrative ways and with numerous fictional causes, from wars to the coming of deadly monstrous beings. Such details have generally been associated with historical counterparts: social disorders and upheavals, political intrigues, or diplomatic conundrums; all of these have been contextual mirrors through which authors have envisioned their fictional disasters. Such narratives can be thought of as eschatological stories, which vary in many religious cosmologies around the world, from the Christian Apocalypse, to the Hindu ending of a *kalpa*[1] (aeon), to the ancient Scandinavian *ragnarök*.

As the so-called civilisation expanded in the 20th century, so did the nuances of technological warfare and the intricacies of diplomatic tension. The religious imagery of divine intervention and the subsequent end of days then gave way to social unrest over the prospect of global wars, which was fuelled by the two major conflicts that had already taken place in that same century. With the turn of the century, both artistic media and the apocalyptic imagination acquired new shapes: the former expanded their spectrum with the evolution of cinema, and the latter proposed new reflections on mass catastrophes after the Second World War with the advent of nuclear weaponry. The Hiroshima and Nagasaki bombings demonstrated that entire cities might be swept away with the radioactive heat of a single explosive device. Furthermore, post-Hiroshima researches on nuclear armament intensified that fear with the coming of the hydrogen bomb, which far surpassed the power of the two bombs used against Japan in 1945[2], thus having a much more destructive power on massively populated urban areas.

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[1] A *kalpa*, for Hinduism, is considered a day in the life of Brahma, or an entire aeon in the material plane. As the night comes about, the kalpa ends and, with it, another cycle in the creation/destruction of the Universe (Sullivan 257).

After World War 2, tensions between the United States and the Soviet Union arose as they advanced to be the two major military powers of the world, creating a geopolitical and ideological dispute that came to be known as the Cold War – such a controversial term indicates the reluctant nature of the two powers towards each other, while also belittling full-fledged conflicts and invasive military operations that took place in the same context, such as the Vietnam War or the bomb tests in civil areas of Pacific atolls. Even with the ever-growing researches on nuclear energy for civil use, the images of Hiroshima and Nagasaki caused intense fear in the post-war generation, since popular surveys from that time attested that no civil use of nuclear energy was considered conceivable by the population since, according to physicist and historian Spencer Weart in his work *Nuclear Fear: a History of Images*, "to the general public atomic energy means the atomic bomb" (162). Indeed, this new form of energy generation might be considered unstable and a potential hazard both to populations and to the environment[3]. Fear of utter destruction spread, and the possibility of a Third World War started to loom. The danger of nuclear damage and a new perspective on how war could turn into a mass annihilation with the dropping of a single bomb on a civil area inspired authors to experiment with that idea: the nuclear race that started after the Second World War gave birth to fictional responses about the power of massive destruction carried out through the use of technological advancements.

Therefore, the objective of the present study is to investigate fictional representations of disaster and apocalyptic/post-apocalyptic scenarios in audiovisual works produced during the Cold War period (conventionally agreed to have taken place between 1947 and 1991), or looking back at that period, in order to examine how artistic production has dealt with the anxieties of the Cold War nuclear scare[4] and also how the very notion of a Cold War as a context of deterrence and apocalyptic imagination can be fluid and can be adapted to different national perspectives and modes of production. The investigation will be conducted by drawing on a comparative analysis between the works' historical contexts and mediatic structures in different styles and genres of film and video game.

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[2] In an experiment with the first hydrogen bomb, "the familiar cloud began to mushroom upward, but enormously larger than any atomic cloud ever seen. November 1, 1952: the first fusion device [. . .] In short, from the outset everyone saw fusion as something that went farther even than fission bombs into the realm of apocalypse" (Weart 155).

[3] Although still considered a relatively clean form of energy, the general public does not seem to trust in the civil use and management of nuclear power.

[4] I will use the term *nuclear scare* to denote the climate of social unrest over the danger of a nuclear war, something that intensified with presidential statements about bomb testing from the late 1950s and early 1960s.

The constant Cold War paranoia that stemmed from US authorities[5] into the popular imagination itself pushed artists and scientists[6] to wonder about the end of the world and about the ethical implications of nuclear weapons use. However, perhaps as frightening as the idea that the world could witness the ravaging of numerous homes by fabricated fire was the notion that civilisation might not be entirely dead after that gruesome event. Carl Abbot, researcher on urban studies and planning, and author of "The Light on the Horizon: Imagining the Death of American Cities," states that "fictions about the effects of total war have often been tales of survivors – their ways of coping, their wanderings, their efforts to start anew;" survival had become a major concern, and as major a topic for fictional works as the political intricacies that would lead to the cataclysm (177). As early as the 1950s, several novels told their versions of a nuclear holocaust aftermath, such as Nevil Shute's *On the Beach* (1956), Pat Frank's *Alas, Babylon* (1959), Philip K. Dick's *Dr Bloodmoney* (1965), and Walter Miller, Jr.'s *A Canticle for Leibowitz* (1959); all of which dealt with possibilities of starting over, of returning to simple life and trying to rebuild the world from the ruins of the pre-war glory. Films also envisioned life after global disaster, and offered their science-fictional view on moral and social deconstruction through massive social mutilation: *Five* (1951, directed by Arch Oboler), the British production *The Day the Earth Caught Fire* (1961, directed by Val Guest), the *Mad Max* series (1979-1985, directed by George Miller), and *The Day After* (1983, directed by Nicholas Meyer) are examples of post-apocalyptic films that dealt with dystopia after a nuclear event. That kind of science fiction – and also other drama films – begotten in the Cold War era was not exclusive to the Anglophone cinematic universe, but also to the East, most notably Japan, whose people had suffered from those phenomena first-hand. Japan brought to life such films as *Virus* (1980, directed by Kinji Fukasaku), and the acclaimed anime *Akira* (1988, directed by Katsuhiro Otomo). Soviet productions or written works on the matter were uncommon[7], and the public did not have much access to post-apocalyptic fiction from other countries in the early decades of the war (Weart 238). The scarcity of Soviet films with the theme will be discussed in the third chapter of this research.

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[5] Government notices and warnings about nuclear war were not uncommon, nor was the idea of community fallout shelters as a *sine qua non* instrument of civil defence (Weart 254). In 1955, the US Office of Civil Defense released a short film called *About Fallout*: practically an educational video teaching the general population about the implications of nuclear fallout and radiation. Similarly, the Canadian Emergency Measures Organization released a booklet called *Your Basement Fallout Shelter*, first part in the *Blueprint for Survival* series. The booklet was signed by then Prime Minister John G. Diefenbaker and distributed with the aim of teaching citizens how to improvise a fallout shelter in their individual homes. On the other hand, little indication can be found on systematic construction of fallout shelters by Soviet defence authorities. In fact, Weart notes that "Many agreed with the Soviet Minister of Defense [Rodion Malinovsky] when he told *Pravda* in 1962 that an atomic bomb shelter was 'nothing but a coffin, a grave prepared in advance'" (257).

[6] "Many people only now gave serious attention to nuclear energy, and in the mid-1950s the number of publications on the subject increased sharply around the world [. . .] articles dealing with civilian uses of the atom increased, as a proportion of articles on any subject, by more than half between 1948 and 1956. But still more striking was the rise in articles on nuclear weapons - a fourfold jump" (Weart 184). That piece of information attests the increasing intensity and seriousness with which scientific eyes not only looked for alternatives for the energy generation dilemma, but also at the latent – though increasing – worry about the real devastating power of nuclear weapons. The former dilemma is due to the problem of instability of enriched ore – such as uranium or plutonium – used in nuclear power plants that generate considerable radioactivity, and under slight mistakes can cause serious accidents and spread across neighbouring areas, such as what happened in Chernobyl, Three Mile Island, and more recently, Fukushima. Under that perspective, it can be said that there is no harmless use of nuclear energy.

Ultimately, six other works of speculative fiction interest the present study. The 1959 film *The World, the Flesh and the Devil* (henceforth to be referred to mostly as *WFD*), directed by Ranald MacDougall, follows the discovery of a new world by three survivors who witness urban desolation after a mysterious bombing that wiped out society. Harry Belafonte plays a mine inspector named Ralph Burton, who gets accidentally confined underground while at work during the event of the mysterious bombing. The world he eventually finds afterwards is empty of human contact, and Ralph begins living a new life of solitude, nonetheless filled with the luxury of activities that he, a working-class black man, had little contact with before. His solitude is then disturbed by the discovery of another survivor, Sarah Crandall

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[7] That fact can be explained by the residue of Stalinist censorship that still seeped in the artistic production of the USSR in the Khrushchev years and the Thaw (1954-1964), during which period there was relatively more freedom in creative and scientific endeavours, but not so much. Such freedom was aimed at leveraging scientific and technological research, which were part of Khrushchev's plan to accelerate "nuclear arms, a space-program, and above all, highly efficient economic (especially agricultural) production," as stated by science fiction scholar Istvan Csicsery-Ronay, Jr. in "Science Fiction and the Thaw" (339). Csicsery-Ronay also points out that part of "Soviet SF attempted to imagine the human species as the engineer of technology and personality, rather than the opposite" (343). Therefore, it is not surprising that Soviet narratives of mass destruction were rare in this period, only springing up in the late 1970s and the 1980s, as the corpus of the present study will exemplify through the choice of its Soviet films.

(Inger Stevens), a young white woman, and their interaction follows, teeming with conflicts related to racial differences and the misconceptions that rise from those conflicts. A third survivor turns up in Benson Thacker (Mel Ferrer), and the conflicts intensify as a love triangle builds up and tensions related to Burton's racial background are aggravated. A film released on the brink of The Great March on Washington (1963) and the protests in Selma and Montgomery (1965), *WFD* also chooses the post-apocalyptic aesthetic to tackle issues that were intimately related to contextual human rights struggles.

Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb (henceforth to be referred to as *Dr Strangelove*) is a 1964 satirical comedy directed by Stanley Kubrick. The film portrays the political disparities in a war room, where the United Statesian[8] president and several military authorities are gathered to discuss an unexpected authorisation for the deployment of nuclear missiles by a paranoid general against the Soviet Union. The film plays with the idea of political manipulation based on conspiratorial assumptions of nuclear deterrence in the Cold War, and takes place prior to the actual nuclear incident, after which the final credits are announced. That factor makes *Dr Strangelove* the only work in this corpus not set in the post-apocalypse; instead, it is aimed at scorning the diplomatic superstitions of high-ranked authorities of the US government, and concluding – among several other ideas – that secret devices might not matter if they are put into incompetent hands, and might be better left unused.

The 1979 Soviet drama *Stalker*, directed by Andrei Tarkovsky, also contains various singularities of form and style. Loosely adapted from the brothers Boris and Arkady Strutgatsky's post-apocalyptic novel *Roadside Picnic* (1972), the film contains lengthy shot time-frames and a slow-paced editing that is characteristic of the Russian director in some of his other works, such as *Solaris* (1972) and *The Mirror* (1975). The colour palette variation of the film also indicates spatial continuity and the overall significance of geography in the diegesis; Tarkovsky tackles various elements of sound, image, and movement that will be discussed in the third chapter. Where the Strutgatskys' novel offers an explanation about the event that took place and led the world to such a dystopian state – in this case, an extra-terrestrial invasion –, Tarkovsky's film sheds no light on the event. The mysteriously decayed world is inhabited by wanderers and military authorities who patrol prohibited areas, and *stalker* is the title given to individuals who venture out into the wilderness to find the Zone, an area outside the urban surroundings with supernatural forces – post-technological forces, it could be said – that contains a room where wishes can be granted to visitors. However, a visit to the Zone is not without its adversities, as so-called traps can surprise unwary explorers – it will be part of my argument that such traps and such a magical aspect of the Zone can be interpreted as radioactivity. Although the film was released nearly a decade before the Soviets' own nuclear disaster, the Chernobyl Nuclear Power Plant meltdown, it is instigating to reimagine its portrait as a "prophetical" depiction of the Soviet accident, especially considering the context of production of the film, during which the film crew was exposed to chemical toxins while shooting on location at a hydroelectric power plant near Tallinn, Estonia. Tarkovsky, his wife Larisa Tarkovskaya, and his esteemed actor Anatoli Solonitsyn later died of the same malady, lung cancer, which is believed to have been resulted from such an exposure to particles of toxic waste from the power plant during the extensive shooting process[9]. Such characteristics make up for pertinent contextual aspects to be taken into consideration in this research.

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[8] I will use the term *United Statesian* instead of *American* throughout the thesis, since the latter originally refers to all things from the continent of America. Although considered by some to be a nonce word, it more precisely describes things and people from the US, as opposed to things and people from the whole continent.

Dead Man's Letters (1986, henceforth to be referred to as *DML*), a film released in the late Cold War period, shows the despair of an underground group of survivors who attempt to return to a radioactive surface. The blast itself was a result of a launching machine fault, and the operator failed to reverse the accident for choking on the coffee that he was drinking: the film chooses such a situation to illustrate a vile deed of technological discovery and the prospect of a disastrous outcome from a measly error made possible by the military urgency to stand by mass-destruction devices as a civil defence belief (the bomb itself struck a civil area, after all). The sepia filtering of colours that pervades its entire duration also gives the film an aspect of decay, adding to the atmosphere of ruined settings used for its filming. Released a few months after the accident at Chernobyl, *DML* is a cinematographic example of atomic destruction, enhanced by a real-life accident.

The video game *Fallout*, released in 1997 by the California-based publisher Interplay and developed by its sub-studio Black Isle, parodies the imagination of atomic destruction that the Cold War United

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[9] For more information, see: *Stalking the Stalker*, by James Norton. *Nostalghia.com.* Web. 5 Nov 2017.

States propagated – from a post-Cold War perspective. The game, which belongs to the computer role-playing game genre (RPG for short), focusses on a post-apocalyptic setting in the Western United States about one hundred years after a worldwide nuclear war. Its storyline is based on a discrepancy in historical time, a speculative timeline in which the diplomatic scenario of the Cold War ended in a world war that devastated much of the planet, thus making reference to US science fiction and cultural elements of the 1950s and 1960s to construct its setting and characters, as well as its post-apocalyptic political factions. My choice for *Fallout'*s inclusion in the present corpus is due to that satirical style, as well as its contrast in comparison to the other works in this corpus when it comes to its audiovisual singularities as a video game.

Finally, I will include the 2007 first-person horror video game *S.T.A.L.K.E.R.: Shadow of Chernobyl* (henceforth to be referred to mostly as *Stalker: SoC*), developed and published by the Ukrainian studio GSC Game World. The game attempts to reproduce the notion of the Zone, first envisioned by the Strutgatskys in *Roadside Picnic* and then by Tarkovsky in *Stalker*. The developers chose to incorporate the latter's depiction of an anomalous area, while also imagining it as located in Chernobyl's own exclusion zone, the area within which human presence is not recommended because of the high levels of radiation. Incidentally, all of the non-Anglophone works chosen for this study deal with the idea of an exclusion zone, dangerous in its emanation of invisible volatile energies, be it the radioactivity of *Dead Man's Letters* and *Stalker: SoC*, or the symbolic "traps" of Tarkovsky's magical Zone. *Shadow of Chernobyl*'s own Zone is the culmination of such a motif, an idea adapted from an adaptation. Besides, by acknowledging its adaptive relation to 1979's *Stalker*, there is a compelling opportunity to analyse not only that relation, but also what it incorporated in its development as a video game from Tarkovsky's film, especially since it was released after Chernobyl; there is an argument to be made about its specific historical view about both the film and the Soviet disaster. That argument will be discussed in the fourth chapter, an approach which will privilege a comparison with *Stalker*.

Among all such items of science fiction and drama, produced in times when the prospects of a war involved the imagination of apocalyptic destruction – or setting their narratives in such a period –, rests a common element that binds together their relation to the apocalyptic/post-apocalyptic: the imagination of a new beginning. However, the uniqueness in each of the four aforementioned portrayals of nuclear apocalypse and a fresh start, as well as their subsequent commentary on real-world tensions, is a matter worth investigating. Such is a task that will require a comparative approach, one that takes into account not only the contents of each work, but their belonging to specific media. From that perspective, the different contexts that produced each text will be examined. It must also be noted that there is a historical contrast between the films chosen. The choice for *WFD* and *Dr Strangelove* are not only due to the common nationality in distribution and the contextual portrayal – both illustrate speculative scenarios in the US and come from US filmmakers with mostly United Statesian production crews, even though the latter was filmed in the UK – but also to the fact that the 1950s and 1960s were particularly prolific decades for apocalyptic/post-apocalyptic fiction in Anglophone cinema[10], and their proximity in production period can reveal contextual parallels. On the other hand, Soviet apocalyptic/post-apocalyptic cinema was practically inexistent in the 1950s and 1960s timespan, and both *Stalker* and *DML* present an imagery and symbolism that characterise a revitalisation of Soviet science fiction in film, as will be seen in more depth in the third chapter. Lastly, the video games are set in a historical period after the Cold War, but both the scarcity of complex apocalyptic/post-apocalyptic video games before the 1990s and the amount of cultural and historical references to the Cold War period and events make *Fallout* and *Stalker: SoC* adequate video games for my corpus. All in all, there will be a comparative look at the timespan from the release of *WFD* – in the heat of the bomb testing period – to *Stalker: SoC* in the 21st century, aimed at understanding the features of mediatic development and structuring among such audiovisual works, as well as a take on the historical impact from the Cold War on apocalyptic/post-apocalyptic speculative fiction and its dynamics of drama and/or satire found throughout the decades from the late 1950s to the 2000s.

Each piece of the selected corpus also exhibits its own elements of style and narrative tone that will be considered here. MacDougall presents his take on the theme by proposing a moral reformation after the bombings, especially concerning racial stigmas and the notion of matrimony. Kubrick resorts to satire, venturing into the political sphere and discussing the unstable nature of nuclear deterrence. Tarkovsky makes his *Stalker* a psychological drama, developing the course of the narrative in lengthy sequence shots, frequently positioning the camera in a stasis that accompanies the funereal rhythm of the three main characters' path across a destroyed world. Lopushansky approaches it with a sentimental quality – constant close-up shots depict emotional expressions from its actors –, representing his characters in an initial state of hopelessness and later giving them reasons to be optimistic. The developers from Black Isle Studios produced *Fallout*, a game that introduces the player to a sarcastic interpretation of Cold War anxieties. Finally, the Ukrainian developers at GSC Game World took a national tragedy – at a time when Ukraine itself was a territory of the Soviet Union – and gave it a psychological horror aspect, while also including elements from Tarkovsky's rendition of the Zone. Therefore, it is relevant for this research to examine what fictional elements (narrative form, film techniques, character construction, metaphorical concepts, and socio-political commentaries) and extra-fictional elements (historical context, as well as context of production) express such particularities in those six narratives.

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[10] In the article “The Apocalyptic Imagination Reborn,” Jerome Shapiro reveals the number of films about atomic bombs and an apocalyptic event during the Cold War decades – “1950-1959: 154 Films / 1960-1969: 133 Films / 1970-1979: 89 Films / 1980-1989: 148 Films” (3).

Ultimately, three research questions that can support the objectives of this thesis stand out: 1. How do the four films – two US films and two Soviet films – render imaginations of disaster and/or post-disaster in cinematographic language? 2. How do the two games selected for this study adapt such imaginations to this new medium? 3. And how can their structural, stylistic, and thematic elements be compared and contrasted considering the span of almost seventy years of production? While investigating audiovisual elements from the films and the video games, addressing those questions will be part of the objective of the present research. The first question will be the basis for the analysis of the second and third chapters; the second will be the basis for the discussion about the video games in the fourth chapter; whereas the last question will be part of an overall comparison in the fifth - and final – analytical chapter of this thesis. More details about the chapters will be given later in this introductory section.

The following theoretical texts and discussions will complement my argumentation, and most of them cover the various elements of the study on post-apocalyptic fiction, the Cold War nuclear scare, film studies, and video game studies.

1.1 Post-apocalyptic fiction, Cold War, and the nuclear scare

The period immediately after the end of World War II was crucial for setting up a scenario of technological race between two major powers, but it was also crucial for establishing a climate of paranoia and a sense of supremacy in the Soviet and US imaginations in what became known as the Cold War. The documentary *The Atomic Cafe* (1982, directed by Jayne Loader, Pierce Rafferty, and Kevin Rafferty) details the media's portrayals of nuclear warfare and testing carried out by the United States government in the 1950-1960 period, showing how rudimentary the public knowledge on radiation and its collateral effects was. The government – especially the military – would leave its staff vulnerable to brutal levels of radiation exposure from the detonations of hydrogen bombs, back then a novelty in warfare. The documentary shows and compiles testimonies from government authorities about the devices of mass destruction being constructed by both the United States and the Soviet Union that could be used should the need arise, which again refers to the fear of an unprecedented world war as a consequence of that critical a level of deterrence. It is compelling for the present study to investigate how influential such facts were to the fiction produced in the Cold War period, and how dramatically the works from back then portrayed the outcome of such potential events, bearing in mind the ignorance and paranoia cultivated by the media and the governments about nuclear war and the fate of civilisation.

It is important for this study to consider how the use of nuclear energy culminated into the nuclear scare of the Cold War. Science historian Spencer R. Weart wrote *Nuclear Fear: A History of Images*, offering an account of the chronological perception on atomic energy and warfare in the world, and especially in the United States, across the 20th century. The author carries out a research on the impact that images have in awakening senses of urgency and fear in the collective imagination. He suggests that

> The historian of images can take up a straight forward task: to look through materials of every description and find for a given group of people what pictures, symbols, beliefs, rational concepts, feelings, and emotions have become strongly associated with one another in a cluster that includes a particular subject, such as nuclear energy. (xii)

Weart collects information from various sources and disciplines to support his extensive historical review on the subject. He defends that particular moments in history, through being spread to a large audience in the form of images, may have a considerable impact on collective anxiety (xiii). On that premise, the writer organises his chronology from the first moments of nuclear energy research – in the early 1900s –, through the first developments of fission bombs, to the disaster of the Chernobyl Nuclear Power Plant in the 1980s, decade in which his work was written. In that regard, the author also touches on the phenomenon of massive post-apocalyptic fictional production inspired by the doomsday horror during the first decades of the Cold War. Perceiving that warlike weaponry had reached a potentially massive destructive level, some citizens and authorities around the world became aware of and protested against all developments of nuclear warfare, from the radioactive dust particles from power plant disasters being carried away by the wind to other places, to the threat that it posed to the environment; all of such public responses being "the most profound answer that could ever be given to the nuclear question" (Weart 248).

Philosopher Jacques Derrida questions the commotion over the imminence of civilisation's extinction by nuclear weaponry. In the article "No Apocalypse, Not Now," he argues that it is not the first time in which countries have posed the political threat of total devastation in a war, and that it is a modus operandi of the historical course of large conflicts or simply technological contentions between nations. He asserts that

> whatever credence we give it [the fact that humanity might destroy itself in their use of nuclear weapons], we have to recognize that these stakes appear in the experience of a race, or more precisely of a *competition*, a rivalry between two rates of speed. It's what we call in French a *course de vitesse*, a speed race. Whether it is the arms race or orders given to start a war that is itself dominated by that economy of speed throughout all the zones of its technology, a gap of a few seconds may decide, irreversibly, the fate of what is still now and then called humanity – plus the fate of a few other species. As no doubt we all know, no single instant, no atom of our life (of our relation to the world and to being) is not marked today, directly or indirectly, by that speed race. (20, author's emphases)

Derrida's association of the importance of the *speed race* with the notion of another threat to end the world is a reflection on the relevance of geopolitical disputes and their effects on the collective imagination. The largely globalised world of the Cold War allowed information to spread quickly, as though itself a part of Derrida's speed race; such spreading of information, especially when the United Statesian and Soviet governments themselves kept reinforcing the urgency of nuclear weaponry development, was crucial for determining the general commotion. Although it was by then pretentious to assume that a fusion bomb could indeed ravage entire countries – thus the entire world in a few detonations –, anxiety needed no practical demonstration. As aforementioned, writers and filmmakers capitalised on the turmoil, since, as British novelist Martin Amis states, "Although we don't know what to do about nuclear weapons, or how to live with nuclear weapons, we are slowly learning how to write about them" (9). However, for Derrida, the backbone of the Cold War paranoia lies in its US-USSR *course de vitesse*, and be it the nuclear arms race, or the space race, it ignores the societal dimension of the geopolitical scenario, since

> Is it not *apparently the first time* that that dissociation, more unbridgeable than ever for *ordinary mortals*, has put in the balance the fate of what is still now and then called humanity as a *whole*, or even of the earth as a whole, at the very moment when your president is even thinking about waging war beyond the earth? Doesn't that dissociation (which is dissociation itself, the division and the dislocation of the *socius*, of sociality itself) allow us to think the essence of knowledge and *technè* itself, as socialization and de-socialization, as the constitution and the deconstruction of the *socius*? (22, author's emphases)

The technological competition of the Cold War, surreptitiously diplomatic in its nuclear deterrence, demonstrated that each of the two powerful nations attempted to display detention of knowledge and *technè* as a prime display of power, ultimately not having engaged in armed clash against each other while involved in other conflicts from the same period (e.g. the Korean War, the Sino-Soviet conflict, the Vietnam War, etc.). Such an act of de-socialisation, however, could not avoid the rise of a collective fear regarding a possible incoming conflict, and the deterrence ended up having its more considerable impact on the minds of "common citizens," rather than those of the strategists and statesmen.

Novelist and essayist Susan Sontag also addresses the subject of post-apocalyptic fiction and its relation to the social imagination of the time. In the essay "The Imagination of Disaster," written in 1965, amidst the social alarm generated by the threat of a new world war and the psychological effect that images of bomb tests still had in the global population[11], the author argues about the state of science fiction back then and how much influence it was receiving from the possibility of nuclear war and post-apocalyptic struggle. She discriminates stages of creative writing and directing – in the case of films, which she also analyses in the article – and lists motifs of the genre in film, as well as isolating such features in different kinds of film – Technicolor films and black-and-white ones –, thus highlighting elements of style and film language that could be enhanced or softened by technical particularities. Sontag starts the essay with the statement "ours is indeed an age of extremity," which already sets up the orientation of her argumentation from then on, based on historical implications of social fear caused by the prospect of world-wide extermination. She discusses the effects of fictional portraits of the horrors of war:

> For one job that fantasy can do is to lift us out of the unbearably humdrum and to distract us from terrors, real or anticipated-by an escape into exotic dangerous situations which have last-minute happy endings. But another one of the things that fantasy can do is to normalize what is psychologically unbearable, thereby inuring us to it. In the one case, fantasy beautifies the world. In the other, it neutralizes it. (42)

That statement is attentive to the fact that a profound moment of tension in world's history can generate reflections on polarised emotions projected into the fictionalisation of crises. In this case, science fiction played with the idea of worldwide disasters, and where imagination could engender that which the bomb tests could only calculate and stipulate, "collective nightmares [could not] be banished by demonstrating that they are, intellectually and morally, fallacious. This nightmare – the one reflected in various registers in the science fiction films – is too close to our reality" (Sontag 42). The author adds to that reasoning by claiming: "science fiction films are not about science. They are about disaster, which is one of the oldest subjects of art" (44). Sontag, therefore, acknowledges the motivations of the genre produced in the Cold War era about the risks and sheer horror of a veritable apocalypse being depicted on a silver screen or on pages of a written work, a phenomenon that reinvented the notions of a new kind of war towards which several people had built considerable anxiety. Finally, the complement to her idea of disaster-oriented narratives and their reflections upon history and its political big figures springs up when she asserts that "modern historical reality has greatly enlarged the imagination of disaster, and the protagonists – perhaps by the very nature of what is visited upon them – no longer seem wholly innocent" (Sontag 45).

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[11] "The first atomic bombings would be an act of rhetoric, a science fiction image aimed less at the enemy's cities than at his mind" (Weart 97).

Carl Abbot also discusses the presence of post-apocalyptic motifs in fiction, drawing from both literature and film. He writes about the political implications of diplomatic dissolution and the global tension that generates a disquieting sense of imminent war between powerful nations, and adds that his article sets out to examine "fiction, both in literature and on film, where Americans have tried to think about the consequences of total war on their nation and cities" (175). He argues that "Military planners, civil defense officials, and scientists project war-related scenarios of attack and counterattack. Social scientists and journalists use such projections for their own purposes" (Abbot 175). In the context of a tentative war, it seems imperative for governmental authorities to initiate plans and strategies that should awaken the sense of security that the population is supposed to feel towards their leaders, and Abbot acknowledges the social effects of such a process, delineated as it is to incite collective docility and trust. As such effects are created in the form of demonstration videos and bomb testing footage[12], anti-Soviet pamphlets and educational demonstrations about fallout shelters, the national imagination of whole cities perishing under nuclear blasts begin to take shape and bleed into the levels of artistic creativity.

Social rupture and the restoration in notions of power relations, political hierarchy, and the very closeness that society may develop to the wild are appropriate motifs from post-apocalyptic fiction. In

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[12] Footage produced for public announcements and awareness are extensively shown in the documentary *The Atomic Cafe*.

Postapocalyptic Fiction and the Social Contract: "*We'll not go home again*," scholar Claire Curtis deals with notions of Social Contract and the return to State of Nature in a post-apocalyptic scenario, having as points of reflection the theories of Thomas Hobbes, John Locke, Jacques Rousseau, and John Rawls. The author clarifies early on that

> World endings […] by their very character are understood to destroy functional government, food distribution, organized medical care and the infrastructure on which we rely for most of what we do. If such an event creates a state of nature, then how might we think about coming together and creating a new social contract after such an event? (2)

That is an important question to keep in mind. *Dead Man's Letters* revolves around a barely self-sufficient underground group of survivors who have – not for long – gone through the disaster and are still trying to cope with the consequences, still far from establishing any centralised and institutionalised politics of social order. In the case of *Fallout*, the chronology has advanced for almost a century, and settlements begin to arise and establish smaller and less democratic leadership roles, sometimes bordering autocracy. Curtis poses questions that may compel insights on the political tones of such narratives: "what happens when the end becomes a new beginning? What might this new beginning bring? How new would it really be?" (3). Part of the image of nuclear devastation lies in the misled idea that it is perceived as a veritable end for humankind. Authors of apocalyptic and post-apocalyptic fiction, including the ones studied here, had in mind to show the audience that that might not be true, and that society might have to start over with the rubbles of a broken civilisation, not very distant from the conditions in which Hiroshima and Nagasaki citizens found themselves after the Second World War; only in a larger scale. The relation between the fear of living in a state of post-war anarchy and the hope of coming together once again and structuring a new social contract is a common dilemma in these stories. Looking at such stories to conceive the reality behind them in times when the world had just witnessed two world wars and the effective use of nuclear devices evokes the "imagining of how things could become desperately worse is surely little solace to those who have already had their worlds shattered through war, disease, famine or natural disaster" (Curtis 188).

Space becomes a pertinent aspect to bear in mind when analysing post-apocalyptic fiction, particularly because it often involves the obliteration of urban areas, themselves inflated regions of common dwelling. Some of the narratives in the present corpus work with the idea of an escape to the wilderness – namely, *Stalker*, *Fallout*, and *Stalker: SoC –*, for cities are now too dangerous to inhabit, or their infrastructure too decayed to be maintained. Urban desolation is a powerful image to be rendered in fiction, and Abbot states that “when cities do appear in post-apocalyptic fictions, they are dangerous and deadly far more often than desirable, bearing the burden of old times rather than the hopes of the future” (177). The drastic change in setting can signify a strong need to readapt, to shape social needs and structures to a more recondite geographical reality, to attempt harmony with nature as an initial step in social rebirth. Cities then represent the old ruins of society, as well as locations where progress and global exploration – and exploitation – led it to. In *Under the Shadow: the Atomic Bomb and Cold War Narratives*, Cold War science fiction researcher David Seed notes: “Because the prime targets in a nuclear war would be not only military installations but also cities, these cultural centers might be entirely erased” (4). That notion permeated writers and filmmakers’ works, as the dreadful thought that all cultural memory might be vanquished along with the areas that used to uphold it inspired visual conceptions of post-apocalyptic urban settings in films and other audiovisual media about the subject. Science fiction writer Philip Wylie[13], famous for earlier experiments with post-apocalyptic narratives such as in *When Worlds Collide* (1933), even

> saw a prime role for civil defense as informing the public and therefore in some measure diffusing that fear. In 1949 he was invited to join the new Federal Civil Defense Authority as an expert consultant; there he devised a defense program for American cities. (Seed 76-7)

A break in the progression of time for human development separates civilisation from its safe tenets of modernisation, sending it back to an imperative survival state and turning cities into "dangerous and deadly far more often than desirable, bearing the burden of old times rather than the hopes of the future," be it in the form of raiding groups and lawlessness, or crumbling buildings and structures that are deadly to dwell in (Abbot 177). Abbot also remarks that "the literature of disaster and apocalypse is inherently structured by the arrow of time – the contrasts of before and after, cataclysm and rebirth" (177). It is important for this study to reflect upon the fictional simulation of the temporal break in a total war event as well as the urban horror of the aftermath.

