MARTIN LANGHOLM MARKUSSEN
SUPERVISOR: TYSON RETZ

Responsible Use of Metahistory

An investigation into literary trends
within environmental history

Master thesis, 2024

Lektorutdanning for trinn 8-13 – Historie

Institutt for kultur- og språkvitenskap

Fakultet for utdanningsvitenskap og humaniora

Antall ord: 31037

U
S
Universitetet
i Stavanger

Abstract

In response to the International Network for Theory of History's call for papers on responsible history writing, this thesis analyzes three award-winning environmental histories to address one of the key questions posed: "Is the prime responsibility of professional historians a deontological one relating to academic procedures and source criticism, or can particular situations trump these and create other priorities and types of responsibility?" The primary objective is to analyze the current best practices in history writing and identify potential avenues for advancement. To achieve this, the analysis employs Hayden White's tropology to systemically catalogue the narrative structures of each book under consideration. Additionally, the study draws upon two papers to analyze how human agency has been represented within these narratives. Finally, the thesis takes insights from Jörn Rüsen and Kalle Pihlainen to explore the dimensions of engaged historical writing. By examining the narrative choices and representational strategies employed by historians, the thesis seeks to highlight the literary effect of the inclusion of specific events and the portrayal of specific historical agents. The findings emphasize the benefits of embracing the closure effect and the strategic use of the epilogue in historical narratives. Ultimately, this thesis contributes to the broader discourse on responsible history writing by offering insights for historians committed to advancing ethical and politically engaged historiographical practices.

Sammendrag

Som svar på International Network for Theory of History's oppfordring om innsendelse av artikler om ansvarlig historieskriving, tar denne oppgaven for seg en analyse av tre prisbelønte miljøhistorier for å adressere ett av de sentrale spørsmålene som ble stilt: "Er det viktigste ansvaret til profesjonelle historikere et deontologisk ansvar relater til akademiske prosedyrer og kildekritikk, eller kan spesielle situasjoner overstyre disse og skape andre prioriteringer og typer Ansvar?" Hovedmålet er å analysere dagens beste praksis innen hsitorieskriving og identifisere potensiale for videreutvikling. For å oppnå dette, benytter analysen Hayden Whites tropology for å systematisk kategorisere de narrative strukturene til hver bok som vurderes. I tillegg trekker studien på to artikler om handlekraft for å analysere hvordan dette har blitt fremstilt i bøkene. Oppgaven bruker også innsikter fra Jörn Rüsen og Kalle Pihlainen for å utforske dimensjonene av engasjert historieskriving. Ved å undersøke de narrative valgene og representasjonsstrategiene som historikere bruker, søker studien å belyse den litterære effekten av inkluderingen av visse hendelser og fremstillingen av visse historiske

aktører. Funnene understreker fordelene ved å omfavne avslutningseffekten of den strategiske broken av epilogen i historiske fortellinger. Til slutt bidrar denne oppgaven til den bredere diskursen om ansvarlig historieskriving ved å tilby innsikt for historikere som ønsker å fremme etiske og politisk engasjerte historiske praksiser.

Contents

List of Illustrations

Preface

To everyone who helped me during this writing process, I could not have done it without your support. Special thanks to Sara for proofreading my use of commas.

What historians do, while it may seem obvious, proves surprisingly hard to define once you start to think about it.[1]

---

[1] Sarah C. Maza, *Thinking about History* (Chicago: The University of Chicago Press, 2017), 1.

Introduction

In the expansive field of historical scholarship, a paradoxical landscape emerges where there is a notable consensus on theoretical principles, yet a palpable divergence when these theories are applied in practice. This duality not only enriches the discipline with a diverse range of perspectives, but also presents a unique challenge in harmonizing these views to advance the practice of history. Central to this discourse is the acknowledgment that while historians broadly agree on certain theoretical frameworks—such as the importance of rigorous evidence evaluation, the inevitability of narrative construction, and the ethical implications of historical interpretation—the application of these frameworks is not uniform.

As introduced by the International Network for Theory of History call for papers, the ethical dimensions of history writing has always been a topic of concern, yet the past few decades have seen these issues enter broader public discourse more prominently than ever before.[2] Central to these discussions are the debates on historical wrongs and their persistent effects on present-day injustices and inequalities, the examples used, relevant to this thesis, being both the enduring impacts of past pollution on climate change and institutional abuses in indigenous communities, have spurred debate about the role of historians in addressing these issues.[3] Historians find themselves at the heart of these controversies, often viewed as either vital resources for supporting claims for historical redress or as having overlooked—or even exacerbated—historical injustices.[4] The profession itself seems divided, with historians expressing varied opinions on what their ethical commitments should entail.[5] These debates provide an opportunity to reflect on the broader relationship between history and moral responsibility, a relationship that is undoubtedly complex, ambiguous, and highly contested.

The call for papers uses the examples of critics like Martha Minow and John Torpey who caution that merely engaging with the past does not necessarily lead to justice or morally responsible outcomes.[6] Furthermore, challenges to the notion that history or historians can

---

[2] "INTH Conference 2024: History & Responsibility" (International Network for Theory of History, 2023), https://www.inth.ugent.be/index.php/node/147185.
[3] "INTH Call for Papers."
[4] "INTH Call for Papers."
[5] "INTH Call for Papers."
[6] "INTH Call for Papers"; Martha Minow, *Between Vengeance and Forgiveness: Facing History after Genocide and Mass Violence*, Nachdr. (Boston: Beacon Press, 2009); John Torpey, "'Making Whole

deliver definitive "judgments" of the past, alongside insights from memory studies, suggest that remembering dark histories does not automatically cultivate good citizenship or respect for other cultures, and may sometimes foster the opposite.[7] Despite these critiques, the idea that historical engagement connects to moral responsibility persists.[8] This belief underpins the conviction among many policymakers and historians that studying history can foster ethical responsibility.[9] The recent 'ethical turn' in historiography has intensified this view, leading to calls for the establishment of value judgments about the past, the development of an ethical code for 'responsible history', and a focus on historians' virtues, epistemic justice, and the role of the moral witness.[10] These developments signal a renewed momentum in the field to reassess and potentially redefine the moral imperatives of historical study.

I tend to think that there is broad agreement on certain principles in theory of history, but that there is a lack of agreement on practice. For example, from De Baets' *Responsible History* there are principles that are well-founded which could be useful, but as Dortins points out, not everyone necessarily agrees that there is a need for such a code of ethics.[11] In another example, Herman Paul proposes certain historians' virtues that both historians personally as well as professional standards should strive for.[12] But seeing as these are virtues, they merely represent a motivation for a certain kind of action 'in general', not any uniform prescriptive content in regards to different kinds of situations 'in specific'. The same goes for moral evaluations of the past. There is agreement that there is an unescapable moral dimension of

What Has Been Smashed': Reflections on Reparations," *The Journal of Modern History* 73, no. 2 (June 2001): 333–58.

[7] Joan Wallach Scott, *On the Judgment of History*, Ruth Benedict Book Series (New York: Columbia University Press, 2020); Lea David, *The Past Can't Heal Us: The Dangers of Mandating Memory in the Name of Human Rights*, 1st ed. (Cambridge University Press, 2020), 19–20, Sarah Gensburger and Sandrine Lefranc, *Beyond Memory: Can We Really Learn from the Past?*, trans. Katharine Throssell, Palgrave Macmillan Memory Studies (Cham, Switzerland: Palgrave Macmillan, 2020); Robert Nichols, "Joan Wallach Scott. *On the Judgement of History.*," *The American Historical Review* 127, no. 1 (April 26, 2022): 464–65, Felix Krawatzek, "Book Review: *Beyond Memory*: Can We Really Learn From the Past?," *Memory Studies* 14, no. 6 (December 1, 2021): 1514.

[8] George Cotkin, "History's Moral Turn," *Journal of the History of Ideas* 69, no. 2 (2008): 314–15.

[9] "INTH Call for Papers."

[10] Donald Bloxham, *History and Morality* (Oxford (GB): Oxford University Press, 2020); Antoon De Baets, *Responsible History* (New York: Berghahn Books, 2009); Herman Paul, *Historians' Virtues: From Antiquity to the Twenty-First Century*, Elements in Historical Theory and Practice (Cambridge: Cambridge University Press, 2022), Ewa Domańska, "Prefigurative Humanities," *History and Theory* 60, no. 4 (December 2021): 141–58, Verónica Tozzi, "The Epistemic and Moral Role of Testimony," *History and Theory* 51, no. 1 (February 2012): 1–17.

[11] De Baets, *Responsible History*; Emma Dortins, "Review of *Responsible History*, by Antoon de Baets." *Canadian Journal of History* 46, no. 1 (June 2011): 235.

[12] Paul, *Historians' Virtues*.

historical writing, but that overt moralizing is frowned upon.[13] The degree of ethical comment from historians is therefore not specifically guided. Additionally, there is agreement that historians are not mere academics, but that they carry some social responsibility.[14] What these responsibilities are in specific, are often named in the form of 'should not' rather than the form of 'should' in general terms as with De Baets' 'abuse' and 'irresponsible use' of history.[15] Merely pointing out injustices has little to no impact, and using history to prove some sort of moral righteousness bends the limits of responsibility.[16] If historians can agree that remembering is important, the shape or form of that remembering is also in question. Some champion restorative justice, whilst others point out the ineffectiveness of some memory policies or reparations movements.[17] The same goes for responsibility to the people of the past versus the future; as outlined by James Booth, there are considerations to make regarding the dead, which aligns with similar thoughts from De Baets.[18] In dealing with the future, however, there are tendencies towards principles of confronting contemporary challenges, as proposed by Ewa Domańska, but so far only to the extent of experimentation in regards to practical applicability.[19]

Although there are certain aspects of the current state of history, some would suggest having limitations that we need to try and overcome i.e. literary ones, I want to propose making use of what is already agreed on as an acceptable way of doing history. This approach does not seek to diminish the value of theoretical diversity or suggest a homogenized method of historical inquiry. There might be room for experimenting with different representational

---

[13] Herman Paul, "Review of *History and Morality* by Donald Bloxham.," *The American Historical Review* 127, no. 4 (January 24, 2023): 1960–61, "Review of *On the Judgement of History*," 464; Scott, *On the Judgment of History*.

[14] De Baets, *Responsible History*, chap. 4; Melissa Nobles, "Review of *Enduring Injustice.* By Jeff Spinner-Halev.," *Perspectives on Politics* 11, no. 1 (March 2013): 302–3, Jeff Spinner-Halev, *Enduring Injustice* (Cambridge, UK: Cambridge University Press, 2012).

[15] De Baets, *Responsible History*, chap. 1.

[16] Nichols, "Review of *On the Judgement of History*," 464–65; Nobles, "Review of *Enduring Injustice.*," 302–3.

[17] Minow, *Between Vengeance and Forgiveness*; Colin McGee, "Review of *Between Vengeance and Forgiveness: Facing History After Genocide and Mass Violence*," *Journal of International Affairs* 60, no. 1 (Fall/Winter2006 2006): 253–54; Torpey, "'Making Whole What Has Been Smashed,'" 357–58; Lamont DeHaven King, "John Torpey, Making Whole What Has Been Smashed: On Reparations Politics.," *The Journal of African American History* 98, no. 2 (April 1, 2013): 355–56.

[18] Simon Stow, "Review of *Memory, Historic Injustice, and Responsibility.* By W. James Booth.," *Perspectives on Politics* 18, no. 4 (December 2020): 1205–6, William James Booth, *Memory, Historic Injustice, and Responsibility* (New York: Routledge, Taylor & Francis Group, 2020); De Baets, *Responsible History*.

[19] Domańska, "Prefigurative Humanities," 151.

forms such as 'the middle voice', but for now I want to remain within established practice.[20] Instead, by aiming to highlight how embracing the commonalities can enhance the impact of historical research. By systematically analyzing how different historians handle narrative inevitabilities and ethical considerations, my thesis will explore potential pathways toward a more unified practice that respects diversity while addressing the common challenges that historians face. Such an endeavor is not only academically ambitious but also timely. In an era where the relevance and accuracy of historical interpretation are frequently contested in public and academic spheres, establishing a more agreed-upon foundation for historical practice could serve to strengthen the discipline's credibility and enhance its societal impact.[21] In sum, this thesis will leverage the broad agreements in historical theory as a springboard to address the more contentious aspects of its practice, offering both a critique of current historiographical approaches and a constructive pathway forward. Through this dual focus, the research aims to contribute to the ongoing dialogue about the role of history in society and the responsibilities of those who write it, ultimately advocating for a practice that is self-aware of its literary dimension and does not shy away from applying it.

From what I could gather, there was something unsolved in this area of history. Returning to the call for papers, when faced with the question:

Is the prime responsibility of professional historians a deontological one relating to academic procedures and source criticism, or can particular situations trump these and create other priorities and types of responsibility?[22]

This question asks about a contentious issue, namely engaged historical writing. Are there situations that would alter our understanding of current best practice? In such a case, what would a 'new' best practice look like? To find out I needed two more pieces, firstly I needed an analytical framework suited to the task. Secondly, I needed histories to analyze. Starting with my theoretical framework of analysis, I started with one of the founding fathers of modern theory: Hayden White. Who better to illustrate the practices of representation in historical writings than White? Any assumptions about current best practices count for little, if they are not backed up with any proper analysis. I also wanted to gauge, not only what kinds of narratives at display in environmental history, but also find out more about the representation of the historical process as well. In other words, what kind of agency has been

---

[20] Hayden V. White, *The Fiction of Narrative: Essays on History, Literature, and Theory, 1957-2007*, ed. Robert Doran (Baltimore, Md: Johns Hopkins University Press, 2010), 255.
[21] "INTH Call for Papers."
[22] "INTH Call for Papers."

represented. The final piece of the theoretical puzzle, how does 'pointing out' certain aspects of current representational practices affect historians wishing to write as responsibly as they can? If there is a 'particular situation' that requires other priorities and types of responsibility, what are those? What kind of considerations should historians make when writing about this sort of 'situation'?

The second part, the histories: investigating environmental history necessitates books on the topic. When looking for a choice of relevant and 'good' examples, it was suggested to me that I examine the prestigious George Perkins Marsh prize from the American Society for Environmental History.[23] What I found was a collection of varied and interesting topics, that included different perspectives and periods. I decided to choose three books from this list that followed certain requirements: 1) they had to be published fairly recently and 2) I wanted them to discuss topics and periods with some crossover between them. Recently published books can be assumed to follow the current 'best practices' of historical writing. As well as being written around the same time giving the benefit of elucidating any possible representational trends of one period. Secondly, I wanted the books to discuss roughly the same period to find out if there is an observable trend in how the period is described. This served two purposes, firstly, reading three books on one event would be too limited in scope. On the other hand, three books about completely different periods or regions would be too scattered to find any coherence. So, three books that offer different perspectives of the same period, with mostly the same timescale, allows for a better understanding of that particular set of circumstances.

The books chosen for this were, *Killing for Coal*, by Thomas G. Andrews, *Mass Destruction*, by Timothy LeCain, and *Power Lines*, by Andrew Needham.[24] All three books center around the industrialization process of the United States. *Killing for Coal* centers around the expansion of the fossil fuel economy towards the western Colorado frontier, through a drama of labor war.[25] *Mass Destruction* centers around the implementation of

---

[23] American Society for Environmental History, "American Society for Environmental History - Past Recipients," Past Recipients, November 4, 2024, https://aseh.org/past-recipients.

[24] Thomas G. Andrews, *Killing for Coal: America's Deadliest Labor War*, 1. paperback ed (Cambridge, Mass. London: Harvard University Press, 2010); Timothy J. LeCain, *Mass Destruction: The Men and Giant Mines That Wired America and Scarred the Planet* (New Brunswick, N.J: Rutgers University Press, 2009); Andrew Needham, *Power Lines: Phoenix and the Making of the Modern Southwest*, Politics and Society in Twentieth-Century America (Princeton (N.J.) Oxford (GB): Princeton University Press, 2014).

[25] Andrews, *Killing for Coal*.

'modern' mining techniques, or "mass destruction" technology.[26] And lastly, *Power Lines* centers around the unequal treatment of 'Indian' tribes in the Southwest during the electrification process of both the Southwest, but the United States as a whole, as well.[27] All three books use different perspectives on the environmental past of the United States, and the time limits from start to finish in each book vary somewhat to fit each narrative's contextual representation, but together they form a picture of some parts of the United states' industrialization process, or 'modernization' process.

Before we get started, then, an overview of this thesis. First on the agenda, presenting a concrete theoretical framework of analysis in three parts: 1) Narrative analysis based on White's *Metahistory*, 2) Agency analysis, based on the article by Otto, Wiedermann, Cremades, Donges, Auer and Lucht, as well as the article by Peter Haff, 3) Analyzing the implications of representation upon the more practical aspect of communication in historical writing, based on *The Engaged Historian*, more specifically the chapters of Jörn Rüsen and Kalle Pihlainen.[28] Answering the question, "Is the prime responsibility of professional historians a deontological one relating to academic procedures and source criticism, or can particular situations trump these and create other priorities and types of responsibility?", finding the unavoidable literary and political dimensions of writing history, and its communicative effect towards the reader. [29]

---

[26] LeCain, *Mass Destruction*.

[27] Needham, *Power Lines*.

[28] Hayden V. White, *Metahistory: The Historical Imagination in Nineteenth-Century Europe*, Fortieth-anniversary edition (Baltimore, Maryland: Johns Hopkins University Press, 2014); Ilona M. Otto et al., "Human Agency in the Anthropocene," *Ecological Economics* 167 (January 2020): 106463, Peter Haff, "Humans and Technology in the Anthropocene: Six Rules," *The Anthropocene Review* 1, no. 2 (August 2014): 126–36, Stefan Berger, ed., *The Engaged Historian: Perspectives on the Intersections of Politics, Activism and the Historical Profession*, Making Sense of History, volume 37 (New York: Berghahn Books, 2019).

[29] "INTH Call for Papers."

Theory and Method

Outline

First of all, before I start to lay out all the details and intricacies of my thesis, I want to explain the reasoning and logical structure of it. From the questions that inspired my inquiry and guided my process, to the great works that helped me land this hefty enterprise. The framework that will aid me in this analytic process is divided into three main parts, to match the overall structure of the thesis. In this thesis I am going to analyze three environmental histories, to make sense of these books I have to ask the right questions. The first of which is, 'what kind of stories do they tell?' I ask this question to find out how historians today represent the history of our environmental past. If we follow the assumption of tragedy and decline, finding out whether it is representative of the literature or not is necessary. The second question, 'who are the movers and changers in their narratives?' I ask this to establish if, based on the same assumption as the last question, there is a trend towards tragedy and decline, who are the agents and actors that brought it about? The third question, 'what are the implications of such findings?', I ask this to find out if there are any consequences for historians, and if there are, try to find out what that might entail in a more practical sense.

Before starting on this project, I had an intriguing thought that I wanted to unravel, namely the idea of tragedy and decline, but in an environmental history perspective. One informing factor of this idea was Carl Tighe's *Writing and Responsibility*, where he points out the literary tradition of representing the progress of society as one of decline.[30] Could this literary artifact also be present within the field of history? And if so, what are the implications of such a finding? One could start to wonder about the consequences of such a trend, when applied to history, and especially so if it is warranted. If it was merely a matter of aesthetic choice, it would be one matter, but if it is the prevailing notion of several esteemed historians that ground their works in rigorous study alongside careful consideration of their representational choices, it would be another matter entirely. As environmental history deals with the topic of the environment we, the people of earth are living in, a trend towards tragedy and decline should be worrying indeed. In other words, if there is a well-founded trend towards tragedy within environmental history, what kind of questions emerge from this

---

[30] Carl Tighe, *Writing and Responsibility* (London ; New York: Routledge, 2005), 19.

knowledge? As any historian with an interest in engaged writing would wonder: should historians merely record this decline, or are historians in a special position to communicate something useful about the past, as well as the process of history, to the consumers of historical works? Is there some actionable knowledge that can help inform the present to avoid such tragedies in the future?

To answer the first question, I will lean on Hayden White's magnum opus *Metahistory* and his theory of tropes.[31] In a sense, this first part will be an act of cataloguing the three books into stories of different kinds. In answering this first question, I can follow up with the question 'what kind of picture is painted?' or, in other words, do these stories help us form a collected narrative of our environmental past, and if so, in what way? As explained by Tighe and the literary tradition of decline, are there histories that fall under this literary artifact? Imagine reading a selection of histories that span different events through the same period, through different perspectives and locations. They are not part of the same book, but as a collective, they form a shared narrative of understanding of this period. It gives a view of both the events within this period, as well as a view of how they are written about.

To answer the second question about agency, I will use the theory of "Human Agency in the Anthropocene."[32] The authors propose a quadrant scale of agency that define the levels of agency of both the individual and the collective, as well as the temporal plane of said agency. In addition to Otto, Wiedermann, Cremades, Donges, Auer, and Lucht's article, I am going to make use of Peter Haff's Six Rules, further examining what kind of agency is at display by showing historical actors and agents as parts of systems and the role they perform within it.[33] By identifying the systems and agents described in the narratives of each book, one can analyze how their actions affect change in one system whilst helping sustain another. What this entails is within the domain of the engaged historian. The representational strategies that propose certain agents as the main movers of the historical process, could very well be both accurate and responsible, but within the perspective of our environment, change is very much what is at stake. This is not an exercise in moralizing against 'the people that caused' pollution and climate change, it is an attempt to find strategies that empower historians to help self-determination amongst their readers in the face of this monumental challenge.

---

[31] White, *Metahistory*.
[32] Otto et al., "Agency in the Anthropocene."
[33] Haff, "Humans and Technology."

To answer the third and final question about engagement, as mentioned previously, I will make use of Stefan Berger's *The Engaged Historian*.[34] Firstly, Jörn Rüsen's chapter about engagement: "Metahistorical Considerations on a Disputed Attitude in Historical Studies," where he points out the unavoidable political and ethical dimensions of historical writing.[35] In other words, it is impossible to write apolitically, neutrally, or objectively, because the subject matter itself has bearing upon the real world and narration of that subject matter only mediates the level of politicization. This calls for historical writing that is self-aware about its political implications, in much the same way that Hayden White made historians aware of the literary aspects of historical writing. Secondly, Kalle Pihlainen's chapter about Committed Writing: "History and Narrative Communication Revisited", discusses the communicative dimension of historical writing, taking on the form of the content, the content of the form, the writer, the reader, and the relationship between them.[36] In other words, asking the questions: what to convey, how to convey it, and to whom?

So, what does it all boil down to? To speculate, I think to find that there is a trend towards tragic emplotment within environmental history, which is very much warranted. Additionally, the agency of the actors and agents trends towards sustaining the overarching system, and inertia on the side of the establishment. Given this set of circumstances, I postulate that the way environmental history is currently represented is very much responsible in regards to subject matter, and histories have been emplotted in a manner to reflect that. However, I figure there is an angle yet to be taken into account. As mentioned earlier, even separate histories and separate books form, in the reader's mind, a shared narrative whether the original authors intended it or not. Drawing upon Pihlainen's commentary about communication, then, I think there is an untapped political potential. To be aware of 'metahistorical political implications' is well and good, but I think there is room for historians to revisit the communicative angle. In the age of the Anthropocene, global warming, and climate change, to represent the past as tragedy, the historical process as one of decline, along with a restrictive view of agency, not only paints a drab picture of the past, but it also makes for a dim view of the horizon of the future as well. I think that there is a potential upside latent in taking an interest in the reader's point of view. Not to 'distort the past', or to write open political exhortations, but to make sure that the reader gets both an accurate view of the past,

---

[34] Berger, *The Engaged Historian*.

[35] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, chap. 1.

[36] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, chap. 3.

as well as keeping in mind the need for action and their potential for agency both individually and collectively.

Tropology

In this section of the thesis is the part that will aid in cataloguing and differentiating the literary forms the histories may take. The first part of the chapter will include descriptions of Hayden White's tropology. Using this reference point, there are four ways to characterize histories into stories of different kinds: Tropes, Emplotment, Formal or Discursive Argument, and Ideological Implication.[37] Each of these four categories have four sub-categories, which makes for a nice and tidy table in the end: a four-by-four chart, to visually map the literary aspects of a historical work.

Tropes

The first category, the idea of tropes, is about how the historian connects the different events within the narrative, the literary link between each event, meaning what kind of literary effect each event has on the narrative. The tropes are further divided into: Metaphor, Metonymy, Synecdoche, and Irony.[38] Metaphor is explained as how events can be characterized by their similarity to another, used to the effect of saying how 'this' part of history is similar to another part of history.[39] The characteristics of one event is signified to be like that of another. Metonymy is explained as using the name of one part of a whole to mean the whole.[40] This one part is so significant to the function of the whole that it can be referred to by the name of the part, to imply the meaning of the whole and still keep coherence. White uses the example of "fifty sails" to mean "fifty ships".[41] This is used to the effect of saying that one piece of a historic period is so significant it is essentially synonymic to the period itself. Synecdoche is explained as when "[…] a phenomenon can be characterized by using the part to symbolize some quality presumed to inhere in the totality…"[42] White uses the example "he is all heart" to illustrate. This is used to the effect of saying that one part of a

---

[37] White, *Metahistory*, 29.
[38] White, *Metahistory,* 30–31.
[39] White, *Metahistory,* 31.
[40] White, *Metahistory,* 31.
[41] White, *Metahistory,* 31.
[42] White, *Metahistory,* 31.

historic period is qualitatively significant to that period, such as philosophy to the enlightenment period, the quality of philosophy is a defining part of that period. The final trope, irony, refuses such connections as the other three makes. Instead, it views such connections as absurdities or paradoxically. This trope is used to the effect of underscoring uncertainty about either subject matter or representation. Unintended consequences could be an example of the ironic trope. Irony is different from the other tropes in another way as well, as it can be used to view the other tropes themselves ironically. The example "he is all heart" from the example of synecdoche could be read ironically if it is made clear that the person referred to is anything but courageous or empathetic.[43]

Emplotment

Secondly, emplotment is, as White so eloquently put it "[…] the way by which a sequence of events fashioned into a story is gradually revealed to be a story of a particular kind."[44] In other words, it refers to the literary 'genre' the form of the historical narrative takes. The four kinds of stories are as follows: romance, tragedy, comedy and satire.[45] First up, romance in the classical sense, not a focus of interpersonal relationships, but that of overcoming great obstacles. The protagonist of the story is faced with a great challenge which he, she or even they have to surpass. The easiest way to understand it, the way White explained: "It is a drama of the triumph of good over evil, of virtue over vice, of light over darkness, and of the ultimate transcendence of man over the world in which he was imprisoned by the fall."[46] Tragedy is perhaps just as familiar to most, but as the naming schemes of genres have shifted in popular culture, it is important to note the specific differences from an intuitive understanding. Tragedy is more than a story with a sad ending. There are three component parts that help illustrate this. Firstly, the sad ending, it still remains a defeat or a situation where the protagonist fails to overcome his challenge. White explains it as, "[…] there are no festive occasions, except false or illusory ones; rather, there are intimations of states of division among men more terrible than that which incited the tragic agon at the beginning of the drama."[47] Meaning that during a tragic story there is a focus on

---

[43] White, *Metahistory,* 36.
[44] White, *Metahistory,* 7.
[45] White, *Metahistory,* 7.
[46] White, *Metahistory,* 8.
[47] White, *Metahistory,* 8–9.

the obstacles that the actors of the story failed to overcome. Secondly, however, it is important to note that these obstacles, or the conclusion of the conflict within the story are not apocalyptic.[48] The world endures despite the obstacles and despite the conflicts. Finally, at the conclusion of the main conflict, as hinted at above, the spectators of the conflict learn from their struggle, and this act of learning "[…] is thought to consist in the epiphany of the law governing human existence which the protagonist's exertions against the world have brought to pass."[49]

The third mode of emplotment, comedy, is also one that needs explanation beyond the reflex of popular culture. The comedy is not a story that is funny or humorous, there may be events or situations within that story that prompt laughter, but that is not the function of the emplotment. Rather, in regard to the resolution of the main conflict of the story, there is a hopeful tone and a belief that the actors are able to achieve a "reconciliation" rather than a triumph or a defeat as with romance and tragedy respectively.[50] An example from popular comedy would be any police drama, the police do not end crime, they merely hold out hope for a state of living that is not destructive towards the "[…]social and natural worlds…" in which they live.[51] These reconciliations are usually marked with a "festive occasion" at the end of the story.[52]

The final mode of emplotment, satire, like the trope of irony, is different from the others. A romance or a comedy might hold out hope for a triumph or a reconciliation at the end of the main conflict, satire on the other hand "[…] views these hopes, possibilities, and truths ironically in the atmosphere generated by the apprehension of the ultimate inadequacy of consciousness to live in the world happily or to comprehend it fully."[53] In other words, there is a lack of comprehension that makes struggle in the face of conflict senseless. The actors of the story either lack the comprehension of the challenge they face to meaningfully affect change, or they lack the agency to do so. Either way the "ultimate inadequacy of consciousness" negates the possibility of triumph or reconciliation.[54]

---

[48] White, *Metahistory,* 8–9.
[49] White, *Metahistory,* 8–9.
[50] White, *Metahistory,* 8.
[51] White, *Metahistory,* 8.
[52] White, *Metahistory,* 8.
[53] White, *Metahistory,* 9–10.
[54] White, *Metahistory,* 9–10.

One final comment on emplotment regarding their differences and similarities. With tragedy and satire, White explains, there is an inclination that, "behind or within the welter of events contained in the chronicle structure of relationships or an eternal return of the same in the different."[55] In other words, tragedy has a negative outcome that reveals a truth about the world. Time goes on, and the tragic reveal has changed the spectators' view of the world, but it remains still as true as at the beginning of the story. With satire the struggle in the conflict is viewed as futile in any regard, and almost pre-determines the outcome, or lack of one. Thus, the repeated defeats of the tragic story will at some point reveal a 'law' or 'truth' that reinforces those defeats, making struggle futile based on the inadequacy of the actors' power to enact change. An experienced repeated tragedy can hence come to be viewed as satire. To draw upon one popular culture reference, in the HBO hit crime series The Wire, detective Pryzbylewski offers some meta-commentary on the process of the series when watching an NFL match on his TV at home, "No one wins. One side just loses more slowly."[56] His evaluation of the football match hits on the sentiment of futility in satire through the continual failures of tragedy.

Discursive Argument

Thirdly, formal argument or discursive argument is as how a historian finds "the point of it all" or "what it all adds up to in the end."[57] The historian goes through a process of explanation of what happened "[…] by construction of a nomological-deductive argument…" that applies "principles of combination which serve as putative laws of historical explanation."[58] It adds another layer of explanation and understanding of the past, of how it all fits together, on another level to that of emplotment and how the event fits together 'logically'. The four kinds of argument are as follows: formist, mechanistic, organicist, and contextualist.[59] The formist argument is explained as an aim at identifying the "[…] unique characteristics of objects inhabiting the historical field."[60] Following this logic, the explanation is done when, "a set of objects have been properly identified, its class, generic,

---

[55] White, *Metahistory,* 10.

[56] *The Wire*, season 4, episode 4, "Refugees," directed by Jim Mckay, written by David Simon, Dennis Lehane and Ed Burns, aired October 1, 2006, on HBO, https://play.hbomax.com/player/urn:hbo:episode:GVU2wyQyuuINJjhsJAVP7

[57] White, *Metahistory*, 10.

[58] White, *Metahistory,* 10–11.

[59] White, *Metahistory,* 13.

[60] White, *Metahistory,* 13.

and specific attributes assigned, and labels attesting to its particularity attached to it."[61] In other words, finding 'objects' – events, processes, systems etc. – and describing their 'particularity' or their similarity or differences from other such 'objects'. The mechanistic argument is explained in two main points: firstly, it tries to find the laws that guide the unfolding of the historical process, and secondly, it views the actors of the past as symptoms of these rules.[62] In other words, there are certain rules that dictate the playing field, and the players usually act according to their relative positions illustrated by these rules.

The organicist argument examines how the small-scale "microcosmic" fits into the large scale "macrocosmic" and vice versa.[63] An organicist explanation puts emphasis on identifying "[…] individual entities as components of processes which aggregate into wholes that are greater than, or quantitatively, different from, the sum of their parts."[64] White also focuses his explanation around "[…] the *end* or *goal* toward which all the processes found in the historical field are presumed to be tending."[65] In other words, knowingly or not, the actors in this type of historical drama are usually driving towards some end or other. It could be both intentional and unintentional, but in this narrative, a plurality of actions supports this larger 'scheme'. The contextualist argument has a more intuitive explanation than the others. It suggests that there is a set of logical paths that connect events in a set time frame. When explaining the coherence between seemingly disparate events, "[…] the revelation of the specific relationship they bore to other events occurring in their circumambient historical space."[66] At all times, then, it is possible to trace the unfolding of the historical process by linking each event to the next because 'one thing leads to the next'. This process does away with any larger 'meaning' of a sequence of events and connects them purely on a 'causal' chain of relationships. Additionally, it allows for a natural expansion of understanding by addition of new elements. The same historical period or event can be described several times, with each iteration adding a layer of nuance than the previous one, without necessarily disproving it or making it obsolete. Several contextualist explanations of the same period will 'add more context' by – for example – offering different perspectives or drawing on other

[61] White, *Metahistory,* 13.
[62] White, *Metahistory,* 16.
[63] White, *Metahistory,* 15.
[64] White, *Metahistory,* 15.
[65] White, *Metahistory,* 15.
[66] White, *Metahistory,* 17.

elements outside the 'original' narrative. What separates the contextualist mode of argument from the mechanistic or organicist, White puts quite nicely:

[…] if the historian who is inclined toward Contextualism would aggregate the various periods he has studied into a comprehensive view of the whole historical process, he must move outside the contextualist framework – toward either a mechanistic reduction of the data in terms of the "timeless" laws that are presumed to govern them or an organicist synthesis of those data in terms of "principles" that are presumed to reveal the telos toward which the whole process is tending over the long haul.[67]

In this 'episodic' view of the past each event is closed into itself with no larger ideas connecting them. What I want to point out in this thesis is that if we take a view of the communicative dimension of history, more specifically the reader's perspective, this reduction or synthesis can happen even if the historian tries to avoid it within the pages of his or her own book. The consumer of history will paint a picture in their heads about the past that is informed by the histories they read. If you were to read a contextualist history of three sequential time periods, you would essentially be presented with a timeline of beginning, middle, and end. The contextualist mode of representation may very well be the most responsible way of describing isolated events. It keeps the integrity of events intact and makes no metaphysical claims about diffuse subjects or abstract, hard to define, aspects of the historical process. At the same time, a reader collates a narrative of histories that, in themselves are written as responsibly as can be expected, but together can form another narrative altogether. On the fringes of one such narrative starts another, and they are both part of the same past. Giving a contextualist argument, then, purposefully distances the historical narrative away from such connections. This distance, I think, makes room for discussion.

Ideological Implication

Finally, ideological implication of a historical narrative. Firstly, it must be pointed out that this implication does not have to represent the historian's own political views.[68] Rather, it reflects "[…] the ethical element in the historian's assumption of a particular position…"[69] regarding the "[…] question of the nature of historical knowledge…"[70] and perhaps most importantly: "[…] the implications that can be drawn from the study of the past events for the understanding of present ones."[71] The crux of the term ideology, then, is the attitude towards

---

[67] White, *Metahistory,* 18–19.
[68] White, *Metahistory,* 23.
[69] White, *Metahistory,* 21.
[70] White, *Metahistory,* 21.
[71] White, *Metahistory,* 21.

taking a position in the present world. White defines ideology in the context of historical representational practice as, "a set of prescriptions for taking a position in the present world of social praxis and acting upon it (either to change the world or to maintain it in its current state)…"[72] The four ideologies included in his tropology are as follows: anarchist, radical, conservative and liberal.[73] They all have relative positions to each other in regards to a few central questions: pace and scale of change, temporal view of utopia, and social transcendence or congruence.[74] In other words, how fast do changes need to happen, and how comprehensive do these changes have to be? Additionally, what does the change add up to? When do the changes result in a state of envisioned utopia? Lastly, do these changes promote social congruence or transcendence?

First of all, the issue of scale of change. Conservatives and liberals both agree that the current form of society functions as intended and that it mostly works as it should. They both believe change to be inevitable but favor a smaller scale to any changes. Preferably parts are changed, rather than structure.[75] Radicals and anarchists on the other hand, prefer larger scale changes and the need for systemic change. Radicals preferring "reconstituting society on new bases," anarchists preferring "abolishing "society" and substituting it for a "community" of individuals held together by a shared sense of their common "humanity".[76]

Secondly, the issue of pace of change. Conservatives favor a "natural rhythm" viewing the process of change as "plantlike gradualizations" where the current system grows and evolves as it is only needing sustenance.[77] Liberals favor a "social rhythm", that is dictated by e.g. "the parliamentary debate" and view the process of change as "adjustments or "fine tunings," of a mechanism."[78] Radicals and anarchists on the other hand, "envision the possibility of cataclysmic transformations", but radicals are "inclined to be more aware of the power needed to effect such transformations" and anarchists are less concerned with "the inertial pull of inherited institutions" and "the means of effecting such changes", i.e. the cataclysmic ones.[79]

---

[72] White, *Metahistory,* 21.
[73] White, *Metahistory,* 21.
[74] White, *Metahistory,* 23.
[75] White, *Metahistory,* 24.
[76] White, *Metahistory,* 24.
[77] White, *Metahistory,* 23–24.
[78] White, *Metahistory,* 24.
[79] White, *Metahistory,* 24.

Thirdly, the issue of the temporal view of utopia. Conservatives tend to regard the current system as "utopia" or "the best form of society that men can "realistically" hope for, or legitimately aspire to for the time being" and therefore looks skeptically at change.[80] Liberals for their part, imagine utopia somewhere far in the future, with an eye on negating any radical action in the present to upset the current system.[81] In other words, they will get there some day, but it will not be any time soon. Time is needed to bring it about as much as any form of action. Radicals in turn, view the possibility for utopia as right around the corner, people only have to reach out to get it, and it can come about quite quickly. This "inspires their concern with the provision of the revolutionary means to bring this utopia to pass now."[82] In other words, the current system is flawed, but there is a better system within arm's reach, therefore it would be wrong not to move mountains to achieve it. Anarchists believe in, not a far future, but a far distant past that was disconnected from the "corrupt "social" state in which they currently find themselves", it is meant to inspire people to "seize control of their own essential humanity" to abandon "the socially provided belief in the legitimacy of the current social establishment", which they find to be flawed in a moral sense.[83]

Finally, the issue of social congruence or transcendence. Openness to change, conservation of values, self-betterment, benevolence and universalism. Conservatism is "the most socially congruent" as they value a conforming to current social relations and systems, to borrow a math description 'to have the same shape and size'.[84] Liberalism is "relatively" socially congruent, its referent being the other three ideologies.[85] Anarchism is "the most socially transcendent" on the opposite side to conservatism, and radicalism "relatively so."[86] At last, we have a formalized theoretical framework ready to catalogue each book in this inquiry. The form of the narrative is not the only part I wish to investigate, however. It is well and good knowing what kind of change is seen in each work of history, but just as useful is identifying the agents of this change.

---

[80] White, *Metahistory,* 24.
[81] White, *Metahistory,* 24.
[82] White, *Metahistory,* 24.
[83] White, *Metahistory,* 24.
[84] White, *Metahistory,* 24.
[85] White, *Metahistory,* 24–25.
[86] White, *Metahistory,* 25.

Agency

In this part of the thesis, I will outline the theory of agency as explained in "Human Agency in the Anthropocene" by Otto et al. as well as Peter Haff's six rules in his article "Humans and Technology in the Anthropocene".[87] The reason for choosing these particular rule-sets is because I want to find out, in a nuanced way, who the historical narratives present as the movers and changers of the historical process. Not only what kind of change they empowered, but what kind of role they played in relation to their contemporaries. One person might be responsible for some change or other, but in what sort of timeframe? Did he collaborate with anyone at any point in time? Were there any unforeseen consequences as a byproduct of his wanting to bring about change? What position was this person in to be able to bring about this change? Could he affect others' behavior to support his own goals? In narrative representation we get a condensed version of the past for both practical and aesthetic purposes, but this act of narrativization allows us to map out systems and people that move *the narrative* forwards in a way that escapes us in the 'real world'.

First, I will outline the relevant parts of each article, differentiating agency between the agency of one person or a larger group, as individual versus collective agency. Then, differentiating between the agency of short-term goals and long-term goals that require planning and careful execution, as everyday agency versus strategic agency.[88] Additionally, the aspect of intentional versus unintentional agency. Second, I will outline the six rules: inaccessibility, impotence, control, reciprocity, performance and provision.[89] These two articles also provide some useful considerations regarding the issue of sustaining a system as opposed to change. Organization and constraint display the self-preserving functions of a given system, whilst transformation is explained as the window of action that allows for the turn from one system to another.

Individual vs Collective / Everyday vs Strategic

Otto et al. differentiate agency into four different categories that scale on a quadrant in relation to each other. The categories are as follows: individual, collective, everyday, and strategic.[90] On one axis there is time, with everyday agency on one side, and strategic agency

---

[87] Otto et al., "Agency in the Anthropocene"; Haff, "Humans and Technology."
[88] Otto et al., "Agency in the Anthropocene."
[89] Haff, "Humans and Technology."
[90] Otto et al., "Agency in the Anthropocene," 3–4.

on the other, signifying the time it takes to enact different levels of agency. Individual agency is the capacity of one person to affect change both large and small. Individual agency is at display both when a person goes to work to earn a wage, as well as when one person at that job – the boss – enacts a new policy for the entire company. Collective agency "refers to situations in which individuals pool their knowledge, skills and resources, and act in concert to shape their future."[91] One person driving to work displays individual agency through getting in their car and using the highway to reduce travel time, a thousand people all getting in their cars at the same time to go to work around the same time and place displays collective agency through the making of a traffic jam. Although not explicitly planned, every driver knows to some extent that the roads will be busy if everyone drives at the same time.

This is where the temporal plane of agency comes in. The making of a traffic jam through collective agency is one example of everyday agency. No one had a meeting at 'traffic jams inc.' and decided to block up the roads, it just so happens that everyone starts their workday at around the same time, and everyone has to go to work to support themselves. Strategic agency on the other hand, does involve "long-term planning and strategies…"[92] Organizing a protest with banners, flags and slogans that unites a hundred people into blocking up the highway just before the end of workday rush-hour, makes for the same result i.e. clogged up roads. In one example, people happen to be in the same place because they have their own goals, needs and wants to fulfill, in the other there was a determined attempt to both organize a group and to direct their actions towards the same goal.

Intentional vs Unintentional

Otto et al. explain how social structure is a result of both intentional as well as unintentional action, from both individuals and collectives, from both small and large timescales.[93] The key aspect of intentional versus unintentional, then, is the emphasis on 'result', not the state of mind of the people displaying agency. As they point out, "Human history is created by intentional activities, but it is not an intended project; it persistently eludes efforts to bring it under conscious direction."[94] There could be two different ways of grading agency in regard to intentionality, then. One where you analyze the planning and

---

[91] Otto et al., 3.
[92] Otto et al., 3.
[93] Otto et al., 4.
[94] Otto et al., 4.

careful execution of a series of actions striving towards a goal, the other where you analyze how the outcome fits with the initial vision of change. What I intend to focus on, however, is the results. If some kind of change is the result of strategic agency, one has to assume that at some point some people had to have intentionally done something to reach this end, but if there are side-effects or byproducts of this end-goal they resist easy classification.

In some instances, someone can envision producing a certain solution to a certain problem, where the solution works as intended. The problem is solved. But in another, the solution is not perfect, e.g. it lacks permanence, or it only mitigates the problem. The problem appears in analysis, at least, that it is difficult to assign which effects of the proposed solution are planned for and not. Drawing upon a generic example from the world of mining, inspired by one of the histories examined later in this thesis: a mine operator wants higher output from his mine and employs engineers and scientists to find a way to accomplish it. The solution results in a higher output than the mine operator could have ever imagined, but during the refinement process of the extracted ore, pollution spills out to the surrounding countryside wreaking havoc with plant and animal life. The goal of higher output has been achieved, but at the cost of massive pollution. The goal was not to pollute as much as possible, but it happened anyways. Instead of diving into the moralities behind the intentions of historical actors, I wish to rather investigate the disparities between goal and result. Therefore, a strategic collective effort to increase productivity is strategic because it takes time and planning to enact, but it is unintentional because the results stray from the original goal. Although it would be easy for environmentalist historians to moralize against giant corporations that destroy nature, the goal of this thesis is to investigate the agency at display through narrative representation.

Organization and Constraint

To borrow a headline from Haff himself, he starts off by explaining in practical terms, one object of study for this theoretical framework, namely organizations. By using the distinction of system and organization to allow for better nuance, he explains first that "Organization means that many parts work together." This is true both for *an organization* as well as the *act of organizing*, be it a collection of individuals or a collection of systems.[95] A system therefore is at the heart of organization, "[…] a system is a collection of parts. These

---

[95] Haff, "Humans and Technology," 128.

parts may themselves be systems." Making these parts pull in the same direction makes for an organization, "A dynamic system of many parts is organized if the system function can be described succinctly."[96] Their function has to be both observable and describable.