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[13] Such an acquaintance with the government culminated in the publication of *Tomorrow!* (1954), Wylie’s novel “which describes the bombing of twin midwestern cities modeled on Minneapolis and St. Paul. Wylie dedicated the work to the staff of the Federal Civil Defense Authority, one member of which reviewed the novel and recommended its promotion among civil defense officials” (Seed 57).

In his *Monsters, Mushroom Clouds, and the Cold War American Science Fiction and the Roots of Postmodernism, 1946-1964,* M. Keith Booker organised a chronology of science fiction works produced in the Cold War era that deal with the nuclear scare in his book . Among other historical periods, the author works within the frame of fiction produced in the 1946-1964 period, focusing on novels and films. To him, "a number of post-holocaust works succumb to the temptation to see nuclear war as an almost positive event that interrupts the growth of alienation and routinization in American society" (65). Some works indeed play with the end of the world as an eradication of social alienation (almost a process of cleansing), and approach narrative from a satirical perspective on the crisis of the nuclear scare and the more problematic scenario of nuclear deterrence between the United States and the Soviet Union: such would be the case in *Dr Strangelove* and *Fallout.* Booker also adds that "Given the careful control of nuclear-related images by the American government, it is not surprising that much of what Americans learned about the impact of nuclear war during the long 1950s had to come from science fiction," seeing as even the images that did reach regular audiences until then were already softened and romanticised to suggest the need for mass-destruction weaponry (66).

1.2. Film

Since cinema works will comprise over half of the present study's corpus, it is important to understand some foundations of filmmaking in order to better comprehend how the framing, movement and editing of a certain film can express its structural singularity as well as its thematic explorations. According to film critic André Bazin in *What is Cinema? – Vol. 1,* by departing from the aspect of stillness found in plastic arts and photography and thus seeking movement through technological advancements, cinema transcended the artificial *trompe-l'œil* that such arts had attempted to integrate in order to achieve depth and fluidity (19); cinema created its own language. Such a language and the myriad of technical nuances that highlight or conceal the cinematographic presentation – from lighting to soundtrack – are aspects that will orient my analysis of the films. All such aspects are subject to the manifestation of a socio-political context of the time when a film is produced – and sometimes the context surrounding the production of the film itself that may help understand the conception of themes in it, as will be the case with my investigation of *Dr Strangelove* and, to a certain extent, *Stalker*. Film studies scholar Ismail Xavier, in his acclaimed work *O Discurso Cinematográfico: a Opacidade e a Transparência*, argues that "*o cinema, como discurso composto de imagens e sons é, a rigor, sempre ficcional, em qualquer de suas modalidades; sempre um fato de linguagem, um discurso produzido e controlado, de diferentes formas, por uma fonte produtora*[14]" (14). It is important to reiterate the relevance of production for this investigation: a film's background, the urges and priorities in its making which are more often than not direct sources for its way of delivering a narrative.

One of Andrei Tarkovsky's priorities as a director is film time. It is a fundamental element of audiovisual narrative that will be critical for this study in the following chapters. In his book *Sculpting in Time,* Tarkovsky questions:

> In what form does cinema print time? Let us define it as *factual*. And fact can consist of an event, or a person moving, or any material object; and furthermore the object can be presented as motionless and unchanging, in so far as that immobility exists within the actual course of time. (Tarkovsky 63)

According to him, the continuity of an image in a film maintains that fictional current of time, the world from which the image projects itself represents a form of time. In a film like *Stalker,* the notion of time is expressed by means of several moments of quiet performance from the main three actors, or the gentle breeze on the shrubs and trees, or the repetitive clanging noise of the railroad cart on the tracks; through the very existence of its moving image. He later complements:

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[14] "Cinema, as a discourse comprised of images and sounds is, strictly speaking, always fictional, in any of its modalities; always a language fact, a discourse that is produced and controlled, in different ways, by a production source" (henceforth all the translations are mine, unless otherwise indicated).

> The dominant, all-powerful factor of the film image is rhythm, expressing the course of time within the frame. The actual passage of time is also made clear in the characters' behaviour, the visual treatment and the sound […] One cannot conceive of a cinematic work with no sense of time passing through the shot […] (Tarkovsky 113)

Such an assertion comprehends the relevance of the fictional time-frame and the intensity of rhythm that each separate shot or scene may carry. When put together in the editing process, it may or may not show consistency in the various time-frames filmed, and the particular approaches in the assembly of shots can reveal unique meanings suggested by the images. For Tarkovsky, therefore, "Editing brings together shots which are already filled with time, and organises the unified, living structure inherent in the film" (114). Such a living structure, a unified sense of time that permeates the narrative of a film, will have an outstanding factor that will articulate meaning.

In this regard, Soviet filmmaker Sergei Eisenstein, in his work *Film Form*, suggests that the combination of shots[15] is an action that is guided by "dominating indications. Montage according to tempo. Montage according to the chief tendency within the frame. Montage according to the length (continuance) of the shots, and so on. This is montage according to the foreground" (64). In the films that compose my corpus, the existence of the shot and the interaction between shots are governed by different "dominating indications" that will be taken into account during the analyses. *Stalker*, for instance, presents an editing process in which many scenes and sequences are governed by time pressure, and the rhythm that results from that process creates meaning in a particular way that will be discussed bearing eschatological themes in mind in the third chapter of this thesis. In *Dr Strangelove*, editing sometimes follows concurrent action, as events from different contexts of the diegesis take place alternately in a single sequence, thus exposing two different circumstances of the narrative through cross editing. Each film here will have particular dominating indications in the combinations of shots from the scenes to be analysed.

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[15] Eisenstein constantly brings up the concept of *montage*. In *Film Form*, montage is the reunion of fragments that contain time and make meaning in a film that can be "combined in many ways" (Eisenstein 3). The author sees montage theory as "the height of differentiatedly sensing and resolving the 'organic' world" (27); and the process fundamental way of translating images from the real world into film language and giving them sense. To him, montage is the "basic nerve" of film (44).

Framing is another relevant component of filmmaking that determines the direction of a film’s language. The choice of what image and what elements of the fictional world to include inside the frame can tell about the film’s message and its way of conveying it, not only by means of what it keeps inside the frame, but what extends outside of it – which can be subsequently accessed by the camera movement or not. André Bazin states that

> The outer edges of the screen are not, as the technical jargon would seem to imply, the frame of the film image. They are the edges of a piece of masking that shows only a portion of reality. The picture frame polarizes space inwards. On the contrary, what the screen shows us seems to be part of something prolonged indefinitely into the universe. (166)

Actors moving and other items of *mise-en-scène* may establish the frame within which movement takes place, but that is also a matter of style, either authorial or contextual. In the case of *WFD*, there is much camera movement, so the exposure of the fictional world around the actors and the production location is usually imminent. For Xavier, the stability of the frame and the contingencies of setting can produce an effect of “*enclausuramento*” – imprisonment – of the image (21). In *Stalker*, however, the focus lies inside the frame, and one can realize the stasis of such a framing: the movement occurs within its limits, with scarce shifting in direction besides tracking shots. The frame creates a segment of time in which things take place inside that autonomous space; more often than not, the cut either brings focus to an actor/object or changes spaces entirely. About static and lengthy shots, Bazin concludes: “Take a close look at the world, keep on doing so, and in the end it will lay bare for you all its cruelty and its ugliness” (27). Tarkovsky features some of these elements in *Stalker*, and maintains his rhythm in that universe of discourse, prolonging the view of the landscape presented as if inserting the viewer into that fictional time-frame that starts to manifest itself more the longer the shot keeps focussed on the scenery. Close looks into the world of both *Stalker* and

Dead Man's Letters are reinforced by the time pressure of the shots, lengthy and static as they are in many occasions. Such is the case in some moments of *The World, the Flesh and the Devil* as well.

Therefore, cinematographic space will be a key factor in the analyses to follow. Images of empty streets and long shots of panoramic desolation can reveal instigating stylistic choices from filmmakers: in such a case, film space dwells in the choices for *mise-en-scène*, as well as the frame configuration, shot editing, and sound editing, all of which can serve as primordial elements for the orientation of the viewer and the establishment of meaning through spatial crafting and continuity, as well as characteristics of genre and style. Cinema, not unlike photography, captures an object so it is "freed from the conditions of time and space that govern it" (Bazin 14). Outside those conditions, fiction establishes its own time and space structures, and it is in that fictional construction that this study aims to find the likenesses and differences among the corpus in representing fantasies of apocalypse. In the book *The Cinema, or the Imaginary of Man*, philosopher Edgar Morin states that "it is the role of the camera to transgress the unity of place" (62). A film is capable of doing so through details of production – different filming sets for different shots of a film, even if the action being filmed is linear and set in the same fictional space, generating a specific perception of spatial continuity – as well as by the intervals of editing and movement of both camera, persons and objects that compose the *mise-en-scène* and can fragment such a unity[16]. Consequently, films can produce a geography of disaster *or* imminent apocalypses – through the production of a gigantic War Room in which megalomaniac authorities bicker for power, as in the case of *Dr Strangelove* – that are important for eschatological imaginations to transgress the supposed unity of realistic space and create new, apocalyptic spaces.

Therefore, in the corpus of this thesis are films whose portrayals of apocalyptic scenarios help construct spaces based on suspense – *WFD* –, the stasis of the shot – *Stalker* –, contemplation and interaction of the characters in diegetic world – *DML* –, or increasing and concurrent action – *Dr Strangelove.* There is an underlying construction of space that accompanies time and movement. Noël Burch also establishes the difference between auditory and visual space, distinguished by what can be seen on screen and sounds that may suggest off-screen spaces (97). In films like *WFD* and *Stalker*, a distinction such as that is important, since both church bell echoes through the streets of an abandoned New York and the sound of droplets of water or a bolt hitting the grass can suggest the existence of spaces that are out of the imprisonment of the framing, raising suspense or the sense of foreboding of fictional worlds in which decay and danger are constant impending elements of spatial construction and continuity. Thus cinematographic space, much like time and editing, framing and *mise-en-scène*, is a relevant aspect to be considered in this study when reading apocalyptic/post-apocalyptic films.

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[16] In *Theory of Film Practice,* film theorist Noël Burch elaborates on that fragmentation of a unified space when talking about temporal ellipsis: "[...] if a shot transition takes us from one location to another, more distant one without there being any way of relating the two distinct spaces [...], the temporal continuity between them will remain indefinite unless it is preserved through the use of such clumsy devices as successive close-ups of a clock-dial or some convention such as cross-cutting, an emphatic alternation between two actions occurring in two distinct spaces" (6).

1.3. Video game

Video games, not unlike the films analysed here, are audiovisual discourses. They contain moving images, performance – through voice acting by invited performers –, soundtrack, animation techniques, etc. Video games, however, can offer interactive systems and diegeses that may be accelerated, slowed down, and even altered according to a set of programmed rules that set what the player can or cannot do and levels of difficulty of the game's main challenges.

The evolution of video games coincides with the expansion of mediatic languages and modes of communication. If, according to Andrei Tarkovsky, one of the qualities of cinema is the *imprinted time*, the means of stamping "*movement* of reality: factual, specific, within time and unique; of reproducing again and again the moment, instant by instant, in its fluid mutability" (94, author's emphasis) – then one of the most notable qualities of video games is allowing the player to handle part of that simulated movement, to regulate their own input of information and expect a reaction from the simulation that coordinates the rules of time and space of the fiction being interacted with. The evolution of video games from the early Cold War period and into the 21st century allowed its software-built structure to accommodate more resources and enhance its interactive potential. Other forms of interactive art – not necessarily rendered in video – have been made: Yoko Ono produced the performance *Cut Piece* in 1967, in which she knelt still on stage while spectators were given a pair of scissors to cut parts of her clothing with; earlier, Marcel Duchamp created a rudimentary moving mechanism that was supposed to be activated by members of the audience called *Rotary Glass Plates* (1920); a few decades later, Hélio Oiticica created his experimental *Parangolés*, which invited spectators to participate in its dances, costumes, and spaces; whereas more recently, Maurice Benayoun has created his many "interactive installations" with panels that spectators can access at their discretion to reveal content from the expositions; the list goes on. Video games, however, assigned those interactive properties to predetermined and interchangeable banks of information, leaving open-ended interaction to a player and a computable system. In his book *The Language of New Media*, Lev Manovich argues:

> Although database form may be inherent to new media, countless attempts to create "interactive narratives" testify to our dissatisfaction with the computer in the sole role of an encyclopedia or a catalog of effects. We want new media narratives, and we want these narratives to be different from the narratives we saw or read before […] In short, we want them to be new media specific. Given the dominance of database in computer software and the key role it plays in the computer-based design process, perhaps we can arrive at new kinds of narrative by focusing our attention on how narrative and database can work together. How can a narrative take into account the fact that its elements are organized in a database? (208)

The ability not only to access information contained in a software's database by a player at any time, but also access different pieces of information from the same database depending on how they engage a game's systems and virtual participants, is what strengthens the interactive quality of its narrative. Moreover, the ability to develop graphical and aural information and store it in a single database to be accessed by the player in such different ways and paces is what allows detailed fictional worlds and spaces to be more than a set of rules and become narrative mechanisms in the first place; something that had already been done in older, more open-ended titles such as the fantasy-themed computer role-playing game (cRPG) *Ultima I* (Origin Systems 1980), but which was not the focus of more popular, challenge-centred games like *Pong* (Atari 1972) or Alexey Pajitnov's *Tetris* (1984). That ability has broadened considerably with the advancement of computer programming since the early 1990s. A 2D game like *Super Metroid* (Nintendo 1994) with an open-ended world that can be navigated freely was successful back then, and games with similar open-endedness quickly started to come out, especially top-down[17] cRPGs such as *Diablo* (Blizzard 1996) and *Baldur's Gate* (BioWare 1998). Open worlds that could be revisited and engaged with numerous times and in different rhythms became ever more popular.

Video games contain a similar *modus operandi* to that of chess or blackjack, or other simple table-top games: there are game rules, the intervention of the player in the game set, states of victory or loss, etc., although some games may present more complex limits than these. In the book *Future Narratives: Theory, Poetics, and Media-Historical Moment*, Christoph Bode and Rainer Dietrich inaugurated an idea that will guide this study's investigation on *Fallout* and *Stalker: SoC*: that of a Future Narrative (FN). According to Bode and Dietrich,

> [FN] does not only thematise openness, indeterminacy, virtuality, and the idea that every 'now' contains a multitude of possible continuations. No, it goes beyond this by actually staging the fact that the future is a space of yet unrealised potentiality – and by allowing the reader/player to enter situations that fork into different branches and to actually experience that 'what happens next' may well depend upon us, upon our decisions, our actions, our values and motivations. (1)

According to that remark, one can understand that video games work not only with the gradual disclosure of narrative for the spectator as the experience moves on, but also with the prospect of changing impact on that narrative by the spectator as they interact with the world within the video game. Narrative functioning works as play in video games – space works to guide play, which in turn determines the narrative direction. Bode and Dietrich add that "Future Narratives do not operate with 'events' as their minimal units. Rather, their minimal unit is at least one situation that allows for more than one continuation. We call this a 'nodal situation', or a 'node', for short" (1). The idea of a *node* is crucial for the comprehension of *Fallout* and *Stalker: SoC* as open-ended fictional worlds, which the player can alter through their actions at specific moments of gameplay. Sebastian Domsch, in *Storyplaying: Agency and Narrative in Video Games,* observes that

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[17] Top-down views, akin to bird's eye view or aerial shots in film, consist of slightly angled overhead perspectives on the game's space, be it in 2D or 3D games. Sometimes also called *isometric* or *trimetric* views, and are common in cRPGs and in strategy games such as *Age of Empires* (Microsoft 1997) and *Civilization II* (MicroProse 1996).

> The node is the defining feature of FNs […] as the definition says, a situation is nodal if it allows for more than one continuation, which means that the two continuations that are both possible from one point have to be different from each other. The state after the node can only be one or the other, not both at the same time, they are mutually exclusive. (1)

Therefore, a game like *Fallout*, usually placed under the role-playing game genre, suggests an open world that can be accessed by the player freely – both spatially and chronologically – and a branching storyline filled with nodal moments that depend on the player's actions to continue and whose narrative succession of events is modelled after such actions. Similarly, *Stalker: SoC*, despite not being a role-playing game – instead being a first-person horror game, which is often a more linear genre –, also presents the player with different narrative outcomes following certain notable actions during the gameplay. And, like *Fallout*, its space is open for exploration, obviously contained within the limits of the world imagined and designed by the developers. Such principles as applied to both games will be expanded upon in their respective analysis chapters.

It is also important for the following analysis to bring up other concepts of video game making, such as *architecture*, *run* and *protocol*. Domsch points out that

> the *architecture* is the overall structure of the text, containing its rules, its nodal structure (e.g. tree or network), possible entry and exit points etc. The *run* is the concrete realization of one possible reading/playing of a FN. A *protocol* is the perceptible, recorded result, or permanent notation, of the performance, which is by its nature transitory. (48, my emphases)

It is important to note that my findings about *Fallout* and *Stalker: SoC* are based on *my own runs* of the games. The architecture of the games is the same with its interactive and informational systems ready to be accessed at any point, but both offer multiple ways to be played. Since

FNs can be experienced in vastly different ways depending on each player's run and impact on the narrative nodes of the games, certain events may be perceived differently or not occur at all. That is a characteristic of branching narratives: a protocol[18] can be showed to present themes and elements of gameplay, but it will never comprise all that the storyworld has to offer that may have not been explored by the player presenting their own run. Therefore, the analyses that will be presented in the following pages will be protocols of my findings while playing the two games, and all thematic and technical investigations will be based on multiple runs that I did. Dialogue lines will be transcribed here, as well as stills from some scenes and areas of the games, to discuss how the particular language of video games – and specifically in both cases, of open-ended video games – express post-nuclear fiction as well as reflections on the Cold War and the nuclear issue.

Domsch also discusses the concepts of *gameworld* and *storyworld*. The gameworld comprises the mechanical system that the game imposes as necessary in order to be played: "a fictional world with its own self-contained meaning and rules […] players choose to ignore all of the world knowledge about themselves, other players, or the game system that they encounter, insofar as it is not part of playing the game" (Domsch 18). A storyworld[19], on the other hand, is "the fictional world in which the structure of the game and its rules as well as the actions of the player within it are given meaning. It is the product of the player's semanticization of the rules and existents of the game system" (Domsch 28). The storyworld often comprises aspects of fictional construction such as "the back story; the world state; the events; the foreshadowing" (28). Games that contain storyworlds usually set the player in that fictional world presenting said aspects in various orders of disclosure, putting the player in a position to decide how to proceed with the information given. At that point, game rules and gameplay mechanics – both part of the gameworld; the latter including controls, the game's own laws of physics if necessary, player's point-of-view, etc. – have been demonstrated to the player or not, but basic knowledge of the gameworld is necessary in order for the player to proceed, so some games can be self-explanatory concerning their rules and mechanics, while others may choose to leave that to the player's intuition and curiosity.

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[18] "The result of the performance is a retrospectively realized narrative, as the nodes have been exploded into events that can be narratively linked – and often are, automatically" (Domsch 48).

[19] Other minute elements of a storyworld include: "straight (passive) narrative such as expositions or cut scenes within gameplay, but also trailers, movie tie-ins, comics or supplementary novels outside of gameplay; all forms of spatial narrative such as visual clues, evocative spaces etc.; embedded narratives such as audio logs, diary entries, or encyclopaedic information; dialogue with non-player characters; the interactions of the protagonist with the gameworld" (Domsch 29).

The perspective, like the narrative, can be altered by the player in certain video games, as pointed out by Tamer Thabet in *Video Game Narrative and Criticism: Playing the Story* (27). That quality gives the player the freedom to choose focus and particular interests in the gameworld and the storyworld. The storyworld of *Fallout* comprises ravaged US Southwest landscapes; hot deserts filled with radiation and dangerous mutated creatures. The gameworld, on the other hand, gives the player control over the playable-character's perspective and movement, and they then have the liberty to control the movement of the camera by using a keyboard and a mouse, thus being able to avoid certain perilous locations or situations and journey to other places of the storyworld, such as towns or bunkers. That liberty has limits within the structure created by the developers, for the "[p]layer freedom in video games is always a negotiation between the player's input and the game's input, and the same goes for the unfolding of a game's narrative" (Domsch 35).

The techniques through which a game narrative can be applied vary, but Sebastian Domsch splits it into three major groups: *passive*, *actively nodal*, and *dynamic* forms (Domsch 29-47). The former refers to the presence of narrative expressed through "forms that cannot be interacted with by the player," and can be *textual* (items of the storyworld that contain information, such as diary entries, logs, or books) or cinematographic (the common cut-scenes[20]), or film segments interspersed with automatic gameplay, intended to be simply watched instead of played. Actively nodal forms of narrative can be expressed directly through the player's actions, and often include techniques such as *quick time events* – cinematic segments similar to cut-scenes, but whose presentation involves the interaction from the player and unfolds in different ways depending on such an interaction –, *dialogue trees* – sections of nodal text accessed when conversing with a non-player character, whose course depends on answers and questions given by the player –, or *event triggers* – locations and/or situations in the gameworld that, upon the player's interaction, activate special events. Finally, *Dynamic* narrative forms "can contain forms that are experienced by the player as narrative but that are neither passive presentations (such as cut scenes or screen text) nor dependent on the player's own input (as is the case of event triggers)" (Domsch 43). These include *non-playable characters*, *intra-diegetic clock* – "while the game is being played, time actually passes within the storyworld of the game, independent of the player's actions" (46). Such is the case in both *Fallout* and *Stalker: SoC*: non-playable characters and other gameworld models keep carrying out their "routine" through artificial intelligence programming as the day/night cycle ensues, while the player experiences the fictional world while not necessarily interacting with them.

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[20] "The distinction between gameplay and cut scenes was especially pronounced in those games (mostly earlier ones) that do not use the game engine to create the cinematic sequences, but that create them in an independent way, leading to two distinctly different visual styles" (Domsch 33).

1.4. Procedures

Bearing in mind the theoretical support presented above, the approach to this study will comprise two analyses aligned with each of the two different media involved, with formative and thematic associations to be conducted regarding the mediatic and stylistic uniqueness of the works that were chosen. The analyses will culminate in a comparative investigation of such renditions of apocalyptic/post-apocalyptic fiction that closes the analytical section of thesis.

The first analysis will cover *WFD*, *Dr Strangelove*, *Stalker*, and *DML*. I will select sequences from each film that more evidently explore the potential of the production in exposing the themes in which I am interested. As aforementioned, elements of *mise-en-scène*, cinematography, editing, sound editing, as well as other individual nuances of style and national production from each piece, are to be part of the scene analysis. While editing and the study of the shot will be important aspects to analyse the time-frame and continuity of each film, cinematography and *mise-en-scène* will serve to find images and objects of eschatological meaning.

The second analysis is related to the investigation of the video games *Fallout* and *Stalker: SoC*, and comprehends mostly the aspects of writing and game design that I intend to use as textual evidence of my scrutiny. Consequently, I aim to work on audiovisual aspects of the games, such as concept art, soundtrack, role-playing mechanics, as well as dialogue lines found throughout the game's narrative. All of these elements will be aimed at expressing how the barren worlds of *Fallout* works within the qualities of a satire towards the post-apocalyptic imagination from US science fiction films from the 1950s and 1960s, and addressing the aesthetic style and world design of *Stalker: SoC* and its retrospective bond to Tarkovsky’s 1979 film and the Chernobyl disaster. Ultimately, a concluding analysis will bring all the works together for an examination of form, theme, and context in light of apocalyptic/post-apocalyptic fiction.

Therefore, the thesis to follow will be divided into five subsequent chapters. The next – and second – chapter, called “Subversion and satire: *The World, the Flesh and the Devil* and *Dr. Strangelove*,” initiates the investigation with the procedures focussed on the film analysis of MacDougall’s and Kubrick’s pictures, which bring representations of the US anxieties concerning a nuclear war. I will analyse scenes from both films and explore issues of race and gender in the desolate post-nuclear world of *WFD* and how satire is constructed to depict belligerent authorities in the pre-nuclear world of *Dr Strangelove*. The third chapter, called “Anomalous zones: *Stalker* and *Dead Man’s Letters*,” starts the film analyses on Tarkovsky’s and Lopushansky’s films, revealing Soviet takes on eschatological narratives. In this chapter, the focus will be turned to the eerie worlds of both films, devastated and threatening; the construction of characters, as well as editing and time pressure of the shot will be analysed to determine what aspects of the films’ styles translate post-disaster imagination into film. The fourth chapter is called “Does war really never change? *Fallout* and *S.T.A.L.K.E.R.: Shadow of Chernobyl*,” and delves into the analysis of the United Statesian and Ukrainian video games, both of which recollect the impact of the nuclear issue in the Cold War. Here, the discussion turns to a new medium, and the matter of player interactivity with video games becomes the focus in order to examine the gameworlds of two titles that recreate Cold War concepts of apocalypse. The fifth chapter is called “Eschatological revelations: bringing the corpus together,” and in it I will provide a final comparative investigation of similarities and differences in each work studied, going through the most pertinent aspects of the analyses developed in the previous three chapters to establish connections. Lastly, the brief “Final remarks” will go over what the findings presented in each chapter of the research, as well as consider further paths that can be taken in future studies regarding any of the academic areas observed by this thesis.

CHAPTER TWO

SUBVERSION AND SATIRE: *THE WORLD, THE FLESH AND THE DEVIL* AND *DR STRANGELOVE*

> "After a while they just looked out through the silted glass to where the track curved away in the waste of weeds. If they saw different worlds what they knew was the same. That the train would sit there slowly decomposing for all eternity and that no train would ever run again."
>
> *The Road*, Cormac McCarthy.

The late fifties and early sixties were still times of growing anxiety in the United States and the Soviet Union following the end of the Second World War. As mentioned in the introductory chapter, a new fear was instilled by the advent of the H-bomb, and the idea of mass destruction still lurking in the minds of the United Statesian population from the horrors of Nagasaki and Hiroshima. As historian Ken Alder argues in "America's Two Gadgets: Of Bombs and Polygraphs:" "There were two bombs dropped on Hiroshima in August 1945: the actual bomb and the *idea of the bomb*. And it was the idea of the bomb […] that carried weight in the emerging post-war conflict with the Soviet Union" (126, my emphasis). The reflection of that idea in the audiovisual medium originated narratives that imagined a future; and such a future invoked specific apprehensions of one of the nations – the U. S. – involved in the geopolitical conundrum. Two films approached that idea in particular ways: *The World, the Flesh and the Devil* and *Dr Strangelove.* They commented not only on the concrete possibilities of geographical destruction and fatality, but also on internal socio-political conflicts of the time and how they might live through the tension of an incoming apocalyptic scenario. Such commentaries carried critical or satirical tones and approached more than the issue of the bomb: they approached the demands for basic civil rights, as well as the ironies of diplomacy and political paranoia. They also enabled the envisioning of fictional portraits of urban spaces, and a hyperbole of military protocols and personas.

Therefore, the focus of this chapter is to identify and connect particularities of film language and presentation in such productions in order to investigate each one's unique way of approaching post-apocalyptic motifs and the imagination of nuclear war from the period. Besides discussing technical aspects of film language (that is, elements such as *mise-en-scène*, soundtrack, cinematography, acting etc.), I will look at one major section from each film that better expresses my arguments as well as such aspects. Stills from the films will be used to illustrate some of my points.

2.1. *The World, the Flesh and the Devil*

When director and screenwriter Ranald MacDougall, known for scripting films such as *The Naked Jungle* (1954, directed by Byron Haskin) and directing *Man on Fire* (1957), released *WFD* in 1959 with distribution by Metro-Goldwyn-Mayer, mainstream media criticism was mixed. Bosley Crowther from *The New York Times* wrote at release date with a cry for realism in the film's proposal for total devastation of civilization, asserting that the filmmaking team had "stretched their imaginations a great deal further than they have stretched their intellects"[21]; on the other hand, the critic praised the initial film's drama as "graphic and interesting, presenting a science-fiction idea in good, vivid cinematic style." *Variety* commended the film at the time, mentioning its "provocative three-character story dealing with some pertinent issues (racism, atomic destruction) in a frame of suspense melodrama"[22]. However, the on-location shooting of the piece in New York seemed to impress both reviewers – again for the sake of realism, which was the critical focus employed by said outlets –, something that shows one of the film's prominent characteristics: the use of space to construct its diegetic drama and the idea of post-apocalyptic extinction.

The film draws its events from the last-man tale of M. P. Shiel's *The Purple Cloud* (1901)[23], and its initial premise focusses on a single perspective of the narrative: that of the protagonist Ralph Burton, played by Harry Belafonte. Burton, a black man, is a coal mine inspector who ends up alone in a Pennsylvanian mine; a cave-in traps him inside, and the radio silence when he tries to contact his colleagues on the surface suggests an imminent conflict in the plot. He eventually surfaces to find that the nearby city has been deserted and travels to New York to find the same thing. After managing to make a building inhabitable by reactivating power to it and organising supplies, he meets Sarah Crandall – played by Inger Stevens – on the streets; Sarah is a young white girl who had also been lost since the cataclysmic event. The two build up intimacy as the days go by. Crandall and Burton then find a third person while exploring, a white man named Benson Thacker – played by the then acclaimed Mel Ferrer. Thacker's introduction in the narrative creates a relationship complication, with Crandall developing romantic feelings for both him and Burton, which ultimately leads to a conflict between the two men, with a subversive twist in the closing resolution due to the fact that the three found a way to reconcile and consolidate the love triangle.

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[21] "Screen: Radioactive City; 'The World, the Flesh and the Devil' Opens," by Bosley Crowther. *The New York Times*. Written in 1 May 1959. Web. 18 Jul 2016.

[22] "Review: 'The World, the Flesh and the Devil,'" by Variety staff. *Variety*. Written in 31 Dec 1958. Web. 18 Jul 2016.

[23] The initial credits display the message "Suggested by a story by Matthew Phipps Shiel" (*WFD* 00:01:19).

MGM made sure that the cast would look familiar to the audience, and Mel Ferrer had even played a role of a seductive man involved in a love triangle before, as Andrei Bolkonsky in King Vidor's *War and Peace* (1955). Inger Stevens was a new star in the film industry, but had debuted in a major role working with Bing Crosby in *Man on Fire*, although the critics of the time recognised her presence in the film more for her appearance than her performance[24]; a sign of the sexist focus of mainstream film criticism of that time. She had also collaborated with famous names such as Yul Brynner and Charles Boyer in *The Buccaneer* (1958). As for Harry Belafonte, his position as a cast member is crucial, since his character should enable the race discussion that had been increasingly drawing attention and would culminate in the 1963's civil rights campaign, in which he prominently participated[25].

The section of the film that is important for this study comprises the initial sequences in which Burton is alone in the mine, leading up to the moment when he settles down in a flat in New York before meeting Sarah Crandall (*WFD* 00:33:00). The early action reveals Burton's work routine, familiarising the viewer with the character's reality. Lighting is dim, shots are closer (fig. 1 and 2) – usually medium close-ups or medium shots–, creating a sense of closeness and restlessness about the narrow tunnels of the place. There is no music early on, and the echoes of Burton's voice trying to reach his co-workers through the radio help foreshadow the disaster. Then the cave-in takes place and Ralph is truly alone. Ismail Xavier's idea of imprisonment brought about by frame stability and contingencies of space mentioned in the introductory chapter can be applied to this initial sequence. There is no obvious sign that the bombs have fallen. The audience's point of view of the action follows the camera frame, which in turn follows Ralph, so the viewer's perspective is somewhat trapped underground with him. Technical clues – mostly conveyed through diegetic sound – are given as to the fact that something unusual is going on: the silence of the radio, and the sudden silence of a rescue team that had been digging to save him. But only when the character surfaces can the audience find out about the apocalypse, for it is visible – including the fact that nobody else apart from Burton can be seen – in wider, brighter shots of the empty mining facilities and equally empty streets (fig. 3).

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[24] The only line about Stevens in Bosley Crowther's review of *Man on Fire* for The New York Times reads: "Inger Stevens is quite pretty and pleasant as the young lady who inexplicably loves the man, and E. G. Marshall is ruggedly aggressive as her lawyer boss." *Screen: 'Man on Fire'; Crosby Has Difficult Role in State Film,* by Bosley Crowther. *The New York Times.* Web. 23 Aug 2016.

[25] Along with other prominent African-American artists such as writer James Baldwin and actor Sidney Poitier, Belafonte committed himself to the civil rights cause, something that "was amplified in his years with [Martin Luther] King [Jr] and the civil rights struggle for 'freedom now!' and through his commitments to world citizenship," as described by Judith E. Smith in *Becoming Belafonte: Black artist, public radical* (256).