The next part, constraints, can be observed in both human and non-human parts of a system, as Haff points out, but for this thesis the human parts of a system are more relevant. If someone were to do an analysis of the technical systems within mine workscapes in the industrializing United States, they could apply the same rules for constraint, but that is not the goal of this thesis. For the human parts then, Haff uses the example of an office worker, "A company employee experiences the hard constraints of his office, whose walls resist penetration. The door is open, but the soft constraint of fear, for example the implicit threat that he could lose his job, suffices to keep him confined for much of the day."[97] This is one form of constraint that is as the name suggests, constraining towards the worker. Another type of constraint drives at the issue from the other side, namely incentives. Returning to the example of the office worker, "[…] the softer constraint provided by incentives, for example the prospect of higher pay or, better, the implicit incentive offered by a rewarding job – he wants to be in the office because he loves what he does."[98] These constraints are backed up by tangible consequences in either direction. As reward follows a good performance, punishment follows a bad performance. Examples range from, "[…] the implicit threat of job loss for a lazy worker, execution for a murderer, a court martial for a deserter from the army, suspension for a disruptive student and so on."[99] The purpose for these rewards and punishments, and thus constraints, being "[…] to keep its human parts locked into the system so that the system can continue to function."[100] This last part is important when discussing agency and change, because of the question 'how does an actor leverage his agency to change a system, if the system by its nature resists changing?'

Transformations

Transformations, the 'windows of change' where systems can be changed, modified or replaced. Usually stemming from instability, large-scale changes or "[…] sharp brakes from

---

[96] Haff, 128.
[97] Haff, 128.
[98] Haff, 128.
[99] Haff, 128.
[100] Haff, 128.

the established procedures rarely happen", the circumstances preparing the ground for change usually coming in the form of "[…] massive discontents such as civil wars, revolutions, or financial crises."[101] The forces behind change in the face of such disruptions can have many faces, it "[…] could be exclusive and incorporate only a narrow group of decision-makers as frequently as it happens in 'quiet' transitions to authoritarian regimes."[102] They could also "[…] be more open and include representatives of various social groups, as happened in the political and economic transformation in eastern Europe."[103] As mentioned above, institutions carry along with them the stability of the system, as "Even in periods of radical change, however, the actors never start from scratch. They cannot choose a completely new system and they always depart from the ongoing social order in which they are embedded."[104] Ultimately one system must be interchanged for another if one is to avoid the chaos of unending change. It may be a simple observation, but it is nicely put, "The future evolves from practical activities, experiments, learning, conflict and struggle."[105]

Six Rules

Haff gives six rules for the performance and function of any given system. It explains how the parts of one system interacts as well as how different systems interact with each other. The six rules are as follows: 1) Inaccessibility, 2) Impotence, 3) Control, 4) Reciprocity, 5) Performance, and 6) Provision, each rule describing functions and unavoidable aspects of system function.[106] I will describe them in a list underneath.

1. Inaccessibility

The rule of inaccessibility points to the fact that with two systems of different sizes, the larger system "cannot directly influence the smaller system without also affecting many other small systems or parts that are nearby." Haff providing the example of a person trying to touch a single cell in a leaf only using their hands, resulting in just picking up the leaf in its entirety.[107]

---

[101] Otto et al., "Agency in the Anthropocene," 4–5.
[102] Otto et al., 4–5.
[103] Otto et al., 67.
[104] Otto et al., 4–5.
[105] Otto et al., 4–5.
[106] Haff, "Humans and Technology," 135.
[107] Haff, 130.

2. Impotence

The rule of impotence points to the fact that large systems are "generally unresponsive" to most of their smaller parts, "by virtue of constraints applied to enforce organization of the parts", as discussed in the organization and constraint section above.[108] The example given is illustrative of the infeasibility of the opposite of this law. If small parts of a system frequently affected the behavior of the system at large, it would be "[…] buffeted by large, essentially random, forces, and would lose its ability to behave coherently and to fulfill its function."[109]

3. Control

The rule of control points to the exception, or specification, of the previous rule. There are in fact some parts that are able to affect the behavior of larger systems, "Leaders can have large effects […] and for many large systems leadership is essential to system survival", the examples provided being, "A company, army or country would not last long in the absence of decisions by leaders."[110]

4. Reciprocity

The rule of reciprocity points to the fact that only systems that are about the same size can interact with each other directly and mutually.[111] An example of two systems of different sizes, a company, and a nation state, they may interact, but not mutually. The nation state can impose restrictions upon the company such as taxes and business regulations, making the interaction one-sided.

5. Performance

The rule of performance points to the fact that the sum of the actions of all system parts must be in support of the function of the system, for it to be able to survive.[112] Proven by the opposite fact that if more parts of a system did not support system functions, it would stop working as intended or stop existing entirely or in its current iteration.[113] In this way of looking at it, the rule of performance could be likened to that of a team sport, if most players on the team try to score a goal there is at least a higher chance of it happening than if not.

---

[108] Haff, 131.
[109] Haff, 131.
[110] Haff, 132.
[111] Haff, 133.
[112] Haff, 133–34.
[113] Haff, 133–34.

Assuming that some players on the team also have the priority of stopping the other team from scoring as well, both of these efforts help the team function as intended. Any other type of behavior that does not go under the categories of scoring a goal, or stopping the other team from scoring a goal, could be looked at - in a sporting sense - as sabotage or match-fixing. But the rule of performance goes one step further. The system, or as Haff calls it the Technosphere, has an 'interest' (as much as a non-sentient being can have interests that is) in keeping its human parts within the boundaries of performance, therefore, by going back to the earlier mentions of organization and constraint, there are not only incentives for people to stay within the rule of performance but punishments as well.[114]

6. Provision

The rule of provision points to the fact that the system needs to provide a sustainable environment for its parts for them to be able to "[…] perform their support function."[115] In the same way that the parts of a system sustain it through the rule of performance, the system itself needs to provide a workable environment for the parts themselves to function as intended. Returning to the sports analogy, professional teams provide this workable environment by offering high wages, high quality training facilities and a nice stadium to play in. These are not merely incentives, but they offset the usual time it takes to earn a living from going to work, as well as it takes the guesswork out of putting in the effort of becoming a better performer. In other words, the team – the system – provides an environment that is *pro* sports performance.

Engaged / Committed Writing

This part of the thesis will discuss the theoretical foundation of political engagement and committed historical writing, mainly focusing on the contributions of Jörn Rüsen and Kalle Pihlainen's chapters from Stefan Berger's *The Engaged Historian*.[116] The issues range from the misleading idea of engagement, the logic of historical thinking, the dimensions of historical culture, the aestheticization of history, the present past and the author-reader relationship. They discuss both the subject matter and the representational strategies of history, as well as the communicative role of history.

---

[114] Haff, 133–34.
[115] Haff, 134.
[116] Berger, *The Engaged Historian*, chaps. 1, 3.

The Misleading Idea of Engagement

Jörn Rüsen explains his metahistorical concerns with engagement in *The Engaged Historian*. First, he sets up the false equivalence between engagement versus non-engagement. He introduces this discussion by setting up three links in the chain of logic against engagement in history. Firstly, that it is normal to view engaged versus non-engaged history as opposites because of the 'neutral' or 'scientific' nature of one versus the other. In other words, "[…] commitment is understood as running against basic rules of academic neutrality…"[117] But because of the concept of 'objectivity' losing its position as some unassailable position within history, "[…] it has become rather unclear what the contrary of engagement really means in historiography."[118] If the definition of non-engaged history relied upon objectivity, and objectivity loses its footing, what then happens to the relationship between engaged and non-engaged history?

If non-engaged history is not objective, is it at least neutral? Rüsen refers to another usual description of engaged historiography as a "[…] as a specific way of doing history [that] refers to partisanship in historically describing topical conflicts", and that "Engagement has often meant one-sidedness" and that it violates both truth and morality principles.[119] He answers the question of engagement in the face of objectivity with the understanding that statements "about the past can be intersubjectively tested by empirical evidence and logical coherence of explanation."[120] Thus giving a reasoning behind revoking credence for statements that do not comply with this testing. But as Rüsen points out, "[…] it does not bring about neutrality of historical knowledge in its relationship to practical life." This is because "[…] historical thinking, even in its academic form, remains rooted in practical life, although it furnishes more distance from it."[121] He finishes by stating that "neutrality is misleading" and that "the term intersubjectivity is more adequate" because it acknowledges the nature of history as unavoidably 'not' neutral and merely makes use of this fact.[122] More

---

[117] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 34.

[118] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 33.

[119] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 35.

[120] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 36.

[121] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 36.

[122] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed.Berger, 36.

specifically, this means that claims about the past still needs to 'pass the test', but it does not try to hide its connection to practical life. This idea of an unavoidable ideological component is also explained by Keith Jenkins in *Re-thinking History*, but coming at the issue from the other side of the equation.[123] In his explanation, the ideological component of history is not merely dealing with politically charged subject matter, but the objective of the historian as well in explaining certain outcomes or social practices.[124] Here he gives room for the worries with this realization, for what he calls "hapless relativism" that would make history seem pointless, but ultimately he lands on a definition where deconstruction makes up a sort of construction of its own that makes both endeavors a part of history.[125]

The Five Dimensions of Historical Culture

Realizing that historical knowledge is not neutral would mean that it is in some way political, at least to some extent. Rüsen explains that there are five "most important" dimensions that are both unavoidable and relative to each other.[126] They are as follows: cognitive, aesthetical, political, ethical and religious.[127] In the cognitive dimension, "history is done as an issue of thinking, guided by the idea of truth", in the aesthetical dimension, "history is an issue of sensual perception, guided by the idea of beauty", in the political dimension, "history is an issue of power and domination, guided by the idea of legitimacy", in the ethical dimension, "history is an issue of evaluation (normative assertiveness), guided by the idea of good and evil", and lastly, in the religious dimension, "history is an issue of belief, guided by the idea of resurrection."[128] With an understanding of each of these dimensions being an unavoidable part of writing history, "engagement gains a manifold meaning" being defined by its relative position to each dimension.[129]

---

[123] Keith Jenkins, *Re-Thinking History: With a New Preface and Conversation with the Author by Alun Munslow*, repr, Routledge Classics (London: Routledge, 2005).
[124] Jenkins, *Re-Thinking History*, 21–24.
[125] Jenkins, *Re-Thinking History,* 30–31.
[126] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, *The Engaged Historian*, 36.
[127] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed.Berger, 36–37.
[128] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 36–37.
[129] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 37.

The problem of engagement, then, seems to arrive from the imbalance of these dimensions. In the case of the political dimension being unbalanced, engagement "might lead to political partisanship as a dominant factor… the form of historical representation might come close to propaganda."[130] In the case of the cognitive dimension, it "may go along with a boring presentation, an apolitical attitude, a lack of moral commitment and ignorance concerning the role of transcendence in human life."[131] Rüsen uses the example of an encyclopedia to illustrate.[132] In the case of the aesthetic dimension, "It may lead to an aestheticism that does not care very much about the solidity of facts and the explanatory power of interpretation, thus ignoring the political relevance of historical thinking."[133] In the case of the ethical dimension, "It may reduce empirical evidence to a mere illustration of [rules in and for practical life] and give political attitudes a moralistic form…"[134] In the case of the religious dimension, Rüsen starts off by pointing out that this dimension is on the decline alongside a more secularizing society.[135] But represented in an imbalanced way, it can display as emphasizing "the role of history in articulating the belief in transcendent factors in human life-orientation. It introduces the sacred into the experience and interpretation of the past."[136] Thus, realizing that each of these dimensions all play a role in shaping a historical narrative, the level of engagement might come to be seen as more than "the extent to which the political dimension of doing history is explicated or hidden."[137] It is, as Rüsen puts it, characterized by "an *unbalanced relationship between the different dimensions.*"[138] Imbalance

---

[130] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 37.
[131] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 37.
[132] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 37.
[133] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 37.
[134] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 38.
[135] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 37.
[136] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 38.
[137] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 38–39.
[138] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 39.

in itself is not necessarily a problem, however, it arises when and if "one dimension limits, hinders or even contradicts the deployment of sense and meaning in the others."[139]

Because the point of doing history has aspects of both making sense of the past, as well as the present, Rüsen points out the explanatory power of historical research through interpretation, what he calls "intersubjective plausibility" for issues regarding the past.[140] Secondly, he points out, that this knowledge allows for reasonable arguments and a way to identify and criticize "problematic historical legacies."[141] But he also notes that there is a possible pit-fall when writing about such problematic historical legacies, if the outcomes determines the "[…] perspectives of its interpretation…"[142] The concern lies in reproducing the conditions that brought them about, in regards to representation, that can overshadow the possibility of "overcoming this old distinction for a more complex and mediated perspective…"[143] It does not mean that the conditions on the page is reflected in practical life because of how it is written, merely that there is an ever-present need to add nuance and context to historical representations beyond the traditional ones.

The dimensions of historical culture could be visualized like in table 1. Each x-axis displaying one dimension each on a scale from low to high. The specific example that Rüsen uses for this sort of representation is an encyclopedia, which emphasizes the cognitive dimension above all, as well as a lack of commitment for politics, and what he calls a "boring presentation".[144]

---

[139] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 39.
[140] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 39.
[141] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 39.
[142] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 40.
[143] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 40.
[144] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 37.

Low	Cognitive	High
		✚
	Political	
✚		
	Aesthetical	
✚		
	Ethical	
	✚	
	Religious	
✚		

Table 1

The Aestheticization of History

Pihlainen shows some other considerations of historical writing in his chapter, regarding literary aspects. The most important part that I want to make use of here, is what he calls the "[…]central function of narrative form…", namely closure.[145] He points out how this closure "[…] has to be ethical…" and draw upon "some sense and question of responsibility…" that is beyond the realm of aesthetic concern.[146] He cites White when pointing out how there is no hard line distinction between aesthetical closure from ethical closure, by virtue of the 'content of the form'.[147] The very fact of a "complete" part of the past, the subject matter, "creates an artificial space where evaluation can and *must* take place."[148] He also presents two ways of avoiding this ethical judgement. Firstly, by using subject matter that "might be seen as

---

[145] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 64.

[146] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 64.

[147] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 64–65; Hayden V. White, *The Content of the Form: Narrative Discourse and Historical Representation* (Baltimore: Johns Hopkins University Press, 1987).

[148] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, *The Engaged Historian*, 64–65.

politically significant" or by using a different mode of representation that subverts closure entirely.[149] What this mode of representation looks like still has some way to go.

The Present Past

How to write about the past is not only an issue of narration either, as historians can add comment on their representational practices. Pihlainen points out that there are multiple ways of viewing how this commentary should take place. The first example, citing Dominick LaCapra's emphasis on the "dialogical connection between past and present", how the past is discussed in relation to the present.[150] One such approach forwarded by Joan Scott, is striving for a deeper understanding of "categories of identity" and their construction, introducing the idea of discussing labels of practices, systems and structures that has bearing on the present.[151] The important part, Pihlainen points out, is that history is significant because it "limit[s] and refute[s] interpretations" and establishes a connection to the past in a discursive sense.[152]

The final point I wish to extract from Pihlainen's chapter, is the communicative angle and the question of how to view the reader. Furthermore, he addresses the "reading contract" in an ideal, rather than a commercial context. The idealized "reading contract" involving an expectation of trust and an attempt at understanding on the part of the reader. This contract is not just about passive reception, it anticipates active engagement by part of the reader. It implies an audience that will read with a level of trust and effort of understanding, rather than purely theoretical scrutiny. This trust, however, does not include objections or critiques concerning empirical data or interpretations of events, those kinds of challenges are seen as essential – they lay the foundation for a space where such a trust can exist. The limit of this contract is regarding abuse of trust, the historian must not mislead the reader or distort facts, and the reader should refrain from unfounded critiques that might allege such misconduct without basis.[153] The opposing viewpoints that Pihlainen puts forward of how to write for a certain kind of reader, as more or less active or able: on one side is Keith Windschuttle's view

---

[149] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 65.

[150] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 67–68; Dominick LaCapra, *History, Politics, and the Novel* (Ithaca, NY: Cornell University Press, 1987).

[151] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, *The Engaged Historian*, 68; Joan Wallach Scott, *Gender and the Politics of History* (New York: Columbia University Press, 1988).

[152] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, *The Engaged Historian*, 68.

[153] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 70.

from *The Killing of History* which he sees as "docile and unreflective consumers of text" and on the other side, is Hayden White's view from *Figural Realism* where he sees the reader as able to critically engage with historical representations.[154] Windschuttle is regarded as a champion of traditional representational strategies while White suggested the use of "anti-narrative non-stories" and "postmodern parahistorical representations."[155]

Pihlainen points out how historians need to recognize their impact on shaping public perceptions of the past. A need to figure out how historians view their role in the dialogue between the past and the present, a critically self-aware historian who is accountable for interpretative choices and the broader implications of their work.[156] An opening for a discussion about the very representational strategies being used, along different axis than *just* what is true or not and to what extent. He discusses the spectrum of possible historical narrative approaches, underscoring the need to avoid either extremes that either alienate or oversimplify while creating a narrative space that encourages active and critical engagement from readers. Both the extreme detachment of 'pure data' or the extreme of artistic manipulation may fail to meet the needs of readers who seek answers from what they read.[157] Historical narratives should not only inform but also empower readers, providing them with the tools necessary to interpret and utilize historical knowledge in meaningful ways that are relevant to their lives.[158] To achieve this, would involve a balance between the above mentioned factors, that takes into consideration the communicative relationship with the reader.[159]

Merely emphasizing empirical data, or minimizing interpretation is inadequate for counteracting what Pihlainen calls "the harmful effects of representation."[160] Traditional methods of structuring historical narratives and providing closure often impose specific interpretations that can solidify certain ideological positions.[161] But abstaining from dealing

---

[154] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 71–72; Keith Windschuttle, *The Killing of History: How Literary Critics and Social Theorists Are Murdering Our Past* (New York: The Free Press, 1996); Hayden V. White, *Figural Realism: Studies in the Mimesis Effect* (Baltimore, Ma: Johns Hopkins University Press, 1999).

[155] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, *The Engaged Historian*, 71–72.

[156] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 72.

[157] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 72.

[158] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 72.

[159] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 72.

[160] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 74.

[161] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 74.

with subject matter that resonates with concerns, experiences, or interests of the readers can fail to motivate or be of any practical use, so avoidance in this sense, is not a strategy for escaping the previously mentioned harmful effects.[162] Providing interpretation through aesthetic or ethical lenses makes history not just informative, but also emotionally and morally engaging, as opposed to facts alone devoid of any interpretative framework are likely to only interest those with an "antiquarian" interest in history.[163] The need to provide answers to the reader with clear narratives and definitive conclusions, does perhaps cater to the readers wants and needs, but it could need balancing.[164] The tendency of conventional forms of history to align with conservative values and reinforcing existing power structures and ideologies with the goal of it being nicely packaged and sold, can make history more marketable but potentially at the cost of depth of engagement.[165] Here Pihlainen takes inspiration from Jean-Paul Sartre's idea of "committed literature" and argues for a historiography that is actively engaged with contemporary issues and consciously aimed at having a social impact.[166] What he calls "prescriptive content," not just descriptions of past events, but also insights, critiques, and potential guidance on how to address contemporary issues, aligning with the goal to make history help both with knowledge of the past, as well as understanding of the present.[167]

His concluding remark is that of outcome: "histories either continue to serve the status quo or they become vehicles of change…" expertly put, by aligning with the same foundation noted by Rüsen – as detailed earlier – that historical debates are fundamentally political, he highlights the power of history not just to reflect but also to shape societal norms and values.[168] Furthermore, by moving beyond the mere factual accuracy of historical accounts, the trust readers place in historians is not solely based on the epistemological assertion that "this is true," instead, it suggests that readers engage with history not just to learn what happened, but to understand why it is presented in a particular way.[169] This trust is based on the historian's good intentions and their commitment to generic standards, readers expect

---

[162] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 74.

[163] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 74.

[164] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 74.

[165] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 74.

[166] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 74; Jean-Paul Sartre, *What Is Literature?* (New York: Philosophical Library, 1949).

[167] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, *The Engaged Historian*, 74.

[168] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 75–76.

[169] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 75–76.

historians to be aware of the implications of their narratives and to strive for honesty and integrity in their interpretation and representation of the past.[170] This means that historians should consciously select their methods to meet their ethical and scholarly goals, it is necessary to ensure the integrity of historical writing as well as fulfilling the need to shape public understanding of the past.[171]

---

[170] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 75–76.
[171] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 75–76.

Chapter 1: Narrative Representation

Tropes

For understanding the operations by which the contents of experience which resist description in unambiguous prose representations can be prefiguratively grasped and prepared for conscious apprehension.[172]

In this part I will analyze each book in regard to its tropological mode of representation. I will divide the analysis of each book into title and content. Looking at it both from the outside and the inside, so to speak. My explanation for the trope of the title is threefold. Firstly, by splitting the title into its two main parts, reading the title first and analyzing it. Secondly, reading the sub-title separately. Thirdly, and finally, reading the title and sub-title together as a whole. Afterwards, reading the content of the narrative to find any coherence or deviations.

Killing for coal

The title *Killing for Coal* reads as Irony because of the absurd nature of the phrase.[173] One usually does not kill for coal; one mines for it. As a reader, you would be led to believe that the people in this story kill each other to obtain coal for themselves, in some sort of highway robbery. At least read separately from the sub-title. The second part, the sub-title *America's deadliest labor war*, can be read as a metaphor, as a simile to the American civil war.[174] Because the overt use of the term 'war' as in two opposing clearly defined sides fighting each other, as well as the prefix 'labor' fixing our attention to the fact that at least one side of the fighting is done by workers, and by implication, the other side by corporations. Thus, giving us the 'civil' part of the civil war reference, citizens fighting each other. When read separately, one could form the image of miners and mine-bosses warring with each other over a bag of coal, which is intriguing enough by itself. When read together, we get the better understanding of a labor war over the process of mining the coal instead. The mining process, the labor relations, the unintended consequences, and the environmental damages, all form the picture of a story told through metaphor.

---

[172] White, *Metahistory*, 31.
[173] Andrews, *Killing for Coal*.
[174] Andrews, *Killing for Coal*.

Secondly, how does the trope on the outside of the book fit with the inside of the book? Which story elements fit with the book as irony? Which story elements fit with the book as metaphor? *Killing for Coal* read as irony would be supplemented by the inherent flaws of the dream of "Coal-Fired Benevolence" of chapter one, the dark underbelly of "the New Industrialism" of chapter two, and the futility of "Riding the Wave" of chapter three.[175] As I will outline, the events included in the narrative are told in irony by the fact of undermining and exposing an original narrative, combating it with the harsh realities of the different worlds of experience between capital and working class. With the original narrative of a better future without conflict, clean air, and an abundance of electrical power, best summed up with a quote:

> *To Palmer, his interlocking visions held the promise of a better society, where business would be more profitable, human interactions with the natural world more harmonious, and relationships between capitalists and workers more amicable than in the eastern states and Europe.*[176]

Following up this original narrative with its eventual realization of, in many aspects, the complete opposite of the original dream. Wreaking the environment, putting workers through dangerous working conditions, and more, that all led to a labor conflict which scale has never been seen in the United States. As it turned out it was one thing to envision paradise, and quite another to bring it about.[177]

Killing for Coal read as metaphor would be supported by the "Civil War, Red and Bloody" of the introduction, and the "Battle Cry of Union" of chapter seven.[178] As I will outline, the events included in the narrative are told in metaphor by the fact of simile to the American Civil War in its content and its analogy to Labor War. "[…] the deadliest, most destructive uprising by American workers since Southern slaves had fought for their emancipation during the Civil War."[179] For the analogy of labor war, we can read about the workers organizing on one side, and capitalist repression on the other.[180] Read in this way we can see that the events within the book, is told through the trope of metaphor, and it is wrapped in the trope of irony. The art, then, is being able to read the narrative as it is told, and at the same time

[175] Andrews, *Killing for Coal,* chap. 1,2,3.
[176] Andrews, *Killing for Coal,* 49.
[177] Andrews, *Killing for Coal,* 49.
[178] Andrews, *Killing for Coal,* chap. Introduction, 7.
[179] Andrews, *Killing for Coal,* 14.
[180] Andrews, *Killing for Coal,* 234–35.

understanding the tone. The pervading tone of exposing the misunderstandings and misconceptions of the start of the narrative.

Mass Destruction

First of all, to explain the trope, we start with the title: *Mass Destruction* which tells us one story.[181] Secondly, the sub-title: *The men and giant mines that wired America and scarred the planet*, which tells us a bit more.[182] As with the previous book I will divide my analysis into three parts, one for the title, one for the sub-title and lastly read together. I will argue that the title of this book, in contrast to *Killing for Coal*, doubles down on its messaging. As *Killing for Coal* specifies the irony with a metaphor, *America's deadliest labor war, Mass Destruction* doubles down on its statement of metonymy.[183]

Mass Destruction, then, it does not tell us much about the historic period itself, neither where nor when.[184] What you can take from it is that whatever piece of the past you are going to read about, it sounds dramatic and you can steel yourself for something being destroyed, *en masse*. On its own, it says little in the way of concrete historical commentary. What it does tell us, is a view that says: "in this period described in this book, one central theme was *Mass Destruction*", which I will take to read as metonymy. In other words, the scale of the destruction in this historical period is an ongoing inherent part of it.

The Men and Giant Mines that Wired America and Scarred the Planet, however, does tell us a bit more. To spare the word count, I will simply refer to it as 'the subtitle'.[185] It tells us about four main characters, or objects of study: 1) the men, 2) the mines, 3) America and 4) the planet. The active participants, the men, and the giant mines. And the passive, acted upon, America and the Planet. From this little piece of information, we can gather that there once were some men that wired America, additionally, they created mines and scarred the planet. Reading this subtitle on its own, you get an idea of the period as one where some men dug holes in the ground that ended up scarring the planet, in the pursuit of wiring America. Yet again, you can see the metonymy. Finally, read together the title and the subtitle: a historical period of large-scale destruction where men dug large holes in the ground pursuing the hope

---

[181] LeCain, *Mass Destruction*.

[182] LeCain. *Mass Destruction*.

[183] Andrews, *Killing for Coal*; LeCain, *Mass Destruction*.

[184] LeCain, *Mass Destruction*.

[185] LeCain, *Mass Destruction*.

of finding the resources necessary to wire a continent, and ended up scarring the planet. Not commenting on the actual historical content itself, just the literary aspect, we have some idea of what we can expect from this book. It shores up its description of the historical period within the book's pages.

Secondly, how is the trope on the outside of the book supported by the content within? Which story elements supports the view of this period as metonymy? Or should it even be read as one? Could there be a layer of irony hiding within its pages? I will analyze the events described and sort out the ones central to the narrative. First of all, each chapter tells of a different piece of the puzzle to understand the whole narrative. In chapter one, "In the Lands of Mass Destruction" tells the story of how the original narrative of a good versus evil battle, is too simplistic.[186] Is it to be understood that the original title of this book is to be read as irony? Is there something missing that makes the original narrative, as well as the title of the book, subversive in some way? LeCain explains: "This other story that needs telling is one of arrogant overconfidence more than deliberate malice, of difficult trade-offs more than moral absolutes, about shared guilt rather than convenient scapegoats."[187] It would indeed seem to be the case. All of a sudden, our expectations from before have been subverted. What looked like a book about the destructive nature of man seeking the betterment of life, turns into a stern look upon the air of certainty that surrounded the ideas of this period. An ironic view of the idea of separateness of nature and technology, with a focus on the more or less unintended consequences of their actions.[188]

The issue of complexity returns again a few pages later, telling about unintended consequences, and how "Both the natural and technological systems … proved far more complex than imagined, prone to unanticipated reactions and consequences."[189] LeCain gives us some examples: "Simplified monocrop forests collapsed. Smog choked the life from cities. DDT killed songbirds and turned up in mother's milk."[190] Finally, LeCain touches upon the major vein of this book's statement:

---

[186] LeCain, *Mass Destruction,* 18.
[187] LeCain, *Mass Destruction,* 18.
[188] LeCain, *Mass Destruction,* 18.
[189] LeCain, *Mass Destruction,* 20.
[190] LeCain, *Mass Destruction,* 20.

Given the many potentially harmful effects of the dichotomous view separating the natural and the artificial, the ecological and technological, any effective analysis of environmental and technological history must take pains to avoid validating this modernist illusion.[191]

In other words, this book argues an ironic view of the original narrative. By explaining the harmful effects, or in some cases side effects, that are inherent even in the best-intentioned historical actors. To sum up, LeCain poses the central question of his book as follows: "how did the historical forces unleashed during the past century produce such radically scarred and transformed landscapes? The answer lies with Daniel Jackling and the invention of mass destruction technology during the twentieth century."[192] Here LeCain explains that the forces of large-scale destruction fitting with the reading of metonymy still very much plays a central part, but that it is to be understood through irony, because of earlier, too simplistic, interpretations of this period.

Power Lines

As with the two other books I will analyze the title and subtitle separately at first before reading them together. *Power Lines* can be read in two different ways: 1) the copper wires that transport electrical power and 2) lines of political power.[193] It could be read as a metonymy, or a name change, there could be something literal about power lines that functionally characterize this period. Read in another way, more specifically as a synecdoche, *Power Lines* explain an inherent quality in this period of time, a value laden quality.[194] It does little to explain where and when the narrative within the book is taking place, but we can roughly guess that it is after the discovery of electrical power and the copper mining industry's contributions to make possible an electrical grid system.

Secondly the subtitle, *Phoenix and the making of the modern southwest*, explains where and roughly when the narrative takes place.[195] It focuses on Phoenix and the region of the United States called the southwest. The period is the making, or creation and development of this region. More specifically, the modern era iteration of it. Giving it a value laden prefix. The subtitle is not as hard hitting as the previous two books, but at the very least it can be read ironically. There is something missing from this 'making' that we will have to read the book

---

[191] LeCain, *Mass Destruction,* 21.
[192] LeCain, *Mass Destruction,* 23.
[193] Needham, *Power Lines*.
[194] Needham, *Power Lines*.
[195] Needham, *Power Lines*.

to find out. Read together, then, *Power Lines – Phoenix and the making of the modern Southwest*.[196] What we can gather is that there could be two important factors in the making of this modern southwest: 1) Power lines that transport electrical power and 2) power lines that map out the political power of the region. In some ways yet to be uncovered, by the reading of the book, in the creation and development of the modern southwest, the transportation of electrical power as well as the mapping of the political power of the region is important. The trope of the title, then, presents as synecdoche.

Which events would support the assumption of this book as a synecdoche? Or should it be read differently? There are a few indicators to take into account. Firstly, power production was located in rural areas and transported into metropolitan areas.[197] Secondly, the burden was also placed upon the environment and the people living in these rural areas, at the same time the material profits were only seen in the metropolitan areas.[198] Finally, this example of the development of the modern age can be viewed all over the world.[199] The events within the book, then, views the original modern progression ironically. It says, yes, we did get electrical power, air-conditioning and refrigerators, but at what cost?[200]

Emplotment

To get an understanding of the emplotment of the history, I will explain by sorting the events of each book into their role of inaugural, transitional and terminating events. When we know which parts of the history form which part of the narrative, we can sort it into what kind of narrative it forms.

Killing for Coal

The inaugural events in *Killing for Coal* are formed by the events explained in the following chapters: Chapter 1, 2, 3 and 4.[201] The book tells the story in a non-linear fashion, so the inaugural events are spread out in a time-scale sense. As they have differing distances

---

[196] Needham, *Power Lines*.
[197] Needham, *Power Lines,* 7–8.
[198] Needham, *Power Lines,* 8, 17.
[199] Needham, *Power Lines,* 257.
[200] Needham, *Power Lines,* 18–19.
[201] Andrews, *Killing for Coal*, chaps. 1–4.

to the main conflict of the narrative, they also inform the tension of the transitional events in different ways. The inaugural events in this case, to compare an old epic, is where the local King gets a message that a rival kingdom is massing troops on the border preparing for war. You can tell there is a conflict coming, but the King has not moved yet, he has only been informed of the circumstances.

In chapter 1 "The Dream of Coal-Fired Benevolence," we are introduced to one of the main characters, so to speak, William Palmer and his dream of a better future powered by coal.[202] A new world utopia where the business of extracting and burning coal would provide happiness and sustenance for workers to such an extent that it would bring about the end of the sort of sour labor relations that was typical in this type of industry, on top of making the capitalists very rich indeed.[203] Chapter 2 "The Reek of the New Industrialism" exposes the flaws of the original dream, or fantasy as Andrews puts it.[204] Pointing out that the proposed new system only seemed to copy the same effects as the old, wreaking havoc on the environment, keeping mine workscapes dangerous places to occupy for any period of time, and last but not least, retaining the class conflicts which Palmer thought he could avoid.[205] Chapter 3 "Riding the Wave to Survive an Earth Transformed," points out three main issues: 1) Colorado's dependence on coal, the "earth transformed" 2) Workers migrating from all over the world to find prosperity, and 3) the realization that working conditions in the US were just as bad as the ones they left.[206] Firstly, the introduction of a coal-powered energy-economy made the region heavily dependent on it for regular function.[207] Secondly, workers seeking a better life, reasons ranging from worsening environmental conditions of their homelands, escaping local tyrants or plainly looking for better compensation for their labor.[208] Thirdly, realization of the bad conditions in the US, they found that many of the conditions they travelled so far to escape had found a place in this new strange land as well.[209]

Chapter 4 "Dying with their boots on", points out the dangers of working in coalmines at the time.[210] Andrews writes about the horrible, explosive, nature of mine disasters.

---

[202] Andrews, *Killing for Coal,* chap. 1.
[203] Andrews, *Killing for Coal,* 48.
[204] Andrews, *Killing for Coal,* chap. 2.
[205] Andrews, *Killing for Coal,* 49.
[206] Andrews, *Killing for Coal,* chap. 3.
[207] Andrews, *Killing for Coal,* 84–85.
[208] Andrews, *Killing for Coal,* 96–97.
[209] Andrews, *Killing for Coal,* 120.
[210] Andrews, *Killing for Coal,* chap. 4.

Explosions and fires, exacerbated by the layout of the mine as well as the many primitive technologies that were being used in the mines, led to disasters where, "[…] most would die with their boots on."[211] The horrible results described, needs hardly be repeated here. Anyone who has watched a Quentin Tarantino movie could imagine the outcome. Furthermore, detailing the scale and frequency of these accidents and dangers: "the association between violence and the Wild West appear curious, even negligent."[212] This first part has collected four different inaugural events: the dream, or fantasy of coal, the eventual realization of the flaws of the fantasy, the changing world and the migration of workers and finally the deadly life of a coal miner. One could argue that the changing world and the migration of workers can be seen as two separate entities, but in reading this history I find it more coherent to read them as two parts of one whole. It tells the story of how differing events and episodes form the start of a narrative by coming together and heating the tension of the main conflict in this history. Returning to the old King, the letter has arrived at court and it is now up to the King to decide his course of action.

The transitional events of this book are detailed in chapters 5 and 6.[213] These chapters tell of how the miners started to act upon their lot in life in an attempt to improve it.[214] On the other side, the corporations responding in an attempt to shut down the movement entirely.[215] The King, played by the Colorado coal miners in this case, has gotten word of the troops massing on his border and that he needs to act. In other words, the world the miners moved into trying to create their own luck, has them struggling to survive underground and they decide to do something. The King decides to rally his troops. In chapter 5 "Out of the depths and on to the march," Andrews writes about how the coal miners went on strike and marched across the state to try and convince others to join their cause."[216] Their immediate success looked bright at first. With their numbers swelling it would seem like their victory would be short at hand.[217] This, sadly, seemed not to be the case, however: mineworkers in other fields to the north and in the Midwest made separate strike resolutions, because of the lack of unity and coal production back on the rise, the prospect of creating a fuel shortage was looking

---

211 Andrews, *Killing for Coal,* 122–23.
212 Andrews, *Killing for Coal,* 123.
213 Andrews, *Killing for Coal,* chaps. 5–6.
214 Andrews, *Killing for Coal,* 157–58.
215 Andrews, *Killing for Coal,* 197–98.
216 Andrews, *Killing for Coal,* 157.
217 Andrews, *Killing for Coal,* 191.

bleak, and the strikers were facing starvation if the strike did not end soon.[218] The only tangible gains were the reinstatement of regular pay. Returning to the analogy of the old king, the King gathered his troops, and he watched on as the first skirmishes fell to defeat. He recognized that to be successful in the future he had to up the ante and employ more fierce tactics. The opposing kingdom, however, did not rest on its laurels and pressed its advantage in the hope of serving a knockout punch. Chapter 6 "The Quest for Containment," details the corporate response to the marching strikes.[219] Taking inspiration from the closed camp system, the mine operators adopt the system of corporate paternalism to try, once and for all, to suppress unionization efforts and strikes. Andrews writes about the mine operators: "The operators had successfully repulsed the miners' mobilization, without granting the United Mine Workers any of its demands."[220] The mine operators, motivated by profit after feeling the hurt put on by the strikes, "[…] hundreds of thousands more in lost revenue. John. C. Osgood and his counterparts realized that they might easily have lost the strike."[221]

Using the example of unions as an infection, coal camps were seen as the organism that needed protection from infection, or unionization.[222] The big coal companies spent their efforts trying to boost immunity by changing the infrastructure of the company towns, store, school, home, and club each had its own role to play in the operators' efforts to eradicate the underlying causes of industrial conflict."[223] Especially emblematic of this suppression of the company town system, was the company store. Lyricized by Johnny Cash in Sixteen Tons, the scrip system enforced a sort of never-ending debt system.[224] When miners' payroll did not make ends meet and households found it increasingly hard to pay the bills, the companies found an ingenious solution: the scrip system, "paper certificates deducted from the next month's pay envelope."[225] As anyone can probably tell, if one month's pay does not cover one month's living and next month's pay is further reduced, the miners would eventually find themselves in a downward spiral that would essentially force them into debt. The final nail in the coffin for this scrip system was that it was a closed loop system where the scrip was only

---

[218] Andrews, *Killing for Coal,* 194–95.
[219] Andrews, *Killing for Coal,* chap. 6.
[220] Andrews, *Killing for Coal,* 196.
[221] Andrews, *Killing for Coal,* 196.
[222] Andrews, *Killing for Coal,* 217.
[223] Andrews, *Killing for Coal,* 217.
[224] Johnny Cash, vocalist, "Sixteen Tons," by Merle Travis, recorded January 13 1987, track 6 on *Johnny Cash Is Coming To Town*, Mercury, compact disc.
[225] Andrews, *Killing for Coal*, 220–21.

redeemable in company owned stores if the miners wanted full value for the returns of their labor.[226] Andrews ends the chapter by foreshadowing the next part, the terminating event: "When the next strike inevitably came, opposition to company towns and the "peonage" they represented would fan the flames first of resistance, then of rebellion."[227] Returning to the old King, on the defensive and having to strike back in strength to have any hope of winning the day.

The terminating event of this narrative we find in both the introduction as well as in the final, chapter 7.[228] These two chapters detail the events that perform the role of terminating the main conflict that has been rising from the start, convalescing in bloody conflict reminiscent of the American Civil War. Starting with an attempt at diplomacy instigated by the governor, Ammons tried to get all the parties involved talking to each other to try and conclude the conflict.[229] Ironically perhaps, after the mine corporations refused to listen to the miners' complaints at any point earlier. The results of the conference were eerily similar to any previous attempts at talking. Even if the mine operators accepted that some of the miners' demands were legitimate, they were of the persuasion that they had all the power and all the leverage, and did not need to concede any grounds.[230] After the talks, Ammons proposed a settlement that followed almost all of the corporations' suggestions, and did nothing to alleviate the problems miners faced at work every day."[231] When the striking miners refused, essentially the same terms they were already striking against, the governor was not pleased, and doubled up on his support for the corporations. He ordered the General of the state militia to intensify arrests of strike leaders, which resulted in the incarceration without charge for several union men.[232] Additionally Ammons made it easier for the corporations to import strikebreakers.[233]

After what Andrews calls "A single mysterious gunshot" started the fighting at the Ludlow tent colony, the striking miners resisted the best way they could think of, by trying to lead the militiamen away from the colony to spare the colony itself, but unfortunately this left

---

[226] Andrews, *Killing for Coal,* 220–21.
[227] Andrews, *Killing for Coal,* 232.
[228] Andrews, *Killing for Coal,* chap. Introduction, 7.
[229] Andrews, *Killing for Coal,* 258.
[230] Andrews, *Killing for Coal,* 266.
[231] Andrews, *Killing for Coal,* 266.
[232] Andrews, *Killing for Coal,* 266–67.
[233] Andrews, *Killing for Coal,* 266–67.

the camp at the mercy of the soldiers.[234] After the camp went up in flames, the striking miners went on the offensive and waged war upon the corporations that had oppressed them for so long.[235] The Ludlow massacre served as the initial battle of this labor conflict turned worker rebellion. The strikers found that their funds were running out and that they could not prolong the fighting.[236] The mine operators on the other hand could, they had massive reserves of wealth extracted from the surplus labor value of the striking miners.[237] The battles were costly for both sides, but the struggle remained futile as it did nothing to improve the working conditions in the mines.[238] People were thrown out of their homes, left holes in the lives of family-members.[239] After it was all said and done, not much changed for the ones that were able to return, but even if the companies had different heads, "[…] like John Osgood and William Palmer before them, the Rockefellers held to a vision of Western industrialism that left workers no real place on the land."[240]

In the end, the old King lost the final battle to the invading forces, despite his best efforts. At a great cost to manpower and civilians, the invaders leave mostly intact. A tragic tale, all taken into account. The main conflict being resolved with a defeat, and a return to the same, with the realization that to manage such a fight, strikers needed to adopt fierce and thorough tactics. Meanwhile realizing that the mine operators held the advantage from a systemic point of view, especially when considering the governor essentially running the errands of the corporations by allowing them to import strikebreakers, and only focusing on the resolution of violent conflict and not working conditions.

Mass Destruction

In the beginning of this narrative, in terms of the chronological order of events, we find an extraction industry that was struggling to keep up with demands.[241] The people putting their money into these massive projects wanted a way to make sure that their investments would

---

[234] Andrews, *Killing for Coal,* 272–73.
[235] Andrews, *Killing for Coal,* 272-273,276-277.
[236] Andrews, *Killing for Coal,* 282.
[237] Andrews, *Killing for Coal,* 285–86.
[238] Andrews, *Killing for Coal,* 285–86.
[239] Andrews, *Killing for Coal,* 285–86.
[240] Andrews, *Killing for Coal,* 285–86.
[241] LeCain, *Mass Destruction*, 120–21.

give them a return.[242] Earlier work depended on either "blindly following an ore seam" and hoping it was big enough or doing "dead work", a process of digging shafts and tunnels to measure out the scale of the ore, mostly unfounded, and giving little back in terms of monetary value."[243] As a general of olden times might send a scouting party or advanced skirmish party, they in and of themselves would not decide the battle, but they could measure out the size of the enemy. In the same way, "dead work" was a scouting mission to see if there were any ore worth digging up. The downside of this process, obviously, is that if you spent a lot of time and effort digging these shafts and tunnels and it turned out that there were not enough valuable ore to start a mining operation, the operator was money out of pocket, essentially running a deficit even before the mining process started.

Another problem, in fact a dual problem, presented itself when the mining process had already begun. Namely, the problem of "too much water and not enough air."[244] They found that the deeper the mines went, the less breathable air flowed and under a certain depth, they were bound to stumble across groundwater that would flood the mines. To parry this problem of flooding, mine operators like Marcus Daly, installed powerful and expensive pumps to allow mining at lower depths.[245] Another problem was in air quality, the fine dust made from breaking rocks underground had nowhere to go, and would often end up in the lungs of the miners.[246] To solve this problem, a Belgian professor developed a "breathing apparatus" that would feed "a stream of oxygen from a pressurized tank to a head mask, while the wearer's exhaled breath was recycled…"[247] Downstream of these "natural" problems were the subsequent "technological" ones. If these technological systems were the only thing keeping the miners alive in otherwise deadly environments, what would happen if they malfunctioned? Small breakdowns were not that dangerous, but they could be frequent and irritating, contrastingly, larger breakdowns or systemic collapses could mean the rapid and painful death of numerous miners.[248]

At this point in the narrative, the reader is presented with a sort of game of musical chairs. Mine operators try to dig holes in the ground and stumble upon a problem. They then

[242] LeCain, *Mass Destruction*, 43.
[243] LeCain, *Mass Destruction*, 43.
[244] LeCain, *Mass Destruction*, 44.
[245] LeCain, *Mass Destruction*, 44.
[246] LeCain, *Mass Destruction*, 45.
[247] LeCain, *Mass Destruction*, 45.
[248] LeCain, *Mass Destruction*, 49.

find a solution to this problem and keep digging further down where they find another problem. They then solve that problem as well, but this time their problems do not stop with the natural obstacles and barriers, but with the limitations of their own devised solutions to their earlier problems. A never-ending cycle of problem-solution sprinkled with solution-malfunction that in itself could be just as deadly as the original problems. Exemplified with "the Speculator mine disaster" LeCain explains how interlinked and vulnerable they were, electrical cables that was needed to power all sorts of digging and safety equipment – such as ventilation fans - was insulated with oil to avoid water-related electrical shorts, but as you can imagine, any sort of fire had now the perfect conductor to spread both far and wide through the mine at rapid speeds.[249] That is exactly what happened with the Speculator mine disaster, when the mine caught fire, the ventilation system blew air into the fire which in turn carried toxic fumes downwards into the mine.[250] All of the problems underneath the earth were not all, however, and the problems of mining and refinement continued above ground.