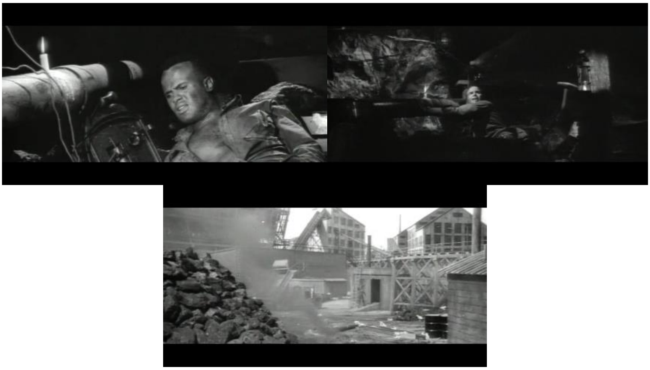

Fig. 1–3 (from left to right, top to bottom): The transition from shots with dim lighting and medium/medium close-up shots to longer shots and brighter lighting.

Such wider shots prevail throughout the rest of the sequence. Burton appropriates a car and travels to New York, only to find hundreds of cars abandoned on the avenues leading into the city. No explanation is given as to why he would travel there, but the use of such an iconic location might benefit the popularity of the film. The film seems to suggest that, if there is nobody alive in the Big Apple, then the world's population must have also disappeared. There is a heavy use of landmarks to compose the setting and make it recognisable for the audience. Familiar spots are depicted as deserted mementos of the cityscape: the George Washington Bridge, or the Lincoln Tunnel; and as he approaches New York proper, the Statue of Liberty is portrayed in the same manner. Public spaces are reimagined as wrecks of the future; as previously quoted from Susan Sontag, a nightmare that "is too close to our reality” (42). Besides, cars are now remains of human agency – pieces of technology that have been abandoned, and the *mise-en-scène* reiteratively demonstrates that. A major part of *WFD*’s *mise-en-scène* consists of such depictions of technological shells of a vanished civilization, permanently motionless until the only portrayed agent of the diegesis comes along and makes use of what is left (*WFD* 00:15:04). Besides cars, Ralph also uses a boat to cross the Hudson River, reiterating the relevance of vehicular technology in the construction of *mise-en-scène* and editing, since it allows for the portrayal of different deserted locations (00:17:20). His relation to technology is strong and he constantly takes advantage of it, just as the film takes advantage of such technological objects to underscore the desolation of the setting.

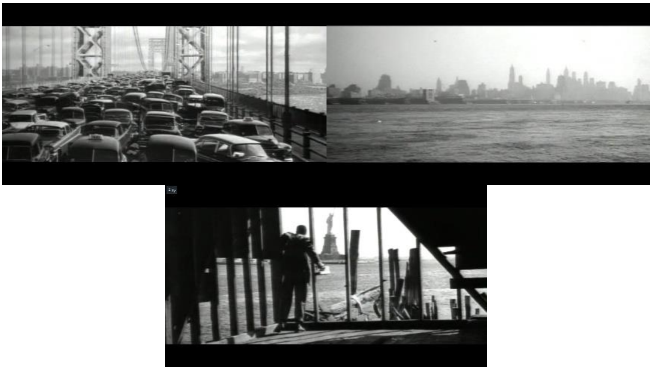

Fig. 4–6 (from left to right, top to bottom): Longer shots of landmarks in NY. The jammed George Washington Bridge, the New York skyline, and a closer shot of Burton with the Statue of Liberty in deep focus.

Movement plays a role in the dynamics of space and photography during the initial sequences. Again, there is a contrast between the scenes inside the mine and the ones in the streets and inside buildings. Burton’s immobility – even though he eventually manages to escape from his post-disaster captivity – when trapped underground is accompanied by the stasis of the shots themselves. Once outside, Burton moves about with considerable frequency and energy. In these moments of exploration, framing happens in two ways: either there is more use of long and medium shots with camera movement in order to focus on Burton’s actions, or there are longer shots with static camera so that the environment becomes the focus and Burton becomes a passing element in the frame. Such an approach to cinematography accentuates the presence of new post-apocalyptic tropes in the exposition of cinematographic space: the collapse of metropolitan societies and the idea of almost religious cleansing and renewal[26]; the focus on the portrayal of war in civilian centres rather than military contexts (Seed 4); and the urgency to find supplies and shelter as a result of the survivor's "attempts to decode the shattered landscape in an attempt to understand what has happened" (Seed 199). The first trope is more accurately expressed in a scene in which Burton visits a New York cathedral in a moment of despair and impotence. He climbs up the bell tower and the rings the bell. As the chimes echo through the streets, the transition of static shots shows five stone lions in different positions and areas, from the first one that is lying down to the last one that is standing up (fig. 7-9). This is a moment that resembles an earlier film: Sergei Eisenstein's *Battleship Potemkin* (1925), in which three still shots gradually show a stone lion rising after the revolutionaries of the Potemkin strike back against the Tsarist forces (00:54:58). In *WFD*, that quick editing work further illustrates the desolation of the city, a once crowded zone in which virtually nothing but stone and glass now compose the landscape where a lone wanderer tries to come to terms with his new existence. There is an intensified sense of solitude as the shot transition creates an illusion of movement by inanimate objects. That illusion can be related to Eisenstein's idea of "an artificially produced image of motion" used to convey "pictorial symbolism" (55-6). Motion and time are constructed in this scene, accompanied by the sound of the church bell coinciding with cuts in the shots. The pictorial symbolism of this scene refers to the idea of a derelict city finally waking up to the call of a survivor.

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[26] In *The Sense of an Ending*, literary critic Frank Kermode alludes to this notion by pointing out "the destruction of the earthly city as a chastisement of human presumption, but also of empire" (112). It is almost unavoidable to notice that the use of New York, one of the United Statesian most important cities, as the main setting for the film can also illustrate the disintegration of the US as an empire of the 20th century.

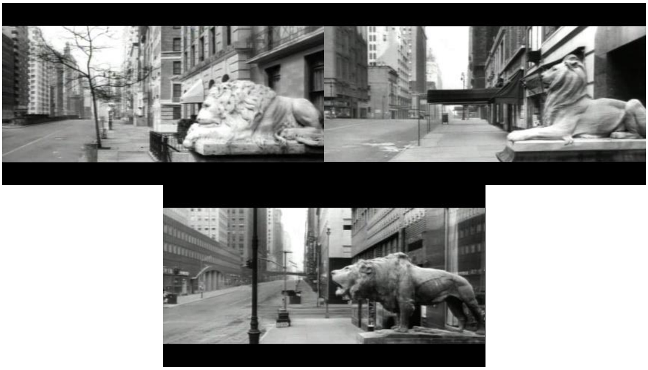

Fig. 7–9 (from left to right, top to bottom): The stone lions “waking up,” a sequence in which five consecutive shots respond rhythmically to the ringing of the church bell. Here, three of them are displayed to sum up the editing work.

In regard to editing, Harold F. Kress – who would later work on such works as *The Towering Inferno* (1974) – makes substantial use of ellipses. There is a certain stability in editing rhythm when Burton is inside the mine, with lengthier shots and few cuts to pass time and further express an idea of entrapment by creating the illusion of days spent in that confinement. However, as Burton escapes the tunnels and travels across the states, there is a shortening of shot length and an acceleration of diegetic time between the shots. That editing approach enables the narrative to revolve around New York before the climax, and also serves to depict different locations in between cuts. Time stops in the diegesis, since all vehicles and buildings remain unchanged, and that allows for the development of Belafonte’s character as a heroic agent, as somebody who manipulates the dead environment around him – which is mostly urban, therefore devoid of immediate action by some forces of nature – and transforms that environment single-handedly. As he walks down the streets of the metropolis carrying a little cart loaded with basic provisions, there is a constant transition from high-angle medium shots of his diminished figure (fig. 10) to subsequent Dutch angle, point-of-view shots of the sky (fig. 11) to imply his disorientation in such an urban labyrinth. Establishing shots are also present throughout these sequences, usually panoramic shots that are shorter in length and lead up to closer shots of Belafonte’s distressed countenance, contextualising his increasing hopelessness.

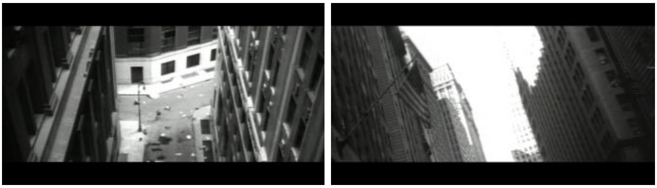

Fig. 10 and 11: Burton’s small figure at the centre of a high-angle long shot, and a point-of-view shot of the towering buildings from a Dutch angle.

Communication is a pivotal part of *WFD*’s plotline and narrative climaxing during these first moments of the film. Ralph continually tries to phone or radio survivors/colleagues, both underground and on the surface. There is also communication from the film to the viewer through *mise-en-scène*: there is an emphasis on the use of street posters and newspapers to convey the message that bombs have fallen and major cities in the world have been evacuated (fig. 12) – although there is no clue as to where all the people have gone. Newspapers read “Millions flee from cities! End of the world!” as an extravagant verbal announcement of setting, while Civil Defense posters are scattered about the locations as Burton jogs along the streets (fig. 13 and 14). A sign that reads “Alert today, alive tomorrow” reminds the viewer of the forthright nature of United Statesian defensive policies of the era[27]. Such *mise-en-scène* elements perform the task of situating the diegesis in the film’s historical context, capitalising on terrifying issues of the day; and, in a way, intensifying them. This sort of communication encompasses the initial sequences, and give the repetitive depiction of streets and buildings an extra purpose.

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[27] In May 1979, the United States Congress published a report with comprehensive details on nuclear war and the possible aftermath of a nuclear blast called *The Effects of Nuclear War*. The book encapsulates the cautionary discourse of alertness that many different post-bomb measures had portrayed – including the earlier short film *Duck and Cover* (1952), commissioned by the US Civil Defense Administration and directed by Anthony Rizzo – among which is the “stay alert” idea and more specific civil defence measures (49).

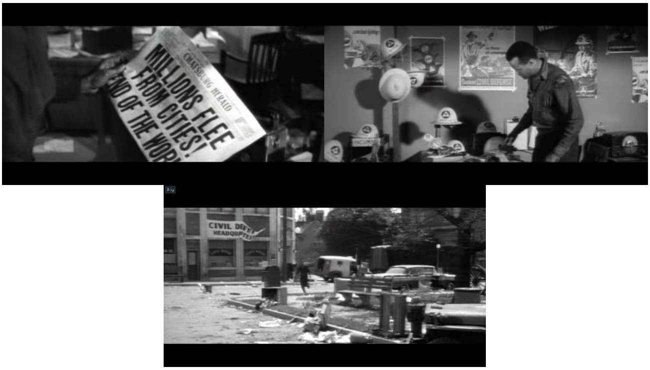

Fig. 12 (top left): The use of *mise-en-scène* components to contextualise the events; in this case, a newspaper headline. Fig. 13 and 14 (Top right and bottom): Civil Defense posters scattered inside buildings and about exterior environments; also, the presence of various construction hats with nuclear hazard symbols on them helps situate the audience.

Music is also an important element in *WFD*; both diegetic and non-diegetic music. Ralph Burton sings when he is happy, sad, or when he is simply feeling lonely. Playing the guitar and singing are some of his ways of communicating in the diegesis, possibly his way of not feeling desperate in a desolate world. In fact, this musical quality of Burton's reflects Harry Belafonte's own musical background, the fact that the actor was also a singer, and featuring that other talent of his became part of the production and ultimate performance[28]. The original score exhibits makings of grandiose orchestral music, not uncommon in high-budget United Statesian productions of the time. However, the rhythm of the musical score sometimes accompanies the images of destruction depicted throughout, and slows down when deserted streets become the main landscape in the frame. In fact, the score is played during the initial credits, then silence takes over as Burton works in the mine and during his first discoveries outside in the small town close to the mine facilities, then picks up again when he sets up to drive to New York, building up as the editing rhythm also speeds up and the whereabouts become more urban and imposing (*WFD* 00:13:55-00:15:17). Burton's way to deal with the solitude and silence of the underground for days on end is to sing; again, something that he does throughout the initial sequences of the film.

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[28] It could be said that Belafonte became part of the star system of Hollywood because of such qualities.

Then there is the issue of racism and social structure depicted in the film, which is portrayed in a particular manner, considering the theme of apocalypse behind it. The interactions between Burton and Crandall are almost always filled with tension and bewilderment, as though their social distance as black man and white woman put them in a position of communicative impediment. There is an underlying instability in their daily routine, for Crandall often calls Burton to perform random tasks, which gradually upsets him and makes him wonder what perception she has of his role in that new world. All of this culminates in a particular scene in which Ralph and Sarah have an exchange about the fact that they might be alone in the world, and that there is no future for mankind. Burton, through an enraged performance by Belafonte (fig. 15), says:

> If you're squeamish about words, I'm colored. And if you face facts, I'm a negro. And if you're a polite Southerner, I'm a nigra. And I'm a nigger if you're not! […] A little while ago, you said you were free, white and 21. That didn't mean anything to you, just an expression you've heard for a thousand times. But to me, it was an arrow in my guts […] In that world where we came from, you wouldn't know that. You wouldn't even know me. Why should the world fall down to prove that I am what I am and that there's nothing wrong with what I am? (*WFD* 00:51:44-00:52:23)

It is through that particular scene that *WFD* provides direct insight into civil rights; a discussion that MacDougall wished to present in the form of post-apocalyptic fiction. The film's diegesis offers the idea that the United Statesian authorities and institutions – and with them, some social conventions[29] – had to be brought down by nuclear war so that taboos could be disputed and eventually broken. Stevens and Belafonte barely have any physical contact during most of the film, whereas she and Ferrer maintain close intimacy since early in their interactions – she warmly tends him as he recovers from the fever that he had developed when they found him. But the ending scene shows that such a racial distance can finally be done without through a prominent shot of a clasp of hands between Burton and Crandall (fig. 16). The clasping of hands does not go without its conflicts, however. The dispute for the "last woman" culminates in Thacker hunting Burton around the city streets with a rifle, as in a jungle. The savage strife is filled with words of threat, and Burton has to put his own gun down and approach his resentful rival to try and talk sense, at which point Sarah approaches them and calms things down. The final scene swaps the typical "The End" caption for "The Beginning," implying that the apocalypse was not enough to erase hope for a restoration of humankind (Fig. 17); a multiethnic, polyamorous restoration. The clasping of hands itself is the moment of resolution, the ending of racial and sexual tensions built up as the three go on to survive with little sense of how to start things over. Reconciling their differences and walking away in cooperation may ironically be a subtle sign of the objectification of the last woman as shareable in a ruined world, but it can also indicate a break of racial taboo.

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[29] Not only social conventions of race and gender are challenged in the narrative, but also those of romantic relationships. The image at the ending – the three characters holding hands and walking towards a new beginning (fig. 17) – suggests that the moral imposition of monogamy is threatened. The love triangle and the subsequent conflict between Burton and Thacker does not end in murder, as it habitually would, but in a resolution that benefits everyone. And since the avoidance of human extinction is a recurrent issue throughout the plotline, that suggestion may ring true.

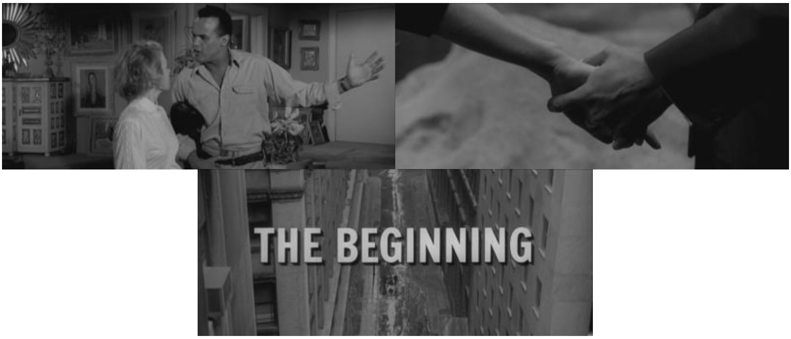

Fig. 15 and 16 (Top left and right): Burton's argument with Crandall, and the final reconciliation between the two. Fig. 17 (bottom): the final shot of the film, showing the three survivors holding hands.

Space framing, movement, and the post-apocalyptic reimagination of racial and gender power relations have been compelling points in *WFD* for this study. Shots of towering buildings from a low angle express the overwhelming power of a desolate city. The process of photography solidifies the film's particular depiction of post-apocalyptic zones – mostly urban, desolate, but not ruined – and constantly suggests what is outside the frame – the unexplored spaces. Noël Burch argues that "[t]o understand cinematic space, it may prove useful to consider it as in fact consisting of two different kinds of space: that included within the frame and that outside the frame" (17). The panning of the camera in shots with more proximity to Ralph Burton and his movements reveals a landscape with little more than scraps of paper and littered objects. Suspense builds up as the audience is shown the mysteries of a dangerous world "outside of the frame" little by little, since the construction of the urban areas as giant empty spaces depends on the gradual revelation of new spaces previously not within the frame so that, among other things, new characters can be introduced. Burton continually attempts to contact the *outside* world and look for survivors, and succeeds when he finally hears responses from the other side of a radio transmission (*WFD* 00:55:17). However, he – as well as the audience – never finds out whether those responses come from people who wish to reunite and rebuild – like Sarah Crandall – or from people who wish to prioritise their own interests to the detriment of others' – like Benson Thacker. Those tensions are built from the notion that space itself is revealed little by little in the frame. Apart from Crandall and Thacker, there is little possibility of agency in out-of-the-frame spaces that Burton interacts with and walks towards – something that elucidates the impression of mystery in the composition of space and aggravates the aura of desertion that the film reiteratively establishes.

The composition of the shots is also a major feature as *mise-en-scène* elements that remind the viewer of the early Cold War can be seen during many moments of the initial sequences; elements which serve to situate the audience in that world where the threat of nuclear war ultimately materialised[30]. As for the racial issue, it is conclusively what drives the film's drama and the use of conflictive dialogues, taking the narrative beyond what Sontag alleges to be simply an "Adam and Eve plot" (32), and instead presenting Ralph as the image of an Adam – who might also be interpreted as a lonely "Robinson Crusoe" in the first moments of exploration around the vacant city and the discovery of a new safe place in the apartment later on – as somebody who questions the reasons behind Sarah's – Eve's – distance and caution towards him. Such a questioning and such a discussion culminates in a resolution that takes into consideration the historical changes of the time and the struggles for basic human rights in a context of blatant segregation. Gender roles can also be considered an issue: when Sarah and Ralph

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[30] Civil defense signs can be found several times, as demonstrated earlier in this chapter. Artefacts that reflect the Cold War nuclear scare can also be found, as is the case of a rather cautionary poster that reads "Alert Today, Alive Tomorrow" (*WFD* 00:16:14).

Burton find each other and get acquainted, their dynamics of relationship quickly fall into normative, pre-apocalyptic moral standards[31]. Sarah is caught in the middle of a conflict between two resentful and possessive men, as an object of male desire in a situation of survival and societal distress. Such a situation makes it worse for her to make her own choices, as the sense of threat confuses her while she never seems to forget the age-old duty of marrying, the assumed dream of a middle-class woman in the 1950s United States. When the final conflict does happen, she is left with no say in the matter. Her helplessness serves as indication of the secondary position that she ended up having after the coming of Thacker and the subsequent dispute between the two men for her desire. However, the very final scene reconstructs her role as she approaches them after the hostile encounter and acts as a source of bonding, of reasoning in the face of an uncertain, chaotic future – perhaps an object of conciliation between two men. She puts herself in the middle of a dangerous situation so that a new perspective on that desolate world can arise; it is a scene that culminates in the previously discussed clasp of hands. Ultimately, she is both objectified and empowered by the final tensions and by the urgency of a new social order.

2.2. *Dr Strangelove, or How I Learned to Stop Worrying and Love the Bomb*

Dr Strangelove offered an innovative perspective on the nuclear scare at the height of it, in 1964. The comedic mood of the film caught the media's attention, and *Variety* received it well at the time, with columnist Dave Kaufmann writing that

> it would seem no setting for comedy or satire, but the writers have accomplished this with biting, piercing dialogue and thorough characterizations. The climax is one with a grim post-script, as the Pentagon begins worrying about the mine-shaft

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[31] In the essay "*The World, the Flesh and the Devil*: The Politics of Race, Gender, and Power in Post-Apocalyptic Hollywood Cinema," Stéphanie Larrieux states that "Initially, Ralph and Sarah maintain their socially prescribed gender and racial assignments as male and female, black and white. They settle in different buildings, almost unconsciously reconstructing the barriers of a segregated order. With traditional gendered roles in place, Ralph attends to 'manly' tasks like restoring electrical power throughout the city, using radio and telephone technology to search for other survivors, and fixing things in their separate apartment blocks. Sarah oversees the domestic duties of maintaining the households and preparing meals" (137).

> gap in the post-nuclear era, while the Red envoy snakes some pictures of the War room[32].

Bosley Crowther from *The New York Times* criticised the extent of the film's parodies of authoritative figures: "I am troubled by the feeling […] of discredit and even contempt for our whole defense establishment […] when virtually everybody turns up stupid or insane—or, what is worse, psychopathic—I want to know what this picture proves"[33]. Crowther's interest in standing up for the authority of the US government in his criticism of the film disregards the parodic reach of *Dr Strangelove* and favours a moralistic defence of national security. The "love" for the bomb is the film's central motif: the obsession of military authorities from an imperialistic nation with the idea of control over intimidating devices of war. Director Stanley Kubrick idealised the film after years of deep interest in the subject of nuclear deterrence and the hydrogen bomb, and the thermonuclear issue was something that kept troubling him during the second half of the 1950s, as indicated by Kubrick's former producing partner James B. Harris in the documentary *Inside* Dr. Strangelove: or How I Learned to Stop Worrying and Love the Bomb (*IDS* 00:01:30).

As in *The World, the Flesh and the Devil*, the cast here is composed of some illustrious names that play some stereotypical roles. Sterling Hayden, famous for his leading roles in noir films and westerns, had already collaborated with Kubrick in the latter's early *The Killing* (1956); he plays the insane general Jack D. Ripper. The actor and comedian Peter Sellers was chosen to portray three different roles – Dr Strangelove himself (a former Nazi scientist who is ironically assigned the role of director of weapons research and development in the US), President Murkin Muffley, and Ripper's executive offer, Lionel Mandrake from the RAF. Finally, there is George C. Scott, who plays general Buck Turgidson, an overly agitated man whose suspicion of the Soviet Union is almost as critical as general Ripper's.

Before delving into the analysis of major technical aspects and ultimately investigating one section of the film (namely, the final sequence of the War Room and the ending sequence [*Dr Strangelove* 01:27:38-01:34:44]), it is worth noting the first demonstration of its satirical approach expressed through audiovisual elements. The film opens with a disclaimer that reads:

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[32] "Film Review: 'Dr. Strangelove: or How I Learned to Stop Worrying and Love the Bomb,'" by Dave Kaufmann. *Variety*. Written in 21 Jan 1964. Web. 28 Aug 2016.

[33] "Movie Review: Dr. Strangelove: or How I Learned to Stop Worrying and Love the Bomb," by Bosley Crowther. *The New York Times.* Written in 31 Jan 1964. Web. 28 Aug 2016.

> It is the stated position of the U.S. Air Force that their safeguards would prevent the occurrence of such events as are depicted in this film. Furthermore, it should be noted that none of the characters portrayed in this film are meat to represent any real persons living or dead. (*Dr Strangelove* 00:00:00-00:00:23)

That statement already expresses the tense and delicate nature of national reception of works that imagined a nuclear deterrence scenario, especially one that had such a critically acid view of the Cold War.

The sequence then begins with an aerial shot of clouds floating over mountain ridges (fig. 18) as a voiceover narrator introduces the audience to the issue at hand: the diplomatic problems between the US and the Soviet Union and the rumours about the existence of a Doomsday device in the Russian Arctic islands. Such a statement which would come full circle at the end of the film as the powerful individuals in the War Room confirm the existence and the imminent detonation of such a machine. The lengthy shot of the clouds and mountains then transitions to two United Statesian planes in the sky during an air-to-air refuelling. The image would seem trivial were it not for the initial framing of the scene. The centre of the first shot is the refuelling boom itself, protruding from the tanker as a phallic representation of the technological advancements of the US Air Force of the era (Fig. 19). The B-52 bomber itself, the interior of which is a prevalent diegetic space throughout the film, can be recognised as a phallic instrument of war, and its bombing destination an objective of symbolic coitus (Seed 193). The scene resumes with slow movement of the boom lodging into the B-59 (Fig. 20), accompanied by Laurie Johnson’s gentle violin rendition of Harry Woods, Reg Connelly and Jimmy Campbell’s “Try a Little Tenderness” so as to create an atmosphere of romantic intercourse. This sequence is important because the development from the Air Force disclaimer to a depiction of two aircrafts engaging in implied intercourse breaks the seriousness of the subject matter, and sets the foundation for the rest of the film’s humour[34].

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[34] Such a humour is fundamental to understanding its relevance in its cultural scenario. David Seed remarks: “Kubrick’s adaptation of this novel [Peter George’s *Red Alert* (1958)] involved

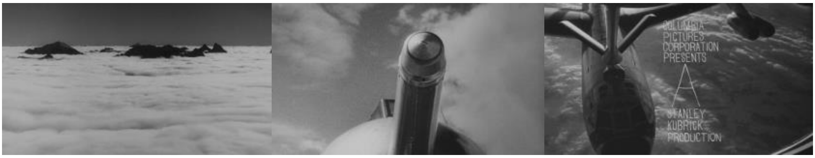

Fig. 18-20: The sequence of shots from the initial moments of the film, showing the quasi-phallic images of the tanker during air-to-air refuelling.

The plotline is composed of some micronarratives that interweave in the development of the film's conflict. There is the first narrative nucleus of Jack D. Ripper at the Burpelson Air Force Base who sends irreversible engagement codes to the B-59 bombers that are flying over Russian territory to drop H-bombs in several locations; one of such aircrafts is another narrative setting in which much of the film's action takes place, commanded by Slim Pickens' character, the rowdy Major T. J. "King" Kong. The main narrative nucleus, however, is that of the War Room, which is introduced to the audience after the authorities at the Pentagon find out that Ripper has issued an attack command to the bombers. The War Room becomes increasingly more prevalent in the plotline as diplomatic tensions between United Statesian and Soviet authorities heat up.

While *WFD*'s exploration of cities is more centred on the pedestrian perspective, *Dr Strangelove* avoids the depiction of large cities entirely, and focusses on the aerial perspective of space. Aerial shots come aplenty throughout the film, and restate the military efforts that form the film's thematic core, as opposed to the civilian standpoint seen in MacDougall's production. Military areas complement – or are complemented by – the use of martial music in some sequences. Verbal language is also used to convey meaning through the depiction of signs that bear some resemblance to those seen in *WFD*, but with a more humorous aspect. The phrase "Peace is our profession" shows up in a framed picture in Ripper's office and in an outdoor hoarding at the Burpelson Air Force Base as part of the humorous composition of space in the film, used in order to convey the ironic idea that peace is the last thing on the authorities' mind – something which is particularly indicated in a shot during the conflict between Ripper and the soldiers who are trying to stop him (Fig. 21). There is also a multitude of books and leaflets of military nature in Ripper's office and in the War Room (Fig. 22) that compose the film's space and build the sarcastic resonance

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a fundamental shift in narrative mode so that rather than dramatizing a crisis within the Cold War, he could direct a comic assault on an entire political stance" (Under the Shadow 182).

of its narrative, especially in the War Room. The film's editing maintains transitions between narrative nuclei, and those transitions are the main driving force behind the development of diegetic time and rhythm, such as in sequences structured in cross-editing. Such a development resembles Christian Metz's notion of *autonomous segments* featured in his article "A grande sintagmática do filme narrativo"[35]. Metz details six kinds of syntagmatic units that organise meaning in a film, and the *alternating syntagma*, or simultaneous editing: a common narrative structure in which autonomous shots from different events alternate and form a cohesive temporal relation, describes precisely the rhythm of *Dr Strangelove* (Metz 212). The transition from one narrative nucleus to the other intensifies as the imminent danger of the Doomsday device becomes palpable, which is reinforced by the concurrent events of the B-59 and the War Room, aligning the separate situations – which were previously temporally independent – and setting up an aura of impending doom, critical to the construction of the final sequence.

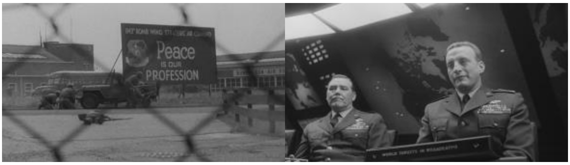

Fig. 21–22: *Mise-en-scène* items: a "Peace is our profession" sign at the Burpelson Air Force Base, where a loud gunfight is taking place; and a book called *World Targets in Megadeaths* sitting on the War Room table in a medium shot of George C. Scott as general Buck Turgidson (right).

The satirical facet of *Dr Strangelove* manifests itself in some particular ways, almost always relating to political dilemmas of the era. For one thing, the film mocks the intricate procedures of engagement on a military aircraft, with the repeated zooming shots of the many buttons and switches necessary to activate the dropping of the nuclear device, which delays time in the diegesis, like a sort of operational bureaucracy (*Dr Strangelove* 01:22:00). Another way – and possibly, the most prevalent way – through which the narrative communicates its satire is the grotesque representation of zealous national measures about the prevention of nuclear apocalypse and the suggestion of an apocalyptic aftermath by high US authorities – expressed through the composition of the film’s satirical characters. Spencer Weart writes that

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[35] "The Great Syntagma of the Narrative Film."

> A nuclear scare built up, worse than any before, frightening the public in the United States, Western Europe, and the Soviet Union. It came to a climax in a tense speech the President gave over national radio and television in July 1961, implying that the world was on the brink of war […] This sounded too scary, however, and in the final version Kennedy only said that people should be ready to protect their families, and that he would ask Congress for funds to stock shelters with food, water, and first-aid kits. (255)

The notion of nuclear scare presented here does not refer to Cuban fears or Soviet fears of the time, but specifically to United Statesian fears resulted from imperialistic values of national defence. Kubrick works on that idea by developing a narrative that mostly depicts figures of authority as obsessive and vulnerable, and Strangelove’s plan to build a fallout shelter serves the purpose of protecting only such authorities, not the people under their control in the hierarchy of political power. However, the characters depicted in the final scenes are from the B-59’s crew, In sum, the policies of shelter would only benefit the establishment and the government. Like in war, the highest authorities are not on the front lines. Subordinates with no choice on the matter operate the bomber that travels above Russian lands, a disadvantaged position in the hierarchy of power that is further illustrated by the performance of Slim Pickens as Major Kong, a rodeo performer[36]. The crew are fulfilling their duties; the authorities are promoting world destruction. But destruction itself is to be brought upon everybody, as represented by the last shot from above. The film satirises and criticises militarism and war by showing the irony of a dreadful, all-encompassing devastation that will leave nothing or nobody unscathed, not even those who planned it.

Another idea mocked by the *Dr Strangelove*’s sardonic format is that of Cold War deterrence, a concept which is increasingly clarified throughout the film, with general Turgidson (George C. Scott) being the first to comment on it at the War Room. His stance on the matter is that of incredulity, and his extremist approach to the weapons race is justified by a belief that "war is too important to be left to politics," and that serious action must be taken, so that "communist subversion and conspiracy" can be avoided (*Dr Strangelove* 00:23:40). General Ripper is the main agent in the plotline as regards suspicion of conspiracy. Sterling Hayden's character is mostly portrayed as an isolated man, locked in his office in a military facility, constantly suspecting that the communists will take action against the US at any moment and in subtle ways. He develops the theory that the Soviets are trying to poison the US people's bodily fluids through fluoridation, an idea that mocks the paranoia common in McCarthyism. That paranoia is what leads Ripper to order the attacks on Soviet territories and begin the main conflict of the film.

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[36] Screenwriter Terry Southern’s son Nile Southern points out Kubrick’s decision to opt for somebody who was “a real human being,” and not necessarily an actor, to play Major “King” Kong’s part (*IDS* 00:22:06). Pickens, like the character he played, was a rodeo performer.