First of these problems, smoke pollution from the refinement process, as LeCain explains, was approached with the same optimism as the problems underground.[251] The scientists of the day had an "uncritical faith" in their ability to unproblematically solve any sorts of problems, and so they approached the problems above ground as they had below.[252] In other words, they continued to hold the belief that these problems they created in the search for more copper ore was possible to solve using technology, inspired by their confidence gained by problem-solving underground. The solution to the problem of pollution is described in the next chapter "The Stack."[253] Focusing on the attempted technological fixes rather than the attempts at paying compensation or simply shutting down production, we arrive at two technologies: filters and precipitators.[254] The first attempt at a technological fix was the flue and smokestack system: they installed a 2,300 foot tall smokestack to allow the heavier particles to cool off and drop back down again, instead of being released into the atmosphere.[255] The problem with this system was that it did not work: "within less than a decade it would be readily apparent even to the Anaconda that the new stack and flue had not

[249] LeCain, *Mass Destruction*, 51.
[250] LeCain, *Mass Destruction*, 51.
[251] LeCain, *Mass Destruction*, 55.
[252] LeCain, *Mass Destruction*, 55.
[253] LeCain, *Mass Destruction*, chap. 3.
[254] LeCain, *Mass Destruction*, chap. 3.
[255] LeCain, *Mass Destruction*, 72.

adequately contained the smoke pollution problem."[256] To minimize sulfur dioxide gas pollution, the "Tennessee Copper Company arrived at a … system for their ores that converted the sulfur dioxide gas into sulfuric acid."[257] To reduce pollution of particles, arsenic etc. "the smelters also added "bag houses," as a relatively simple (though costly) technology that captured much of the arsenic pollution in the fibers of long woolen bags."[258] What then, would be the solution to this problem of finding ore that is bountiful enough to warrant a mining operation and at the same time reduce the time and cost of dead work?

The transitional event in this narrative, when the yield and speed of the old mining process was deemed insufficient for the quantities demanded by the consumers and producers alike. When Daniel Jackling arrived at the Bingham mine in Utah, he had his mind set on changing the extraction industry, wanting to turn an industry that only valued high yield ore, to one that was able to take advantage of ore as low as 2 percent purity.[259] "Jackling's previous mining experience, his grasp of the economics of high-speed throughput production, and an intense desire for wealth and success made him different. Where others saw only worthless rock, Jackling thought he saw a fabulous copper mine."[260] With our historical agent identified, what is then the narrative catalyst for this massive change? The "Copper Famine" was a period of time in the US where the production of copper was tailing the increasing demand for it.[261] The problem, caused by two main factors. "The existing high-grade copper mines could no longer keep pace with demand. Worse, there seemed to be little prospect of discovering any new ones."[262] The old way of mining copper - "For more than half a century, American copper mining had been like a giant national treasure hunt. The discovery of a fabulously rich ore deposit was the most important thing." – was not keeping up with demand, and as with the dinosaurs, would have to adapt, or essentially run out.[263] To remedy this problem of only being able to reliably, and profitably, mine high-grade copper deposits, Jackling proposed a solution: "not only a new type of mine but a wholly new way of running the American mining industry."[264]

---

[256] LeCain, *Mass Destruction*, 74.
[257] LeCain, *Mass Destruction*, 75.
[258] LeCain, *Mass Destruction*, 76.
[259] LeCain, *Mass Destruction*, 112–13.
[260] LeCain, *Mass Destruction*, 112–13.
[261] LeCain, *Mass Destruction*, 121.
[262] LeCain, *Mass Destruction*, 121.
[263] LeCain, *Mass Destruction*, 123.
[264] LeCain, *Mass Destruction*, 124.

When starting out, Jackling had to prove his concept, an expensive venture that needed substantial backing if it were to ever be brought to life, "Fortunately, the impending fears of a "copper famine" were now beginning to work in his favor."[265] With finance secured, "the deep financial resources of the Guggenheim family now at his disposal, Jackling began making the giant open-pit mining operation he and Gemmell had envisioned in 1899 a reality." Not only did the open-pit mining begin, it also produced – "more copper … than humans had "used in all the ages since the first cave man picked up the first copper pebble."[266] Mass Destruction had arrived:

"Of course, scale was important, but equally significant was the related matter of speed, or what the brilliant business historian Alfred Chandler later called "throughput." Just being big was not enough. The real trick lay in being fast. In this need for speed lay the roots of mass destruction."[267]

The contemporary period, so to speak, of this revelation of mass destruction could be recognized in other industries as well. The first point of comparison is with Henry Ford's mass production techniques.[268] However, they differed in some important ways, both resulted in production of a commodity, but only Jackling's mass destruction demanded rending the earth to such a scale.[269] The false dichotomy between "natural" and "not natural" became clear when viewed like this, "[…] Jackling's mine was itself an immense natural factory of mass destruction."[270] It was in fact not separate, it was very much part of nature, "In Jackling's system, nature itself was a factory carved out of natural stone and intimately associated with the fused environmental and technological systems used to create and operate it."[271] Finishing off the terminating event of this narrative we find the aftermath of mass destruction, its many new problems.[272] About areas close to the production of copper, the Washoe smelter and the Berkely Pit in this case, "[…] the creation of two massive "dead zones," areas of such intense environmental exploitation that the technological overwhelmed the ecological and rendered the landscapes nearly sterile."[273] A story of fall to a condition worse off than at the start of the narrative. A tragedy of the environment.

---

[265] LeCain, *Mass Destruction*, 126.
[266] LeCain, *Mass Destruction*, 128.
[267] LeCain, *Mass Destruction*, 128–29.
[268] LeCain, *Mass Destruction*, 131.
[269] LeCain, *Mass Destruction*, 132.
[270] LeCain, *Mass Destruction*, 132.
[271] LeCain, *Mass Destruction*, 131.
[272] LeCain, *Mass Destruction*, 171.
[273] LeCain, *Mass Destruction*,180.

Power Lines

Chapter 1 "A Region of Fragments" tells the story of the southwest and how it developed from a cluster of fragments into an interconnected region grounded in power lines and their unequal distribution."[274] In "Energy's Past" Needham explains how coal formed under the land that would later fall under the Navajo reservation that would eventually provide for the power production industry of the region.[275] In "Empire" Needham writes about the building of the Boulder dam and the usage of the power it produced. He points out how the power produced by the dam was to be used mainly in "metropolitan" areas, far away from its rural origins.[276] About the Navajo, Needham explains how they went from subsistence farming in relative seclusion towards a more centralized, governable part of the US, taking advantage of goat and sheep herds to sustain themselves independently from the federal government, and using coal and wage labor as needed to supplement income diversity.[277] In an effort to modernize and centralize the Navajo, the BIA commissioner John Collier reinstated the tribes rights of freedom of religion and urged them to adopt a form of central government, in an effort of including them in the economy of the surrounding states.[278] Collier spoke to the tribal council and proclaimed: "You can't govern yourself, you can't do business, you can't protect yourself, unless you organize."[279]

This centralization culminated in an effort by Collier to reform tribal government, he made a "revolving loan fund", reoriented educational strategies to help "equip and Indian to hold any position in the Indian service…"[280] The conflicting interests of state, federal and tribal governments and agencies would press a question upon the Navajo leaders: "Should Navajo leaders aim for autonomy, … or should they attempt to connect to the broader economy of the Southwest,… Tribal leaders would have to face this question, because the subsistence economy, by the late 1930s, had cracked", foreshadowing events yet to come in the narrative.[281] Chapter 2 "The Valley of the Sun" and chapter 3 "Turquoise and Turboprops"

[274] Needham, *Power Lines*, 52.
[275] Needham, *Power Lines*, 27.
[276] Needham, *Power Lines*, 34.
[277] Needham, *Power Lines*, 44–45.
[278] Needham, *Power Lines*, 46.
[279] Needham, *Power Lines*, 46.
[280] Needham, *Power Lines*, 49.
[281] Needham, *Power Lines*, 50.

tells the story of increasing population and an increase in demand for electrical power needed to fuel the region's industry.[282]

> *While the federal policies that created a local economy dependent on ever increasing levels of residential growth might turn the house into a commodity to be exchanged, the material infrastructure that surrounded and supplied that house did not adjust. It remained fixed in place to supply the seemingly ever-increasing level of demand within which the house was embedded.*[283]

In a combination of population growth, new buildings and the increasing electrification of the modern lifestyle, power consumption soared.[284] Secondly, the need for power to fuel the boom in the "clean" industries of the region.[285] Returning to the issue of what 'clean' industries mean, the power it drew is the most important at this point. Needham foreshadows the future of this combination of industry and population boom: "By the early 1960s, that combination of industrial demand and political power would send power lines reaching toward the coal reserves of the Navajo Reservation."[286]

Chapter 4 "Modernizing the Navajo" and chapter 5 "Integrating Geographies" tells the story of the 500,000-volt system and its centralization of power production, leading to increased demands on the lands of the Navajo reservation.[287] First, there were signs of a power shortage, demands were ever increasing and the current power systems could not serve it.[288] Secondly, there were calls for building new hydro-electric dams to cope with this shortage, as the favored power source that provided a steady and safe supply of electricity.[289] Thirdly, they realized that hydro power could not supply this demand run amok and that they would need to look elsewhere.[290] Lastly, "That left coal." As Needham writes:

> *Coal had long been seen as a last resort for electrical utilities, a dirty fuel that was difficult to transport, required dedicated trains, and faced high shipping costs. Those conditions, however, no longer held. Improvements in transmission technology allowed larger amounts of energy to be shipped longer distances.*[291]

So, it was decided to rely heavily on coal, and over half of the region's electrical energy would eventually originate from coal.[292] This new power grid would also function

---

[282] Needham, *Power Lines*, chaps. 2, 3.

[283] Needham, *Power Lines*, 90.

[284] Needham, *Power Lines*, 82.

[285] Needham, *Power Lines*, 92.

[286] Needham, *Power Lines*, 92.

[287] Needham, *Power Lines*, chaps. 4, 5.

[288] Needham, *Power Lines*, 126.

[289] Needham, *Power Lines*, 126.

[290] Needham, *Power Lines*, 126.

[291] Needham, *Power Lines*, 127.

[292] Needham, *Power Lines*, 127–28.

differently than in the past. Instead of ramping up coal-powered plants in times of need, the coal plants would run at close to full capacity, as close to the mines as possible, to maximize efficiency.[293] Alongside this pivot in energy production came a new vision of the layout of the industry. Production would be intensified in a few select locations that would transmit power to consumption centers far away.[294] Returning to the interaction with the Navajo, their political leaders were adamant that they wanted opportunity *on* reservation land.[295] Furthermore, deepening their investment into the relationship of energy production, tribal leader Jones wanted the tribal government to be able to provide for its people, and the way to achieve this goal was to pursue energy development.[296] This led to the tribal government seeking oversight and inclusion with the power companies, wanting both a say in business matters as well as in profit sharing, as they had grown weary of the old royalty system.[297]

Rather than accepting a position as a recipient of rents and royalty payments, Jones and other Navajo officials in the 1950s acted as bullish advocates of energy development, seeking arrangements that allowed greater potential financial returns and enabled tribal members to move into management positions.[298]

The difference between the gas and coal industry was more than trifling, however, which the Navajo were to find out. There were no standard payment rate for coal leases, the coal extraction industry in the region was in its infancy and promised great potential for growth, eventually fueling the Four Corners Power Plant, the biggest of its kind in the region which provided power for all its surrounding metropolises.[299] The Navajo welcomed this new industry with open arms, expecting the same sort of profits and privileges that their neighbors experienced.[300] They wanted cheap and abundant power to help facilitate the introduction of new industries on the reservation and to mimic the same progress as their neighbors, "Emmons advised companies that tribes would provide lucrative inducements, including rent-free buildings, free land, tribally sponsored job-training programs, and labor costs far below prevailing wages."[301] They hoped for prosperity in the same vein that Phoenix experienced at the same time, by offering the same terms of growth politics, they hoped that it would modernize living conditions for the Navajo people.[302] The centralization of power production

---

[293] Needham, *Power Lines*, 127–28.
[294] Needham, *Power Lines*,129.
[295] Needham, *Power Lines*,136.
[296] Needham, *Power Lines*,147.
[297] Needham, *Power Lines*,148.
[298] Needham, *Power Lines*,148.
[299] Needham, *Power Lines*, 149.
[300] Needham, *Power Lines*, 150–51.
[301] Needham, *Power Lines*,150–51.
[302] Needham, *Power Lines*, 152–53.

at the Four Corners Power Plant, and the Mojave Generating Station, resulted in a massive production spike of electricity that fed most of the southwest's outlets.[303]

It worked almost too well for some, the heads of private utilities companies formed WEST, a power production alliance that would seek to increase private cooperation whilst excluding government owned utilities.[304] All of a sudden there were, in essence, two major entities fighting each other, trying to overdo their opposition, trying to expand their power production, government utilities versus the WEST alliance "The formation of WEST, thus, intensified energy development on the Colorado Plateau and the Navajo Nation."[305] After the introduction of the centralized power production system, the public and private utilities companies decided to merge their production and transmission, resulting in an intensification of the production at a few plants, to the result of, "[…]as the Mercury astronauts reported that the two man-made entities they could see from space were the great wall of China and the plume streaming froth from Four Corners Power Plant."[306] In other words, it ended up with a system where the rural middle parts of the United States were both dictated to and producers for the power demands of the "[…] periphery's society."[307]

The aftermaths of these policies are detailed in the last chapters, telling the history of resistance and protest against metropolitan exploitation of rural reservation land.[308] By the increased production of the Four Corners Power Plant, there was a lesser need for further development of hydroelectric power.[309] An environmental protest group, the Sierra Club, petitioned politicians to stop hydroelectric power development, but during these protests the Navajo Generating Station was already being built, and would not be reversed, "They represented capital fixed in space."[310] When the Navajo tried to get "A piece of the action" they suffered a valiant defeat, in the sense they were once again left with scraps.[311] The metropolitan centers painted a picture of the reservation land as overflowing with fossil fuels and electrical power, similarly to other rising OPEC nations at the time.[312] This led to Navajos

---

[303] Needham, *Power Lines*, 158.

[304] Needham, *Power Lines*, 171.

[305] Needham, *Power Lines*, 174.

[306] Needham, *Power Lines*, 181.

[307] Needham, *Power Lines*, 181–82.

[308] Needham, *Power Lines*, chaps. 6–7.

[309] Needham, *Power Lines*, 212.

[310] Needham, *Power Lines*, 212.

[311] Needham, *Power Lines*, chap. 7.

[312] Needham, *Power Lines*, 214.

wishing for a bigger slice of the pie, as well as some way to retain their power of self-determination.[313] They were worried about corporate exploitation and being left out in the cold in regards to central political questions, would industrialization lead to a better more prosperous life on the reservation or would it wash out their culture in favor of big corporations' profit incentives?[314] In other words, "[…] Navajo nationalists saw the Southwest's cities as the ultimate agents and beneficiaries of colonialism."[315]

To bring this vision of active participant into life Navajo leader MacDonald had a step-by-step plan, firstly an increase in Navajo ownership and decision-making power, secondly an increase in representation at managerial positions, thirdly a demand that companies follow tribal law on tribal land.[316] MacDonald, a tribal leader of the Navajo, thought that control of future development would remedy the ills of past development, which he saw primarily as a problem of profit-sharing and in the "paternalistic" way corporations were handed favorable leases.[317] Tragically, however, despite their best efforts it all ended in too familiar terms, but it was perhaps more of a pyrrhic victory than a defeat, they were able to implement a tax upon companies operating on their land as well as retaining their right to regulate them through their own laws.[318] They were not able to change what Needham describes as "capital fixed in space" already built structures of inequality, unraveling that web was outside their reach which left them with the only option of taxation and regulation.[319] This "capital fixed in space" was too much, but by going through this process they were able to have a say in future development.[320]

The protest group AIM – American Indian Movement – took matters into their own hands in an attempt to undo what the politicians could not, they marched into Black Mesa Mine and tried to stop the excavation.[321] They even went as far as firing a warning shot at the operator of one drag shovel, but in the end they relented as well, unable to affect change like the politicians, but leaving with the impression that they would put hard against hard if

---

[313] Needham, *Power Lines*, 214.
[314] Needham, *Power Lines*, 217.
[315] Needham, *Power Lines*, 225–26.
[316] Needham, *Power Lines*, 234–35.
[317] Needham, *Power Lines*, 234–35.
[318] Needham, *Power Lines*, 245.
[319] Needham, *Power Lines*, 245.
[320] Needham, *Power Lines*, 245.
[321] Needham, *Power Lines*, 242.

necessary to protect their interests.[322] It all adds up to a continuing tale of disenfranchisement of the Navajo people and their land. The culling of livestock ruining their ability of subsistence farming. Getting unfavorable lease clauses that weighed massively in favor of the mining and power companies. Not getting any opportunity for ownership, part-ownership or even leadership or managerial positions in those very companies running their businesses on reservation land. All in all, a tragic tale.

Discursive Argument

This is the part of the thesis where I explain the given relationship between the events described in these histories. Based on the framework laid out earlier, this section will seek to uncover the preferred mode of argument in the selection of histories. By examining the connections between events that historians consider significant, I aim to understand the criteria and considerations that guide their narrative decisions. This analysis will explore the underlying principles and frameworks that shape the construction of historical accounts, providing insight into the methodologies used by historians to create coherent and meaningful narratives.

Killing for Coal

How, according to Andrews do the events described within the book relate to each other? What I have found tends to lean towards a contextualist reading of the historical process. The different aspects of the period, the different forces that come together to form this narrative, according to Andrews hold together because of their connection to the main conflict. In his words, "What begins as a study of Colorado's coal wars leads necessarily to an exploration of the interconnection of physical energy and social power in the industrial world."[323] The confusion of this historic period, which he endeavors to help us better understand, result, he argues, from differing "polarizing" narratives.[324] The solution, he proposes is to enrich the historical explanation with a "[…] broader context."[325] By casting a wider net, by including more perspectives, labor, environmental and cultural, and by pulling

---

322 Needham, *Power Lines*, 242.
323 Andrews, *Killing for Coal*, 18.
324 Andrews, *Killing for Coal*, 15.
325 Andrews, *Killing for Coal*, 15.

the curtain further backwards in time Andrews presents a more complete history of the coalfield strikes.[326] His explanation is, in other words, a contextualist one.

Mass Destruction

LeCain starts his account with a statement about the fallacy of believing that technology and nature can ever be completely separate from each other, naming it "One of the most destructive and dangerous ideas of the past century…", following up with a focus on the dangerous effects of such a view, and putting an emphasis on historians to expose this fallacy.[327] In other words, LeCain argues that people used to believe one thing, which was very wrong indeed, and to explain the extent of this wrongness he gives examples from mass destruction mining techniques:

> *From an envirotechnical perspective, Bingham, Berkeley, and other such pits of mass destruction emerge from the depths of cultural and historical misunderstandings to reveal their true "nature" as enduring physical manifestations of the tremendous powers and the tragic limitations of the modern ideologies, societies, and economies that created them. Put simply, the pits of mass destruction are the embodiment of a human cultural, economic, and technological relationship with nature gone badly awry.*[328]

And it is context, or contextualism, that drives the historical explanation of this work of history, by introducing all the different factors necessary, LeCain explains how this mining industry was "inextricably linked from the start…" with nature, and the folly of trying to separate them.[329]

Power Lines

Needham also writes a contextualist historical explanation. Starting with explaining the locus of the narrative and its contextual connection to neighboring regions – the southwest and coastal metropolitan areas respectively – and how a series of processes of exploiting the rural 'middle' to fuel the metropolitan periphery.[330] Needham juxtaposes the original narrative of fragmented regions with his own contextual explanation of "a region of fragments."[331] He draws the metropolitan into connection with the rural and connects the fragments into a larger

---

[326] Andrews, *Killing for Coal*,15.

[327] LeCain, *Mass Destruction*, 20–21.

[328] LeCain, *Mass Destruction,* 22.

[329] LeCain, *Mass Destruction,* 23.

[330] Needham, *Power Lines*, 10.

[331] Needham, *Power Lines*, chap. 1.

whole.[332] Drawing upon the multifaceted nature of the unfolding of events, the intricacies of these inequalities deserve just such a rigorous explanation. Firstly, "By telling this story at the regional, rather than the metropolitan, level, *Power Lines* challenges the borders of recent political history" to the effect of adding a layer of context to previous historical accounts.[333] Secondly, drawing upon a set of different aspects of this period, explains exploitative practices, ranging from federal growth policies, to the "exclusionary nature of suburban development", and "damaging ecological transformations."[334] He also makes an argument about 'space' and how it is "[…] a historical text in which can be read the outcome of political struggles as well as a structure that constrains historical agency."[335] Through the examples of the differences between the industrialization of Phoenix and the Navajo reservation all of these factors display the complexity of the issue.

Ideology

These implications need not be formally drawn in the historical account itself, but they will be identifiable by the tone or mood in which the resolution of the drama and the epiphany of the law that it manifests are cast.[336]

The structure of this part, summed up quite nicely by Hayden White. I will conduct an analysis of the selected environmental histories, highlighting the ideological implications of their narratives.

Killing for Coal

First of all, the tone of the resolution of the drama is a dour one. The striking miners lose their battle and have to return to the same set of circumstances of their work as before the conflict.[337] Although negative, Andrews does not write a resolution of hopelessness: "The past has forged the road along which we are traveling. Powerful forces vie to direct where we go

---

[332] Needham, *Power Lines*, 17.
[333] Needham, *Power Lines*, 6.
[334] Needham, *Power Lines*, 6–7.
[335] Needham, *Power Lines*, 7.
[336] White, *Metahistory*, 27.
[337] Andrews, *Killing for Coal*, 286.

from here, urging us in one direction or another. Yet the next step remains ours to take."[338] He indicates a horizon of possible actions that remains hopeful of the future.