Satire is also present in simple elements of presentation, such as the names of the characters themselves, and in subtle bits of performance. Jack D. Ripper resembles the name of British serial killer Jack the Ripper, and Strangelove can indicate the odd enthusiasm that the character seems to have for mass destruction, whereas the word *merkin* in Merkin Muffley – the bald president of the U. S., also played by Sellers – originally means a wig that can be worn as artificial pubic hair. As for performance, it was Kubrick's desire that there should be a constant exaggeration of military uneasiness and ruthlessness, expressed through Ripper's reckless engagement commands or through his belligerent position against his compatriot forces that try to breach into the base to stop his plan, or yet through Turgidson's excessive suspicion about the presence of a Soviet ambassador in the War Room and Scott's own over-the-top performance[37].

Speaking of performance, there are some specificities of direction that characterise the film's tone and help one understand the final sequences of the production, which are important for this investigation. Film critic Alexander Walker points out that Kubrick wanted the character of President Merkin Muffley to "be the one man that understands the consequences of his actions – the one serious point in the film" so he had to play him seriously (*IDS* 00:17:11). Also, Sellers' acting improvisations are recurrent in the film, most prominently in his roles as Mandrake and Strangelove (*IDS* 00:17:00-00:19:40). One moment in the final sequence is a testament to that: Strangelove's abrupt mannerisms as he tries to resist his autonomous right hand (Fig. 23), as if he were resisting his own Nazi past (*Dr Strangelove* 01:31:00). Strangelove eventually explains the logic of a fallout shelter, just as he did the notion of deterrence (*Dr Strangelove* 01:28:00). At this moment, his hand gets especially out of control in Sellers' performance as he becomes overly excited with the idea of nuclear annihilation pushing people into fallout shelters so his breeding techniques can prepare the population for a new future. In *Inside Dr. Strangelove*, Alexander Walker mentions that his mysterious figure

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[37] James Earl Jones – who played one of the characters aboard the B-59, called Lothar Zogg – recalls that "Kubrick manipulated some of those performances out of George by saying this: 'Okay, George, you gave it to me straight, you gave it to me simple, but I want it over the top. Give me one where you go over the top.' And Kubrick invariably used the words 'over the top,' and George resented it" (*IDS* 00:27:31).

> comes out of the old high German cinema of Fritz Lang and Murnau; the sinister man, the man of tremendous power who is himself, in some way, impotent. That is to say, in the film, he is sitting in a wheelchair. Stanley loved that sense of the criminal genius, who, for one reason or another, is handicapped, has got a disability. Which doesn't prevent him from destroying the world. (*IDS* 00:19:43)

Despite the fact that the wheelchair was actually the result of Sellers getting involved in an accident during production (*IDS* 00:21:41), the use of such a prop accentuated Strangelove's increasing lunacy[38], his ecstasy with the Doomsday device leading up to the point when he gets up of the chair and yells "Mein Führer, I can walk!" right before the editing rapidly transitions to real-world footage of various mushroom clouds (Fig. 24), accompanied by Vera Lynn's voice, singing "We'll meet again" (*Dr Strangelove* 01:33:00). The use of musical soundtrack in the very last scenes contrasts with the almost prevailing absence of non-diegetic sounds throughout the film, with the exception of "Try a Little Tenderness" in the beginning and the repetitive and almost goofy use of "When Johnny Comes Marching Home" during all the B-59 scenes; a traditional martial song from the Civil War that sounds fitting for an overly militaristic setting where United Statesian recruits and officials are far from home.

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[38] As Kubrick changes the direction of his project from a drama to a satirical comedy, he "decides that this now comedic strip requires a degree of inspired lunacy" (*IDS* 00:05:31).

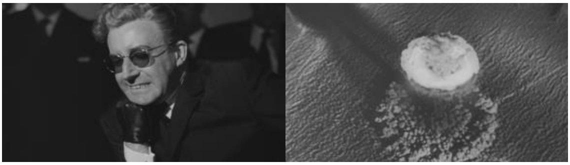

Fig. 23–24: Strangelove fights against his own hand; one of the mushroom clouds shown in the final scenes of the film.

Overall, the construction of meaning in the last scene has a touch of sinister sarcasm that Kubrick had prepared to oppose the otherwise light-hearted and silly mood from the rest of the film. The sarcasm grows stronger as “We’ll meet again,” a love song, accompanies the aforementioned sequence of real-life warhead detonations. Nuclear annihilation does materialise and there is an underlying irony in the fact that the entirety of the film focusses on the political forces of defence and control that can no longer stop the disaster brought about as a by-product of that very expression of uber-control and its subsequent paranoia. The slapstick and droll mode of performance seen throughout the film – especially in Scott’s acting and Sellers’ Strangelove – give way to an equally exaggerated, but more sombre, side of Dr Strangelove: the uncontained Nazi salutes, the pleasure expressed through the monologue that highlights the macabre details of eugenics planned for the future of humankind, as well as the framing and editing work that gradually closes in on Sellers’ face shot after shot until the whole personnel in the War Room is convinced of his plans (Fig. 25-27). Yet there is still room for wacky scenes as the film intermittently cuts from Strangelove’s speech to the parallel action aboard the B-59 – again relating to Christian Metz’ description of the alternating syntagma in cinema, in which autonomous segments complement each other in concurrent diegetic time –, where the crew is trying to open the jammed bay doors so that the bombs can be dropped. In an act of courageous lunacy, Major Kong opens the bay doors manually and mounts one of the warheads, comically falling from the sky in a cowboy-like manner (Fig. 28). All of those techniques build to an explosive climax, a sudden ending of the diegetic action with a tragicomic effect, which is suddenly wrapped up by the aforementioned depiction of nuclear mushrooms accompanied by a love song.

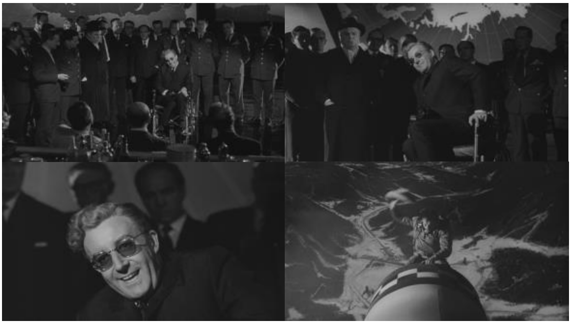

Fig. 25–27 (from left to right, top to bottom): The editing and framing work that closes in on Strangelove as he explains his plans for the nuclear shelters and gradually convinces the statesmen and military officers present. Fig. 28: Shot of Major Kong "riding" the warhead as he descends into oblivion.

With *Dr Strangelove,* Stanley Kubrick and his crew approached the issue of nuclear apocalypse in a way that caricatures the political anxieties of the time. Its *mise-en-scène* emphasised the military paraphernalia and the luxury of the political high echelon. The grandiose space designed by Ken Adam for the War Room demonstrate an exuberance of lighting contrast that is stylistically comparable to Alexander Walker's descriptions of Strangelove's figure as coming out of German Expressionism. Kubrick played with the fears of that era, either through the transition from a jocular depiction of political manias to the suggestion of a sinister imagination of a future based on mass destruction and eugenics. Ultimately, the film's characters,

> especially, but not uniquely, Kong, Turgidson, and Strangelove himself, are determined by clear obsessions and compulsions. The comedy of the narrative reveals these compulsions as a form of diplomatic ignorance and in every case presents psychic automatism as a mechanization of the self. (Seed 197)

So, how do *WFD* and *Dr Strangelove* adapt imaginations of disaster and post-disaster to cinematographic language? Both films defy the usual way of making post-apocalyptic films. They do not follow the formulaic action of other films such as *The Day After,* which veered more towards the action-orientated aspects of survival and less towards social issues, thus resembling the model of earlier films such as the sensationalistic[39] *Panic in Year Zero!* (1962, directed by Ray Milland). Susan Sontag argues that "compared with the science fiction novels, their film counterparts have unique strengths, one of which is the immediate representation of the extraordinary: physical deformity and mutation, missile and rocket combat, toppling skyscrapers" (44). In *WFD*, soaring skyscrapers become direct indicators of something other than imposing structures: they become indicators of an absence of the other, of the sense of loss and lack of communication – they become part of the space composition, but also part of a process of re-discovery of familiar spaces, now devoid of social meaning. In *Dr Strangelove*, missile and rocket combat are presented as more than sources of fictional action: they are presented as a compelling subject matter that an unusual narrative format for its time decided to demystify in order to shed new light on the issues of weapons race and militaristic supremacy. *WFD* and *Dr Strangelove* approach these tropes differently. The former deals with disaster in a palpable way – especially in the initial sequences, in which Burton walks around deserted and car-filled streets of a gigantic and once crowded city. Its set does not feature ruined buildings, because the desertion of its space is what defines its *mise-en-scène*, not its destruction. And the slow revelation of spaces, the gradual opening of the frame's imprisonment as Ralph Burton explores the streets of an abandoned New York, is just as much a moment of discovery for the viewer as it is for the protagonist. And such a structure of editing and cinematography creates thematic meaning that is important for this study: the film links the discovery of spaces with the sense of survival necessary for Burton to start anew, ultimately bringing the "starting anew" trope together with a portrayal of racial differences, sexuality, and gender roles.

As for *Dr Strangelove,* disaster is presented as iconic images of mushroom clouds, and only as a final portrayal of the film's discourse, when the parody of intense diplomacy and nuclear deterrence reaches its ludicrous, if dramatic, peak. *Dr Strangelove*'s depiction of mushroom clouds relates to an aforementioned point by Weart that some images, ideas, and anxieties can "become strongly associated with one another in a cluster that includes a particular subject, such as nuclear energy" (xii). Showing real-life footage of nuclear detonations while not depicting disaster and ruins in the fiction itself serves to bring a sense of foreboding to what the narrative is about: the risk of devastation through the articulations of the military. The film builds up the anxiety of destruction, never explicitly showing how it would affect the characters and the spaces of the diegesis, although Strangelove himself hints at it verbally by describing how the post-nuclear survival would be, and who would enjoy the privilege of a life underground after the event. But it happens in the end, and it is such an absolutely destruction that it is not shown, thus making use of a pictorial apophasis to present its disaster. It can be terrifying for what it does *not* show. Therefore, while *WFD* portrays a post-disaster in its geography and in the social interactions of characters that have to stick together to survive and look past their prejudices, *Dr Strangelove* offers the imagination of a post-apocalyptic world after building it up through the portrayal of articulations of power – in dialogue-heavy scenes – and the danger of the nuclear bomb.

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[39] The poster for the film has a message that reads: "Where science fiction ends and fact begins!!"

The next chapter will discuss those terms of film structure and eschatological narrative in the two Soviet films chosen, taking into account their styles and their contexts of production.

CHAPTER THREE
ANOMALOUS ZONES: *STALKER* AND *DEAD MAN'S LETTERS*

> "What's it like, radiation? Maybe they show it in the movies? Have you seen it? Is it white, or what? What color is it? […]They scare us! The apples are hanging in the garden, the leaves are on the trees, the potatoes are in the fields. I don't think there was any Chernobyl, they made it up. They tricked people. My sister left with her husband. Not far from here, twenty kilometers. They lived there two months, and the neighbor comes running: 'Your cow sent radiation to my cow! She's falling down.' 'How'd she send it?' 'Through the air, that's how, like dust. It flies.' Just fairy tales! Stories and more stories."
>
> Testimony by Anna Petrovna Eadaeva, a Chernobyl re-settler. Documented in Svetlana Alexievich's *Voices from Chernobyl*.

In his book *A Failed Empire: The Soviet Union in the Cold War from Stalin to Gorbachev*, Russian historian Vladislav Zubok points out that after Hiroshima and Nagasaki, the Soviet authorities were under the fearful impression that "[t]he strategic military balance hugely favored the United States," and that "the Soviets had no nuclear strategic forces to retaliate in case of an American first strike" (123). That belief kept being nurtured in the Kremlin in order to build a respectable atomic project, and by 1953, the Soviets were on a par with the US when it came to nuclear weapon production. Now a new problem of national defence had arisen: Stalin's successor Georgy Malenkov believed that nuclear attacks and civilisation's demise – that is, the demise of hegemonic forces of the time – were imminent, and that the nation should take appropriate precautions against a possible nuclear war. Such measures would include the construction of underground shelters, something that had already been underway in United Statesian soil. As indicated by Zubok,

> [Vyacheslav] Molotov and [Nikita] Khrushchev [then former First Deputy Premier and Malenkov's successor as Prime Minister, respectively], however, used Malenkov's departure from the party line to charge him with ideological heresy. They claimed that his pessimistic conclusion would demoralize Soviet people and allies around the world, because it

> disputed the inevitability of the triumph of Communism over capitalism (126).

This is indication that, although the Politburo – the prime political organization in the USSR – experienced some time of paranoia, that would be moved away by the future leader of the nation, in favour of a more optimistic faith in Communism and in a non-nuclear conclusion to an already distressing wartime scenario. But that denial of future nuclear attacks was also inspired by strategic manoeuvres of political discourse: "any concern about nuclear weapons, they argued, could be interpreted by the enemy as a sign of weakness. In his next public speech, Malenkov admitted that a nuclear war would actually lead to the 'collapse of the whole capitalist system'" (Zubok 126). In order to dispel any further internal paranoia, Minister of Defence Rodion Malinovsky would later accuse US authorities of building fallout shelters so that companies responsible for them could profit from the population's fear, as noted by Russian-born political analyst Leon Gouré in *The Soviet Civil Defense Program* (2).

That political climate marked a new era for artistic production in the USSR as well. The Thaw, as the post-Stalin period of political openness to science and art initiated by Khrushchev's administration is recognised, enabled science fiction to thrive again, albeit only to a certain extent. Scientific achievements drove this new version of Soviet Communism, and the policies for the artistic productions also underwent a change, although not entirely for the better, since Khrushchev mostly wanted to project the *image* of a nation under renovation and a more open set of internal policies – policies of public image which were akin to the aforementioned manoeuvres that tried to keep away any signs of weakness in the nation, for both internal and foreign affairs. Because of that caveat, artists – especially writers – were not completely free[40] to explore daunting themes; and in one occasion, Khrushchev himself, when

> [a]ddressing writers directly at a meeting of the Writers' Union […] announced he would not

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[40] Likewise, in the US, "freedom" of production often came with a caveat that war films would have the "cooperation and assistance of the military if they [film studios] had a measure of script approval that would propagate a positive image […] Such films obviously advocated the idea that the Cold War military was important, well-trained, and ready to fight. But they also conveyed that the peacetime draft and the willingness to use nuclear weapons were necessary and even exciting enterprises compared to civilian life," point out film scholars James E. Combs and Sarah T. Combs in *Film Propaganda and American Politics* (90).

> permit the kind of liberal literature that had led to the revolution in Hungary […] Party-consciousness (*partijnost*) remained the guiding principle of approved literature. (Csicsery-Ronay 341, author’s emphasis)

Such an expression of censorship affected science fiction writers, many of whom were “persecuted for their writing, either overtly prevented from publishing altogether, or forced to publish work that was fatally compromised” (Csicsery-Ronay 338).

As a result, apocalyptic/post-apocalyptic fiction as a subgenre was adopted by very few authors in the USSR, both before and after the embracing of the Glasnost[41] philosophy. Two of the most prominent names are brothers Boris and Arkady Strutgatsky, whose major contribution is the novel *Roadside Picnic*, which inspired Tarkovsky’s *Stalker*. Other authors and works that would explore such themes would be few and far between, including the short animated film *There Will Come Soft Rains* (1984), directed by Nazim Tulyakhodzayev and inspired by Ray Bradbury’s *The Martian Chronicles*, or the spy novel *The Energy is Under our Dominion* (1950), by Valentin Ivanov, whose plot is described by Rana Mitter and Patrick Major[42] simply as: “NKVD agents foil a Western spies’ plot to detonate a bomb on Soviet soil” (60). The issue of the bomb would be barely touched on in works such as the space fiction short story “The Heart of the Serpent” (1958) by Ivan Yefremov, and Anatoly Dnieprov’s “The Maxwell Equations” (1960). Such a scarcity of works regarding an issue that was one of the main objects of competition between two opposing powers during the most part of four decades is a testament to how avoided the apocalyptic imagination was in the USSR, as opposed to the sensationalist spree that US science fiction had been producing during the same period, which had come to be a rather profitable subject matter for the country’s film industry.

As mentioned in the introductory section of this study, this third chapter is interested in two works that were produced in the latter decades of the Cold War. *Stalker* brings a distinct exploration of the apocalyptic themes in cinema, mostly hinting at them, but expressing them in subtle visual passages and in its use of locations nonetheless.

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[41] The Glasnost was an idea of public openness in the Soviet state employed by the Gorbachev government.

42This is described in the book *Across the Blocs: Exploring Comparative Cold War Cultural and Social History*.

Dead Man's Letters is more direct, visceral in its depiction of post-nuclear despair, and relies on performance and dialogue to construct the idea of a lost future for society. As in the previous chapter, I will make use of stills to demonstrate the visual aspects of the films that support my arguments, and will talk about general technical elements of film, while choosing one particular section from each work to delve into with more detail.

3.1. *Stalker*

Soviet director Andrei Tarkovsky had made a name for himself with films like *Andrey Rublyev* (1966), *Solaris* (1972), and *Mirror* (1975), when the idea for adapting the Strutgatskys' novel *Roadside Picnic* came around and, after a tumultuous production, resulted in *Stalker* in mid-1979. In *Sculpting in Time*, he sees the filmmaker as an artistic representative of their people: "the artist is indeed *vox populi*. That is why he is called to serve his own talent, which means serving people" (164). He states that "because of his special awareness of his time and of the world in which he lives, the artist becomes the voice of those who cannot formulate or express their view of reality" (164). In that sense, Tarkovsky was involved with his national and socio-cultural circumstances, with the spirit of artistic production as public contribution – and not only that, but *national* contribution itself. He borrows from socialist philosopher Alexander Herzen's idea of the critical importance of national representation of an artist's time in their work (Tarkovsky 166).

However much he believed in the spirit of artistic contribution and of his art as a gift for the people, he did have his problems with Soviet organisations. The British Film Institute website released an article by film critic Stephen Dalton called "Andrei Tarkovsky, *Solaris* and *Stalker*: the making of two inner odysseys"[43]. In it, the author explains that "Goskino [the main cinematographic directory institution in the USSR] advised Tarkovsky to make the film [*Stalker*] faster and more dynamic. He replied that it should be 'slower and duller at the start so that the viewers who walked into the wrong theatre have time to leave before the main action starts.'" But that was only part of his disagreements with the Soviet regime, and his two post-*Stalker* productions – *Nostalghia* (1983) and *The Sacrifice* (1986) – were made in Italy and Sweden, respectively. Stephen Dalton also mentions that

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[43] To see the article in its entirety, visit: http://www.bfi.org.uk/features/tarkovsky/. Written in Dec 2014. Web. 5 November 2017.

Tarkovsky was not particularly fond of science fiction, which he regarded as "'comic book' trappings and vulgar commercialism." However, he did come to use Stanislav Lem's novel *Solaris* as inspiration for his 1972 homonymous production, and revisited a sci-fi setting with *Roadside Picnic*.

Despite the objection from Goskino, *Stalker* turned out to be a fairly successful release. It won the Ecumenical Jury Prize in Cannes for that year, and, according to Stephen Dalton, it sold 4.3 million tickets in the Soviet Union alone. Across the Atlantic – or the Pacific, depending on the perspective –, however, the film did not thrill the United Statesian press. Janet Maslin, writing for *The New York Times,* comments that "However we may be doing in the arms race or the space race, we're winning the science fiction movie race by a mile," adding that the film "offers the eye so little that it might well have made a better novel, or short story, than a nearly three-hour-long film," emphasising the slow-paced action, therefore choosing to judge the film solely based on local genre's conventions[44] by encapsulating the entire narrative under the tag of *science fiction*. This view can be partly linked to the fact that it was part of the political ideal of the time to compete in various technological and cultural respects, so Soviet filmmaking would be directly compared to United Statesian filmmaking when the criticism was to be published in a major outlet such as *The New York Times.*

Stalker tells the tale of three main characters – plus two background characters – who traverse a devastated landscape in order to reach a mystical place simply called the Zone. Alexander Kaidanovsky, who had starred in Aleksandr Zarkhi's adaptation of *Anna Karenina* (1967) and *At Home Among Strangers* (1974, directed by Nikita Mikhalkov), plays the protagonist, named simply Stalker. He is one of few people to take other adventurers to a mystic and remote place called the Zone, an unstable area where people are allegedly granted their innermost wishes (*Stalker* 02:04:18). Two other characters come in, the Writer and the Professor, respectively played by Nikolai Grinko and Anatoly Solonitsyn, both of whom had worked with Tarkovsky before in films like *Solaris*, the latter being one of the director's favourite actors (Tarkovsky 144). The Stalker lives in a house in a deteriorating city with his unnamed wife and his little daughter Monkey, who is disabled and later shown to supposedly possess psychic talents, although I will touch on that specific matter later on in the chapter. The Writer and the Professor have hired the protagonist to take them to the so-called Zone, and the film portrays their journey to and fro the place. The themes that can be discussed vary, and the ones which interest this analysis will also come up later.

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[44] "Review: 'Stalker', Russian Science-Fiction. The New York Times." Written in 20 Oct 1982. Web. 5 Nov 2017.

On to film form: as discussed in the Introduction to this study, Tarkovsky was fascinated with how time was expressed in motion pictures, and how each shot contains a temporal structure that is particular to the action within the frame and conveys a compressed inner reality of the film's fictional world. Therefore, editing is as important a topic to be considered when investigating *Stalker* as any. Tarkovsky remarks that "[e]diting entails assembling smaller and larger pieces, each of which carries a different time. And their assembly creates a new awareness of the existence of that time, emerging as a result of the intervals, of what is cut out, carved off in the process" (119). But in *Stalker*, that temporal structure and its cohesion are articulated not only through the shot-to-shot links and alternations, but also through the movement of the camera during the shots and through the action taking place within it. The director even argues that "[t]he distinctive time running through the shots makes the rhythm of the picture; and rhythm is determined not by the length of the edited pieces, but by the pressure of the time that runs through them" (117). As so, it is imperative to notice how time runs through the film so that the shifts in mood of the narrative take place, be it through examining shot-to-shot interactions or through understanding the cinematography of one particular shot and how time flows during it, as well as identifying the rhythm changes that occur in different sections of the film, and how that representation of time can express an apocalyptic atmosphere in it.

It is particularly notable how individual shots are lengthy and how little of the diegetic time is lapsed when cuts do occur. That is to say, there are very few ellipses in editing, and most transitions are done through either slow camera movements – panning or tracking shots – or subtle cuts for shift in angles and perspectives. The initial sequence demonstrates this idea (*Stalker* 00:04:30). The darkened corners of the frame accentuate the double doors that give way to the Stalker's room wherein he sleeps with his wife (fig. 29). Only the room itself is lit, and the entirety of the door frame is within the frame of the shot. Then the camera slowly moves in, and a little over a minute is needed for the frame to comprise the whole room, drastically changing the tone of the scene through a widened perception of space and lighting (fig. 30). The gradual revelation of spaces is present throughout the film, and it shows only how the imprisonment of the frame – Xavier's *enclausuramento* discussed in the introductory chapter – is crucial to storytelling.

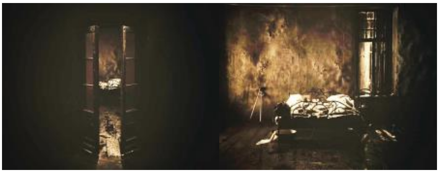

Fig. 29 and 30: The frame approaches the Stalker's room. The increasing exploration of space is accompanied by the increasingly brighter lighting.

There are barely any changes from the shooting process to the actual narrative[45]. However, the rhythm and time pressure within the shot do pick up as the three men begin their quest to leave the city and travel to the Zone. At first, there are lengthy shots in the bar where the Writer and the Professor are waiting, and in the Stalker's house where he sleeps, wakes up, and prepares to leave and meet his contractors. Then, as they meet, the three of them get a car and sneak through the streets out of the city, cuts become more frequent as though the sense of urgency rises and time pressure changes pace as well. There is swift action taking place as they flee and hide from the authorities, and different angles and movements are required to portray that action. Long shots become more common in order to depict the barren aspect of the city and to encapsulate more elements of agency – the three men in their fast car, the authorities, the passing trains, and the buildings (fig. 31-32). In a way, the film "wakes up" along with the Stalker. Then, as they reach the outside areas of the city on their draisine halfway to the Zone, time pressure slows down again, medium shots and close-ups resurface, and more of the actors' expressions of relief and anticipation are shown (fig. 33).

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[45] In fact, Tarkovsky filmed *Stalker* in a way that there is as little lapsed time in the diegesis as possible. "I wanted time and its passing to be revealed, to have their existence, within each frame; for the articulations between the shots to be the continuation of the action and nothing more, to involve no dislocation of time, not to function as a mechanism for selecting and dramatically organising the material—I wanted it to be as if the whole film had been made in a single shot" (193)

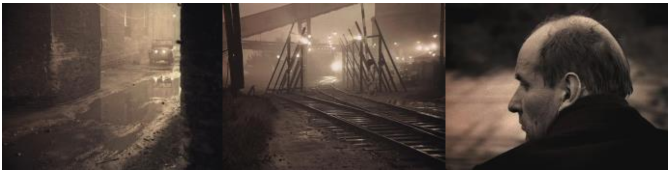

Fig. 31-32: Long shots follow the escape of the three main characters, providing spatial orientation and the hostile environment around them. Fig. 33: When the escape is complete, lengthier close-up shots reveal calmer expressions from the characters (in this case, the Writer [Solonitsyn]).

Even during the moments of intense action, there is little change in the speed of camera movement. There is a subtlety in the rhythm of panning that stays consistent throughout, and that helps maintain the mood of *stasis* suggested by the shot. The only changes that affect rhythm and time pressure are the frequency of movement – however slow it is – and the length of the shot itself. Consequently, editing and movement are the defining factors in constructing the temporal frame of *Stalker*'s diegesis. Such techniques of panning and tracking shot are extensively used in the film as a gradual mechanism of spatial continuity – even with little use of editing – and dramatic enhancement when certain aspects of acting are to be highlighted. Lengthy shots such as the 5-minute one during their path into the main room of the Zone underscore the spatial situation of the trio (fig. 34). During the shot in question, they have reached their destination but are in disagreement as to whether or not they should go forward with their "innermost wishes." After a heated argument and some wrestling between the Writer and the Stalker, the three men sit down, physically and emotionally drained, and the camera gently moves away from them, revealing the decayed foundations of that ghostly building as a sort of supernatural rain starts pouring from the ceiling, indicating a much needed cooling down as well as a testament to the inexplicable properties of the Zone (*Stalker* 02:22:30). Moments such as this one demonstrate how *Stalker*'s extended time frames and unhurried camera movements can serve to enhance the perceptions of graphic continuity and highlight elements in the frame – in this case, the place, the performers and their interactions.

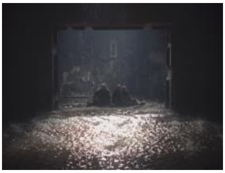

Fig. 34: The shot that slows time down and shows the three men centralised in the frame, exhausted after a turbulent argument.

Speaking of elements in the frame, *mise-en-scène* reveals several features of setting and of the employment of apocalyptic/post-apocalyptic themes studied here. The world of *Stalker* is a mysterious one: the eerie descriptions of its properties and its history, as well as its recurring aspects of a wartime afterworld are things that can be examined not only through verbally conveyed information, but – more prominently for this study – through items on screen. In order to better illustrate points about the composition of the shot and its relation to the thematic construction of modern apocalyptic imagery, I will use one particular section of the film; namely, the sequences from the main characters' departure from the city until their arrival in the Zone (*Stalker* 00:22:00-00:42:55). The section in question starts when the three men get in a car and drive across the city. At this point, all the lighting of the film had been covered in a monochrome tone with a sepia filter, which works together with the setting to create an industrial tone that prevails during the urban scenes. The image acquires a rusty character, intensified by the considerable presence of discarded objects lying about the areas, such as wood logs, furniture, abandoned vehicles, boxes, broken machinery, and general debris (fig. 35-37). This is further demonstrated by the use of empty houses and depots where the characters hide from the authorities. And on the subject of authorities, the presence of an undescribed form of police force patrolling around on motorcycles is an indication of some sort of curfew established in the place. Such observations are important for understanding how *Stalker*'s surrounding aspects of narrative converge with the idea of a collapsed world, disturbed by a cataclysmic event that, besides creating an anomalous and almost magical area, also begot a dystopian society in which individuals are shot at for trying to leave its urban limits and enter that anomalous area (*Stalker* 00:31:17). Again, all of this information is barely hinted at through dialogue or monologue, but stands out through the visual discourse of the film.

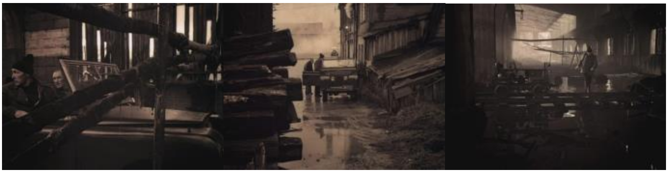

Fig. 35-37: The debris and decayed state of the urban locations in *Stalker*'s shot composition.

Then the transition in setting, colour, and lighting occurs. Sepia-tinted images of dark, damp, littered streets give way to coloured and brighter shots of greener and foggier landscapes along the railroad through which they travel on a draisine and at their arrival (fig. 38-39). The on-screen elements in different tones of colour can modify the way performances come out or the way space is portrayed; something that Tarkovsky personally valued[46]. That differentiation is an indissociable part of *Stalker*'s film language, for the meaning of the film is segmented through graphic alterations over the original image that produce what Noël Burch would identify as "autonomous structures"[47] (55-6). These autonomous structures expressed by colour and contrast refinement affect the perception of time itself, partitioning the film's events into different sequences – the initial preparations for the trip and the escape from the police is sepia-tinted, whereas the awaited arrival in the Zone is fully coloured; the Stalker's dreams are sepia-tinted, and so is their return to the city; and so on.

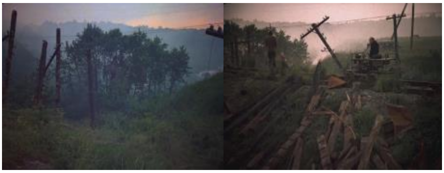

Fig. 38-39: The new landscape as they travel out of town and into the countryside. Full colour, less contrast in the image, brighter lighting, and fewer objects that signify human presence.

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[46] "The perception of colour is a physiological and psychological phenomenon to which, as a rule, nobody pays particular attention. The picturesque character of a shot, due often enough simply to the quality of the film, is one more artificial element loaded onto the image, and something has to be done to counteract it if you mind about being faithful to life. You have to try to neutralise colour, to modify its impact on the audience. If colour becomes the dominant dramatic element of the shot, it means that the director and camera-man are using a painter's methods to affect the audience" (138).

[47] Not to be confused with Metz' *autonomous segments* that operate to build continuity in the narrative, as discussed in the previous chapter.

Sound also plays an important role in this section of the film. *Stalker* uses mostly diegetic sounds to establish aural continuity, often breaking long moments of silence with extra-diegetic noises such as water movement, metal clatter, the revving of engines, and – most prominently – train rattle. All such sounds aggravate the industrial characteristics of the film's setting, but then latter persists even when the characters leave town. Actually, the trail rattle is present from the beginning (*Stalker* 00:06:40) to the end of the narrative (02:24:09), often indicating moments of transition and the journey to and from the Zone. In this particular moment of transition and journey, however, the rattle is not just an extra-diegetic noise. It accompanies the image, announcing that the travel is now done by the main agents of the film, and that the tense moment of arrival at the Zone draws near. The camera closes up on the countenances of the three men just before the sepia filter is replaced by full colour and the urban decay is replaced by the forests, albeit with traces of human presence, which persist throughout (as seen in figures 38 and 39). Melancholy is a constant tone in both the body language of the actors and their lines of dialogue. They discuss how a former stalker hung himself and how the Stalker's daughter was a "victim of the Zone" for not being able to walk (*Stalker* 00:42:55). All those factors indicate that the Zone is not exactly the magical place where dreams come true as they had anticipated. The film gradually builds up this notion through *mise-en-scène*, which, despite giving the countryside more colour and less militaristic restriction, still depicts that new place as a dangerous and decadent piece of land.

Additionally, the Zone is the element in *Stalker* that most significantly embodies the apocalyptic/post-apocalyptic themes that I aim to address in this study. When discussing zones of conflict in cinema, Adrian Ivakhiv[48] suggests that "the Stalker is not one who actually stalks an animal or another human being. He is not a hunter; if anything, he is more hunted, a *becoming-hunted* […] The Stalker's journey into the Zone is a journey into a world that stalks him" (241, author's emphasis). The Zone is a volatile space; a space of transition, of uncertainty and of disruption. Disruption of physics – e.g. the rain pouring down from a ceiling –, societal disruption – law-enforcing institutions violently react against its existence, banning any and all interactions with it –, disruption in social microcosms – the Stalker's job and adventures are the reason why his wife is unhappy in their marriage and supposedly why their child Monkey has been afflicted since her birth –, as well as a disruption in film language – the shift in colour modes during the trips through the Zone, as well as in scenes in which Monkey is by herself. It is said multiple times to be a space of danger, wherein anything good or bad can happen as it responds to the visitor's wishes and intentions. Ivakhiv adds that it is a space of "convergence of *their* worlds, *our* worlds, and *another* world in which neither of us can tread safely and surely" (241).

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[48] Canadian scholar and professor of Environmental Studies at the University of Vermont, author of the book *Ecologies of the Moving Image: Cinema, Affect, Nature* cited here.

In that sense, this representation of an unstable, dangerous, unpredictable, and transient space converges with the concept of an irradiated zone, where the boundaries of natural radiation are exacerbated by human intervention, be it through the use of nuclear weaponry or failure in the use of nuclear material for civil purposes. Fallout radiation was a relatively uncharted phenomenon in the 1970s and 1980s, and its effects were as mysterious outside of the specialised scientific community as the fictional concept of being stalked by an anomalous force of unknown origins. Svetlana Alexievich, in her book *Voices from Chernobyl*, interviews several people who were directly or indirectly victims of the Chernobyl NPP disaster a mere seven years after *Stalker*'s release. One of the interviewees says of the occasion: "We weren't too afraid of this radiation. When we couldn't see it, and we didn't know what it was, maybe we were a little afraid, but once we'd seen it, we weren't so afraid" (28). Another interviewee reveals that the authorities had been as cryptic about the situation as possible, and that the

> doctors kept telling them [workers from Prypiat who had helped clean up debris from the power plant] they'd been poisoned by gas. No one said anything about radiation. And the town was inundated right away with military vehicles, they closed off all the roads. (Alexievich 7)

The presence of the military serves as another convergence of meaning with the representation of the Zone in *Stalker*: if the potential anomalous effects of the area may harm the general population, the restriction of space creates violators that magnify the mythos of the place and may disrupt social order and defy the control of authorities. In *Stalker*, stalkers venture into the Zone; in Chernobyl, the popularly called

Exclusion Zone is constantly explored by young Ukrainian daredevils[49]. The Stalker throws bolts around to identify potentially harmful areas; in Chernobyl, explorers have to use Geiger counters.

As a consequence, the protagonist lives outside of the norms and in close contact with the Zone. He is said to have been imprisoned before for accessing the place (*Stalker* 00:42:49). For him, the Zone represents a place of peace and quiet, of serene solitude; and when in intimate contact with it, there is a direct response from the film's discourse through low-key, non-diegetic synthesiser music (00:44:53). But beyond that, he devotes so much of his time to journeying there because he thinks that its mysterious properties can give people hope, that his mission is to "serve people who have lost their hopes and illusions" (Tarkovsky 193). In a ravaged and dystopian world, circumstances pushed him to believe in the uncharted, the supposedly miraculous. Even when it is hinted that his daughter may have telekinetic abilities by moving glasses on the table without touching them (fig. 40), it is an event left unclear seeing as the sound of train rattling blares out nearby as the glasses slowly slide across the vibrating table, in a convergence of sound and image (*Stalker* 02:40:17). For all that one knows, there is no certainty that a miracle has materialised, and the fascination with the exotic phenomena of the Zone can be as much an unfortunate fruit of ignorance and imagination as the misperceived charm of the glowing – but highly radioactive – caesium-137 was to Roberto dos Santos Alves and his family in the tragic Goiânia radioactive accident of 1987. Ultimately, the Stalker recognises that the Zone is filled with strange traps and that it is a complex and ever-changing space (*Stalker* 01:02:20), but sees the hope in achieving his innermost desires and helping other people do so worth risking his life for.

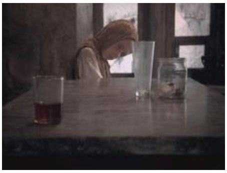

Fig. 40: Monkey and her telekinetic powers.

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[49] "The Stalkers: Inside the bizarre subculture that lives to explore Chernobyl's Dead Zone," by Holly Morris. *Slate.com.* Web. 06 Nov 2017.

The fictional scenario of *Stalker* is obscure and the discussions carried out in its narrative are mostly reflective on matters of hope, religious imagery – as the very concept of the protagonist is that of a man of faith[50] (Tarkovsky 193) – and the frustrations of each character's professions. However, the images of destruction, abandonment, as well as social and environmental disruption, which are common tropes of eschatological narratives, are present through visual and aural techniques. Frank Kermode suggests that

> it would be childish to argue, in a discussion of how people behave under eschatological threat, that nuclear bombs are more real and make one experience more authentic crisis-feelings than armies in the sky. There is nothing at all distinguishing about eschatological anxiety. (95)

Likewise, the mystery of the event that gave birth to the Zone and rendered *Stalker*'s world unsettling and withered does not make the anxieties expressed in the film less related to its time. What is more, its scenes and movements present vistas of contextual dereliction and ecological deterioration[51]; a veritable destruction of spaces.

3.2. *Dead Man's Letters*

As observed by Csiscery-Ronay about the post-Stalin Soviet period: "The emphasis on science led to the construction of special Science Cities that were to be devoted to scientific research and development (The first and largest of these, Akademgorodok, near Novosibirsk, was established in 1958)" (339). Similarly, nuclear cities such as Prypiat were part of that scientific renovation across the Soviet territories. Built in 1970, Prypiat was designed to accommodate workers from the Chernobyl Nuclear Power Plant near the town of same name in Ukraine. On 26 April 1986, one of the reactors in the power plant went through a meltdown after a testing error. The event is considered one of the worst nuclear disasters in history. Some historians discuss the latter decades of the Soviet Union's history to be a decline in technological innovation and maintenance. Chernobyl can be seen as a result of what Rana Mitter and Patrick Major came to describe as "pollution and outdated technology, when the present seemed to be making a mockery of the once-vaunted future" characteristic of the stagnant technological burden of the Soviet Union in its final years (56). All of that took place during the turmoil of the Gorbachev era, when ideas such as the Glasnost came into play. The irony of the situation is that the incident in Chernobyl was resolutely concealed from the general public and the rest of the world until days later, at which point it was claimed that the situation was "under control" when in actuality radiation was quickly spreading across Europe, especially affecting countries such as Belarus (Alexievich ix).

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[50] A signature of Tarkovsky's religious images in the representations of his characters. In his *The Sacrifice* (1986), the protagonist Alexander comes to terms with his faith in a moment of terror as the end of the world approaches.

51 Most scenes were filmed on location in the rural areas outside Tallin, Estonia. The desecrated fields and abandoned chemical factories are a testament to the triviality with which hazardous waste is treated. In an extreme instance of such a poor state of the area, the toxic liquid coming from a nearby hydroelectric plant contaminated many people in the film crew, and some believe that it was the cause of Tarkovsky's, his wife Larissa Tarkovskaya's, and Anatoly Solonitsyn's terminal cancers years later, as seen in the Introduction to this study.

Dead Man's Letters was released in the midst of all that national commotion. Director Konstantin Lopushansky had developed interest in the subject of war, having directed a short film called *Solo* (1980), set in Leningrad during the Nazi siege of the city. He especially developed interest in the subject of apocalyptic scenarios of science-fiction and urban devastation, later working on other films with the similar topics such as *A Visitor to a Museum* (1989) and *Russian Symphony* (1994). Lopushansky had also been Andrei Tarkovsky's apprentice, having worked with him as an assistant producer in *Stalker*, according to film scholars Vida T. Johnson and Graham Petrie in *The Films of Andrei Tarkovsky: A Visual Fugue* (16). Still as suggested by the authors, Lopushansky was inspired by Tarkovsky's "long takes, and the slow-moving camera lingering over the landscape" (16).

The film is about a band of survivors who live their days out in a museum bunker below a fictional town that has been bombed by nuclear warheads. An unnamed old man – hereby to be called the Scientist[52] – lives in the bunker with his sick wife Anna and the other survivors, and writes letters to his disappeared son Eric. Those letters are reflections on the collapsing state of the world, on his relationship to Anna, and on his feeling of longing towards Eric. Rolan Bykov, who played the jester Skomorokh in Tarkovsky's *Andrey Rublyev*, plays the main part, and his voice-over narration reads the letters for the viewer. His perspective of the events, much like Ralph Burton in *WFD*, is focussed on during the entirety of the film, and no other character's agency stands out in the construction of continuity.

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[52] He is called "Professor" by some other characters in the film, but in order to avoid confusion with *Stalker*'s Professor, I will name him the Scientist, since he is portrayed as a former physicist. Later on – when the original word becomes applicable – I will come back to his "Professor" title.

However much Lopushansky borrowed from Tarkovsky's directing style, *Stalker*'s narrative lasts for a long period – as a result of Tarkovsky's wish to articulate diegetic time in every shot possible –, whereas *Dead Man's Letters* is a considerably shorter film; as a consequence, there are differences in editing and time pressure. Elliptical editing is common, and while time in the shot usually runs slowly and constantly expresses the apathy of the underground life and the characters' hardship of finding the will to survive, time between shots is compacted, and often accelerates spatial continuity. There is, however, a prevalence of not only slow-paced, but also lengthy shots that dictate the lethargic passage of time in the narrative, notably in the museum bunker. This is, like *Stalker*, a film that offers a constant and careful revelation of its spaces, situating the viewer in the suffocating tunnel where most of the diegesis takes place. Camera movement is also subtle, and few cuts determine changes in perspective. There are very few establishing shots since the tunnels look alike and there is virtually no vaster space for the viewer to familiarize with, so the spatial continuity goes on with little elliptical editing, and the constant medium shots are responsible for bringing a claustrophobic mood. The lengthier shots also raise a sense of drama. When the Scientist's wife dies, an event that had been suggested since the beginning given Vera Mayorova's performance as a constantly agonising character, other survivors in the bunker dig a grave for her there and then. The shot in which her body is buried develops for over a minute (*DML* 00:35:12-00:36:39), and the camera barely moves, so the silence and stasis of the protagonist are emphasised (fig. 41). The sound of shovels reiterates the inevitability of the moment that he had been anticipating for a considerable portion of the narrative, and nothing else is heard. Then a cacophonous synthesiser intensifies as he sits against the wall, apathetic. The dramatisation of the characters' actions – the Scientist's inertia, the priest's concentration and ritualization of that moment – are given time to settle and consolidate the sense of tragic quietude that such an impending death had been building up.

Fig. 41: The stasis in Bykov's performance reveals the Scientist's shock and responds to the also slower camera movement.

Another way in which editing and continuity make meaning in the film is through the graphic constitution of images, specifically lighting and colour. Again, following on Tarkovsky's footsteps with the hue and saturation changes of *Stalker*'s images, Lopushansky plays with changes in tint as the film goes on. A strong yellow filter marks the scenes in the museum bunker and outdoors sequences are depicted with a lighter tone of yellow, whereas a blue-tinted filter overlays the images of the clinic bunker that he travels to a couple of times (fig. 42-44). These techniques offer spatial continuity effects that are akin to hand-coloured silent films of yore, such as Georges Méliès' *A Trip to the Moon* (1902), or Abel Gance's *Napoleón* (1927). There are also an underlying lack of definition and a certain haziness in the images – also evocative of old silent films – that keep the frames from having any depth of field, which in this case produces an even more pervasive effect of decay and bleakness. Furthermore, adding specific tints in *Dead Man's Letters* meant establishing locations, as well as the meanings of those locations in the narrative. Yellow overlays indicate rust and the aforementioned industrial deterioration that also pervades the urban scenes in *Stalker*. A brighter yellow tone for outdoor locations indicates the sunlight, whereas blue in the clinic bunker points to a darker atmosphere (a place where people are on the verge of dying) as well as a cleaner environment than the grimy museum bunker and the rubbles of the outside. Lighting works along with colour in these cases: tunnels have an extremely dim lighting, especially the clinic; the contrast and shadows are toned down outdoors.

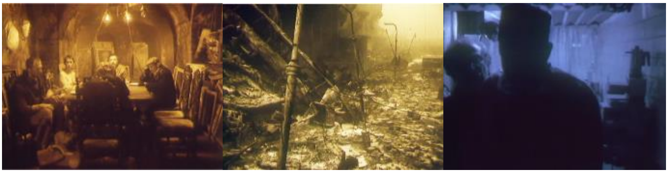

Fig. 42-44: Differences in colour overlays and lighting in museum bunker scenes (42), outdoors scenes (43), and clinic bunker scenes (44).

Moreover, the arrangement of on-screen elements does work to create the sense of precariousness of a post-nuclear life. Initially, little is revealed, and the process of situation organised by the *mise-en-scène* is gradual in the progression of the images; much like in *Stalker*. Low lighting prevails during these first scenes (fig. 45), and ill people lie about, raising an impression of contamination and the impossibility of proper healthcare (*DML* 00:00:33). That impression pervades the sequences set in the museum bunker, as if the Scientist's visits to the clinic are an escape from the powerlessness that he feels towards the hazardous situation of his and his folk's survival. In such initial scenes, the only objects present are worn out blankets and a small light bulb, barely producing any light in a cluttered environment. A sickly woman sleeps – soon revealed to be Anna –, and a there are pill bottles and a syringe on a nightstand next to her (fig. 46). This is reminiscent of the camera slowly moving from the Stalker's bed to his nightstand, with pills on it that are probably administered to his ill daughter Monkey (fig. 47). There is a recurring theme of sickness and physical weakness to match the depiction of a decadent world around its agents. In *Dead Man's Letters*, space is composed of layers and layers of chambers, door after door, compressing their sealed existence underground even further. The habitual digging of graves in the bunker is a reminder that death is already part of the setting, constantly besieging the survivors.

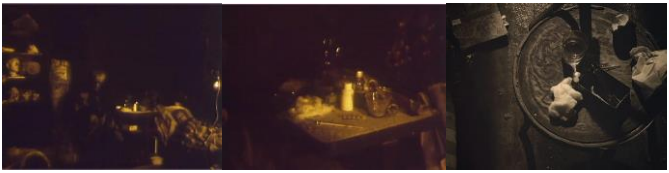

Fig. 45: The darker lighting in the beginning of *Dead Man's Letters*. Fig. 46-47: The common theme of medicine lying around for the care of continuously ill people in both *Dead Man's Letters* and *Stalker*.

It does not take long for the film to introduce another one of its main settings: the outside world. Through the depiction of the Scientist putting on a hazmat suit to leave the bunker and visit a nearby orphanage, already the *mise-en-scène* indicates the crumbled world outside is just too toxic. The revelation of the ruins of an old world is reinforced by the orchestral soundtrack that develops into a crescendo as the camera zooms out to display the ruins of the town, reducing the old man's figure to a small hole amidst the debris of a fallen building, almost like a graphic match within the same shot (*DML* 00:05:24, fig. 48-50). The smallness and powerlessness of the character is engulfed by the contaminated hostility of that space; as one character describes in the bunker, “a howl of desolate thinking creatures in the cold and impassive space desert” (*DML* 00:55:10). But the hostility does not exist merely as an environmental response. Like in *Stalker*, there is also the theme of military presence and authoritarian control. The army prevents people from coming up to the irradiated surface by setting up a curfew, creating the film’s own exclusionary zone, much like *Stalker*’s Zone and Chernobyl’s Exclusion Zone. In the outside world, several corpses lie about in contrast to the severely ill but still living people inside the bunker, and the present of medical equipment in the frame. The film makes it clear that the ruined world is deadly, and that one’s presence in it should always be transitory. The inside means sickness, but also community, and the gathering of efforts to fight another day. The outside means environmental and military hostility, restriction and oppression, contamination and war. There is, however, life outside. A few clandestine groups deal in drugs, and they are the ones with whom the Scientist can find pills for the people back in the museum bunker (*DML* 00:31:10). Life is agitated outside. They gather, they trade, they gamble, hiding like outlaws in a restricted world. Like stalkers.

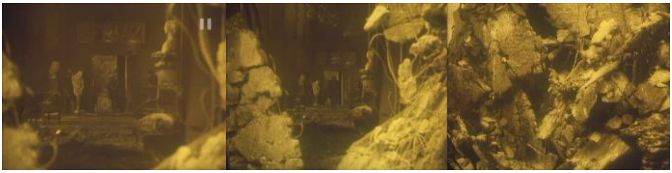

Fig. 48-50: The figure of the Scientist is reduced and engulfed by the rubble of the shattered outside world.

In *Dead Man’s Letters*, such a use of *mise-en-scène* – as well as the rhythm of editing – for the constitution of its post-apocalyptic images can be better examined in one particular section (*DML* 00:43:20-00:51:10). After Anna dies and is buried by her and the Scientist’s fellow survivors, he lies on her grave and the shock of her death triggers grim memories from the past. He recounts, in a voiceover narration, how the cataclysmic event happened: a computer error committed by a distracted operator. This is one indication that *Dead Man’s Letters*’ narrative initiates *in media res*. There are events that took place before the present narrative of the film that matter in the construction of the Scientist’s perception of the underground world that he inhabits. The flashback sequence begins with the depiction of a light bulb failing as darkness takes over the picture, just like it metaphorically takes over the protagonist's mind (*DML* 00:44:03). A montage sequence of a nuclear warhead ascending to the sky is repeated on screen, building the impression that many were detonated (Fig. 51-52). Parents watch the launch with their children from afar, as cries are heard. The soundtrack here is basically composed of the diegetic screams and the non-diegetic synthesiser high-pitched notes that never cease throughout the sequence. The mood of tension and morbidity increases as tunnels are stormed by people being evacuated by the authorities. Finally, this particular part of the sequence culminates in the mushroom clouds themselves, not detonated during daylight – thus maintaining the dim lighting that is prevalent throughout –, a high-pitched voice of an opera singer can be heard as non-diegetic music (00:45:08, fig. 53). The synthesiser sound that raised the tension of the scene is gone, and the explosions almost generate a sense of relief, as though the awaited destruction has finally struck. This is the apocalyptic moment of the film. Cities are shown in flames, the darkness of the buildings' silhouettes contrasted against the bright light of the consuming fire (Fig. 54). The struggle for survival is afoot.

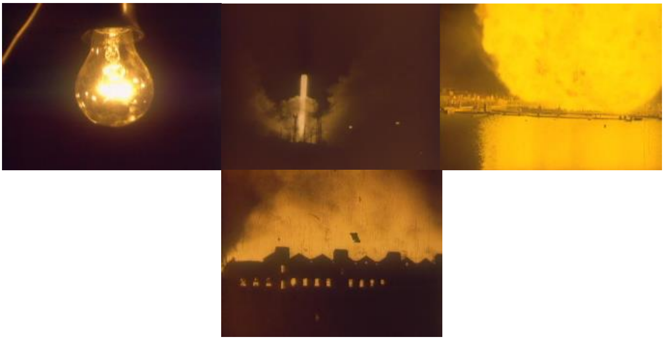

Fig. 51-52 (from left to right, top to bottom): The light bulb slowly fades away to bring darkness to the picture, and a nuclear warhead ascends to the sky. Fig. 53: The detonation hits a city, bright lighting taking over again. Fig. 54: The darkened silhouettes of buildings on fire.

The sequence jumps ahead, but still in flashback narrative, as the Scientist looks for his son right after the apocalyptic event. He is frustrated by the authorities' impassivity to help him locate Eric. At this moment, lighting is even dimmer, sirens are heard, and the protagonist's silence is compensated by the constant sound of carts carrying bodies through the tunnel as he sneaks past security to gain access to the sick ward (*DML* 00:47:00, fig. 55). There is an abundance of parallel editing through cross-cutting techniques here: while he is underground struggling through the overwhelming crowd, people above scream and fight for supplies and gas masks amongst the debris and the fire, desperate and lost in the convoluted ruins of that new world (00:48:37, fig. 56). When he finally manages to reach sick ward, he is directed to a corridor with wounded people all around. The frantic rhythm of both graphic and sound editing rush the compressed time in the action, as the synthesiser continuous high-pitched notes and the children's screams come back, and point-of-view shots from the Scientist's perspective show extreme close-ups of agonising faces and physicians performing emergency procedures. The end of the sequence breaks out with the Scientist's scream as he cannot take those gruesome images any longer (fig. 57). He is overwhelmed by the horrors of those events; and by this point, so may be the viewer. Again the editing returns to images of buildings falling apart under the strength of the fire, and the flashback sequence ends.

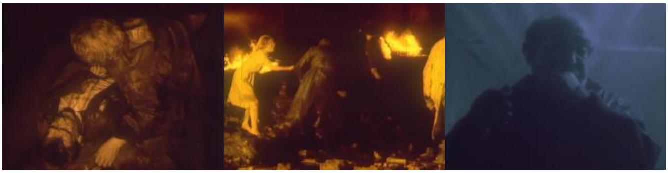

Fig. 55: The Scientist hides among bodies to gain access to the clinic in order to find his son. Fig. 56: Outside, people fight to survive. Fig. 57: The culmination of the sequence, when the protagonist enters the clinic and is horrified by the state of the wounded and the sick inside.

Dead Man's Letters carries a constant mood of hopelessness and slow decadence of the conditions of survival in a post-nuclear world, but there is ultimately a portrayal of hope in the film – another trope of post-apocalyptic narratives. The Scientist takes responsibility for many duties in the tunnels, including the relief of psychological tensions that the other distressed survivors experience. He feels responsible for his fellow survivors in the museum bunker, for his wife Anna, for his son Eric, and for the children in the orphanage nearby. That feeling of responsibility is explained in the flashback sequence examined above, which is the apex in the film's raw depiction of desperation as a constant message of the narrative; the rhythm of the shots and the way they are put together with each other and with the soundtrack bring about the culmination of the shock in being surrounded by suffering.

André Bazin comments that “the combinations [of shots] are infinite. But the only thing they have in common is the fact that they suggest an idea by means of a metaphor or by an association of ideas” (25). Such a basal cinematic notion explains the use of montage early in this sequence of *DML* and by the end of it, not only to suggest an idea, but to create a temporality. Darkness prevails all over, and the frantic changes in setting – the cross-cutting, the extreme close-ups, the recurring shots of nuclear bombs ravaging urban areas – build up the shock and sense of suffocation. As he comes out of those grim thoughts and memories, the Scientist sets out to help the people he can still help, and goes to the orphanage in order to prepare the children – which defines him as his original title of “Professor” more than any other circumstance in the narrative – there for a quest that is the ultimate action of the film: going outside and beginning again. Once more there is a similarity in thematic exposition with *Stalker*: the religious representations of hope and altruism. While the Stalker saw hope in taking people to the Zone and restoring their faith in miracles, the Scientist intends to prepare children so they can walk out into the film’s own irradiated zone and look for a better place to start anew. The moment when he decides to gather them is conveniently set during Christmas Eve, as he tells them to never lose hope in society. The message is almost messianic, as if it is fitting that the day that conventionally celebrates the Christian messiah’s birth is the day when little children are going to set out and repopulate a ravaged world (*DML* 01:11:50). The end portrays those same children struggling to walk up hills in the hostile outside environment, while an orchestral score – very similar to the one that opens the narrative – plays in the background, enhancing the idea of hope proposed during the whole of the sequence (fig. 58).

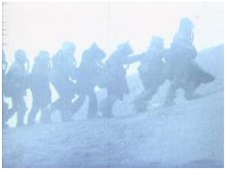

Fig. 58: One of the shots in the final sequence. The children leave their orphanage bunker and look for a new place to restart. Lighting is much brighter than the rest of the film, and the orchestral accompaniment suggest the theme of hope in renewal.

Fundamentally, that idea of hope that permeates specific moments of the film, especially in the voiceover narrations of the Scientist's letters to Eric, is contrasted with the hopelessness of most scenes in which he interacts with the ravaged world and his weary peers. It is ultimately a cyclical chain of events – the death of a world, the death of a son, and ultimately the birth of a new world by a new generation – that defines hope as an unassuming theme for *Dead Man's Letters*' post-apocalyptic depiction. Claire Curtis writes:

> If there is anything that links all these disparate [post-apocalyptic] works together, it is sheer violence, the massive destructiveness of the apocalyptic event […] The stories are often strange fantasies of destruction and domesticity, of massive violence and then the satisfaction of building a new world. (187)

The violent and ghastly depictions of scattered bodies on devastated streets and graves being dug in the silence of a filthy bunker spread throughout the narrative. It is part of the contrasting notions of despair and hope. In the museum bunker, survivors were trying to protect themselves from the dangers above. However, the idea of an underground shelter should mean a progressive preparation for a later ascension back into the open world and a rebuilding of society. Yet the underground survivors in *Dead Man's Letters* are often represented in complete disbelief in their abilities to build a new world, and often discuss how their mistakes are an inherent part of an alleged human nature that *should* indeed come to an end (*DML* 00:40:03). One of the survivors once mentions that "I loved mankind. I love it better now that it doesn't exist" (00:55:51). On the other hand, the Scientist wants to avoid such fatalistic thoughts, and his move to the orphanage expresses his will for renovation. He has seen enough pain and death, and the constant images of violence are part of the character's own experiences of that world; experiences that become saturated and need to be counteracted by an aspiration for something better. In the end, such a crude representation of a nuclear apocalypse was partly possible because of the artistic censorship cooling down in the USSR with the coming of the Perestroika in the 1980s. In the midst of all that change, and in the scarcity of post-apocalyptic material in Soviet cinema, *Dead Man's*

Letters was unique[53] for presenting bleak portrayals of nuclear destruction – and also rebuilding. The overarching sense of fatality in many dimensions of film discourse and the constant indications of suffering that serve as a narrative *memento mori* actually culminate in an aspiration for renewal.

Stalker and *Dead Man's Letters* are the only films in this corpus to deal with exclusionary zones, and somewhat antagonistic representations of spaces. Such spaces are usually interpreted by the characters as deadly, when in fact they are shown to be decadent. Life works in a mysterious way in Tarkovsky's Zone, whereas destruction and a military curfew erased the possibility for a stable development of life in Lopushansky's crumbled town. However, in the case of the latter, "[t]he Terrors and Decadence are two of the recurring elements in the apocalyptic pattern; Decadence is usually associated with the hope of renovation" (Kermode 9). That existence of space as a decayed shell of an old world worth reforming is built by recurring images of brutality and war, and of how time seems to stop in such representations of utter destruction. In *Stalker,* there is no renovation because the new world is a continuity of an undisclosed event that apparently cannot be reverted. The almost magical circumstances surrounding *Stalker*'s Zone – circumstances whose interpretation by the main group of characters can be considered superstitious – and the strong presence of repressive authorities end up stopping anybody from ever adjusting the status quo or even investigating what constitutes the new structure of those spaces, the elements of the afterworld. The Stalker constantly reminds his fellow travellers that others have tried to explore the Zone and failed, and that it is "a very complicated system of traps, and they're all deadly. I don't know what's going on here in the absence of people, but the moment someone shows up, everything comes into motion" (*Stalker* 01:02:07-01:02:30). Tarkovsky's representation of the Zone proposes these mysteries and miraculous properties so its space cannot be altered.

How do these productions adapt imaginations of disaster and post-disaster into film, then? Through the translation of anxieties about the decay of spaces and disruption of social institutions to an audiovisual discourse, both directors achieved particular perspectives on destruction and desolation in their narratives. Tarkovsky discusses the code of film:

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[53] In *Russian Critics of the Cinema of Glasnost*, film critic and *Iskusstvo Kino* editor Lev Karakhan credits Lopushanksy for having "developed the genre of futuristic film disaster" (30-5).

> By means of words literature describes an event, an inner world, an external reality which the writer wants to reproduce. Cinema uses the materials given by nature itself, by the passage of time, manifested within space, that we observe about us and in which we live. (177)

Stalker keeps using a collection of spaces that exhibit a clear passage of time through visual indications of abandonment. In order to achieve that, the director created rural and urban areas where derelict remains of human presence – from old labour vehicles to deserted buildings to discarded objects – could provide the anachronism that he was looking for; an anachronism that could express diegetic scenarios of loss and stagnancy. Lopushansky, on the other hand, resorted to grittier images of urban ruins and grimier indoors environments and numerous pieces of footage that showed the raw effects of nuclear weaponry. Both narratives resort to such images so that themes like hope or renewal can come up and provide a contrast. Under that scope, one could say that *Stalker*'s world is geared towards the fantastic whereas *DML* has a more "realistic" tone.

The two films end up tackling, directly or indirectly, the anxieties of a world in which technology had been increasingly becoming a commodity and an object with which to threat and to oppose. How not to notice the unease over what may be of the future when a new kind of war keeps lurking through convoluted diplomatic discussions? Susan Sontag points out:

> Again, there is a historically specifiable twist which intensifies the anxiety, or better, the trauma suffered by everyone in the middle of the 20th century when it became clear that from now on to the end of human history, every person would spend his individual life not only under the threat of individual death, which is certain, but of something almost unsupportable psychologically-collective incineration and extinction which could come any time, virtually without warning. (48)

Through the use of science fiction or not, that trauma persisted throughout the decades following World War II, and if nuclear technology had not already become reason for public apprehension in the USSR, Chernobyl consolidated it. After the disaster, “[t]he most secret and impenetrable part of the Soviet system, its nuclear program, became the object of blistering criticism, its heroic and romantic image tarnished beyond repair;” but most drastically, it was a watershed event that “affected the health and well-being of 435,000 people, and the list is not yet finished” (Zubok 288). It raised concerns about nuclear energy in general, and shortly afterwards, the project of the Perestroika and the entire Soviet Union came to an end, in a year (1991) which some historians consider to be the end of the Cold War.

In the next chapter, I investigate how the post-apocalyptic imagination seeps into the 1990s and 2000s in both the United States and the Ukraine, having two video games as the analytical objects. It is a departure from film and a study of a new audiovisual medium that continued to explore eschatological themes related to nuclear devastation in those decades.

CHAPTER FOUR
DOES WAR REALLY NEVER CHANGE? *FALLOUT* AND *S.T.A.L.K.E.R.: SHADOW OF CHERNOBYL*

> "The incorporation of virtual camera controls into the very hardware of a game console is truly a historical event. Directing the virtual camera becomes as important as controlling the hero's actions… the computer games are returning to 'The New Vision' movement of the 1920s (Moholy-Nagy, Rodchenko, Vertov and others), which foregrounded new mobility of a photo and film camera, and made unconventional points of view the key part of their poetics."
>
> Lev Manovich.

If the nuclear race and the constant deterrence used as a passive-aggressive geopolitical strategy are to be considered prominent features of the Cold War, then the war bled into the 1990s and further into the 21st century. From the suspicions of Iraq possessing weapons of mass destruction during the Gulf War, to the US-led invasion of Iraq in 2003 – in part justified as a measure to hinder the development of nuclear and chemical weapons by Iraqi armed forces –, to the tensions with North Korea in recent years are key events in late 20th century and early 21st century that indicate that geopolitical deterrence has not been left behind in history. England-based journal *Bulletin of the Atomic Scientists*, which has covered the development of offensive and defensive nuclear weapon measures around the world, has indicated that while the number of atomic bombs has steadily decreased since the peak year of 1986, more nations now possess them[54]. From the United Statesian perspective, some of these countries – such as Iran and North Korea – can be considered a threat to the policies of the country. In 2016, tensions of nuclear war arose between India and Pakistan after attacks by Pakistani militants on Indian military facilities[55]. As for the nuclear energy issue, new exclusionary zones were added to Chernobyl, such as the area around the Fukushima Daiichi Nuclear Power Plant in Japan, which underwent multiple reactor meltdowns after an earthquake in 2011; or the leak of tritium and caesium-137 into the groundwater of the area around the Vermont Yankee Nuclear Power Plant in 2010 and 2011, which caused outrage among the local population following the Fukushima Daiichi disaster that raised awareness on the subject[56].

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[54] Kristensen, Hans; and Robert Norris. "Nuclear Notebook." *Bulletin of the Atomic Scientists*, Updated in 2017, Web. 27 Dec. 2017. The chart shows that, in 1986, six countries had nuclear weapons in their arsenal and conducted tests with them (United States, Soviet Union, United Kingdom, France, China, and Israel), totalising 64.099 warheads. In 2017, the number went down to 9.220, but countries like Pakistan, India, and North Korea have also developed such devices.

[55] As reported in "It is two and a half minutes to midnight," *Bulletin of the Atomic Scientists*. Edited by John Mecklin, 2017.