Secondly, the epiphany of the law the resolution manifests, presented through the commentary of the epilogue.[339] A return to the same, is presented again in the aftermath of the conflict: "The increasing obsolescence of craft traditions, the scarcity of work, and miners' continuing need and desire to move around to seek out better opportunities – these factors together led most coalfield migrants to set out on the road once again."[340] Andrews uses the example of class conflict in America, "a nation that continue to deny the significance or even the existence of class and class conflict, these forces continue to shape lives and landscapes. Almost a century and a half after William Jackson Palmer first embarked on his utopian empire-building scheme, this amnesia, this denial, obscures a Western past and present far more complicated – and far more troubled – than myth or memory would generally credit."[341] This forms a liberal ideological implication, in my view. By pointing out both the flaws in the system, as well as a hopeful tone of some future resolution, it is decidedly liberal.

Mass Destruction

LeCain spends time to explain how many of the horrible environmental effects of his narrative took place, ironically, because of unintended consequences often inspired by overconfidence.[342] For example, when writing about the American culture of consumption, he points out how it ties back to destruction wreaked by technologies such as that of Jackling.[343] He explains how the system worked more or less as planned, but that the effects of that system was the result of a faulty assumption at its inception. For example, the "promise of painless infinite extraction", which was proven when the Berkeley pit was closed and the groundwater that swelled within carried many times the safe levels of arsenic, cadmium and lead.[344] As LeCain does comment, being careful in his observations and limiting himself to the safe ground of pointing out how even the well intentioned can fall wide of their mark. Examples of solutions that sought to mitigate the issues mentioned above, even if performed

---

[338] Andrews, *Killing for Coal,*291.
[339] Andrews, *Killing for Coal*, chap. epilogue.
[340] Andrews, *Killing for Coal*, 288.
[341] Andrews, *Killing for Coal*, 290.
[342] LeCain, *Mass Destruction*, 54.
[343] LeCain, *Mass Destruction*, 182.
[344] LeCain, *Mass Destruction*, 202–3.

to the best of their abilities, would not solve the environmental damages that resulted from the necessary extraction techniques that fed the consumption of, "a billion new cars and a billion new refrigerators..."[345]

I would argue that the book itself reads liberal but that the contents of the book speak to a system that has brought about Mass Destruction of the environment, and that has to be changed, therefore eliminating both a conservative and anarchist read. Even to some extent it reduces the liberal reading of the book in favor of a radical one. Although not explicitly stated anywhere, as a reader, one would be hard pressed to accept this system that brought this about, and it brings thought of change. What ultimately draws this back to firm liberal ground is the focus on the unintended consequences. As LeCain writes: "The culture and technologies of mass destruction seem destined to expand even further before they are likely to undergo any fundamental changes."[346] If one were to set out to change in pursuit of some goal, there would be some unintended consequences that would be impossible, or at least, hard to predict or account for. As with the mine operators that pursued higher returns went to the mine engineers to solve problems of pollution, in the belief that it would be possible to solve, the person that would pursue a change in the system could face other problems that would only be able to be addressed in partial remedy, or simply mitigate the issue.

LeCain condenses the closure of his narrative into the 'epiphany' that the mass destruction technology of Daniel Jackling was only made possible because of the abundant availability of cheap coal and other oftentimes fossil fueled power sources.[347] The availability of this power, he then points out, has to end somewhere.[348] At some point there will either be an end to the possible ways of expanding power production, or the environmental devastation of these sorts of extraction techniques will surpass its use-value, "the problem of global warming makes increased use of hydrocarbons dangerous."[349] This points to a liberal ideological implication. He makes no qualms about doing away with the system that currently destroys the environment, but places this change into the future. He also points out the futility of abandoning the system, there is no 'going back' as there are damages made that will remain even if all fossil fuel extraction stopped instantly and all mass destruction mining operations

---

345 LeCain, *Mass Destruction*, 206.
346 LeCain, *Mass Destruction*, 206.
347 LeCain, *Mass Destruction*, 207.
348 LeCain, *Mass Destruction*, 208–9.
349 LeCain, *Mass Destruction*, 208–9.

were halted.[350] The dead zones for example will not go away by themselves, at least for a very long time, far surpassing practical limits.

Power Lines

When focusing on the tone, Needham writes, in the conclusion that, the industry that mined coal relied on exploiting both nature and labor.[351] Pointing out both the scarring of landscapes and poisoning of local habitats only pouring salt in the wound, so to speak, when the monumental effort required to bring these changes about did not result in any meaningful material improvements for the Navajo.[352] The tone is, in other words, a sad one. It is not hopeful of the future, it is not one of reconciliation, it is not one of mediating circumstances. It focuses on the failings of the past, their malevolent effects on people and the environment.

How does Needham close out the drama? When explaining the aftermath of the resolution at the end, he focuses on two parts. The first epiphany, the unequal nature of "the infrastructure of energy development had fixed in space."[353] The second one, pointing to the near impossible task to change this system of inequality based on its quality of "capital fixed in space…" instead having to accept the fact that "It could not be reversed, it could only be regulated."[354] This focus points out that there are certain movers that are beyond the powers of some people to change or affect, in this situation, utilities companies and the Navajo people. Not only are these movers outside the reach of some, but they in turn have massive overreaching powers to affect, in this case negatively, their surroundings in pursuit of their own goals. I would then say that this book presents as liberal, but that Needham points out severe flaws in the system that needs to be changed,

It also created a style of modernity reliant on ready an inexpensive energy, a style that developing nations across the world have aimed to replicate. In an era of unprecedented global climate change, that style, and the ignorance that has accompanied it, must become an artifact of history.[355]

It not only points out this severe flaw, but also puts forward a need for a definite end to it, or at least parts of it. This can be read as a radical hue, but ultimately there are no calls for immediate and large scale, sweeping, action to follow this statement. In other words, the

---

[350] LeCain, *Mass Destruction*, 227.
[351] Needham, *Power Lines*, 248.
[352] Needham, *Power Lines,* 250.
[353] Needham, *Power Lines,* 245.
[354] Needham, *Power Lines,* 245.
[355] Needham, *Power Lines,* 257.

system has benefited some people, and has without question brought about a higher standard of living for those experiencing the benefits of this system, but Needham points out that the system has flaws in its application, where the burdens and benefits of the modern age fall in an unequal manner, to the detriment of the rural in general, and to the Navajo in this specific setting. Meaning, it sort of works, but the downside is too big to ignore, and the system needs changing.

Summary ch.1

All in all, we can catalogue each book into these categories, as indicated by table 2. It says nothing about the value of the content, only the form.

	Trope	**Emplotment**	**Argument**	**Ideological implication**
Killing for Coal	Ironic Metaphor	Tragedy	Contextualist	Liberal
Mass Destruction	Metonymy	Tragedy	Contextualist	Liberal
Power Lines	Synecdoche	Tragedy	Contextualist	Liberal

Table 2

If we were to compare the flow of these books with the original selective affinities of White's tropology, as indicated by table 3, we find that the authors very much write their own styles and that it is not constricted by some imagined set of literary circumstances.

Trope	Emplotment	Argument	Ideological implication
Metaphor	Romance	Formist	Anarchist
Metonymy	Tragedy	Mechanicist	Radical
Synecdoche	Comedy	Organicist	Conservative
Irony	Satire	Contextualist	Liberal

Table 3

If each book were to be color coded in this chart, they would look like this, indicated by table 4, 5 and 6.

Killing for Coal

Metaphor	Romance	Formist	Anarchist
Metonymy	Tragedy	Mechanicist	Radical
Synecdoche	Comedy	Organicist	Conservative
Irony	Satire	Contextualist	Liberal

Table 4

Mass Destruction

Metaphor	Romance	Formist	Anarchist
Metonymy	Tragedy	Mechanicist	Radical
Synecdoche	Comedy	Organicist	Conservative
Irony	Satire	Contextualist	Liberal

Table 5

Power Lines

Metaphor	Romance	Formist	Anarchist
Metonymy	Tragedy	Mechanicist	Radical
Synecdoche	Comedy	Organicist	Conservative
Irony	Satire	Contextualist	Liberal

Table 6

This section of the thesis has delved into the prevalent modes of writing in environmental history, particularly among award-winning works. It becomes evident that there is a favored narrative structure that underscores the environmental history of the United States, especially during its industrialization era. This preferred narrative mode is predominantly tragic, focusing on the irreversible impacts of industrial progress on the natural world. Such characterization not only emphasizes the consequences of human actions on the environment but also aligns with a broader historiographical tradition that views industrialization through a lens of loss and degradation.

The trend toward tragic narratives can be understood within the framework of historiography, which seeks to interpret history within the specific contexts of time and place, rather than through a universalizing or deterministic lens. This approach allows for a more nuanced understanding of the industrial era, highlighting the complex interplay between human ambitions and environmental limitations. Moreover, the liberal ideological underpinnings of these narratives reflect a critical engagement with past policies and

decisions, suggesting a form of historical writing that is not only informative but also implicitly reformative. This aligns with the broader ideological shifts within the field of history writing, where there is an increasing emphasis on using history as a tool to inform and influence present and future policy decisions.

Thus, the analysis reveals a significant alignment between narrative style, historiographical approach, and ideological orientation in the writing of environmental history. This convergence is not coincidental but indicative of a broader disciplinary commitment to understanding and addressing historical roots of contemporary environmental challenges. As we continue to explore different aspects of environmental history writing, it is crucial to recognize these underlying patterns, as they shape both the historiography and the public's understanding of environmental issues. This insight not only enriches our comprehension of narratives about the past, but also guides future scholarly endeavors in crafting histories that are both reflective and directive in nature.

Chapter 2: Representation of Agency

In this part of the thesis I ask the question of, out of these histories, who are presented to us as the movers and agents of change? Who are the people affecting change? Change in the system, change in daily life, organization, building or destruction, all parts or deviance from the norm. A longer thesis with a broader lens could investigate the pillars that upheld and sustained previous systems in more detail, but it falls outside the scope of the query of this thesis. The phenomenon to keep in mind here is change. Instead of going through every event in all three books and judging the daily life of every single person, I will identify the major events of change that is central to the narrative. I will investigate what kind of agency is at play, and the actors behind it.

Killing for Coal

I have chosen to focus on the major event of change in *Killing for Coal,* namely the major conflict of the narrative: the attempt at going from autocratical company rule to a form of representational worker democracy.

From Autocratical Hierarchy to Representational Worker Democracy (1)

The final aspect of change to be viewed in this narrative is the attempt to democratize the coal mines. Not a direct democracy, but a representational one, where the labor union would have a seat at the table to fight their cause. The first of the strikers' demands was exactly that "First – We demand recognition of the Union."[356] And as the union vice president vowed that he would, in a speech to a union meeting before the 1914 strikes, "never leave this field until [they had] stricken the shackles from every mine worker", using value specific language to signify the importance of the strike and to work up the strikers' passions.[357] They pursued the goal to wrest control from the top of the chain and give the people providing value to the company through mining a say in how the company should run and how it should prioritize. First of all, the old system of an autocratical hierarchy favored by Palmer was not

---

[356] Andrews, *Killing for Coal*, 238.
[357] Andrews, *Killing for Coal,* 239.

unique to the time, so to say that he invented it or established it by himself would be false. He did, however, have a large impact on the implementation of this system in his own company.

To bring about this change to this system, there was indeed a window of transformation characterized by crisis. Dangerous working conditions, for one, made work-related injury and death all far too common.[358] These conditions made worse by company neglect, "One mine inspector admitted," because of geographical challenges, "that sprinkling as profusely and thoroughly as is suggested would incur an expense so nearly equaling the margin of profit that they would be forced to cease operating." Citing 'profit margins' as a reason, "Parsimonious executives primed mine environments for disaster when they balked at the expense."[359] Labor that was once scarce on the frontier was now abundant, and mine operators used that leverage to lower wages.[360] Now work was not just dangerous, it had worse compensation than just a short time earlier.

In addition to dangerous work environments and a falling wage, circumstances were worsened by a dangerous profit incentive, the tonnage system. This system of payment only compensated miners for the coal they extracted from the ground, not from any other necessary work securing the mine.[361] As Andrews writes, "Miners who pushed their luck in hopes of earning a little more money sometimes paid with their lives; more cautious comrades sacrificed wages for safety."[362] When the miners had to risk their lives to make pay, it stung all the more when they fell victim to irregular pay; when the local banks started having trouble, the companies struggled to find the cash necessary to pay their workers.[363] There was little to no cash available in local banks, something the miners could do nothing to prevent, and the corporations only partially trying to remedy, by implementing the 'scrip' system.[364] Creating essentially a closed loop system that left the miners at the mercy of the company they worked for. The rule of provision was failing. The system did not provide amply enough for the colliers to be able to play their role in the system properly. In other words, the miners struggled to keep their heads above water in between paychecks. Summed up by Andrews, "[…] a regional economy that was at once wildly erratic, brutally competitive, and closely

---

[358] Andrews, *Killing for Coal,* 138.
[359] Andrews, *Killing for Coal,* 141.
[360] Andrews, *Killing for Coal,* 159.
[361] Andrews, *Killing for Coal,* 138–39.
[362] Andrews, *Killing for Coal,* 138–39.
[363] Andrews, *Killing for Coal,* 177–78.
[364] Andrews, *Killing for Coal,* 178.

controlled by the few dozen industrial oligarchs on whose actions the livelihoods of hundreds of thousands...”[365]

Through a series of strategic and collective actions the miners went on to strike for their demands. They started unionizing, acting on longer term visions of working together to leverage the mine operators into concessions.[366] The miners realized that they were an important part of the system, they played a crucial role to the rule of performance, they supplied the most important function of the mineral economy, its very fuel.[367] From this realization came the understanding that if they were to enact change, they had powerful leverage, the threat of fuel restriction.[368] The first attempts at striking, however, often ended in failure because of the mine operators had the opportunity to either wait them out or deploy any number of anti-union tactics.[369]

Union leaders realized that in the face of stubborn corporations they needed to organize “[…] every mineworker in the United States and Canada into the union fold.”[370] Initially, they had some success by sending envoys to other mine camps, but at certain “closed camps” they were turned away.[371] But easy as it might have been to turn away an envoy, it was not as easy to turn away a whole company of them, which is what they did in the marching strikes at the beginning of the century.[372] Furthermore, they increased their efforts at infiltrating these closed camps, by infiltrating both the workforce and management, and using the “inside-out system,” they were able to recruit more miners to their cause.[373]

The mounting pressure that the strikers initiated with their strikes made the governor step in to try and find a solution, by inviting strike leaders and mine operators to the discussion table, in his mind, he would try and fix years of resentment and grievances “[…] by staging a “man-to-man talk.”[374] But it proved as futile to the strikers' cause as any other means, because the governor either ignored or misunderstood the point of the strike, his interests were centered on getting back to order as usual and played right into the hands of the

---

[365] Andrews, *Killing for Coal,* 161.
[366] Andrews, *Killing for Coal,* 181.
[367] Andrews, *Killing for Coal,* 183.
[368] Andrews, *Killing for Coal,* 183.
[369] Andrews, *Killing for Coal,* 181,241.
[370] Andrews, *Killing for Coal,* 178.
[371] Andrews, *Killing for Coal,* 184.
[372] Andrews, *Killing for Coal,* 184.
[373] Andrews, *Killing for Coal,* 235.
[374] Andrews, *Killing for Coal,* 258.

mine operators, "The companies had fooled the gullible governor."[375] The results, then, were even worse for the striking miners, than before the talk, the General of the state militia was ordered to intensify arrests of strike leaders, holding them without charges, to be tried by military tribunal.[376] Even the federal government, through a federal investigation, could not impact proceedings in a meaningful manner on behalf of the striking miners. As Andrews explains, "Once capital and the state had joined forces against them, union leaders lost faith that they could win the strike without carrying the fight beyond Colorado."[377]

After using all other leverage available to them, the miners were backed into a corner, and at this point Andrews called it "a formula for disaster," the only option left to the miners once all other options were exhausted seemed to be violence.[378] There had been violent exchanges on both sides leading up to the culmination at Ludlow, ominously narrated by Andrews: "The day of reckoning was at hand, virtually everyone concluded. All it took was one gunshot to ignite the powder keg."[379] The one gunshot happened to introduce one of the most devastating events of the coalfield wars, the Ludlow Massacre, a battle that turned to devastation for the tent colony and its residents, and also served as the opening salvo of the Ten Days' War.[380]

Following the Ludlow Massacre, the striking miners vented their anger at the symbols of corporate power, in a show of force intended to let mine operators know that they would not be pushed around anymore.[381] They besieged mining camps, destroyed mine infrastructure and railroads, and even captured a locomotive to transport stolen arms, an exceptional display of collective agency, the last desperate attempt at trying to force change upon a system that resisted it at every turn.[382] The workers enacted collective agency that was both highly intentional and highly strategic. Even before open hostilities, they had tried their very best to change their predicament. Long planning, adaptation and adherence to that planning was needed to unionize that many miners and convince them that their striking efforts could make

[375] Andrews, *Killing for Coal,* 266–67.
[376] Andrews, *Killing for Coal,* 266–67.
[377] Andrews, *Killing for Coal,* 268–69.
[378] Andrews, *Killing for Coal,* 271.
[379] Andrews, *Killing for Coal,* 271.
[380] Andrews, *Killing for Coal,* 271–72.
[381] Andrews, *Killing for Coal,* 276–77.
[382] Andrews, *Killing for Coal,* 276–77.

a tangible difference in their lives. The agency discussed above can be illustrated as indicated by table 7.

Event:	Company Autocracy to Worker Democracy (1)	
Individual VS Collective	Individual	
	Everyday	Strategic
		Collective

Everyday VS Strategic

Unintentional
Intentional

Table 7

From Autocratical Hierarchy to Representational Worker Democracy (2)

The other side of this main conflict, the mine operators and their allies, actively imposed their agency in an effort to retain the old system. Occupying leadership roles within this industrial framework, they exerted top-down control, strategically maneuvering to maintain their established order. This imposition of authority was particularly evident in their responses to labor disputes, as they repressed striking actions vigorously whenever and wherever they arose. Their approach was not merely reactive but also preventative, employing various strategies to stifle dissent and prevent labor unrest from gaining momentum and operational dominance, reflecting a clear strategy of resistance against changes to the status quo.

Where strikers realized that they held leverage in their quality of performance part to the system, the mine operators realized that they could keep the system going by importing strike breakers.[383] Strikes presented the mine operators with a cynical way to further cut labor

---

[383] Andrews, *Killing for Coal,* 159.

expenditure.[384] By taking advantage of the labor market in Colorado at the time, mine operators could turn already desperate miners to the brink by importing strikebreakers, the mines would go back into production keeping the operators pockets full, whilst the out of work strikers faced starvation on the horizon.[385] They also took advantage of the striking miners' wish to be able to go back to work, by exploiting the fact that the labor unions allowed non-mining activity to continue during the strikes, such as work maintaining the structural integrity of the mine.[386] All the work, that was in itself unproductive, but allowed the mines to continue operating, motivated by the want of both parties for work to resume, although perhaps under different conditions.[387] Some work had to be done to maintain the mines' security and to save them from irreparable harm.[388] The strikers wanted to return to their place of work, the mine operators however, had no qualms about exploiting this fact.[389] A safe mine could be turned into an operable mine in no time if they could only import enough strike breakers.[390]

The mine operators, and industrialists in the coalfields in general, realized the provisional role of the coal mining industry, and the competitive companies bound together in what they perceived as a time of crisis.[391] Ironically so, in a system that is supposed to be built on healthy competition, different parts of the industry all joined arms against the strikers, companies dealing in "[…] railroads, streetcars, smelters, hard-rock mines, factories, and banks of the Rocky Mountain West..." all raced to take the side of the "coal barons."[392] Andrews summarizes the collective efforts of the mine operators, "Supremely conscious of the stake their own class had in the outcome of the coalfield struggles, the overlords of the fossil-fuel-driven economy closed ranks to present a united and formidable front."[393]

This extended to the government as well. On a local and state level, corporations borrowed institutional leverage to contain the marching strikes and stop unrest that threatened the instability of current affairs.[394] The coal mine operators beseeched both the courts as well

---

[384] Andrews, *Killing for Coal,* 161.
[385] Andrews, *Killing for Coal,* 159.
[386] Andrews, *Killing for Coal,* 247.
[387] Andrews, *Killing for Coal,* 247.
[388] Andrews, *Killing for Coal,* 247.
[389] Andrews, *Killing for Coal,* 247.
[390] Andrews, *Killing for Coal,* 267.
[391] Andrews, *Killing for Coal,* 161.
[392] Andrews, *Killing for Coal,* 161.
[393] Andrews, *Killing for Coal,* 161.
[394] Andrews, *Killing for Coal,* 241–42.

as law enforcement, "Whenever the marchers moved openly to confront colliers laboring in company-owned camps, however, they ran up against court orders and officers of the law."[395] The mine operators would not stop at this, they imposed constraints on the striking miners. In the mine workscape, mine managers would give favorable rooms to work in exchange for bribes and punish troublemakers with rooms that had far worse prospects for profit.[396] Meaning that anyone finding themselves on the bad side of the manager would suffer real world consequences to their paycheck. This would also extend to the company store. If a worker spent their money someplace else, the mine manager could threaten the miner with a worse room to work. Andrews uses a quote to describe these events, "[…] there will be a number of small, sneaking, underhanded ways" – short weights, bad room assignments – "in which he will be made to feel that he is being discriminated against."[397]

The constraints did not stop there, however. The mine operators would spend large sums of money as well as time and effort in building paternalistic company towns, designed to inspire loyalty and subservience.[398] These towns were physically shut off from the outside world with barbed wire fences and they were patrolled by mine guards, making sure that no troublemakers made their way into the camp.[399] Perhaps most devious of all, "Those allowed inside soon learned about "a rule observed in all the camps": any "'undesirable citizen' [was] eliminated as soon as possible", meaning they could close access to the camps to anyone.[400]

In addition to building homes with a higher quality than what many of the miners managed to build on their own, they also built schools and hospitals, thinking that if workers had basic amenities covered they would lose their feelings of malcontent and stay loyally put where they were and keep working.[401] Night schools for the miners, and camp schools for the children, provided a larger knowledge base for all the people living in these closed camp company towns. The mine operators wanted to control as many variables as possible and went about a corruption campaign to twist government officials to their cause, they bribed county sheriff's deputies, local judges, a state prosecutor, they even made a move to win a senate seat for one of their allies.[402] Andrews draws upon the account of one of their miners, "As "far as

---

[395] Andrews, *Killing for Coal,* 193–94.
[396] Andrews, *Killing for Coal,* 137.
[397] Andrews, *Killing for Coal,* 219.
[398] Andrews, *Killing for Coal,* 197.
[399] Andrews, *Killing for Coal,* 215.
[400] Andrews, *Killing for Coal,* 215.
[401] Andrews, *Killing for Coal,* 199.
[402] Andrews, *Killing for Coal,* 216.

law" in the camps was concerned, recalled one old miner, "the company was law."[403]

Corrupted in this way, there could be little to no help from the different government branches for the striking miners. Quite ironically then, "[…] company stores, camp guards, the corruption exercised on local political and legal systems, company housing, and other elements of the new paternalism further fanned the flames of unrest."[404]

These tactics are best highlighted by Osgood's four-pronged strategy of strike suppression. The first, dirty tricks, involved employing private detectives alongside mine guards to beat up miners and throw them out of their houses.[405] The second, co-optation of state power, included using state militia to help stamp down on strikes.[406] One way of doing this was the third prong, movement restriction. By blocking road access to union men, and deporting 'non-resident' miners out of the state, they limited the reach of the strike and robbed them of many strike leaders.[407] The fourth and final prong, control of information. This was a concerted effort to censor the press and incentivize positive news coverage. It also included arresting and imprisoning journalists.[408] Presenting the agency on display from the point of view of the mine operators, could look something like this, indicated by table 8.