After the collapse of the Soviet Union, images of nuclear apocalypse kept being revisited in fiction, especially in the United States. Cormac McCarthy wrote the novel *The Road* (2006), narrating the fictional events of a father and his son travelling across a barren United States after an unexplained nuclear war. In film, most pieces were adapted from Cold War works, such as the *On the Beach* (2000, directed by Russell Mulcahy), a TV remake of Stanley Kramer’s 1959 film, itself adapted from Nevil Shute’s homonymous novel; *12 Monkeys* (1995, directed by Terry Gilliam), which was inspired[57] by the short film *La Jetée* (1962, directed by Chris Marker); and *The Postman* (1997, directed by Kevin Costner), adapted from David Brin’s 1985 novel of the same name. Science fiction literature and cinema from the 1990s and 2000s still took interest in matters of world destruction, radiation, and dystopian societies, and it is important to note that many of those narratives still looked back at those decades in which the United States and the Soviet Union constantly threatened each other and instilled in their civilian populations anxieties about total war. The images of massive destruction are still evoked, and the climate of dystopia and survival – common in many films of the 1950-1980s, including most of the films in this research – are still recurring tropes.

Yet still during the conventionalised Cold War period, a new medium was rising. If films could tell stories through an audiovisual language, video games allowed new generations of spectators to interact with the narrative items that they supply. Early video games did not necessarily bear narrative qualities, and focussed more on the competitive aspects of play, simulating previously existing sports and games. Early interactive systems such as *Bertie the Brain* (1950, developed by Josef Kates) and *Tennis for Two* (1958, developed by William Higinbotham) established the use of video displays for gaming experiences. The competitive game *Pong*, whose simple mechanics resemble those of *Tennis for Two*, came out over a decade later, helped popularise arcade machines and home consoles. Video games became a prominent form of entertainment in the Cold War, and almost indissociable from the war. Higinbotham himself was a physicist and had previously worked at Los Alamos on the development of the first atomic bomb[58]. One of the most iconic arcade games of old, the title *Missile Command* (Atari, Inc. 1980), put the player in control of an anti-aircraft weapon in order to destroy warheads that were aimed at six different cities that, if entirely destroyed, resulted in *game over*[59]. The Soviet video game *Tetris* took some time and effort to be released in the United States, since local companies did not know how to bring over a puzzle game that, unlike mainstream products such as *Mario Bros.* (Nintendo 1983) and *Donkey Kong* (Nintendo 1981), was not necessarily marketed for children.[60] Such cultural differences and such bomb-themed ideas for video games of the era mark the Cold War as a contextual kick-starter for the gaming subculture.

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[56] Fleckenstein, Paul. “The struggle to close Vermont’s nuke.” *SocialistWorker.org*, 28 Mar. 2011, Web. 28 Dec. 2017.

[57] Kamal, Nathan. “Remake/Remodel: *La Jetée* (1962) vs. *12 Monkeys* (1995).” *SpectrumCulture.com*, 12 Aug. 2012, Web. 1 Jul. 2018.

The capabilities of that new medium to engender narrative potential in its software-driven technology relied on specific techniques and concepts. As discussed in the introductory chapter, Future Narratives (FNs) are an intrinsic part of many video games. It is important now to remember some of the aspects that characterise a FN in order to understand how both games here analysed work with temporality and player agency. The structure of a FN is based on the existence of branching points in the narrative that respond to the player's actions, called *nodes*. Interactive novels have adopted the nodal model and allow the reader to experience different narrative branches in the same story; such is the case of Joe Dever and Gary Chalk's gamebook series *Lone Wolf* (1984-1998). In cinema, the German interactive documentary *13ter Stock* (2005, directed by Florian Thalhofer and Kolja Mensing) is an example. Sebastian Domsch states that "FNs must at least provide one node that can lead to multiple continuations –otherwise, they're not FNs –, but they may also present the reader/player with a choice between these multiple continuations" (112). That state of multiple continuations and, therefore, an interchangeable linearity, provides many video games with an emergent temporality, since time progresses as such nodes are accessed or interacted with. Film scholar Sabine Shenk, author of the book *Running*

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[58] Sullivan, Ronald. "Obituaries: William A. Higinbotham, 84; Helped Build First Atomic Bomb." *The New York Times*, 15 Nov. 1994, Web. 8 Jan. 2018.

[59] *Game over* is a common phrase used in video games to indicate player failure.

[60] For more information, see: Rivera, Joshua. "The Insane Cold War Battle to Bring *Tetris* to America." *GQ.com*, 12 Oct. 2016, Web. 19 Dec. 2017.

and clicking: Future narratives in film, claims that “truly open FNs are optimally realised in virtual realities, since these offer a multitude of nodal situations, emergent narratives, 24 hours continuation [which is the case in both *Fallout* and *Stalker: SoC*], a high level of interactivity […]” (208). If these are factors to be considered, video games of the Cold War like *Ultima I* and the post-apocalyptic cRPG *Wasteland* (Interplay Productions 1988) already work with such a sense of unrestricted temporality and causality, although not satisfying Shenk’s call for virtual reality, since there is no social interaction in the process of playing those games – they are single-player titles. Later on, the potential for nodal narratives was improved as FNs became a common asset for the medium, and many games like *Fallout* and *Shadow of Chernobyl* adopted complex structures of multiple continuations.

This chapter is therefore aimed at discussing both games and how they employ techniques of video game mechanics to approach the issue of nuclear apocalypse. I will make use of stills and lines from the games that can help comprehend their narrative styles and how they relate to imaginations and anxieties of disaster.

4.1. *Fallout*

Before the making of *Fallout*, game designer Brian Fargo had founded Interplay Productions and spearheaded the development of the post-apocalyptic video game *Wasteland* in 1988. Since Interplay did not possess considerable funds – as is the case with many developers of both past and present –, they needed a publisher, and Electronic Arts published the game. *Wasteland*’s premise was that a nuclear war had turned the Southwestern US into a hot and radioactive desert. Still, groups of survivors travelled across the barren territories, full of raiding hordes of humans, as well as mutated animals: in part a reimagining of *Mad Max* and *A Canticle for Leibowitz*. The role-playing system of the game allowed players to freely explore the large map and enter different locations, and survival was key; even more so considering that the player takes control of a party of four playable-characters (PCs). PCs get hurt and have to resort to collected supplies in order to be healed, or to visit a doctor. The simulation increases the difficulty of the situation and the player has to deal with the ruthlessness of a post-nuclear scenario, and the anxieties of the Cold War United Statesian authorities are incorporated in the game’s own challenges. Author William Knoblauch, in the book *The Silence of Fallout: Nuclear Criticism in a Post-Cold War World*, mentions that “like the most outlandish 1980s survival guides, *Wasteland* suggests that Americans [the game takes place entirely in the United States] who had the right tools, gadgets, and wherewithal could thrive in the post-apocalypse” (131). The game offers enclosed areas teeming with hostile non-playable characters (NPCs) that the player’s party has to beat in order to complete quests and/or acquire valuable equipment and supplies. Possessing materials that can help face the horrors of a destroyed world is the only way out, and the wasteland’s impoverished and ill are left to perish; quite like the material success necessary in order for civilians to secure a spot in a fallout shelter during the early Cold War.

Nine years after the release of *Wasteland*, Fargo still led Interplay. Failing to acquire the rights to *Wasteland* from Electronic Arts, Interplay could not make a sequel. Game director Tim Cain and a small team of about ten people started working on a new idea, and Fargo suggested the name *Fallout* for the game that would be a successor to the 1988 cRPG[61]. The plot was similar to *Wasteland*’s: a ravaged United States, and the Southwest in particular, was to be its setting. Bands of raiders and mutated animals still roamed the deserts, terrorising incautious travellers and small settlements. The introductory cut-scene, narrated by actor Ron Perlman, states the phrase that would become a motif in the later games of the series: “War… war never changes.” The narrator goes on to tell of the fictional scenario of the game, of world nations undergoing periods of high tension and nuclear threats, until the United States and China went at each other with warheads and the modern world came to an end. But the line “War… war never changes” deserves special attention. It may be interpreted as the continuous struggle for power, for dominance and colonisation among nations throughout history. It may also mean the epochal distress of the nuclear issue in the Cold War-era United States. The message suggests that the constant concern that persisted for over four decades never changed; the technological race that characterised the deterrence, and the aura of Doomsday Clock that dragged on for so long. And *Fallout*’s recreation of Cold War themes portrayed war in that sense, although the message can be deemed a risky tautology for not taking into consideration the subtleties of political diplomacy and the social impacts of the *technè* produced in the period that changed over the decades. The fear of a new war changed with the evolution of bombs over time, the tides of geopolitical diplomacy changed with, for example, the coming of the Perestroika; and so did the notions about nuclear energy from the construction of the X-10 Graphite Reactor in 1948 to the aftermath of the Chernobyl disaster in 1986.

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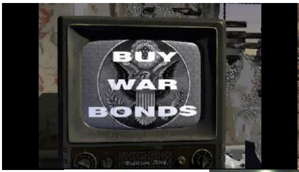
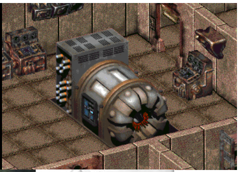
[61] Reed, Kristan. “*Fallout*’s Forgotten Ancestor.” *IGN*, Written in 20 Feb. 2012. Web. 01 Jan. 2018.

Such a recreation is made possible through a particular construction of the game's diegesis. *Fallout* proposes the idea of a temporal divergence. In the storyworld of the game, the 1950s Cold War went on through the decades and into the 21st century, and technology continued to be developed with the design and resources of the 1950s. Television sets are still black-and-white, computers are still room-sized behemoths with rudimentary interface (fig. 59 and 60), and some of the music is taken from the 1950s pop genre; part of the introductory cut-scene is accompanied by The Ink Spots' "Maybe" – in later *Fallout* games, musical soundtrack includes more artists from the period, with styles ranging from doo-wop to country music to rhythm and blues to rockabilly. The game establishes that the world went through a full-fledged nuclear war in 2077, a future that is portrayed in that unique style: the future as imagined by US fiction from the 1950s and 1960s. Robots that later became iconic in the series (fig. 61) resemble the design of Robby the Robot in Fred Wilcox's sci-fi film *Forbidden Planet* (1956); the replacement of the Soviet Union for a communist China that, ultimately, developed similar politics of nuclear deterrence with the United States that culminated in the apocalypse that so many Cold War films had imagined; the motif of the post-apocalyptic lone wanderer present in fiction such as Harlan Ellison's short story "A Boy and His Dog" (1969), the film *Mad Max: Road Warrior* (1981, directed by George Miller), and even *The World, the Flesh and the Devil*; as well as a fascination with the fallout shelters of the era, which in the game turned out to be populated and become the primary setting in the storyline.





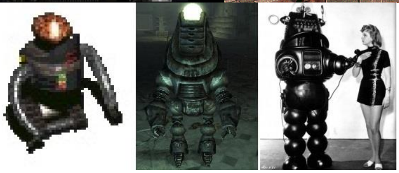


Fig. 59 (top left): A black-and-white CRT TV set portrayed in the introductory cut-scene. Fig. 60 (top right): In-game image of the supercomputer ZAX (which the PC can interact with and even play chess against), here portrayed as a room-sized machine of old, despite the futuristic setting. Fig. 61 (bottom): Comparison between the robots Robobrain (*Fallout* and *Fallout 2*), the Protectron (*Fallout 3* and *Fallout: New Vegas*) and Robby the Robot from *Forbidden Planet*. Note the similarities in their designs.

The plot itself starts in 2161, almost one hundred years after the cataclysmic event, and the setting is the Southwestern United States, mostly Southern California. It can be considered fitting that the setting be so, since most nuclear tests carried out by the United States military in their own soil took place in the Southwest. In *Fallout*, California is only rubbles of what it used to be, as though its heavy involvement in the nuclear issue is suggested to have been its calamity[62]. Still, survivors have rebuilt much of the old world, thriving in mostly impoverished communities, living either in small settlements or in the ruins of big cities, such as Los Angeles – called Boneyard in the game – and Bakersfield – called Necropolis.

The player plays the role of the Vault Dweller, an unnamed inhabitant of Vault 13, one of many fallout shelters scattered across the US territory and built by a megacorporation called Vault Tec. *Fallout* gives the player the opportunity to customise their character before the game begins (fig. 62), and its customisation system includes main attributes that determine the PC’s base stats (Strength, Perception, Endurance, Charisma, Intelligence, Agility, and Luck), skills that determine the chance of success in challenging situations (e.g. Speech, Barter, Outdoorsman, Lockpick, Repair, etc.) and perks that determine personal characteristics of the PC (all of them have positive and negative aspects to them; e.g. “Small Frame” makes the PC more agile, but they can carry less weight). The player can also choose to play a male or female character, as well as choosing a name and age for them. The customisation factors in the expression of the player’s agency in such a post-disaster world; in the book *Designing Virtual Worlds*, game developer and researcher Richard Bartle explains that “when players create their character’s appearance, it’s the first opportunity they have to engage with their character. It therefore represents a powerful iconic representation of their identity goals” (428). A computer role-playing game like *Fallout* often allows for that depth of expression through character creation that culminates in the choices presented by the quests and the progression of the storyworld itself. As far as game mechanics are concerned, all those stats are key in enabling the player to survive the many situations of the game, be it in combat, PC-to-NPC interaction, or navigation through the levels of the game's world map. No background information about the PC is given other than the fact that they were born and raised in Vault 13 and were chosen to fulfil the vital task of retrieving a new water purification chip for the vault, since the original one has broken and without it the shelter population will perish from water radiation. The task is the initial motivator for the storyworld of the game, and is the reason why the Vault Dweller has to venture out of their home for the first time in their lives, the player taking control of the dangerous endeavour.

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[62] The series returns to the Southwestern setting in two later games: *Fallout 2* (Black Isle Studios 1998) takes place in Northern California and Southern Oregon, whereas *Fallout: New Vegas* (Obsidian Entertainment 2010) takes place in Nevada and Northeastern California, the former region having been crucial to nuclear arms testing in the infamous Nevada Test Site.

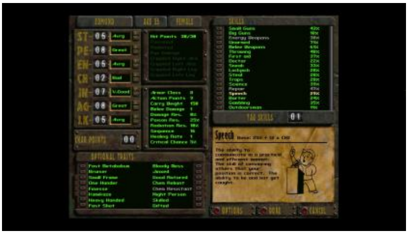

Fig. 62: Character customisation screen, featuring options such as name, age and sex (top-left corner), main attributes (left-hand side), and skills (top-right corner).

The introductory cut-scene also illustrates the game's concept of vaults, showing a commercial ad on a television set that mentions a "Vault from the future." Since these fallout shelters are a considerable part of its premise, the satirical reference to Cold War fallout shelters and their comfortable appeal. The unnamed mascot of Vault Tec (fig. 63), a blond and jolly cartoonish boy who dons the blue-and-yellow vault jumpsuit and gives the player the thumbs up is part of the satirical image, reassuring the people who can secure a place in a shelter that their future is safe, away from the mushroom clouds of the outside and the mutating radiation – a quasi-eugenic notion akin to Dr Strangelove's proposition about fallout shelters and "cleaner" future generations in Kubrick's film. A disc that can be bought from a NPC called Mrs Stapleton and entitled "Vault Locations v.34.129" mentions that "Vaults are not just for the upwardly mobile, but for everyone," which is part of Vault Tec's corporative ruse and reinforces the sarcastic tone of the apocalyptic image of *Fallout*.

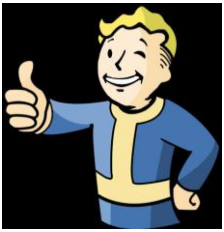

Fig. 63: The Vault Boy, mascot of the megacorporation Vault Tec, portrayed in many cut-scenes throughout the *Fallout* series wearing the vault jumpsuit. He appears in the introductory cut-scene of the first game to illustrate the concept of vaults.

In the storyworld, vaults were built to work as social experiments for the US government: Vault 12, for instance, was designed to be purposefully left open so that scientists could study the effects of prolonged exposure to nuclear fallout; and Vault 15, which in the gameworld is located near Vault 13, was built to house people that had differing political positions[63].

Fallout also features a reputation system in which factions and towns respond differently to the PC depending on player's previous actions towards them. In fact, factions are another considerable aspect of the game's concept, and a few can be described in more detail in order to better understand *Fallout*'s post-apocalyptic references and motifs. One faction is the Brotherhood of Steel, a quasi-medieval group of isolated explorers who take upon themselves to collect and restore technology from before the bombs, which in principle resemble the monastic survivors from *A Canticle for Leibowitz,* who sought to preserve ancient knowledge[64]. Such a monastic aura with a touch of futuristic concepts – their "paladins" wear *power armours* and carry energy guns (fig. 64) – reiterates *Fallout*'s sense of anachronism, a characteristic part of which is suggested to have come from the technological fragmentation caused by the mass destruction of the bombs in the cataclysmic event of 2077. Another faction is the Master's Army, a band of super-soldiers who were infected by a pre-war virus called Forced Evolutionary Virus (FEV), which turned them into huge greenish brutes, referred to as Super Mutants. The Master is an old physician named Richard Moreau[65], who when scavenging at the Mariposa Military Base, fell into one of the vats containing the toxic FEV and radically damaged his body (fig. 65). Disillusioned by the historical inability of past nations and communities to avoid war and genocide, he contradictorily becomes obsessed with “cleansing” society by turning all who were not affected by FEV into Super Mutants in order to establish a sort of purity; or, conversely, a generalised contamination. All these factions and others – such as raider groups – can be interacted with and helped/attacked, resulting in a positive/negative state of reputation and subsequent reaction by members of the factions.

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[63] The social system of vaults and their experimental aspect is further discussed by *Fallout 2* lead designer Chris Avellone in *The Fallout Bible* (11).

[64] A theme that can also be noticed in Ray Bradbury's *Fahrenheit 451* and Truffaut's 1966 adaptation of the novel.

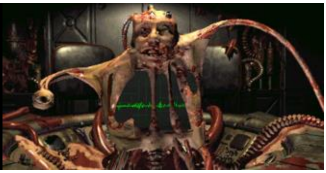

Fig. 64: Rhombus, one of the main members of the Brotherhood of Steel in the faction’s bunker, wearing the characteristic power armour. Fig. 65: Richard Moreau, here portrayed as the Master, the game’s main antagonist.

There are particular ways in which time is incorporated into the mechanics of the game. There is the game’s clock, which follows two patterns: one when the player is in top-down view[66] (fig. 66) exploring places and interacting with characters, and another when they are on the “world map view” (fig. 67). The regular, trimetric view follows an intra-diegetic clock of real-time 24 hours, with the clock stopping whenever the game is paused, the inventory of the PC is accessed, when dialogue screens pop up, or when the Pip-Boy[67] is accessed (fig. 68). The world map view follows a temporal pattern dependent on movement and, therefore, on territory travelled: every square of the map corresponds to virtually fifteen in-game hours. That distinction is important in order to understand one crucial element of the Vault Dweller’s main quest: a timer of 150 in-game days. The vault's overseer makes clear that the new water purification chip has to be found within those 150 days, or clean water will run out and people in the vault will die. So time is a fundamental aspect of *Fallout*'s gameworld, and more specifically, time constraint. It gives the main quest more focus, and it gives the passage of time a purpose other than dictating the day-night cycle of the gameworld. It is part of the idea of new apocalypse in the isolated and alienated world of the vault, and it is ingrained in the game's architecture from the very beginning – a deadline that will mean *game over*. Sebastian Domsch observes that

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[65] The name Moreau may have been borrowed from the mad eugenist scientist of H. G. Wells’ *The Island of Dr. Moreau* (1896). The image of the Master can also refer to a current of disabled characters in fiction that are portrayed as villains, such as Hoppy Harrington in *Dr. Bloodmoney* and Dr Strangelove himself.

[66] Similar to the point-of-view explained in footnote 17 of this thesis.

[67] *Pip-boy* is the storyworld’s name for a device that serves as an interface for the player to keep track of notes and discs found in the storyworld, as well as quest objectives and detailed maps of explored locations. The device itself is said to be given to every Vault 13 dweller and was initially issued by Vault Tec.

> While many video games take place in an ever-frozen intradiegetical present or allow changes in time only between gameplay sequences, some games are aligning real play-time and intradiegetical time continuously: while the game is being played, time actually passes within the storyworld of the game, independent of the player's actions. (46)

That concurrent temporality between the gameworld and the player's playing time is crucial for *Fallout*, since the interaction of the PC with NPCs found throughout has to be done always taking into consideration the survival of the Vault 13 inhabitants. However, while a sense of urgency and attention to the main task is suggested, the player is given enough time to explore a sufficient number of areas and complete a sufficient number of side-quests. 150 in-game days may not seem like much, but there is considerable time for diversion, so the existence of the timer can be interpreted more as a sign of importance of the main quest and the game's fundamental concept, and less as a clock rapidly ticking for the player to unconditionally heed.

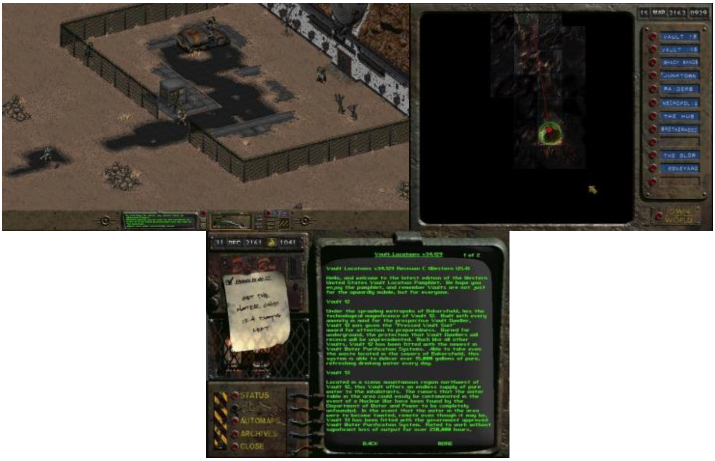
15 MAR 2162 0929
VAULT 13
VAULT 15
SHADY SANDS
JUNKTOWN
RAIDERS
NECROPOLIS
THE HUB
BROTHERHOOD
THE GLOW
BONEYARD
TOWN WORLD
31 DEC 2161 1041
STATUS
AUTOMAPS
ARCHIVES
CLOSE

Fig. 66-68 (from left to right, top to bottom): Three screens of the game with their own interfaces. The *top-down view*, used for most of the game's duration, with characters and spaces on screen and an interface for inventory, turn-based combat and skills at the bottom; the *world map view* with its squares and quick-access location links on the right; and the Pip-boy, with buttons to access information such as quests, maps, calendar and clock, and logs/diaries/discs.

Time and space work together in that sense: exploration is an important aspect of navigation in *Fallout*'s world, and it is necessary in order to complete game objectives, especially the timed main quest. The player can travel from town to town looking for information about the water purification chip, and on the way, they learn more about how the wasteland is and how its participants behave, people and other creatures alike. It is an acquisition of knowledge that integrates the agency of both the player and the PC: for a first time playthrough, the player knows nothing about that hostile and desolate world, and neither does the Vault Dweller. Therefore, it becomes imperative that they learn about it and adapt to its dangers. For instance, the first settlement of the game, a small farming town named Shady Sands, faces challenges with bandits and radscorpions[68] invading the place from time to time. The player can offer help solving both problems, and that serves not only as an introduction to the fiction behind *Fallout*'s storyworld, but also as an introduction to mechanics of combat and quest progress. Also in Shady Sands, the player can find information about the water purification chip, so gaining high reputation with the local NPCs can help the player with their main quest, shortening the time needed to find the device. Therefore, exploration of space and time do end up working together in the game's architecture.

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[68] In the game's parlance, a *radscorpion* is basically a mutated – and much larger – variation of the North American Emperor scorpion, according to dialogue with the NPC Razlo, an NPC that can be located in Shady Sands. Monsters that are enlarged versions of real-world animals as a result of nuclear bombs were common in 1950s B films such as *Them!* (1952, directed by Gordon Douglas) and *The Beast from 20,000 Fathoms* (1953, directed by Eugène Lourié).

Scavenging is also part of space design of the game – motivating the player to explore the accessible locations and find scattered pieces of pre-war history[69] – *and* part of the concept of survival and prosperity in a post-nuclear world. Navigation in *Fallout* works in two ways, and both coincide with the two types of screen view mentioned previously: in trimetric view, the player clicks where they want the character to go, and special pop-up options of interaction will appear if the player finds items, doors, characters and containers (chests, boxes, shelves, fridges, etc.) on screen. The screen will only be visible within a limited radius of the PC's location, so moving around is required for further exploration. When in world map view, the PC becomes a red dot, and moving around is done again with the mouse; only this time, space is marked by squares that represent a symbolic and scaled down landmass. Unexplored squares in the world map are darkened out of view, making travelling around also necessary in order to find new settlements, towns and other locations (bases, caves, vaults, etc.). The mechanics of space are, therefore, an architectural representation of challenges and access to new interactions with NPCs and items. Lev Manovich states this about virtual spaces:

> Navigable space represents a new challenge. Rather than only considering topology, geometry and logic of a static space, we need to take into account the new way in which space functions in computer culture: as something traversed by a subject, as a trajectory rather than an area. (238-9)

Areas outside the settlements and towns do not follow a geographical pattern: they are all bland desert-like spaces with virtual, scaled down distances between them, which encourages planning for routes and alternative trajectories in order to beat the main quest timer. Again, due to the limitations of a 2D engine, space in *Fallout* is mostly flat and filled with similar-looking buildings and environment objects (caves, rocks, trees, etc.), but it fulfils the role of contextualising the action and characters and orientating navigation for the player.

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[69] Items from old guns to discs about institutions of the old world, such as the aforementioned disc entitled "Vault Locations v.34.129" that contains information about all the vaults in the larger region of the game.

In addition, space in *Fallout* is mostly static when it comes to environment reactivity. Characters wander about and navigate in the trimetric maps, but the still early technology of 2D graphics did not allow for much inclusion of transformative areas, as they would mean more costs in the development of the game. One exception would be an electrified floor at a hostile location called Mariposa Military Base, but its functioning is predictable, as the entire floor of an area hurts the playable-character every few seconds; another location would be the abandoned research base called the Glow (because of its lethal levels of radiation). The Glow is divided into various underground levels, more irradiated and inhospitable the lower the player navigates. However, radiation in the Glow is expressed by a simple system that, like the electrified floors in Mariposa, hurts the player every few seconds, which in the game system translates into an “irradiated” status that lowers the player’s basic stats for a period of time. In that sense, the stasis of Fallout’s areas can convey the idea of a barren world, passive to interaction and hostile mostly through the agency of its participants (namely, other non-playable characters and creatures).

The storyworld of *Fallout* uses all those spaces and the time needed to navigate them to instigate exploration so the main quest can get out of the way, since the narrative has a continuation to it. After the water purification chip is acquired and installed in Vault 13, the player finds out that the Master’s Army threatens the security of the place, for their base – the aforementioned Mariposa Military Base – lies nearby. Eliminating the Master’s Army becomes the new objective, and instead of a constructive meaning – recovering a means of survival –, the storyworld shifts to a destructive meaning – waging war against a faction that is seen by the Vault 13’s overseer as an alien group and an imminent danger; another anxiety for the end of things. As previously mentioned, the Master is a character that acquires the science fiction image of the “mad scientist,” and as such, plans to change the society as presented in the fictional work through cruel means.

Facing the Master is the last challenge of the game, and it is during this part that nodal points can have the most impact on the storyworld and in the way the game ends. Previously in the game, especially in other side quests, nodes exist and often express points in which the player can choose to take one side or the other of whatever conflict is taking place. For instance, a side quest in the settlement of

Junktown requires the player to help mayor and sheriff Killian Darkwater to put down a crime lord in town that owns a casino, who goes by the name Gizmo. Darkwater suspects Gizmo is behind many crimes, including sending something to attempt on his life; however, he wants to send somebody who the kingpin does not know in order to keep a low profile. When in dialogue with Gizmo, the player can get information out of him using the Speech skill, plant a transmitting device on him using the Sneak skill, or side with him and take Darkwater down, decreasing the reputation with Junktown, but gaining prestige with Gizmo. In the case of the final quest, entitled "Destroy the Mutant leader," the player can eliminate the Master, thus fulfilling the conventional objective of the quest; but they can also choose to persuade him to give up his plans to "cleanse" society with his FEV project, as well as give him the location to Vault 13 so he can use the PC's own fellow dwellers to forward his ideal. Each choice results in a different ending, voice-narrated through a series of stills informing the player about the ultimate situation of each place the Vault Dweller has visited and changed.

If the Vault Dweller chooses to side with the Master, a sequence shows Vault 13 being invaded and its inhabitants panicking and perishing. If they choose to defeat him, however, a different narrative arises. The PC comes back to the vault, being received by the overseer himself just outside the entrance door. He thanks the protagonist and commends them on their accomplishment, on saving their people. The image of the hero/ine is consolidated. Such a heroic figure was present in government propaganda from the Cold War, and converged with ideas of salvation and survival that ultimately promoted policies of defence and corporative interests. Spencer Weart points out that the

> image of heroic survivors was encouraged by authorities who said that simple precautions could save most citizens. Life advised drinking hot tea for relief from radiation illness and printed a photograph of a teenage girl relaxing in a shelter, laughing and holding a bottle of Coca-Cola. (256-7)

There is a caveat, however. The overseer[70], despite appreciating everything that the Vault Dweller has done, mentions in dialogue that

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[70] In the last scene of the game, the overseer can be found in the cave entrance to Vault 13.

> Everyone will want to talk to you. Every youngster will look up to you. And want to emulate you. And then what? They'll want to leave. What happens to the Vault if we lose the best of a generation? What if we are the only safe place in the world? […]You saved us, but you'll kill us. I'm sorry. You're a hero… and you have to leave.

The game nurtures the image of the hero/ine, and then breaks it as the protagonist is kicked out of the vault only to return to the ruthless wasteland. It is the irony of the exiled hero/ine. There is no actual reward or acceptance in the long quest for the avoidance of apocalypse in the hero/ine's underground world.

And thus the storyworld of *Fallout* concludes. Many are the final outcomes, but they have one thing in common: the Vault Dweller is not going back home. The discovery of an outside world in ruins is the moment of transformation in the narrative, and every step further requires the player's agency to happen. The story accompanies every travelling point of the PC, every nodal dialogue with certain NPCs that end or advance quests, and every interactive action with objects and spaces that branches the narrative. But there is a balance that exists between player interactive impact and continuity of the storyworld[71]. Domsch suggests that

> [w]hile one end of this scale loses agency, the other end loses narrative proclivity. A passive decision by the player character (one that is forced on her through the game) cannot but be presented and experienced by the player as narrative, but strips the situation of the choice element and openness that would characterise it as a node. A player decision that is exclusively based on the player's worldview, on the other hand, would presuppose that the player ignores the game's presentational level, and thereby prioritises agency over its meaning for a storyworld. (168)

Fallout attempts to stay in the middle. It gives the player freedom to explore and decide how to proceed, but the choices are limited and streamlined, since it is also a focus of the game to present the sense of a new apocalypse in the constrained and alienated world of the vault. Some decisions are passive and are necessary in order for the narrative to go on – having to face the Master and decide the fate of Vault 13, although there are choices –, others depend entirely on the player's decision to explore and interact with elements of the game – interacting with the Brotherhood of Steel is optional, and may or may not affect the main quest going forward, since the Brotherhood can provide help to the PC depending on their reputation with them. The completion of the game ultimately depends on how the player approaches gameworld elements – especially other characters – *as well as* how they follow the storyworld and decide which developments culminate in its conclusion.

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[71] As a whole, not only the storyline. Elements in places change once the player acts on them (e.g. Shady Sands locals change their attitude towards the PC if one of the inhabitants – a girl named Tandi – is rescued from raiders; the population of the city of Necropolis will be decimated by the Master's Army should the player visit it and leave, implying that Super Mutants are spying on the Vault Dweller). That aspect of FN in the game establishes that not only the *story* side of *storyworld* changes, but also the *world* itself.

4.2. *S.T.A.L.K.E.R.: Shadow of Chernobyl*

In 2001, Ukrainian video game developer GSC Game World announced their sci-fi title simply named *S.T.A.L.K.E.R.* The game would integrate features of first-person shooters, set in a desolate area around the Chernobyl NPP, and an open-ended gameworld. The game entered development hell for the next six years, making many believe that it would never be released[72]. Finally, in early 2007, still maintaining the same concept and many of its initial mechanics, the developers unveiled the game in its finished form, with the released copies being published and distributed by the US company THQ. *Stalker: SoC* received positive feedback from game critics. *Eurogamer*'s writer Jim Rossignol mentioned that "*Stalker*'s [the game's] terrain is, of course, ripped directly from the real-world decay of the Chernobyl exclusion zone. The tract of Soviet-era Ukraine that was cordoned off after the nuclear disaster of April 1986 has been transformed, with a potent dose of artistic licence, into gamespace"[73]. Indeed, the visual recreations of the zone of exclusion, and how decayed spaces were constructed in order to enhance its horror motifs – especially the low-pitched synthesiser soundtrack based on minor notes, and the constant jump-scares of the creatures present in the gameworld – are the main elements that define its post-apocalyptic imagery.

In the bleak world imagined by GSC writer Ernest Adams, Chernobyl's power plant underwent a second disaster two decades later, leaving the region more contaminated and dangerous than before. In fact, the diegesis establishes that the second disaster of the area was responsible for creating supernatural occurrences that threaten all life within its limits. Not only does a second, fictional disaster justifies the basic premise of the game's plot – an even more desolated, dystopian zone of exclusion where explorers search for riches and for the Wish Granter[74] (fig. 69) –, but it also contemporises the events of Chernobyl, bringing them from the Soviet Union to modern-day Ukraine. The player takes control of The Marked One, a mysterious man who wakes up from an undisclosed incident in a derelict village south of Pripyat, which is now populated by fellow Stalkers looking for riches in the unstable Zone. The Marked One remembers little about his past, which is fitting for a character that will be played by a participant that is inserted in the diegesis *in media res*. The Marked One is a more defined character. As opposed to *Fallout*, *Stalker: SoC* is not a role-playing experience and does not allow the player the freedom to customise their character, instead giving him a backstory – he is looking for an old friend called Strelok – and an identity – he is a Stalker –, despite his memory loss that initiates the conflict of the game.

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[72] Adams, David. "*S.T.A.L.K.E.R.* delayed, again." *IGN,* 2 Feb. 2005. Web. 5 Jan. 2018.

[73] Rossignol, Jim. "Reviews: *S.T.A.L.K.E.R.*: *Shadow of Chernobyl*: In the Zone." *Eurogamer.net*, 19 Mar. 2007. Web. 5 Jan. 2018.

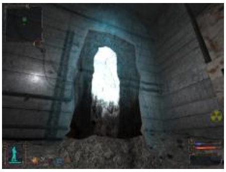

Fig. 69 – In-game image of the Wish Granter, the stone located inside the Chernobyl NPP that is supposed to recreate the room in Tarkovsky's *Stalker*.

Mechanically, the game follows much of the formula seen in other open-ended first-person shooters like the action shooter *Far Cry* (Ubisoft 2003), the cyberpunk-themed *Deus Ex* (Ion Storm Austin 2000), or the space-themed horror shooter *System Shock 2* (Looking Glass Studios 1999). The playable-character appears in the middle of a conflict that involves interacting with other NPCs in order to see the start of the main plotline. The PC can move freely around the gameworld, which is divided into several levels that can be accessed at any moment; some of which are temporarily blocked by NPCs depending on how far into the plotline the player is.

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[74] Similar to Tarkovsky's rendition of the Zone, *Stalker: SoC* proposes the idea of a place where an individual's innermost wishes are granted. However, the "room" of the film is replaced by a supernatural monolith – namely, the Wish Granter, located inside the power plant itself –, and the undisclosed setting where the Zone is located is replaced by Chernobyl.

Like *Fallout*, *Shadow of Chernobyl* has a system of main tasks[75] (which are always active and last for the entirety of the game) and secondary tasks (optional ones which last for short segments of the game so the player can move on). And like *Fallout*, *Shadow of Chernobyl* also has an integrated interface for the player to access in order to keep track of tasks, voice messages received from various NPCs, the world map, as well as an encyclopaedia of terms, events, places and participants of the storyworld. The device that plays that role is a personal digital assistant (PDA), which the player can open with the pressing of a button on the keyboard. In addition, perhaps the most obvious element of gameplay that determines the player's perspective of the gameworld is the game's first-person view. About the subject, Tamer Thabet writes that

> The player impersonates the game's character by taking its name, eyes, ears, and originally authored abilities and then tells that character's story while occupying the center of perception in first-person game narratives. For all those with the need to see the term "interactive" in the context of studying video games, the interactivity of narrative here is manifested when the first-person game genre puts the player inside the character's body to face the challenge posed by a fictional world and when the player counters the fictional world's discourse by acting and thus producing a counter-discourse that defies the system's discourse. (41)

By taking control the first-person perspective, the player is allowed to look around, to explore the world in an organic and thorough way – as opposed to a top-down 2D perspective of *Fallout* in which the player is stuck at one angle of the environment and can only scroll up and down and from side to side[76] –, walking in any direction of the environment, while also being able to crouch and stand up. The player also becomes more vulnerable to enemy surprises since it is harder to see what lurks around the corner without having an overhead view of spaces, and such a surprise factor converges with the horror aura that *Stalker: SoC* establishes. In *Stalker: SoC* more than in *Fallout*, dangers are abundant, since it is more of an action game rather than a role-playing game. In *Stalker: SoC*, time is relevant simply through the day/night cycle, but enemies become stealthier and thus The Marked One is more exposed to dangers during night hours. Danger is part of the gameworld, part of its system's discourse. And it is up to the player, by taking total control of their PC's perspective and movement, to perceive and counter the threats of the post-apocalyptic spaces built by such a discursive mechanism that is common in video games and that determines the narrative experience of play.

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[75] *Quests* are called *tasks* in *Stalker: SoC.*

[76] "The player's field of vision is anchored to the graphic representation of the protagonist (the avatar), and thus, it constantly reminds the player that he or she does not personally occupy the center of events, but the player is instead represented by an avatar in the story. The player of third-person games is not a focal-character and can only be an external focalizer since the visual illusion that places the player inside the character's body is not created. Through his or her restricted ability to move the camera, the player as a co-narrator can still focalize externally as a monstrator type of narrator who, however, cannot perceive away from the protagonist" (Thabet 42).

Space in *Stalker: SoC* is instrumental in that it contains most of the post-apocalyptic imagery that interests this research. The post-apocalyptic imagery is expressed mostly through the audiovisual simulation of a real-world area with detail in the desolate aspect of it. That area is a loose adaptation of Tarkovsky's Zone in *Stalker* (fig. 70-71). The game reinvents the idea of the Zone, though. The concept of a place with supernatural occurrences that daredevils venture into in order to extract its mysterious riches is brought over, a place that sustained an also mysterious watershed event that changed it forever. An anomalous zone, recreated with a different contextualisation. In *Stalker: SoC*, the second nuclear disaster caused the Zone to become extremely unstable. That instability is expressed through the existence of radioactive spots and *anomalies*: specific small areas in which the laws of physics are distorted, and natural occurrences such as gravity and electricity are exacerbated, making them hostile areas. But the challenges that they represent can offer a reward: valuable artefacts that grant the user powers. The PC can get hold of such artefacts by entering these hostile spots and coming out alive, activating them in the inventory screen (fig. 72) and gaining whatever specific abilities they provide[77]. That fantastic aspect of *Stalker: SoC*'s fiction converges with the fantastic characteristics of *Stalker*'s own Zone: a place whose dangerous and unpredictable happenings have to be explored and mapped out in order to acquire the marvellous secrets that it withholds. It is a scavenging activity, and the mapping out is part of the image of the many Stalkers present in the gameworld, just as it was part of the image of Kaidanovsky's Stalker.

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[77] Some of these artefacts increase the PC's resistance to radiation, while others increase athletic endurance, while others increase the PC's resistance to damage taken from anomalies.

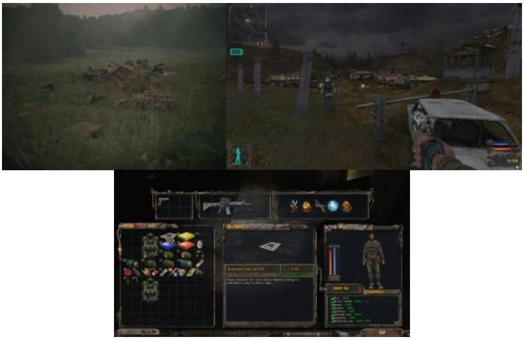


Fig. 70-71 (top left and top right): *Stalker*'s and *Stalker: SoC*'s representations of the rural areas of the Zone, a desolate land with abandoned vehicles and debris. Fig. 72 (bottom): Inventory screen in *Stalker: SoC*, with available items on the left and items in use at the top slots. Common items include artefacts, clothing, weapons, food and drink, and medical supplies.

Radiation, physical anomalies, and artefacts are not the only elements of *Shadow of Chernobyl*'s Zone, however. The perimeter of the Zone is controlled by a faction simply known as the Military. Its members constantly make announcements in speakers about how Stalkers should be reported to them, and how dangerous the Zone is. The announcements echo across the initial rural section of the game, letting the player know that there is a tight control over the area, and that it is not free to be explored by any Stalker. In the Cordon area of the gameworld, for example, soldiers yell: "We're trying to protect you from the Zone, not the Zone from you," or "Do not put your lives and the lives of you families at risk for the sake of dubious profit." Entering the Zone has become profit, but the more trained Stalkers know that there is more to it. The player can actually ask around in dialogue with non-playable Stalkers to find out more about the areas and dangers of the Zone, the various groups and important characters in the game, as well as receive new side tasks from these NPCs. Many of the Stalkers and explorers of the Zone are there to escape from the authorities: fugitives, former prisoners, and mercenaries. That means that the Zone is a no-man's land, perhaps less watched by the authorities than the outside world, which is quite unusual compared to *Stalker*, in which the seemingly populated town was the space that was fenced-in and watched by the military forces. The post-apocalyptic spaces of *Stalker: SoC*'s are restricted to the Zone, since nothing is said about the rest of the world (unlike *Fallout*, in which it is established through the initial cut-scene that the world was destroyed by the nuclear war between the US and China). That suggests a sense of entrapment, that the Zone is the world, but also not a world worthy living in – because of the pervading hostility of its regions and because of the curiosity that might be enticed by the lack of knowledge about an outside world. A sense that is reminiscent of how Chernobyl victims themselves must have felt knowing that they were trapped inside a world of sickness and death following the disaster and the quarantine measures.

As previously mentioned, the Zone here is a recreation of the region in and around Chernobyl and Pripyat. The city of Pripyat, abandoned since the 1986 disaster, has also been recreated and becomes a war zone towards the end of the game (fig. 73). Many landmarks of the city were represented in the gameworld (fig. 74-75), and the eerie and greyish aspect of its abandoned buildings adds to the horror element of *Shadow of Chernobyl*. Although scaling down is necessary in order to make the world small and thus quicker to navigate, GSC employed a minute process of simulation of the geography of said areas, giving the region their own impression in terms of colour filtering and contrast. Since the game, being released ten years after *Fallout*, could make use of more advanced 3D technology, lighting and sound could be used as assets to construct an atmosphere of horror.

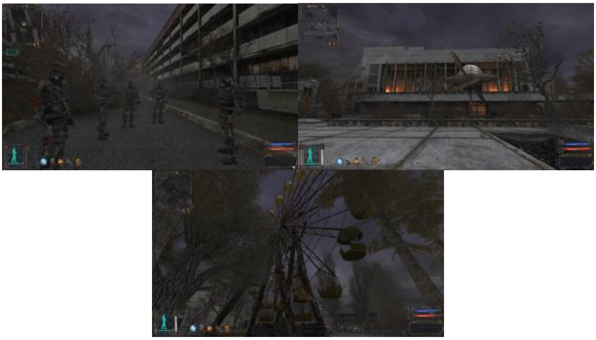
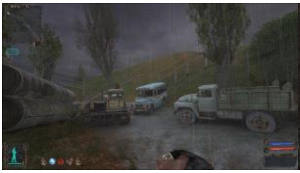


Fig. 73: The city of Pripyat is recreated in the game, and as the PC approaches the Chernobyl NPP, a conflict between factions explodes, and the city becomes a war zone. Fig. 74-75 (top right and bottom): Landmarks of the city of Pripyat in *Stalker: SoC* – the Palace of Culture Energetik and the Ferris wheel of the Pripyat Amusement Park.

There is a pervading aspect of decay of the gameworld objects, mainly cars and buildings. Everything is rusty and blends in with the natural environment. Several cars seem to have been abandoned in a hurry, and many look outdated models considering the contemporary setting of the storyworld (fig. 76). Military vehicles are also present in many locations, reinforcing the idea of military presence in the diegesis and during the past disaster itself. Buildings are almost always abandoned, with objects lying about and many of them in ruins, providing spots for cover and more accessible navigation[78], but also being locations where anomalies and radiation are more likely to be present (fig. 77). Lighting is usually low throughout the game, with faint colour hues and high image contrast, enhancing the eerie and abandoned aspect of the locations. Nights are especially dark in *Stalker: SoC*, which serves as a horror element, making the appearance of hostile NPCs and creatures more of a surprise, and navigation more precarious. Sound effects add to the horror of the game, from the prevalent use of minor scales in the musical accompaniment to the use of distant growls, murmurs and screams when the player is in abandoned or rural areas. Audiovisual techniques can work together to both intensify the suspense of exploration and add post-apocalyptic ideas of desolation and survival[79].



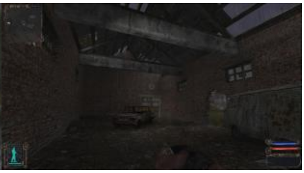


Fig. 76: Abandoned vehicles in the rural areas of the Zone. Fig. 77: One of the many derelict buildings commonly found in the gameworld.

Like *Fallout*, scavenging here is part of the exploration of space. The Marked One can pick up PDA files from dead Stalkers that give details about items of interest lost in random areas, scattered across the many accessible regions of the game. But unlike *Fallout*, the concept of exploration and scavenging in *Stalker: SoC* does not focus on rediscovering the treasures of an Old World, pre-apocalyptic and rusty – although there is a lot of that in abandoned vehicles and buildings that compose the landscape of the game –, but instead focusses on looking for magical artefacts that are natural in that they rise from the earth, but exist because of the second disaster of the gameworld. In that sense, not only does scavenging motivate the player to explore the gameworld, but it also suggests a sense of community that the player can develop with the rest of the Stalkers – who are non-playable characters – present in the game's map.

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[78] Some spaces in *Shadow of Chernobyl* can be confusing to navigate due to the density of trees and lack of referential points. Many buildings in the game serve as landmarks, some with high rooftops that stand out amidst woods and hills.

[79] The survival aspect of the game is expressed through its mechanisms of playable-character damage. Physical damage such as bleeding and radiation have to be cared for by the player whenever they affect the PC, otherwise the health bar (a basic integrity stat present in most action games) will decrease. The game provides the player with items that can prevent and treat direct damage (medkits, bandage kits) or radioactive damage (antiradiation drugs and, sarcastically enough, vodka).

In addition, unlike *Fallout*, spaces in *Stalker: SoC* are not in the least static. Anomalies move about and pop up unexpectedly, and in many forms. Pockets of radiation diminish the level of protection that the player has in their health bar. Electric anomalies burst onto the player and scatter about in a large radius, whereas gravitational anomalies draw the player into a whirlwind and trap them there. Some of these occurrences are random and some of them may pop up in different areas as the same map is reloaded. Besides, they are completely reactive to the PC's proximity, and are indicated by a beeping device worn by the Marked One. In that sense, exploration is also contextualized in a hostile and post-nuclear world through the use of a Geiger counter. Like the beeping device used to locate anomalies, it indicates areas where radiation is lethal, and it is an important tool for navigation in the game. It is not exactly a detailed interface since it just produces the responsive sound when the PC approaches a radioactive area, but the mechanisms of radiation in the game are simple (physical proximity and the subsequent damage value) and do not require it to offer an interface.

FN, as mentioned before, is present in *Stalker: SoC*, and it is expressed partly through the PC's interactions with factions of the game. There are four main factions that have a particular position about the existence of the Zone: the Military, whose members surround and monitor the limits of the Zone, forbidding the entrance and permanence of civilians in the territory; Duty is a faction whose members see the Zone as a threat to society outside and want to hinder its mysterious power and eventually eliminate it; Freedom members stand by Stalkers and want the Zone to be wholly and freely accessible, claiming that it is a natural response to human actions and thus should be respected; and Monolith is a faction that represents the antagonists of the game – cultists of the Zone and isolationists, they worship the power of the

Wish Granter. Fundamentally, the PC can only side with either Freedom or Duty, and either stand against the existence of the Zone or for it going forward in the main task of reaching it. Progress in the storyworld means advancing from the rural areas towards Chernobyl and the centre of the Zone, a journey that is similar in purpose to the quest of the three main characters in Tarkovsky's *Stalker*. The game uses the idea of factions to both develop a sense of conflicting ideologies in the battlefield that is *Stalker: SoC*'s post-disaster gameworld and also set the player on a branching path in the narrative: two groups that see the Zone differently, and the choice of who to go with is inevitable as the game progresses.

Coming into the power plant, the player will face the last challenges that will culminate in one of many endings. If the player has previously visited a mysterious character named Doctor, they will know their character *is* Strelok – the man the PC is looking for –, and that the supernatural occurrences of the Zone – the anomalies and the artefacts, not the desolation and the radiation – are the result of something else rather than the previous nuclear disasters. The Doctor directs the player to a secret room inside the power plant, which the player has to find on their own by exploring the many corridors of the building. Upon reaching such a secret room, they meet the C-Consciousness, the by-product of years of clandestine research done by scientists in the Zone after the collapse of the Soviet Union, which created the aforementioned anomalies and artefacts. The C-Consciousness is presented in the game as a force that binds together the psyche of everyone that it consumes, sucking them into that bound consciousness. In a tree dialogue with it at the Chernobyl NPP level, the player can discover that

> [w]e immediately subordinated those who were conducting the experiment and assigned them to tasks we needed them to carry out. According to our calculations, Earth is surrounded by a special informational field, the so-called noosphere[80] […] Our main goal was to make small adjustments to the noosphere, allowing us to remove things like anger, cruelty, greed and other negative factors from the planet.

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[80] The concept of *noosphere* was borrowed from spiritualist Pierre Teilhard de Chardin's metaphysical notion that there was a system of joint human consciousness that superimposed on the biosphere, or the sphere of life (*The Phenomenon of Man* 251). This integration is another one of *Stalker: SoC*'s ideas pertaining to the realm of the fantastic, just like the idea of the anomalies and the C-Consciousness itself.

Such an idealistic objective is similar to the manipulative plans of the Master's Army in *Fallout*, and both convey the motif of the mad scientist – in this case, mad *scientists* – driven to change society in drastic ways in order for a seemingly "noble goal" to be achieved. The player can choose to join the C-Consciousness' cause or to refuse it, resulting in two different ending cut-scenes that depict either the player's integration into the system or the elimination of the scientists who keep the C-Consciousness alive. In case the player has not contacted the Doctor and does not know about the secret laboratory, they can still finish the game by reaching the Wish Granter, and whatever background with the factions and their actions in the many nodal points of the narrative will determine which ending cut-scene they watch. If the player eliminates the leaders of both Freedom and Duty, The Marked One will ask the monolith to rule the world, the object will consume him, ultimately making him part of the C-Consciousness; if the player sides with one of the factions and has little money in their inventory, The Marked One will ask for immortality, then being turned into a statue; and so on. All the endings in *Stalker: SoC*, by working with continuous nodal points and the accumulation of PC's choices, suggest mechanisms of achievements and rewards, since the ending must be based on multiple actions taken throughout the game that create this or that narrative linearity and thus result in this or that cut-scene.

Fallout and *Stalker: SoC* are fictions of their own places. The US has been established by subsequent *Fallout* games as the main setting for their diegeses, be it in the Southwestern region in both *Fallout*, *Fallout 2*, and *Fallout: New Vegas*; or Washington – main setting of *Fallout 3* –, Boston in *Fallout 4*, and West Virginia in *Fallout 76* (2018). The habitual United Statesian setting draws on the development of fictional entities of the gameworld, such as the vaults, which are the reimagination of Cold War fallout shelters; or the Super Mutants, who are the game's picturesque representation of a mechanical and uber-belligerent US soldier. As for *Shadow of Chernobyl*, its detailed depiction of the Zone of Exclusion was later elaborated on by its following titles, *Clear Sky* and *Call of Pripyat*, both set in the same area, thus also establishing *S.T.A.L.K.E.R.* as a Ukrainian video game franchise about fictional representations of the Ukraine. In addition, gaming communities have developed for both titles in their respective countries: the *No Mutants Allowed* forum covers news about the *Fallout* franchise and publishes articles and fan-made modifications for the game – commonly called mods[81]. In Ukraine, the *GSC Game World* community page also features a forum for fan discussion, and *S.T.A.L.K.E.R.: Shadow of Chernobyl Nexus* is one of the websites where players worldwide can find mods for the game.

Ultimately, how do both games bring such imaginations to this new medium? Firstly, there is something to be said about player agency. Both games project the images of the Vault Dweller and the Marked One as possible heroes or antiheroes, even villains should the player choose to either let the Master's Army storm in Vault 13 or achieve of one the negative endings of *Stalker: SoC* – both cases depend on the choices of the player throughout their respective narratives. The two playable-characters have very emblematic monikers, as though the games establish since the beginning that there is an important role for those protagonists to play in shaping the future of that gameworld and of those narratives. In sum, both games take advantage of FNs to give the player the choice to do what they want – within the limits of the games' databases and narratives – with their chance to start over and survive. These are video game mechanics of survival, one of the main elements of eschatological fiction inserted into their gameplay capabilities.

Moreover, both games are set in alternate realities of their respective countries of production. Historical and political divergences are what builds their fictional aspects of temporality and gameworld design. Divergence is also part of how their FNs are expressed, since that narrative mode fits the way their gameworlds develop as the player acts *in* and *on* them. They are volatile, uncertain worlds, in which the cataclysm has taken and can still take many forms depending on how that main agent impersonated by the player interacts with the architecture of the game. *Fallout*'s satire and exaggeration of Cold War anxieties are also part of its post-apocalyptic portrayal. The mad scientist figure as the main antagonist, the anachronic existence of a medieval-like faction in a post-nuclear world, the picturesquely dull and alienated dwellers in that fallout shelter, one of which is the improbable hero/ine – or villain, depending on what fate the player decides to choose for Vault 13 – who leaves alone to save their underground birthplace; those are all parodies of the nuclear scare and of the imagination of a post-disaster world. In *Stalker: SoC*, the divergence is illustrated by the second disaster in Chernobyl, which both intensified the radioactive contamination of the area and produced the idea of the supernatural C-Consciousness, bringing the game closer to the fantasy concept that was prevalent in Tarkovsky's portrayal of the Zone in the film from which the game was loosely adapted.

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[81] Mods for games such as *Fallout* and *Shadow of Chernobyl* include additional, fan-made storylines and quests, items, characters, soundtrack, and visual enhancements. Such a modding subculture allowed players not only to participate in the original game's narrative and change it, but also to extend the existing narratives or create a new one by using the very game engines built to develop them. *Lost Alpha* (2014), developed by a collaboration of fans worldwide called Dezowave, widened the original *Stalker: SoC*'s gameworld to include ideas that were cut from the main game by GSC Game World; whereas *Fallout 1.5: Ressurrection* (sic, 2016) is a fan-made title based on the engine of *Fallout* and *Fallout 2* and created by the Ressurrection team, a group of Czech fans that wanted to expand the storyworld of the first two games and conceive a narrative of their own about what happens east of California between the events of both instalments.

Fallout and *Stalker: SoC* are post-apocalyptic stories that refer to Cold War imagination and anxieties, but they are also interactive narrative works *of their time*. Mechanics of achievements and rewards, as mentioned previously, serve to characterise the concept of Future Narratives and how they are formulated in video games. Failure is also a nodal element of a FN. In *Fallout*, player failure is represented by a game over screen that shows the dried out skeleton of the Vault Dweller in rags of the familiar blue-and-yellow Vault 13 jumpsuit half-buried under the hot and sandy wasteland. That is, once again, a contextualisation of the game's mechanics: the portrayal of the ruthless barren lands of the gameworld contextualises the purely architectural event of failure. The Vault Dweller's death coincides with the apocalyptic imagery of a lifeless landscape. In *Stalker:* SoC, failure is indicated by a simpler screen: a sudden third-person image of the player's avatar lying on the ground with a "game over" sign on the screen. The suddenness of the animation indicates the more violent action that takes place at a faster pace than in *Fallout* to mean the abrupt failure of gameplay from the PC. On the other hand, how players *succeed* to shape the gameworld through reaching key areas and completing objectives defines how these two post-apocalyptic stories are portrayed, told[82] – for it is a medium that, like cinema, is not only audiovisual, but potentially verbal –, and, most peculiarly for video games, experienced and interacted with by such spectators. And that narrative shaping is possible due to the *actively nodal* and *dynamic* FNs[83] of *Fallout* and *Stalker: SoC*: dialogue trees, intradiegetic clocks and their effects on gameplay, as well as event triggers that depend on the player's actions to happen. The sense of urgency and of imminent disaster built into the both games’ architectures brings forth the apocalyptic element that their audiovisual style already conveys and contextualises it in their gameworlds and storyworlds for the player to interact with.

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[82] I draw, here, from film scholar Brian McFarlane's notion that most films constitute an intertwined system of visual, aural and verbal signifiers; and not simply audiovisual ones (*Novel to Film: Introduction to the Theory of Adaptation* 26).

[83] Refer to the Introduction for descriptions of these concepts of FNs in video games.

CHAPTER FIVE
ESCHATOLOGICAL REVELATIONS: BRINGING THE CORPUS TOGETHER

> "'I suppose I haven't got any imagination,' said Peter thoughtfully. 'It's—it's the end of the world. I've never had to imagine anything like that before.'
> John Osborne laughed. 'It's not the end of the world at all,' he said. 'It's only the end of us. The world will go on just the same, only we shan't be in it. I dare say it will get along all right without us.'"
>
> *On the Beach*, Nevil Shute.

Given that all the works of my corpus have been analysed in their respective chapters, it is appropriate now to bring them together. The third research question listed in the Introduction is the one that will guide this last analytical chapter: how can the structural, stylistic, and thematic elements of all the works chosen for this study be compared and contrasted considering the span of almost seventy years of production? The aim of this chapter then is to make a comparative analysis of the qualities and perspectives of each film and video game, considering the formal and thematic aspects investigated in the second, third, and fourth chapters of this thesis.

The nuclear issue has been an important part of this study's scope, given that even fiction from this corpus that does not openly deal with it can incorporate thematic elements that relate to it. In *Stalker*, for instance, the Zone is the ultimate region of the prevalent decaying landscape and is recognisable for its mutating properties and its mysterious and invisible effects, features that are reminiscent of the insidious dangers of radiation. Those properties appealed to narratives during the early decades of the Atomic Age, especially after the first H-bomb tests, and influenced patterns through which fictional characters were conceived in works dealing with the theme. The film *Them!* portrays giant ants that come out of the New Mexico desert area of Alamogordo, where the Trinity test was conducted. The comic book industry in the US teemed with superheroes that gained their powers directly or indirectly from radioactivity, such as Marvel Comics' Spider-man, Hulk, and the Daredevil. Radioactive effects were redesigned as mere triggers for the acquisition of supernatural traits, fuelling the comic book industry. Similarly, *Fallout* draws on that notion of radioactivity as a source of power, as expressed by the ghouls, creatures that were exposed to so much radiation as to become immune to it. They are, however, shunned from communities that have not been largely affected by radiation, seen as mutants and monsters. They lie on the frontier between what they once were – humans unharmed by radiation poisoning and able to blend in – and what they are deemed to be throughout the narrative – reminders of the invisible danger of radioactive fallout and thus treated as a representation of that danger, disallowed and disenfranchised.

On the other hand, countries that went through nuclear disasters seem to tackle radioactivity as a biological change in a different manner: the tradition of Japanese *tokukatsu* cinema began with *Godzilla* (1954, directed by Ishiro Honda), a film whose antagonist is giant lizard that has been awakened from the ocean by nuclear tests, proceeding to attack the nearby island of Odo and eventually Tokyo itself. The hyperbolic proportions of the creature and its immunity to radioactivity can be interpreted as a fictional rendition of radioactive mutation. Likewise, video games like the ones in the *S.T.A.L.K.E.R.* series do not portray humans as having super powers derived from radiation poisoning, but rather mutated creatures that are also constant threats to survivors in the gameworld. To the playable-character in *Shadow of Chernobyl,* radioactivity is not power but disease and disruption.

In addition to illustrations of nuclear effects in fiction, there is something to be said about the politics of apocalyptic/post-apocalyptic narratives. I have examined and revisited some historical changes and moments that reflected on the fiction produced about the matter; fiction that is considerably relatable to articulations of power, some of it of national proportions, some of it from more microcosmic spheres of the *socius*. Part of United Statesian eschatological cinema has been concerned with the end of the national state of affairs, of the geopolitical pride and of the predominance of United Statesian ways of life and morality. As Frank Kermode points out, “the mythology of Empire and of Apocalypse are very closely related” (10). A hefty portion of modern apocalyptic and post-apocalyptic fiction – especially in the 1950s and 1960s – has been concerned with the threat of end of the world as revolving around the United States, and exposed through the United Statesian perspective. Even when information is given about the situation elsewhere in the world, such as in *The World, the Flesh and the Devil*, the audience is rarely given extensive indication of the state of things; Ralph Burton is devastated to find that Rio or London are also being evacuated, and he tries to contact those places, but the standpoints of people over there are either not revealed or filtered through his perspective.

That also applies to fictional representations of conflict and the threat of external attacks as an implication of the end of the world at large, with the focus broadly lying on the United Statesian – or sometimes British, as in the case of the already mentioned *The Day the Earth Caught Fire* – anxieties. If the world is going to end by war, the threat must then come from a foreign nation who is not in alliance with the Empire. There is an underlying imperialistic idea that the risk of a new war is always imminent, and that the Empire is always the target of some dangerous nation looming with subversive ideologies and looking to infiltrate or obliterate the homeland. In many narratives, the agents of opposition were the "commies," and while *Dr Strangelove* mocks the polarising dynamics of US and Soviet diplomacy and deterrence, *WFD* focusses on the tale of survival and mostly leaves the geopolitical discussion out, announcing that the ones responsible for the attacks could not be identified. *Fallout* suggests that nobody knows who struck first in the general exchange of nuclear warheads, but determines who the enemies of the Empire were before the cataclysmic event. David Seed argues that there are more recent narratives that focus on "the nuclear threat but that reflect considerable difficulty in identifying the new enemies of the United States and in setting up speculative narratives of nuclear conflict" (*Under the Shadow* 231). In the case of *Fallout*, released after the collapse of the Soviet Union, China is the chosen enemy. That may be the case because of the political proximities between the Soviet Union and China in the past, given that the game attempts to satirise the discourse of capitalism versus communism.

Another proximity that has been worthy of investigation is that of the looming possibility of an all-out nuclear conflict and how fiction has absorbed the apprehension that came with such a possibility; it is something that was discussed in the introductory chapter of this thesis, and it is suitable to give it a conclusive touch after the analysis of the corpus. During the peak of the nuclear deterrence tensions and the public knowledge about tests being carried out by the United States and the Soviet Union, Bertrand Russell said, as quoted by historian Kenneth D. Rose in his book *One Nation Underground: The Fallout Shelter in American Culture*:

> One must expect a war between U.S.A. and U.S.S.R. which will begin with the total destruction of London. I think the war will last 30

> years, and leave a world without civilised people, from which everything will have to build afresh—a process taking (say) 500 years. (39)

Such a train of thought was not uncommon, whether it was a calculated anticipation of a disastrous event or an expression of concern about the state of affairs between two powerful nations; it was part of the zeitgeist of the era. Science-fiction scholar W. Warren Wagar wrote in 1962 that society was threatened by “the most radical crisis in history… The wolves are not howling outside the ramparts of civilization: they have broken in. Their breath is hot on our cheeks” (qtd. in Rose 39). As previously discussed, such a standpoint that assumes that the US and their allied nations are the epicentre of civilisation and that every other country whose political stances conflict with those of the Empire are not civilisation inspired United Statesian post-apocalyptic fiction. The deterrent politics in the US has been prevalent since after the end of the Second World War, yet their policies do not seem to constitute the parable of the “wolves” in Wagar’s statement. Making nuclear bombs and testing them on a large scale near civil areas – such as the numerous tests in Pacific islands and atolls – was a substantial part of US strategies during the Cold War, yet such a discourse assumes that those acts did not constitute war acts.