Event:	Company Autocracy to Worker Democracy (2)	
Individual VS Collective	Individual	
	Everyday	Strategic
		Collective

Everyday VS Strategic

Unintentional	
	Intentional

Table 8

[403] Andrews, *Killing for Coal,* 216.
[404] Andrews, *Killing for Coal,* 199.
[405] Andrews, *Killing for Coal,* 241.
[406] Andrews, *Killing for Coal,* 241.
[407] Andrews, *Killing for Coal,* 241.
[408] Andrews, *Killing for Coal,* 241.

To recapitulate, although these initiatives were decided from the top-down, the mine operators would not have been able to suppress the strikers on their own. The companies formed alliances to fight the strikers wherever they went. They enlisted the help of state and local branches of government. And finally, to stop the violence, the women of Colorado coalfield wars demanded that the governor seek the aid of the president in ending their suffering.[409] Women of all ages, marched on the capitol and crowded the governor's offices' doorstep.[410] At first, the Governor was dismissive of the women outside his door, but they would not relent, and Ammons had to give in to their demands and send another letter to President Wilson.[411] Acting on behalf of the sustaining of the current system instead of on the behalf of change, the president sent – what Andrews quite humorously refers to as a "major agent of peace" - the federal army to quash the strikers war efforts.[412] The strikers quickly laid down their arms and hoped for a peaceful and favorable resolution due to the labor-friendly attitude of the Wilson administration.[413] Unfortunately for the miners, when the federal army was in place, they lost their most powerful leverage. The mine operators could suddenly import strike breakers *en masse*, and so they did, severely undermining the strikers' cause.[414] Ironically, the army was supposed to stop the importation of strikebreakers, but they did not stop anyone from entering the camps seeking employment.[415] Which led the mine operators to take full advantage, corporations spread the word about available jobs to facilitate an influx of new labor.[416] Even if the army supposedly stopped many from securing work like this, the end result was still mines that went back up to productive levels upwards of seventy percent of prestrike conditions.[417]

Living off the remnants of the union's coffers, many miners faced poverty and starvation if they could not return to work, and thus they had to call off the strike.[418] As opposed to the mine operators' substantial wealth, which they had "[…] skimmed from the bounty of the earth and the sweat of the miners' brows", mine workers on the other hand,

[409] Andrews, *Killing for Coal,* 280.
[410] Andrews, *Killing for Coal,* 279.
[411] Andrews, *Killing for Coal,* 281.
[412] Andrews, *Killing for Coal,* 281.
[413] Andrews, *Killing for Coal,* 283.
[414] Andrews, *Killing for Coal,* 282.
[415] Andrews, *Killing for Coal,* 282.
[416] Andrews, *Killing for Coal,* 282.
[417] Andrews, *Killing for Coal,* 282.
[418] Andrews, *Killing for Coal,* 282–83.

came ever closer to the extremes of poverty.[419] The conflict ended without any large scale or meaningful changes.[420] Instead, the only consolation that was offered to the strikers were scraps in comparison. "The Rockefeller Plan" for example, "[…] enabled Colorado Fuel and Iron mineworkers to present grievances to local officials", which, in turn, allowed them to "rectify some of the worst excesses of the closed camps."[421] Yet, the mine operators had won, and they opted to keep the old system that had brought about the unrest to begin with: "the Rockefellers held to a vision of Western industrialism that left workers no real place on the land."[422]

To sum up, the main event of change described in *Killing for Coal*, was the attempt at implementing worker democracy in an autocratic corporate structure. Although ending in failure, it still displays how power was applied. The miners tried to better their working and living conditions first through power of word, in isolated cases. The mine operators held on to their only concern, profits, and denied these changes. The miners tried to go on strike, but these were also shut down because of the support within the system. Mine operators could import resources to cover individual camps going on strikes for long enough to force the strikers to stop. The miners tried to overcome this obstacle by organizing several mining camps together, but the mine operators stood firm, arm in arm with their 'competitors' as well as local and state government to suppress the strikes. When the miners had exhausted every other avenue, and the mine operators had used every stratagem they could think of, the only option left to them was to give up or to take up arms. When they did take up arms, the federal government had to step in to shut them down, allowing the mine operators to return to normal practice. In the end, then, the collective might of the Colorado miners was not enough to overcome the collective power of mine operators, concentrated capital and government cooperation.

Mass Destruction

The major event of change in this book is Daniel Jackling's introduction of the mass destruction system of extraction to the mining industry.[423] It changed the output and

---

[419] Andrews, *Killing for Coal,* 282.
[420] Andrews, *Killing for Coal,* 286.
[421] Andrews, *Killing for Coal,* 286.
[422] Andrews, *Killing for Coal,* 286.
[423] LeCain, *Mass Destruction*, 23.

effectiveness of an industry that struggled to keep pace with rising demand for the raw materials that fed into the making of the modern era. Electrification, consumer goods and services, all at the mercy of increased effectiveness of copper extraction.[424] The book also describes the cultural shifts in extraction industries all over the world, but the main focus is on copper mining in the United States.[425] Daniel Jackling is presented as a central figure in introducing mass destruction technologies.[426] It is an example of a high level of strategical planning in bringing about the change, but several instances of unintentionality are also part of the narrative.[427] Daniel Jackling, for his part, envisioned a way of making use of low-grade ore in a profitable way.[428] During this process, however there were several instances of unintended consequences that followed these grand designs. To make use of low-grade ore, they needed lots of it, this meant excavating massive amounts of earth and rock that literally made molehills out of mountains, to borrow a phrase from LeCain.[429] During the refinement process of this ore, they found that the ore was full of contaminants that would spread to the surrounding areas and kill off everything.[430] When trying to fix the problem of pollution, several scientific solutions were able to reduce pollution, but it was far from able to mitigate or even solve these problems.[431]

LeCain asks the question of the central thesis of his book, about how the results – mass destruction and a scarred continent – came about, and he answers with pointing the finger at Daniel Jackling and the mass destruction technology invented in the 20th century.[432] He so kindly answers his own question, but the interesting parts of this investigation is the details of this massive change. Firstly, there was an increasing demand for copper, and it was not an option to abandon mining it or finding an alternative metal to use.[433] When the demands rose and the high yield deposits were mostly exploited, there were low chances of suddenly discovering another high yield deposit that would fulfil this rising demand.[434] There had to be a way to find more copper. Yet again this is where Daniel Jackling comes in, he

[424] LeCain, *Mass Destruction*, 25–26.
[425] LeCain, *Mass Destruction*, 230.
[426] LeCain, *Mass Destruction*, 23.
[427] LeCain, *Mass Destruction*, 18.
[428] LeCain, *Mass Destruction*, 170–71.
[429] LeCain, *Mass Destruction*, 146.
[430] LeCain, *Mass Destruction*, 179–80.
[431] LeCain, *Mass Destruction*, 206.
[432] LeCain, *Mass Destruction*, 23.
[433] LeCain, *Mass Destruction*, 25–26.
[434] LeCain, *Mass Destruction*, 121.

envisioned a way to make use of so much lower yield ore that, when combined, would result in massive amounts of copper.[435] He had his doubters at the time, his critics asking if the locations he wanted to mine were even an ore deposit at all, but "Where others saw only worthless rock, Jackling thought he saw a fabulous copper mine."[436]

Jackling was allowed to start small, with a tryout of his new mining technique, but he realized the scale needed to make use of the concept of high throughput was much higher than his meager beginning. Luckily for him "[…] the impending fears of a "copper famine" were now beginning to work in his favor."[437] This window of change was brought about, in other words, by an impending crisis. The Guggenheim took a punt at this upstart with a great idea, and he could put his vision into reality.[438] To name it a blinding success would be an understatement, his mining operation unearthed copper to an unprecedented scale: "This was more copper […] than humans had "used in all the ages since the first caveman picked up the first copper pebble."[439] Jackling's invention made away with the old notion of digging underground, 'into nature' as a mine and introduced nature itself as the mine.[440] What LeCain calls a "natural factory of mass destruction" that is "not separate from the natural world" but "*is* the natural world."[441] To operate this new type of mine effectively, both the structure of the factory, and hence the environment itself, would have to be changed, as LeCain calls radically so.[442]

"Paired with the precision power of high explosives, the geological mapping of the Bingham deposit allowed Jackling to plan and execute the efficient disintegration of a mountain of ore into a pile of rubble."[443]

This emphasis on throughput and speed above all else also introduced poison into the environment at rates previously unheard of, eventually resulting in "dead zones" where "the landscape" was made "nearly sterile."[444] To make molehills out of mountains and to kill off large areas of vegetation and animals, the destructive powers were indeed frightening. This systemic change in mining brought along by Daniel Jackling was made possible by using

---

[435] LeCain, *Mass Destruction*, 112–13.
[436] LeCain, *Mass Destruction*, 112–13.
[437] LeCain, *Mass Destruction*, 126.
[438] LeCain, *Mass Destruction*, 128.
[439] LeCain, *Mass Destruction*, 128.
[440] LeCain, *Mass Destruction*, 132–33.
[441] LeCain, *Mass Destruction*, 132–33.
[442] LeCain, *Mass Destruction*, 135.
[443] LeCain, *Mass Destruction*, 146.
[444] LeCain, *Mass Destruction*, 180.

massive amounts of readily available fossil fuels which was a staple of the time.[445] The cultural shift as a ripple effect could be seen across industries. By using cheap and abundant fossil fuels, extraction industries were able to make use of any natural resource and "the natural world as an abstracted economic commodity, a mere product waiting to be mined and processed for the market."[446] LeCain gives some examples to highlight this point, firstly logging, with chainsaws and steam donkeys leading towards the clear-cutting of forests reminiscent of the destruction of the open pit mine, which LeCain points to being a result of the culture of the time.[447] Secondly, the fishing industry, steam-powered trawlers, overcoming both weather and seasonal challenges, as well as being able to trawl up anything on the ocean floor, killing off fish and plant life that was deemed as "worthless specimens."[448]

It is not the case that Daniel Jackling himself brought about a cultural shift, but it shows us the manifestation of this culture of mass destruction used to power the growth of modern era industry.[449] There were two central part that underpinned these changes, firstly the powerful machinery driven by fossil fuels that dug into the environment at hand in vast portions, secondly, only to set aside most of it for the little fraction of valuable sellable commodity.[450] A lack of specificity in the first stage of extraction alongside a higher level of sorting in the second. Lecain points out that Daniel Jackling was not alone in bringing about these changes to extractive industries, but he was pivotal in copper mining turning to mass destruction techniques, "In this broader sense, Daniel Jackling may have been the father of mass destruction mining, but he was also only one of many who perfected the wider technology of modern mass destruction."[451] The agency can be illustrated as indicated by table 9.

---

[445] LeCain, *Mass Destruction*, 207.
[446] LeCain, *Mass Destruction*, 208.
[447] LeCain, *Mass Destruction*, 213.
[448] LeCain, *Mass Destruction*, 214–15.
[449] LeCain, *Mass Destruction*, 216.
[450] LeCain, *Mass Destruction*, 217.
[451] LeCain, *Mass Destruction*, 217.

Event:	Mass Destruction extraction	
	Individual	
Individual VS Collective	Everyday	Strategic ✥
		Collective

Everyday VS Strategic

Unintentional	
✥	
	Intentional

Table 9

To recap, there was a need for higher throughput and efficiency in mining industries, Jackling provided the solution. It took long term planning and execution to make it work, he could also not have done it alone, so he had to enlist the help of investors. He did not man the machines himself, either so he needed workers to uphold the system. This might be an interesting presentation. The people in charge of inventing technologies within the system of mass destruction, knew the challenges they faced, and they could calculate the limitations of their proposed solutions. However, they went on. Therefore, I have chosen to represent it as a middle ground between individual and collective. Because the scientists and engineers knew some of the extent of their possible damages, I have also decided to represent the side effects of mass destruction mining as unintentional. It was not the purpose of pit-mining to move mountains, it was a by-product. It was not the purpose of poisoning the surrounding areas, but when smelting copper ore there are heavy metals and acids that kill off vegetation and animals alike released into the air. When trying to mitigate these factors, there were intentional decisions to reduce their efforts to the bare minimum, but that is another aspect of change.[452] I have also decided to represent it as an in-between of individual and collective because the destruction itself was made possible not because Jackling and his engineers went into the mines with dynamite and hauled ore themselves.

---

[452] LeCain, *Mass Destruction*, 75–77.

Power Lines

The major event of change I will examine in Power Lines, was the attempt at changing the profit share of the industries of the Southwest. This event details how the Navajo tribes found that it was unfair that they should carry the burdens of extracting coal and its subsequent power production, that powered large parts of the United States, without being allowed to take part in either the profits or the decision-making process.[453] They wanted the exploitation to end. Both the pollution that ruined their land and their agricultural enterprises as well as the unfair division of profits.[454] They wanted to take part in the distribution of wealth that was generated on their land, and so MacDonald – tribal council chairman at the time – pressed his demands, he wanted Navajos to be business partners, to be represented in managerial positions, and for companies doing business on tribal lands to adhere to tribal law.[455] Needham poses this turn towards control, as a way to mitigate "the problems of past development." Which was partly an issue of division of profits, and partly the level – or lack of – control in lease negotiations.[456]

To enforce these demands, among others, they took to protesting. One group especially, AIM – the American Indian Movement – marched into the Black Mesa Mine to interrupt productivity at the mine.[457] Although they ended up with standing down, they managed to temporarily halt production as well as putting something real behind their demands.[458] Although their efforts were in the end a defeat, the effort was not in vain, "[…] they left with an increased reputation for standing up for the interests of local Navajos and demonstrating that energy development could, at least temporarily, be halted."[459] Additionally, this moment marked a turning point in energy development on reservation lands, as they came to the realization that the 'mitigations of wrongs in the past by control in the present' solution that was tried did not give the desired outcome, they instead turned on the very idea of further energy production.[460]

---

[453] Needham, *Power Lines*, 231.
[454] Needham, *Power Lines*, 214.
[455] Needham, *Power Lines*, 234.
[456] Needham, *Power Lines*, 234.
[457] Needham, *Power Lines*, 242.
[458] Needham, *Power Lines*, 242.
[459] Needham, *Power Lines*, 242.
[460] Needham, *Power Lines*, 245.

The Navajo tribes crafted a response through taxation that, while superficially a triumph, underscored a deeper concession to prevailing inequities.[461] This strategic choice affirmed their sovereign authority to oversee industry operations on their territory, marking an apparent victory in self-governance. However, this move also illuminated the persisted inequalities that the infrastructure of energy development had solidified. The decision to tax therefore served as a stark reminder of the limited scope of their victory, highlighting how real gains were undercut by the structural disadvantages that remained entrenched within their lands.[462] The agency of the Navajo tribes proved both effective and limited at the same time. Their political actions were successful in halting new developments, showcasing their ability to influence future projects. However, their influence had its limits. The entrenched nature of previous exploitative developments could not be undone. By the time they had amassed the political strength necessary to challenge these structures, the landscape of the modern Southwest had already been shaped by capital investments firmly embedded in the region. As a result, their power was restricted to regulation rather than reversal of the established inequalities.[463]

To sum up, the resolution of the main conflict resulted in a realization that there were certain limitations to their ability to affect change. They could stop certain developments and they could temporarily suspend certain productions, but overall, they could not reverse the existing exploitative developments. They acted through both their own elected officials and through activist groups. They had to plan their efforts and keep to their plans over time. At first when they tried to embrace electrical developments, they did so with the intention of replicating the successes of their neighbors in the southwest. The unintended consequences of these attempts were that they had little leverage when it came to making decisions on their own. When the honest attempt at power development seemed to fail to gain any prosperity further than any other industry, they were left with the conclusion that they could not trust any further developments either. But because the power to decide who got to do business on their land was with federal agencies, they could no longer trust official channels to care for their best interests. In this case, they were left with protests. This at least proved somewhat successful. At the very least, it proved that the Navajo were capable of standing up for

---

461 Needham, *Power Lines*, 245.
462 Needham, *Power Lines*, 245.
463 Needham, *Power Lines*, 245.

themselves, and that they would not let anyone walk all over them any longer. The agency can be visualized like this, indicated by table 10.

Event:	Navajo attempt at reworking the division of profits	
Individual VS Collective	Individual	
	Everyday	Strategic
		Collective

Everyday VS Strategic

Unintentional	
	Intentional

Table 10

Summary – Chapter 2

My assertion from this chapter can be condensed into the following statement: Following the trend from the previous chapter, about the observable tragic representations of the past, there seems to be an interesting remark with regards to the resolution of the tragic drama. A key part of what makes a narrative a tragic one, the resolution of the main conflict and the following revelation of the rule that the observers are presented with. The reader of histories becomes the observer of this tragic agon. Additionally, when presented with the central actors and agents to the narrative, the ones which drive change and sustain the system in the tragedy, the observer is also presented with a picture of the past where certain actors are responsible for certain kinds of agency that is more prone to change. Even if historians are able to prove or disprove these rules as either true or false, the very fact that these narratives are written in the mode of tragedy exposes the reader to a view where these rules and structures are real and do exist.

From this observation you may ask yourself, "Kings, presidents and rich people have a better position to affect change, how is that revelatory? And why is it important?" To that I

retort with the following: The intricacies of the challenge of climate change are such that it demands large scale change. It demands that a large effort is employed to dig ourselves out of the hole we are in. However, when representing the past as a process where there is a certain class of people who dug us into this hole to begin with, it also presents the danger of the illusion that they are the only ones that can dig us out. At the same time as presenting us with certain actors and agents as the main movers of the historical process, it also presents 'the rest' as possessing both potential as well as agency on their own.

What does it boil down to then? We should not shy away from writing tragedies; the mode of tragedy could very well be the most useful and responsible way to write when approaching from an environmental perspective. Historians should, however, realize that these potential "meta-narratives" that are presented to the reader when they pick up a selection of books on one specific period of time, could have profound effects on their understanding of the past. This case in point, when picking out three recipients of the prestigious George Perkins Marsh prize by the American Society for Environmental History, they represent the past as tragedy. The main conflict of each book is resolved with loss or the worsening of their parameters for living. The Colorado colliers lost their labor war, the extraction industry changed seemingly irrevocably to devastating effect, and the Navajo tribes were met with a glass ceiling they could not pierce. All the while the colliers fought for the very thing that destroyed the environment they lived in, Daniel Jackling chased efficiency and profits into open pits and dead zones, and the Navajo were forced to concede ground time and again at the hands of corporations that made little effort to compensate their loss of autonomy or agricultural produce.

Given the scale of the challenges facing us in regard to climate change, I would beseech historians to realize this dimension of their writing. They already know that what has happened to the environment over the past two hundred years has been in many respects devastating, and so making the tragic representation perhaps the most responsible one in respect to authenticity. But when taking into account the realization of the historical process at display above, could there be room for a more active, more engaged historical writing? Additions that give the reader a more empowered sense of the present, perhaps? The actors and agents that brought about the changes of the industrial revolution and the current system that devastates the environment such, would not likely part with their position gained through the introduction of this system. Therefore, it falls to other forces to start the ball rolling. Perhaps ironically, all three historians display some sort of tendency of this. In each book,

there is an epilogue that answers these questions. Andrews hints at the possibility of a different future, despite this tragic past.[464] LeCain asks the world to spread the burden of supply and demand for these intensive and destructive technologies.[465] Needham takes time to impress the importance of collective understanding, as well as collective action, to remedy the mistakes of the development process that made the modern southwest.[466] Each of these additions are profound in their own way. They engage with the issues presented in their narratives, and they hint at a possible future resolution. Is this, however, the limit of committed writing or engaged historical writing? Is there a way to both point out the mistakes of the past as well as possible solutions to the present/future that still resembles the historical profession?

---

[464] Andrews, *Killing for Coal*, 291.
[465] LeCain, *Mass Destruction*, 230.
[466] Needham, *Power Lines*, 257.

Chapter 3 – Engaged Writing

In this section, we return to the question asked at the beginning of this thesis, taken from INTH's list of questions:

Is the prime responsibility of professional historians a deontological one relating to academic procedures and source criticism, or can particular situations trump these and create other priorities and types of responsibility?[467]

What I will examine in this part is the second clause of this question, "can particular situations trump these and create other priorities and types of responsibility?" My supposition will comprise of the findings that there is a small, but observable trend in environmental history writing that tends towards tragedy, and that the understanding of the past as an ongoing tragedy can have implications for the informative role of history upon both present and the future. The realization of a rule that guides towards lack of agency, or the historical process as one of decline or tragedy has the potential to be quite terrible when considering the case of climate change. This set of circumstances, in my opinion, does create a different priority than just academic procedures and source criticism. As history informs the present, and unavoidably politically so, it has a responsibility to make value judgements upon the past and empower change in the future. Not all circumstances necessitate these priorities, but the existential threat of climate change and environmental issues requires a collective effort to overcome.

Working with the assumptions derived from the third part of the theory chapter, we can lay the foundation for this part of the analysis. Firstly, historical works are not objective or neutral, but intersubjective. Secondly, historical works are unavoidably political, what matters in politically relevant material towards the reader is the relationship between the dimensions of historical culture and if one is 'imposing itself' on the others. Thirdly, how histories of the past can reproduce the one-sidedness of people in conflicts of the past and the moralizing of the closure effect. Fourthly, discussing historical artifacts in social discourses and practices. Finally, the reader's receptivity for different modes of representation and, returning to the original question, different priorities within historical writing.

---

[467] "INTH Call for Papers."

Objectivity, Neutrality or Intersubjectivity

First of all, I will deal with the issue of neutrality. As pointed out by Rüsen, history is not objective by measure of its representational practices, but rather intersubjective because of the possibility of testing statements against artifacts of the past.[468] Most importantly from this realization is the fact that history is not neutral.[469] This is very much the case when dealing with subject matter that is not neutral. If histories touch upon political or social issues that are relevant to the reader, the history cannot by definition be neutral. It could be even-handed in representation, and fair in judgement, but it cannot be neutral. Neutral implying that there is no political value to leverage from it, which would be the case if the subject matter did not touch upon politically or socially relevant issues to the reader.[470] These non-neutral subject matters could have both political and ethical value. Political value in pointing out the flaws in a system or practice in the past and how the results of that system were actually negative towards people, animals, the environment etc. Ethical value in pointing out how the system is based on moral judgements that in later times is found to be wrong. Any number of systems and practices could be used as an example, but thinking about the time of colonization would spur enough ideas to fill a thesis on its own. Pointing out the flaws in both of these aspects of the past has value, meaning it is not neutral. These issues have value, not because they are neutral, but because of the fact that they are decisively valuative. The fact of presenting them shows examples of 'bad things happened in the past'. The value is not in painting historical actors as evil, but in pointing out the effects of their actions. William Jackson Palmer, Daniel Jackling, or John Collier respectively are examples of this. Palmer's role in the corporative system that fanned the flames of rebellion, Jackling's technological innovations and their deleterious effects on the environment, and Collier's implementation of paternalist policies that had detrimental effects on tribal autonomy and cultural heritage.[471]

---

[468] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, *The Engaged Historian*, 34–36.
[469] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 36.
[470] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, 36.
[471] Andrews, *Killing for Coal*; LeCain, *Mass Destruction*; Needham, *Power Lines*.

Political Engagement

With the fact that historical works are not neutral comes the realization that by virtue of subject matter, historical works are unavoidably political. Using the books analyzed we can draw upon some examples. Firstly, poor treatment of workers, as depicted in *Killing for Coal*, would serve as politically useful for any political direction that goes against the system that allowed this poor treatment.[472] Secondly, environmental damages, as depicted in *Mass Destruction*, would be politically useful for political direction against systems that allowed those damages.[473] And finally, the paternalistic and unequal treatment of native tribes, as depicted in *Power Lines* for political direction against the system that allowed that discrimination.[474]

By pointing out the fact that it these histories are unavoidably political by virtue of subject matter, does not make the historian partisan or agenda driven. In regard to the five dimensions, the ethical and political dimensions take up a large part of the representation because of the subject matter 'demands' it. They do not impose themselves onto the other dimensions to their detriment, but take up space because of the lack of content considering the others. The cognitive dimension is still very much taken into account following their rigorous research as well as attention to detail in their explanations. Pointing out uncertainties, differing perspectives, intentions, and motivations are all important to a responsible representation. The religious dimension, for example, gets a small page count over the three books, only Needham pointing out the importance of freedom of religion with the Navajo tribes in *Power Lines*.[475]

Reproducing the One-Sidedness in Conflicts

Each of the books emplotting their narratives in the mode of tragedy reveals three different 'laws'. In *Killing for Coal* the co-optation of corporations and government is too much for workers to fight against, leaving them to persist under this regime.[476] In *Mass Destruction* the fallacy of the 'painless infinite growth' is revealed through the observation of its process,

---

[472] Andrews, *Killing for Coal*.
[473] LeCain, *Mass Destruction*.
[474] Needham, *Power Lines*.
[475] Needham, *Power Lines*, 46.
[476] Andrews, *Killing for Coal*, 282, 286.

leaving the world's inhabitants to deal with the by-products.[477] Lastly, in *Power Lines* the burden of production underpinning the modern lifestyle of metropolitan centers is carried by the remote and rural areas that did not get to take part in the benefits given by said lifestyle.[478] The concern that Rüsen points out is that histories reproduce this one-sidedness by its mere representation.[479]

What I suggest is that historians take advantage of the closure effect, as explained by Pihlainen.[480] At the closing of the narrative, the events within the drama have had a moralizing effect. This moralizing effect can be used to lament against the conditions that brought them about. As much as the mode of tragedy reveals an obstacle too great to overcome for the protagonist, it can be used in history to point out the flaws in that very obstacle on an either ethical or a political foundation. Ethically, one can make the case that it was wrong to treat the Navajos with such paternalism as in *Power Lines*, and politically it was wrong for the government to take the side of the corporations as in *Killing for Coal*.[481] Why it was wrong, the tragic emplotment reasons, was because of its results. A lack of improvement in living-conditions for the Navajo, and miners being forced to continue working in dangerous underpaid conditions, respectively.[482]

Artifacts in Discourse and Social Practice

As Pihlainen points out about historical practice in the poststructuralist approach, citing both Dominick LaCapra and Joan Scott, there is a task in analyzing how people discuss the past.[483] For LaCapra, the "dialogical connection between past and present" and for Scott, the discussion of how categories of meaning have been constructed. These two approaches touch upon the 'real' in the sense that they seek to interact with the artifacts of the past, how we view certain things and how we talk about others. Pihlainen uses the examples of "daily experiences, memory, language, social practices and customs" to show how the "valuative

---

[477] LeCain, *Mass Destruction*, 208–9.
[478] Needham, *Power Lines*, 250.
[479] Rüsen, "Engagement: Metahistorical Considerations on a Disputed Attitude in Historical Studies," in *The Engaged Historian*, ed. Berger, *The Engaged Historian*, 40.
[480] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 64.
[481] Needham, *Power Lines*; Andrews, *Killing for Coal*.
[482] Needham, *Power Lines*, 250; Andrews, *Killing for Coal*, 286.
[483] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, *The Engaged Historian*, 67–68; Scott, *Gender and the Politics of History*; LaCapra, *History, Politics, and the Novel*.

'content of the form' is created."[484] He points out how "the historical past can only present itself through the aesthetic" and although he uses it to make the foundation for what he calls the ethicopolitical, I want to use it as a springboard for a deeper consideration of this aesthetical dimension of narrative.[485] What is 'lost' to the past is 'available' through narrative, and so I think that it is equally important to discuss the literary artifacts of history as well as the historical artifacts of social practice.

In other words, an actor in a historical narrative who takes on the role of villain for plot reasons – grounded in the intersubjectivity of the historical professional standards, of course – needs to be pointed out. In this example, the literary artifact of villain or antagonist, is important for the unfolding of the narrative, but for the historian it is important to point out the 'literaryness' of this role. Thomas G. Andrews does this very well in practice without mention of the literariness aspect. When discussing the Ludlow massacre, he points out how this label lacks nuance and how it paints one side as antagonists and the other side as victim, when actually, the other side is part of the protagonist labor movement not merely acted upon but possessing their own agency.[486] Presenting certain historical agents as 'the movers and changers' in either tragic or comedic emplotments may be in line with responsible representational standards, but their role within the narrative as 'villains' or 'heroes' are just that, literary artifacts. As there is nothing metaphysical differentiating between people, it is their position within the narrative that gives them this role. For example, Daniel Jackling as the 'antagonist' who destroyed mountains and created deadzones, was not a supervillain, but through his position in the narrative, he can be viewed as one.[487] Certainly he is not blameless for the negative effects of mass destruction mining techniques, but the moralizing effect of this history is not 'Jackling was a villain' it is 'mass destruction technology is harmful and unsustainable', which in fact LeCain does a good job of pointing out.[488]

---

[484] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, *The Engaged Historian*, 68.

[485] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 68.

[486] Andrews, *Killing for Coal*, 15.

[487] LeCain, *Mass Destruction*, 23.

[488] LeCain, *Mass Destruction*, 216–17.

The reader

Returning to the original question, if there are situations with other priorities, in what form should they be represented? Should traditional narrative strategies be kept, alongside notes on the literary effects of narrative upon the understanding of the past, or should histories take the form of 'postmodern parahistorical anti-narratives'?[489] Building upon the last point, is it enough to keep the same representational strategies as long as they are filled with comments on both subject matter and literary artifacts, or should historians find new ways of representing the past? Pihlainen points out two polar opposite views in this regard. On one side, the reader is viewed as a passive consumer of information, and on the other the reader is viewed as able to critically interact with both information as well as strange representational forms.[490] One of the supposed benefits of trying these other strategies is to avoid the moralizing of the closure effect, by writing "postmodern parahistorical anti-narratives" the story denies and resists these effects.[491] By changing the form, the hope is to change the 'content of the form'. I will argue the case that until one such alternative becomes available and viable, historians – and readers for that matter – will be better served by engaging more openly with the forms we currently possess.

There are two aspects of current historical practice which I wish to argue for: narrative closure and the epilogue. Narrative closure in historical writing is not merely a stylistic choice; it serves as a mechanism through which historians can impart a moral dimension to their narratives. This moralizing effect stems from the way closure helps to synthesize the complexities of historical events into a coherent story that resonates with the reader's sense of justice and ethical reflection. The value of narrative closure lies in its capacity to offer a resolution that not only concludes a historical account but also invites readers to contemplate the broader moral lessons derived from the narrative. The process of crafting a narrative closure forces historians to engage with the moral implications of the events they describe. This engagement is crucial because it provides a space where historical interpretation intersects with moral evaluation, allowing historians to highlight the ethical dimensions of historical actions and decisions. By carefully managing the closure of their narratives, historians can emphasize certain moral outcomes, thereby guiding readers towards specific

---

[489] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, *The Engaged Historian*, 72.

[490] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 71–72.

[491] Pihlainen, "Committed Writing: History and Narrative Communication Revisited," ed. Berger, 72.

ethical conclusions or reflections. When analyzing the subject matter of this thesis, all three books make expert use of this effect. Firstly, Andrews points out the ending of the ten days' war.[492] LeCain points out the disastrous effects of mass destruction mining.[493] Needham shows the negative effects of systemic discrimination.[494] Narrative closure used in this way can serve as a powerful tool in addressing contemporary moral dilemmas by drawing parallels between past events and present circumstances. In doing so, it acts as a bridge that connects historical insights to current social and ethical challenges, reinforcing the relevance of history to ongoing moral and ethical debates.

Furthermore, the epilogue in historical narratives offers historians a unique opportunity to extend their analysis beyond the temporal confines of their main narrative and comment on contemporary issues or challenges. This section can be particularly effective in situating the historical narrative within a modern context, thereby enhancing the relevance of historical studies to current affairs, which the historians studied here also make use of to good effect. Andrews uses it to emphasize the 'lessons' of his narrative, and to point out the implications for both present and future.[495] LeCain also emphasizes the deleterious effects of mass destruction, and he speculates towards a solution that will mitigate some of the worse excesses in the future.[496] And Needham urges for a better understanding of cultural consequences of consumption as well as a call for a change to the system that brought those consequences about.[497] Utilizing the epilogue in this way allows historians to reflect on the implications of historical events for today's world. It serves as a platform where historians can explicitly address how the lessons learned from the past can inform our understanding of present-day issues, advocate for social or political change, or highlight ongoing struggles that mirror historical injustices. This not only enriches the narrative, but also elevates the role of the historian from a mere chronicler of the past to an engaged commentator on contemporary society. Moreover, the epilogue can act as a call to action, urging readers to consider how the knowledge of the past can be harnessed to address today's challenges. This can be particularly impactful in histories dealing with themes of justice and human rights, where the historian can use the epilogue to connect historical injustices to ongoing issues, thereby fostering a sense of

---

[492] Andrews, *Killing for Coal*, 285–86.
[493] LeCain, *Mass Destruction*, 214–17.
[494] Needham, *Power Lines*, 244–45.
[495] Andrews, *Killing for Coal*, 287–91.
[496] LeCain, *Mass Destruction*, 229–30.
[497] Needham, *Power Lines*, 256–57.

continuity and urgency. This could stress the borders of responsible history writing, but when dealing with the 'specific situation' of climate change, this could be one example of the sorts of new priorities that the call for papers asked for.[498]

One final thought, when dealing with climate change, it stands out as an issue because of its nature it encompasses every living being on this planet, and it has the potential to become an existential threat. But when writing history, there are unavoidable qualities of emplotting the past that cannot take this fact into account. Firstly, there is the perhaps non-starter that these existential threats are in the future and history is specifically writing about the past. But narratively speaking, an existential threat is not part of either the comedic or tragic mode of emplotment. In both modes the conflict or obstacle is merely present and there is either a state of being that makes it possible to intermittently return to regular life or the actors in the drama realize that the obstacle is too big to overcome and that they just have to live with it, meaning it does not destroy their world. Romance can imagine both an existential threat as well as a resolution where the protagonist overcomes this obstacle, but relating to the real world, this resolution would then lie in the future, outside the remit of history. Satire then, perhaps ironically, is the only mode of emplotment which can narrativize an existential threat in the future, by focusing on the actors' inability to deal with the obstacle or their inability to understand the scale or scope of the obstacle. Writing a narrative of historical actors that do not understand the challenge of climate change, or are incapable of dealing with it, might perhaps be the most responsible way to deal with an issue that has not yet happened. Unfortunately, we are forced to ask the question: are either of these alternatives appealing? Or should there be another representational strategy that allows for the possibility of apocalypse? Perhaps a bit extreme to think about. That is why I think that working with the tools we do have, is a better choice than to make historians be the experimenters of such new strategies.

---

[498] "INTH Call for Papers."

Conclusion

To recapitulate, the important parts to take away from this thesis. There seems to be a small, but observable trend within environmental history that tends towards the narrative representation in the mode of tragedy. Underscored by the fact that all three books follow this mode of emplotment. Additionally, there seems to be a representation of agency that favors 'the few and the powerful.' Displayed through the resolution of the narratives each book. In this combination of the literary aspects of the tragic mode of emplotment, the 'realization of the law that governs the historical process' is by the virtue of narrative representational strategy prone to a story where there are certain actors that are responsible for the decline of the environment as well as the sustaining of the system that is responsible for this decline. This representational trend in of itself is not necessarily a worry in regard to historical accuracy, but it could be one in regard to engagement. If historians wish to empower change, and the environment could certainly be such a case where change is needed, then taking heed of both narrative and collective 'meta-narratives' could be a potential path forward. The environment being one potential 'specific situation' that could foster such a priority. Instead of making historians experiment with strange new representational forms, they could point out the literary artifacts present in their narratives in a way that emphasizes the agency and power of the reader to affect positive change.

I find myself being drawn back to the idealized version of history of Croce or Ricoeur that White touched upon a few times, emphasizing the readers' power for self-determination and history's potential to cultivate "a citizen capable of acting responsibly."[499] The moralizing of the closure effect being very much unavoidable in traditional narrative strategies, as is pointed out by theorists and accepted by most, the two options currently – as I see it – are to either avoid it entirely with new representational strategies whatever they might be, or historians could embrace this effect whilst still maintaining the integrity of the dimensions of historical culture.

Writing a traditional narrative where a careful observance of the remnants of the past leads to a certain emplotment is seemingly historians' current best practice. Pointing out the literary artifacts that position certain actors as 'movers and changers' does not change either the past itself or the narrative representation of it. Genuinely learning something from the

---

[499] White, *The Fiction of Narrative*, 66,334.

past, if at all possible, would be the highest form of historical knowledge. Pointing out mistakes does not have to carry a tone of scorn, vilifying historical actors is not necessarily a point in of itself, pointing out the results and the road towards those results is – if anything – more important. The transformation of the energy economy, and all its subsequent technological advancements, has led to a certain point where the environment cannot cope. Castigating the actors of the past as bad people, can only get us – historians – at most halfway there. Recognizing the systems and processes – mass destruction, power lines – furthers the cause even more. Proposing a technical solution to any given problem might be outside the scope of history and outside the capacity of any given historian, but cultural prescriptions of intent is possibly neither in this case. In essence, acknowledging that the result is unfavorable, and identifying the contributing systems or processes underscores the need for either avoidance or reparative actions. Emphasizing these aspects in historical narratives could help foster a more engaged and informed public, capable of understanding the complexities of the past and motivated to enact positive change in the future.

References

American Society for Environmental History. "American Society for Environmental History - Past Recipients." Past Recipients, November 4, 2024. https://aseh.org/past-recipients.

Andrews, Thomas G. *Killing for Coal: America's Deadliest Labor War*. 1. paperback ed. Cambridge, Mass. London: Harvard University Press, 2010.

Berger, Stefan, ed. *The Engaged Historian: Perspectives on the Intersections of Politics, Activism and the Historical Profession*. Making Sense of History, volume 37. New York: Berghahn Books, 2019.

Bloxham, Donald. *History and Morality*. Oxford (GB): Oxford University Press, 2020.

Booth, William James. *Memory, Historic Injustice, and Responsibility*. New York: Routledge, Taylor & Francis Group, 2020.

Cash, Johnny. "Sixteen Tons." By Merle Travis, Recorded January 1987. Track 6 on Johnny Cash Is Coming To Town. Mercury Records, compact disc.

Cotkin, George. "History's Moral Turn." *Journal of the History of Ideas* 69, no. 2 (2008): 293–315.

David, Lea. *The Past Can't Heal Us: The Dangers of Mandating Memory in the Name of Human Rights*. 1st ed. Cambridge University Press, 2020. https://doi.org/10.1017/9781108861311.

De Baets, Antoon. *Responsible History*. New York: Berghahn Books, 2009.

Domańska, Ewa. "Prefigurative Humanities." *History and Theory* 60, no. 4 (December 2021): 141–58. https://doi.org/10.1111/hith.12241.

Dortins, Emma. "Review of *Responsible History*, by Antoon de Baets." *Canadian Journal of History* 46, no. 1 (June 2011): 233–35. https://doi.org/10.3138/cjh.46.1.233.

Gensburger, Sarah, and Sandrine Lefranc. *Beyond Memory: Can We Really Learn from the Past?* Translated by Katharine Throssell. Palgrave Macmillan Memory Studies. Cham, Switzerland: Palgrave Macmillan, 2020.

Haff, Peter. "Humans and Technology in the Anthropocene: Six Rules." *The Anthropocene Review* 1, no. 2 (August 2014): 126–36. https://doi.org/10.1177/2053019614530575.

"INTH Conference 2024: History & Responsibility." International Network for Theory of History, 2023. https://www.inth.ugent.be/index.php/node/147185.

Jenkins, Keith. *Re-Thinking History: With a New Preface and Conversation with the Author by Alun Munslow*. Repr. Routledge Classics. London: Routledge, 2005.

King, Lamont DeHaven. "John Torpey, Making Whole What Has Been Smashed: On Reparations Politics." *The Journal of African American History* 98, no. 2 (April 1, 2013): 353–56. https://doi.org/10.5323/jafriamerhist.98.2.0353.

Krawatzek, Felix. "Book Review: *Beyond Memory*: Can We Really Learn From the Past?" *Memory Studies* 14, no. 6 (December 1, 2021): 1511–14. https://doi.org/10.1177/17506980211053975a.

LaCapra, Dominick. *History, Politics, and the Novel*. Ithaca, NY: Cornell University Press, 1987.

LeCain, Timothy J. *Mass Destruction: The Men and Giant Mines That Wired America and Scarred the Planet*. New Brunswick, N.J: Rutgers University Press, 2009.

Maza, Sarah C. *Thinking about History*. Chicago: The University of Chicago Press, 2017.

McGee, Colin. "Review of *Between Vengeance and Forgiveness: Facing History After Genocide and Mass Violence*." *Journal of International Affairs* 60, no. 1 (Fall/Winter2006 2006): 253–54.

McKay, Jim, dir. The Wire, Season 4, episode 4, "Refugees." October 1, 2006, on HBO. https://play.hbomax.com/player/urn:hbo:episode:GVU2wyQyuuINJjhsJAVP7.

Minow, Martha. *Between Vengeance and Forgiveness: Facing History after Genocide and Mass Violence*. Nachdr. Boston: Beacon Press, 2009.

Needham, Andrew. *Power Lines: Phoenix and the Making of the Modern Southwest*. Politics and Society in Twentieth-Century America. Princeton (N.J.) Oxford (GB): Princeton University Press, 2014.

Nichols, Robert. "Joan Wallach Scott. *On the Judgement of History*." *The American Historical Review* 127, no. 1 (April 26, 2022): 463–65. https://doi.org/10.1093/ahr/rhac039.

Nobles, Melissa. "Review of *Enduring Injustice*. By Jeff Spinner-Halev." *Perspectives on Politics* 11, no. 1 (March 2013): 302–3. https://doi.org/10.1017/S1537592712003295.

Otto, Ilona M., Marc Wiedermann, Roger Cremades, Jonathan F. Donges, Cornelia Auer, and Wolfgang Lucht. "Human Agency in the Anthropocene." *Ecological Economics* 167 (January 2020): 106463. https://doi.org/10.1016/j.ecolecon.2019.106463.

Paul, Herman. *Historians' Virtues: From Antiquity to the Twenty-First Century*. Elements in Historical Theory and Practice. Cambridge: Cambridge University Press, 2022. https://doi.org/10.1017/9781108993067.

———. "Review of *History and Morality* by Donald Bloxham." *The American Historical Review* 127, no. 4 (January 24, 2023): 1960–61. https://doi.org/10.1093/ahr/rhac368.

Sartre, Jean-Paul. *What Is Literature?* New York: Philosophical Library, 1949.

Scott, Joan Wallach. *Gender and the Politics of History*. New York: Columbia University Press, 1988.

———. *On the Judgment of History*. Ruth Benedict Book Series. New York: Columbia University Press, 2020.

Spinner-Halev, Jeff. *Enduring Injustice*. Cambridge, UK: Cambridge University Press, 2012.

Stow, Simon. "Review of *Memory, Historic Injustice, and Responsibility.* By W. James Booth." *Perspectives on Politics* 18, no. 4 (December 2020): 1205–6. https://doi.org/10.1017/S1537592720002984.

Tighe, Carl. *Writing and Responsibility*. London ; New York: Routledge, 2005.

Torpey, John. "'Making Whole What Has Been Smashed': Reflections on Reparations." *The Journal of Modern History* 73, no. 2 (June 2001): 333–58. https://doi.org/10.1086/321028.

Tozzi, Verónica. "The Epistemic and Moral Role of Testimony." *History and Theory* 51, no. 1 (February 2012): 1–17. https://doi.org/10.1111/j.1468-2303.2012.00609.x.

White, Hayden V. *Figural Realism: Studies in the Mimesis Effect*. Baltimore, Ma: Johns Hopkins University Press, 1999.

———. *Metahistory: The Historical Imagination in Nineteenth-Century Europe*. Fortieth-Anniversary edition. Baltimore, Maryland: Johns Hopkins University Press, 2014.

———. *The Content of the Form: Narrative Discourse and Historical Representation*. Baltimore: Johns Hopkins University Press, 1987.

———. *The Fiction of Narrative: Essays on History, Literature, and Theory, 1957-2007*. Edited by Robert Doran. Baltimore, Md: Johns Hopkins University Press, 2010.

Windschuttle, Keith. *The Killing of History: How Literary Critics and Social Theorists Are Murdering Our Past*. New York: The Free Press, 1996.