Sontag condemns post-apocalyptic films made in the 1950s and 1960s as proposing a "hunger for a 'good war,' which poses no moral problems, admits of no moral qualifications" (46). Films like *WFD* and *Dr Strangelove* do bring commentary on issues of socio-political modus operandi in times of deterrence or survival, and that also stems from the fact that they provide unconventional narrative and structural models; which may actually confirm Sontag’s condemnation as they are exceptions. The sardonic way through which *Dr Strangelove* approaches the issue of the bomb and of Cold War politics defies the notion of “hunger for a ‘good war’” as a means to create simplistic political dualisms or diplomatic paranoia – simply put, to create a tale of *good and bad guys*. There is a pervading sense of folly and alienation in the constitution of the film’s characters, most of whom are filled with absurd paranoia, cruelty, or disregard for social preservation. The film encapsulates – while mocking – the horrifying possibility of destructive power falling into the hands of a political, military and diplomatic elite, something that resembles Derrida’s words:

> If on the one hand it is apparently the first time that these [techno-scientific and politico-military] competencies are so dangerously and effectively dissociated, on the other hand and from another point of view, they have never been so terribly accumulated, concentrated, entrusted as in a dice game to so few hands. (22)

Strangelove himself is the ultimate model for politico-military arbitrariness and the danger of accumulation of power in extreme geopolitical contexts; his eugenic project is declared in a passionate manner, with Sellers' intense performance serving to demonstrate how easily seduced by his ideas the other characters in the war room are, whereas the comic excess in his body language serves to demonstrate his alienation and the threat that his beliefs represent. In *WFD*, on the other hand, the issue is racial and sexual, and the presence of only three performers throughout the film highlights the power complexities in their relationships; the apocalypse is eventually ignored, since they have to carry on, survive and begin anew. Burton is portrayed as a self-made man who turns into a sort of servant for a white person once Sarah Crandall comes along, and the racial tensions are ultimately – if somewhat hurriedly – resolved towards the end, when the image of the three people with hands held suggests that there is another chance at debunking inequity with the new beginning, while also suggesting the possibility of a reformulation of sexual structures.

Besides discussing the apocalyptic and post-apocalyptic imaginations of the Cold War and beyond, this study has examined how these media function when storytelling; when constructing structures of time and rhythm, space and movement; and when engaging the spectator who is experiencing them, this particularly in the case of the two video games. In the introductory chapter, one of the questions I posed was: How do their [the corpus works'] mediatic mechanisms change over the span of six decades from film to video game? I have found that some formal – as well as thematic – structures approach eschatological narrative differently over the course of almost forty years from *WFD* to *Dead Man's Letters*, and so do the structure of video games from the 1990s in *Fallout* to the mid-2000s in *Stalker: SoC*. It has been crucial for this research to take into consideration those changes, as well as fundamental ways through which both media portray their diegetic worlds, their languages, their perspectives. It is then fitting that part of this chapter is dedicated to aligning the six works that have been investigated and comparing/contrasting their formal and thematic features.

There is little difference in the linearity of actions between the films. They mostly follow a linear set of events, with the exception of *DML* and *Dr Strangelove*. The former begins *in media res* and makes use of flashbacks to explain the Professor’s agony of not finding a person he loves in the midst of death and the suffering of others. Conflicts build up from the initial voice-over narrative about his lost son and there is a gradual revelation of post-nuclear spaces that come with the widening of shots as the protagonist goes from caring for people within the bunker to wandering in the radioactive outside world. *Dr Strangelove* contains multiple narrative nuclei, with many characters who never end up interacting with each other, and the film sometimes makes use of simultaneous action through techniques like crosscutting, thus creating a sense of parallel narrative. *WFD* and *Stalker* have more linear plotlines, and both are related to the idea of journeying in different ways. As was common in post-apocalyptic fiction of the 1950s and 1960s, the tale of the survivor is incorporated into *WFD*, and such a tale usual focusses on the gradual process of improving the means for survival of the protagonist/s. In this case, Ralph Burton journeys from the miserable conditions of a collapsed mine to the empty and littered streets of New York to a comfortable apartment where he can stock supplies and even salvage books, until he finds other survivors and can then think of better means to re-establish some sort of social structure. In the Soviet Union of the 1970s, such mode of storytelling was not common, and the science fiction element that goes into *Stalker* presents a different kind of journey. The Stalker does not have to find the means to survive in a barren world, even though his family’s life is miserable, since the event that caused that land to decay is well behind them – as opposed to the recent cataclysm in *WFD*. The agents of the narrative already know the world around them to a certain extent, and the mysteries of that place that they still have not figured out are what drives the journey of the film towards the Zone, the ultimate secret of a hopeless world. The succession of events in the film then follows the straightforward journey to the Zone, with no concurrent reference to past or future events. Both Burton’s and the Stalker’s journeys build time as diegetic action takes place. As for the video games, time linearity is driven by the player as they reach narrative nodes. The struggle for survival is the challenge that the game poses, either through environmental mechanisms – such as *Stalker: SoC*’s anomalies or radiation in both *SoC* and *Fallout* – or through hostile participants of the gameworld. But the journeys themselves boil down to reaching objectives and choosing ways to handle the challenges so that new narrative nodes can be unveiled one by one until the end of the game.

The different conceptions and depictions of space were another focus of this research. Spaces are, as discussed in other chapters, critical visual elements in the development of apocalyptic/post-apocalyptic narratives. In audiovisual representations of space that involve eschatological scenarios there is usually an element of temporal tension that lingers within the frame: the integrity of the represented space either hangs in the balance under the possibility of imminent destruction or it has already been threatened and that space has crumbled or decayed thanks to the ending event. The destruction and silence of urban spaces has been common in narratives of disaster. David Seed points out that

> Narratives of nuclear war regularly evoke it as a massive rupture that might or might not open up possibilities of survival […] This process [of survival] involves narrative reconstruction and also exploration of the terrain, since mapping constitutes a spatial exercise of understanding. (*Under the Shadow* 199)

This is the case of *Shadow of Chernobyl*: the decaying state of its spaces requires attention to exploration and navigation. Unravelling the secrets of past disasters is part of understanding why and how distorted portions of the gameworld work differently; part of understanding the fragmentation that the disasters brought about. The fiction of *Shadow of Chernobyl* proposes a nightmarish world similar to the tragedies of Japan in the end of the World War II in that there is a succession of disasters that affect the landscape and life in and around it. In that sense, looking back becomes an augury of what may come in the future, as though there is another disaster waiting to happen – a succession of apocalypses. In *Stalker*, on the other hand, there is no sense of finding out about the past and the reasons why the world has fallen; everything that the agents of the narrative look for is in the future, and not knowing about the past is, as discussed above, part of the diegetic mystery that gives the Zone its fantastic atmosphere.

As discussed in the third chapter, *Stalker* almost predicts the Chernobyl scenario in a fictional articulation that resembles H. G. Wells' *The World Set Free* (1914), a novel that portrays a possible bomb detonation of world-wide proportions and imagines a world with nuclear devices used as weapons in wars *before* they were eventually used. Much like John Wayne, Susan Hayward and others involved in the filming of *The Conqueror* (1956, directed by Dick Powell) may have fallen victim to the radioactivity levels of the area where shooting occurred[84], not far from the Nevada Test Site, and so did part of the filming crew of *Stalker* in Estonia – an unfortunate turn of events that surrounded the production of a film that was itself a fictional illustration of treacherous geography. *Stalker*'s mysterious world – mysteriously aware of the existence and agency of its participants – becomes reactive while vehicles and buildings within it fade and deteriorate, much like the conscious ocean planet in another of Tarkovsky's science fiction dramas, *Solaris* (1972). These are spaces that are agents of the narrative. There is a certain eeriness and apocalyptic quality in their portrayals. Seymour Chatman, in *Discourse and Story*, splits narrative functions of a story (*histoire*) into *events* and *existents*; and existents into *characters* and *items of setting* (19). In *Stalker*, that differing line between characters and setting is blurred; if the Zone asks for something in return, or gives its visitors what they most wish for, is it not a direct agent of a narrative transformation that transforms its participants?

But the Zone is also hope, at least in the eyes of the Stalker. By 2003, some people still had not left the contaminated areas around Pripyat and Chernobyl, and older generations remained in the villages, unwilling to leave behind their lands despite being warned about the risks of prolonged exposure to radioactive fallout, something that is extensively portrayed in the documentary *Chernobyl Heart* (2003, Maryann DeLeo). Zinaida Yevdokimovna Kovalenko, a re-settler from the time of the incident, told Svetlana Alexievich about the same sentiment, as she did not see anything wrong with the trees or wildlife around (30). Their claim was that the place was their homeland, and they would not feel comfortable elsewhere, in spite of the dangers that the authorities warned them about. Similarly, the Stalker faces the dangers of the Zone in spite of his wife's concerns and his daughter's health. The Zone is a place that fills him with hope, peace and quiet, almost like a second home. Such is a theme that permeates the construction of Kaidanovsky's character throughout. Tarkovsky writes that "A spiritual crisis is an attempt to find oneself, to acquire new faith […] The soul yearns for harmony, and life is full of discordance. This dichotomy is the stimulus for movement" (193). The Zone is his stimulus, a familiar place, away from the misery of the grey town that he leaves behind, and the movement is his journey and his will to show people the way; his drive to keep being a Stalker is renewed by his will to help others fulfil their wishes, and both the Writer and the Professor question his faith in that place. Tarkovsky discusses such an idea when he mentions that "[t]he Stalker seems to be weak, but essentially it is he who is invincible because of his faith and his will to serve others" (181). He is a seemingly apathetic hero – a mood brought about by Kaidanovsky's performance –, but whose apathy only exists as a by-product of his experience as an explorer, and quickly disappears once he finds himself in the agony of avoiding the Zone's "wrath" for the intrusion and the behaviour of his colleagues. Ultimately, both the Writer and the Professor act more hopeful about the outcome of their quest, and Solonitsyn's role comes across as that of a condescending and thoughtful intellectual, always eager to discover that mysterious place while reflecting upon its existence and its role along the way. Meanwhile, the Stalker acts as though he seeks salvation, a renovation for him and his family back home; and the Zone can eventually be interpreted as a space of renewal, of cleansing and redemption. Likewise, in *Fallout*, Vault 13 is a place from which the Vault Dweller comes out to face a new world, unknowing of that new reality. Fallout shelters can be seen as places of change and passage. Spencer Weart notes that

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[84] Carroll, Rory. "Hollywood and the downwinders still grapple with nuclear fallout." *The Guardian*, 6 Jun. 2015. Web. 17 Apr. 2018.

> A few critics noted sardonically that the much-publicized shelter somewhat resembled a womb, a safe place to await rebirth. Indeed the long wait in uncertainty, the cramped conditions, and the darkness sounded suspiciously like the traditional rite of passage into a new life. (257)

As the Vault Dweller come out of the vault, both the shocking dangers of the wasteland outside and the unfamiliar social interactions mean that they are born again in order to build again what has been broken[85] – namely, his home.

Stalker: SoC, *WFD* and *DML* work similarly in which the exploration of their spaces means constant alert. In *WFD*, Burton is alone throughout duration that is perhaps the strongest circumstance of survival in the entire film. During those moments, he wanders about a dead city, initially anxious about the uncanny emptiness of the vast streets and tall skyscrapers, but soon he takes upon himself to seek shelter and supplies: means to survive. Inhabited and explored spaces go down in scale: from the complete vastness of a highway to the limited – but still ample – streets of New York to the even more limited space of an apartment. Ralph Burton finds himself gradually more domesticated, seamlessly engendering a process of rebuilding. In *DML*, the opposite effect is depicted: the Scientist slowly goes from living inside a bunker with only memories of a lost son and soon of a lost wife to exploring the inhospitable ruins outside and eventually contacting ever more often the survivors of that conflictive world. The Marked One in *Stalker: SoC* explores miles and miles of barren and abandoned landscapes with one final purpose: reaching the exclusion zone in a journey that is much like that of Kaidanovsky's character in *Stalker*. His attempt to find the mysterious Strelok after his memory loss is only an initial motivating factor to lead the player to the Zone, and the many decisions that they make on the way determine what wish the Zone will ultimately grant them. The main space of the game responds to the player actions and interactions with other non-playable characters found throughout. There is a fundamental distinction between the United Statesian production – in *WFD* – and the Soviet/Ukrainian works: the abundance of goods for survival contrasted with the barely existent means of survival.

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[85] I am referring to the initial mission of the game, which is to find a water purification chip for the vault and save its inhabitants from perishing to radiation poisoning.

In *Dr Strangelove*, space is explored in a different way seeing as Kubrick's approach to narrative has a satirical tone and introduces a pre-apocalyptic story. The spaces are mostly personal, with two of them – Turgidson's room and Ripper's office – being intimate spaces that they share with relatively confident people – Miss Scott and Mandrake, respectively. On the other hand, spaces where a more collective interaction takes place are war-related ones: the B-52 bomber and the War Room. Both of them represent much of the comedic flavour of the film, i.e. the conflict between Turgidson and Sadeski and the peculiar character of Major Kong. The difference lies in the layers of power going on in each space: the War Room is a wide area, almost redundantly wide, and designed for powerful men to decide about important military and diplomatic matters. The B-52 is a cramped environment where government goons argue with each other over whether superior orders about a nuclear strike are accurate.

Naturally, the difference does not lie only in the timespan between one film and another, but also in the cultural distinctions between works, either stemming from language and cultural imaginations of disaster or from stylistic factors adopted during the productions of each piece. *WFD* was produced and released in a United Statesian context of early apprehensions about the bomb and the climate of government secrecy about the issues of deterrence, whereas *Dr Strangelove* was produced away from Kubrick's homeland, thus allowing a relative ease of exploration of certain subjects. *Stalker* was a film that presented various difficulties during shooting and editing, and is marked by Tarkovsky's distinct authorial style, while also resorting to specific existential discussions rather than focussing on the speculative science that is part of the film's quasi-fantastic afterworld. *DML*, on the other hand, delves into the visceral portrayal of human suffering and death while presenting images of urban decay as an intrinsic part of social interaction in the diegesis. All those are differences had been developing from one decade to the next, and if in *WFD* and *Dr Strangelove* the bomb was a constant element of the thematic presentation, the focus of Soviet films tended to be put on matters of survival and life conditions in deteriorated, eschatological environments. As for the video games, their diegeses drew inspiration from the past, working with a new medium that encouraged interaction with the fictional worlds provided and with the elements of narrative exposition that are present – characters, textual data found during gameplay, cinematic cut-scenes that are triggered at certain points of the narrative progression, etc.

Their conception of eschatology is also familiar, but singular in that they are eschatological worlds that have to be explored and conquered – or colonised, so to speak – through challenges of survival. If in *WFD* and *DML* the exploration of landscapes constitutes much of the narrative drive and the perspective of characters, in *Fallout* it is imperative that the player explores the gameworld so the water chip is found before the timer expires. If in *Stalker* there is a sort of *peripeteia* in reaching a place of dreams where nothing good ultimately happens, *Shadow of Chernobyl* intensifies that *peripeteia*: the Zone can be a deadly place or a place of ultimate enlightening, depending on what the player chooses to do with the opportunities given throughout the game. In conclusion, there is much violence in the gameworlds of *Fallout* and *Stalker: SoC*. Both diegeses establish that most of their post-apocalyptic spaces are war zones, deprived of central institutions that can monitor human interactions and of a comfort and a sense of social community that would be strong enough to avoid physical conflict. And such a level of conflict is the underlying factor of gameplay and challenge in both games, essential in instilling a sense of threat.

Fundamentally, there are many similarities between films and video games that have become apparent through this study, especially considering the evolution of video games from the 1960s to the 2000s, when titles became more stylistically complex and more focussed on narratives. Production of video games is somewhat similar to that of films in that teams take up different tasks during the process of production or in post-production, including the employment of artists to perform musical scores, actors and actresses to perform – in the case of video games, mostly to perform voice acting – and editing teams to connect scenes – which in video games mostly take place through the digitally rendered cut-scenes. In film, art direction is responsible for a range of duties that includes set design and costumes, whereas video games include similar tasks that are done by a team of designers, from structuring the levels to be played on to the style of textures that go over objects and characters. The incorporation of video game themes and mechanics have been portrayed in films (*Tron*, 1982), and there are several adaptations of film blockbusters and booming film franchises into the video game form (e.g. superhero games, or mainstream names such as *Rambo*, *Roger Rabbit*, *Ghostbusters*, *Mad Max*, etc). Video games have gone far in terms of transtextual translations, with stories such as Harlan Ellison's "I Have No Mouth, and I Must Scream" (1967) being adapted into this new, interactive medium. Video games have become a mediatic code that incorporates much from pop culture; and as such, they usually comment on historical issues such as the Cold War and the dangers of nuclear energy and weaponry through the use of their own language, as seen in *Fallout* and *Shadow of Chernobyl*. Tarkovsky argues:

> When you read a play you can see what it means, even though it may be interpreted differently in different productions; it has its identity from the outset, whereas the identity of a film cannot be discerned from the scenario. The scenario dies in the film. (134)

In video games, diegetic construction works in a similar way. The scenario is always there, it may change in reaction to the player's agency, but it is always re-accessible through replay, and it will consist of the same virtual information accessed through multiple databases and the same digitally rendered geometry, textures, and shading cells that compose the virtual image of a game. Unlike the many scenarios that a play may assume depending on the different performances of the same work, the scenario dies in the game. But while the game is running, it is freely accessible, non-linear, and in the case of *Fallout* and *Stalker: SoC*, not static – in the sense that the player can continuously interact with its participants and they will keep responding, although *Fallout*'s wasteland and post-nuclear towns are static in the sense that the environment has little responsive effects other than the ones previously mentioned in the third chapter.

It could be said that the Cold War has not ended. Some foundations of the war have endured, and there is still a sense of enmity between polarised sides of a geopolitical conflict, often fuelled by paranoia. It could also be said that defining the Cold War chronologically and historically becomes complex as some of the tensions that arose at its beginning concerning nuclear deterrence and the imagery of nuclear disaster changed throughout its timespan or survived beyond it. As of 2018, the United States still vilifies a former Soviet-occupied state – in this case, North Korea – and nuclear deterrence is still used as war tactics by both sides; although there is some flavour of mockery and flamboyance in the tactics used[86]. The Nuclear Scare also survives, as fallout shelters are still offered to the United Statesian public, now perhaps more visibly commercial and elitist, as if to provide the higher classes with peace of mind in a new age of apocalyptic threat[87]. On the other hand, the memories of an Atomic Age in which nuclear energy was one of the main instruments of novel technological advancement – from weapons to power plants to car prototypes[88] – dissipated as the decades went by. From the 1990s onwards, it became a stylistic item in a few works of fiction, such as *Fallout*.

The end of the world is an interchangeable notion, particularly when elicited by fiction. Dystopia itself is a concept that often happens in determined contexts and to specific groups of individuals, regardless of how close they are to an economic or social well-being; the denial of human rights and access to means of prosperity or subsistence – particularly under conditions of war – can be as close to a dystopian scenario as possible. The idea of an ultimate disaster is thus a contextual one that applies to conflictive relations of power: the recent air strikes on Syrian soil by US, French, and British armed forces added to the already catastrophic circumstances in which Syrian people had been living, and under which the socio-economic stability of the country has crumbled. It would not be hard to find local communities to whom the attacks constituted an eschatological event. And that does not necessarily take into consideration the environmental problems that come with such circumstances: the repeated nuclear tests in Pacific islands and the Nevada Test Site – among other regions of the world – left a heavy ecological impact[89], and communities in the Pacific were displaced so that United Statesian authorities could station teams to carry out the tests (*The Atomic Cafe* 00:14:18). The Californian Salton Sea is another anomalous phenomenon in which the artificial creation of a large body of water left the region highly toxic after years of abuse of agricultural runoff, and remains as a barren and abandoned landscape, inadequate for prolonged dwelling. Post-apocalyptic worlds are constantly created, and exist in microcosms where notions of destruction and abandon do not have to be fictionally imagined, such as in the recent case of the toxic sludge disaster in Doce River (Minas Gerais, Brazil) that left a whole village ravaged by floods and pollution following the collapse of a nearby iron ore dam.

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[86] Crilly, Rob. "Donald Trump mocks 'Rocket Man' Kim Jong-Un." *The Telegraph*, 18 Sep. 2017. Web. 20 Apr. 2018.

[87] Stamp, Elizabeth. "Billionaire bunkers: How the 1% are preparing for the apocalypse." *CNN*, 17 Oct. 2017. Web. 22 Apr. 2018.

[88] Marquis, Erin. "Nuclear-powered concept cars from the Atomic Age." *Autoblog.com*, 17 Jul. 2014. Web. 22 Apr. 2018.

The familiarity of the nuclear devastation through images and news of mushroom clouds and power plant meltdowns was an imagination constructed since Hiroshima and Nagasaki that lives on, still present in fiction and in political discussions, such as the United States-North Korea tensions mentioned previously. Derrida talks about the “non-event” that is the total war and nuclear devastation, which have been feared and expected to happen time and again since nuclear weapons came to the fore. He mentions that “the growing multiplication of the discourse – indeed, of the literature – on this subject may constitute a process of fearful domestication, the anticipatory assimilation of that unanticipatable entirely-other” (23). The continuous fantasy about a destroyed world has been fed by fictional illustrations of the imagined events, although one may argue – as with the case of present-day Syria – that certain conditions have exposed certain people to the visceral effects of an eschatological event. As well as dealing with the recurring themes of disaster, dystopia or survival in fictional narratives, it is instrumental to reflect on the stories of the world outside of fiction and how they tell, for example, of the nuclear effects on people's lives.

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[89] In a 2014 study called “Nuclear Weapons Tests and Environmental Consequences: A Global Perspective,” Romanian geography scholar Remus Prăvălie points out that “[f]rom the ecological point of view, at this stage, there are a few critically contaminated test sites both on land (the Nevada Test Site, Semipalatinsk) and in the marine environment (especially the Bikini, Enewetak, Moruroa, Fangataufa atolls, and Novaya Zemlya marine areas)” caused by past nuclear tests (742).

The features of eschatological narratives can apply to records such as Svetlana Alexievich's *Voices from Chernobyl.* Anxieties of personal tragedies gain meaning and mirror the imaginations of mass destruction and death: radioactivity is frequently discussed in many of the book's interviews as an invisible enemy, a horrible result of contemporary technological findings, of the *course de vitesse* (speed race) of *technè* that Derrida writes about (20). An impactful "end of the world" happened to many people whose stories involve the unavoidable loss of loved ones through the increasing and uncontrollable power of nuclear fallout. Such is the case in *Chernobyl Heart* as well: Marynn DeLeo visits communities around the deteriorated and still menacing power plant to show the lives of those who struggle to keep living where they were born and raised (00:14:42). It also portrays the disheartening routine of a hospital in the Belarusian capital Minsk where doctors tend to victims of thyroid cancer – most of them are children – and perform a delicate operation to treat a girl whose heart exhibits effects of radiation exposure, a disease that came to be locally known as *Chernobyl Heart* (00:32:56). A film like *The Atomic Cafe* shows the power of United Statesian diplomatic strategies and political propaganda surrounding the outcome of nuclear tests massively carried throughout the 1950s and 1960s. All such narratives serve to entice timely reflections on the volatility of nuclear energy and the impact it exerts on the lives of those it has touched, from soldiers who watched bomb tests while dangerously nearby to victims of a nuclear power plant meltdown to members of atoll communities. Ultimately, those narratives help to understand the fictional illustrations of the anxieties that lingered during their respective historical moments, and have been fundamental to forging the different standpoints from which to approach the objects of study chosen for this thesis.

FINAL REMARKS

“I have heard the languages of apocalypse,
and now I shall embrace the silence.”

The Sandman: Endless Nights, Neil Gaiman.

This research has dealt with issues of fictional eschatology and post-disaster in various narratives, pointing out particular items of meaning both in the audiovisual techniques of the works chosen for its corpus and in their thematic peculiarities. Throughout its analytical chapters, I was concerned not only with the reimaginations of disaster inspired by the nuclear scare of the Cold War, but also with eschatological fiction that goes beyond the war and presents portrayals of desolate landscapes and cityscapes, destruction, anachronistic representations of post-nuclear worlds, as well as social fragmentation and the singular otherness expressed through portrayals of fictional mutation. The frantic technological race that started about seventy years ago added a new element – nuclear power and the threat of radiation – to the imagination of disaster that has pervaded eschatological narratives ever since.

Yet such an imagination sometimes surpasses that period and has changed over time, adding some themes and removing others. The works I have chosen demonstrate such changes over time. Where *The World, the Flesh and the Devil* retained the early sentiment that the world could end at any given time and spoke to the United Statesian fear of nuclear death that gained strength back then, a film such as *Stalker* discussed different subjects, subscribing to an idea of speculative fiction that offers uncanny and suspenseful afterworlds instead of recognisable spaces. The developers of *Fallout* decided to look back at the anxieties of the early Cold War and satirise them, whereas *Stalker: SoC*, while looking back at the 1986 Chernobyl disaster and drawing from Tarkovsky’s film in many regards, sets its narrative in the 2000s, focusses on a militaristic dystopia in an isolated and ruthless area and engages the player through its scare techniques and survival mechanics.

Generations also changed over the decades in which those films and games were released, and so did their perception of the end of the world. For a US film goer of the 1950s and 1960s, most productions tackled the issue with narratives that emphasised dramatic action and the constant depiction of destruction and death, but films like *WFD* and *Dr Strangelove*, through their use of unconventional editing – even

Eisenstein's pictorial symbolism in the case of the former –, told stories of the apocalypse from the standpoint of specific people in higher positions of power – e.g. Ripper or Turgidson –and people in lesser positions of power – e.g. Ralph Burton or King Kong. In the late 1970s, Tarkovsky would make a film that contained elements of fantasy to depict a world in ruins where people seemed to have forgotten about a cataclysmic past, as detached from it as the narrative of the film was from the politics of the Cold War. Lopushansky spoke to a generation that had just lived through one of the most tragic nuclear disasters, with a film that portrays a ruined world with ruined people that must ultimately find hope to move on. The video games brought about a new context: younger generations gained access to portrayals of the past, of past anxieties/scares – in *Fallout* – and of past tragedies – in *Shadow of Chernobyl*. Such is the plurality of context in fictions that have dealt with the audiovisual portrayal of ruined worlds from the 1950s onwards.

This study has thus demonstrated that many factors, ranging from context of production to socio-political context to film form and video game form, help analyse the development of eschatological fiction in an age of audiovisual arts. Some of these works emphasise the depiction of spaces that are completely ruined or deserted, or the post-disaster theme of starting anew (Abbot 177). In the case of *Dr Strangelove*, destruction or desertion is left unrevealed, as the horror of the end of the world is too great to be shown. My approach to analysing these works took into account these differences and what they meant for the representation of eschatological imagination in each film and game. Space, time, sound, and storytelling are done differently not only across media, but across works of the same medium. I have written about colour tint as an element of meaning in films that depict derelict urban spaces – namely, *Stalker* and *DML* –, and I have mentioned the use of militaristic music to elicit a sense of political parody in *Dr Strangelove*. I have used a considerable range of film and video game components found in these works in order to shed light on their representations of the end or of what comes *after* an end.

In the second chapter, called "Subversion and satire: *The World, the Flesh and the Devil* and *Dr Strangelove*," I set out to examine *WFD* and *Dr Strangelove* as films from the 1950s and 1960s United States. What I found was that neither of them conformed to science-fiction films about nuclear war, one way or another. *WFD*, while delving into the typical "last survivor" narrative, portrays the path of a man whose racial background would not be found in many protagonists of US sci-fi films of the era. Ralph Burton looks for vestiges of people in a world that has left him behind, with the traces of urban life still there, empty and free to be appropriated. The analysis found that it is a narrative about the fragmentation of certain social norms in an age of social change. It also found that its cinematographic qualities unravel particular depictions of space in its editing. The framing of New York City, the portrayal of familiar places as deserted places is important for the initial narrative of "last survivor" to carry on. As for *Dr Strangelove*, it was found that it is different from *WFD* in many regards. Not only is it a story about a pre-disaster world, its depiction of an imminent nuclear disaster is forthright, different from the mysterious descriptions of whatever happened to the world in *WFD*. The film is a satire of deterrence politics, a subject that has permeated this research. In *Dr Strangelove*, the disaster is something built up, impending, and an indissociable part of its suspense and irony. The tensions of the characters involved in the drama of nuclear deterrence that has gone awry constitutes what Frank Kermode refers to as a *kairos*, "a point in time filled with significance, charged with a meaning derived from its relation to the end" (47).

The third chapter, called "Anomalous zones: *Stalker* and *Dead Man's Letters*," went on to analyse more recent cinematographic ventures of Soviet origin that portray post-apocalyptic worlds. The dystopian society of *Stalker* lives in a barren cityscape, and I pointed out how Tarkovsky's use of colours enhance that effect. Military authorities guard the limits of the city, and thus the post-disaster world of *Stalker* is one of ongoing conflict, of restriction, of transgression. I wrote about how space is an instigating element of *Stalker*'s narrative along with time-pressure and editing. How landscapes change, and how colour pattern changes with them to reveal a world that borders on the fantastic through its images of a supernatural Zone – invisible and unpredictable elements that I ultimately considered to be representations of radiation. In *DML* I examined more visceral images of destroyed spaces, with debris and ruins composing its frame more often than not. The study found that the theme of hope was the catalyst for the ending of the film, and coincided with the idea of starting anew so common in post-apocalyptic fiction. The film makes heavy use of colour tint and *stasis* of the shot, following the blueprint of *Stalker*, thus incorporating a particular time pressure and rhythm of editing that favours the mood of post-disaster and hopelessness necessary in order for hope to be re-established in the end.

Chapter four, entitled "Does war really never change? *Fallout* and *S.T.A.L.K.E.R.: Shadow of Chernobyl*" goes from film to video games for another analysis of two works. In this chapter, I considered the idea that concepts of end of the world – as well as real-life events – from the Cold War seeped into the 1990s and 2000s to influence video games being made, and two of them stood out in each decade and in different countries: the United States and the Ukraine. I took into consideration the language of video games, elaborating on concepts that I had presented in the introductory chapter about the open-endedness of some games, video game interactivity, and Future Narratives. I then proceeded to provide contexts of production for the games chosen and analyse images and mechanics of gameplay, as well as elements of their storyworlds, in order to examine how both of them translated eschatological fiction into the medium. I found, among other things, that both *Fallout* and *Stalker: SoC* deal with images of the past. The former recreates the aesthetic of 1950s film, music, and also politics of national defence and the nuclear scare. The latter reimagines the Chernobyl NPP as a place that went through a second disaster, turning the surrounding areas into a mutated, hostile, and dystopian Zone that refers to some ideas behind Tarkovsky's *Stalker*.

Lastly, the fifth chapter, called "Eschatological revelations: bringing the corpus together," rounded up the works chosen for this study for a final comparative analysis. In the chapter, I reminded the reader of points discussed in the previous chapters, and brought back one of the research questions presented in the introductory section that dealt with the changes in eschatological representations over the seven decades between *WFD* and *Stalker: SoC*. I discussed the development of the Zone and notions of radioactive contamination in fiction, the portrayals of political power in such works, the idea of end of the world as the end of the Empire, as well as the many formal details that each film and game in the corpus brought to this study to help elucidate the possibilities created by audiovisual fiction in representing apocalyptic/post-apocalyptic narratives. I finished the chapter by discussing how eschatological narratives can sometimes tell about real-life tragedies or anxieties, and that the notion of an end of the world can be localised and already true for some – e.g. people living in the ruined present-day Syria, or the survivors of Chernobyl, or the victims of Minamata in Japan. The impact of large-scale destruction on human and non-human lives can be calamitous, and these are instances of a localised end.

This research has made me reflect on the meaning of the Cold War and of polarising narratives in times of turmoil, be it diplomatic, environmental, or techno-military. I have found answers to many questions that I had going into the investigation, and the findings of this research made me think that several Cold War anxieties regarding destruction are not over. They have gone beyond the conventionalised period of the war, and military technology still threatens the lives of many. The nuclear bomb provided a change in eschatological imagery, but the unease of annihilation is one that “attaches itself to the eschatological means available, it is associated with changing images” (Kermode 95). So perhaps one of the most significant findings of this research is that the moment that brought about the hydrogen bomb – and even before that, in Hiroshima and Nagasaki in 1945 – also brought about new eschatological means to the imagery of a world’s end that is directly linked to technology. Then cinema, and later video games, put these eschatological notions that were developed around the nuclear bomb and nuclear energy within a frame and under their particular mediatic rules.

The combination of a number of areas of knowledge, from film theory to video game theory, from eschatological speculative fiction to Cold War history, have been a part of this research. It is only fitting that I conclude my thesis by bringing up new perspectives that could be employed in academic scholarship about the topics here discussed. Film theory is a fruitful field of study, and its broadness is translated into the plurality of researches done in several fields that constitute it and interlap with it, from adaptation to travel narratives to auteur theory. Video games have not received much attention from the academic community of Brazilian humanities, and is only now gaining space in universities; a fertile ground for research. Apocalyptic and post-apocalyptic fiction is also a fruitful area for further investigations, and connections between imaginations of disaster in the Cold War and earlier eschatological narratives can be made. All in all, I wish that this study can serve as an inspiration and/or a support for future studies about science-fiction in film, Cold War-period cinema, eschatological cinema, video games, apocalyptic/post-apocalyptic video games, comparative studies between video games and film, narratives about nuclear disaster or post-nuclear dystopia.

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