



UNIVERSITY
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The Business of Visual Effects:
How Studio Power, Unionization, and Emerging AI Threats
Impact the Working Conditions and Recognition of VFX
Artists

University of York

School of Arts and Creative Technologies

BA (Hons) Business of The Creative Industries

May 2025

Exam Number: Y3912832

Total Word Count: 9,113

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Acknowledgments

As I submit this dissertation, I am quite proud of what I have accomplished and glad to have researched and discussed a subject I love. I would first like to thank my project supervisor, Nathan Townsend, for his guidance and support throughout. I also wish to thank Sam Gorski, Niko Pueringer, and Wren Weichman of Corridor Digital, whose YouTube videos and Life After Pi recommendation sparked my inspiration for this individual project. Lastly, I appreciate all my friends and family for being so understanding during my 24/7 grind this year.

Introduction

“There are a lot of people working very hard to make sure you don’t see their work, which is counterintuitive, but it’s the nature of what we do. So I will continue to call attention to those visual effects artists, because they work really hard in service to telling the story (Goldman, 2018).”

- Jon Favreau, *Pioneering Director of the VFX-Driven The Jungle Book* (2016)

Visual effects (VFX) are one of the most integral parts of the fruition of a film project, and the industry employed over 170,000 workers worldwide (Das, 2023, p. e304; Jacob, 2023). Much like musicians, painters, directors, and actors, these professionals are artists themselves. Animators, composers, and others make up the term visual effects (VFX) artist and their expertise involves crafting intricate digital environments and characters, contributing to at least 49 of the top 50 grossing films annually (*Life After Pi*, 2014, 3:49–3:54). In spite of their significant role, these workers experience systemic undervaluation, which is attributed to factors like studio dominance and emerging technologies (Curtin & Vanderhoef, 2014, p. 219). In this dissertation, these factors are thoroughly analyzed by investigating their labor conditions, examining how artificial intelligence poses a risk to their livelihood, and exploring unionization as a means of resistance.

In the creative industry, visual effects (VFX) artists are commonly employed on short-term contracts that do not include overtime pay or profit-sharing, making VFX labor distinctly precarious (*Life After Pi*, 2014, 09:10–09:19). Existing research on the topic, like Parker and Cox’s 2013 article on the power relations in the sector highlight critical imbalances in terms of the film studios’ power, but fails to consider the workers’ lived experiences and the impact of AI on labor. On a similar note, Narayan et al.’s profound article gives insight into the ethical risks surrounding AI but fails to consider a labor-focused theoretical lens. With this in mind, this study aims to address these gaps by examining key issues using the theoretical framework of the Labor Process Theory (LPT), pioneered by economist Harry Braverman, with its three fundamental pillars of control, deskilling, and resistance to analyze labor.

The structure follows three main chapters. The first chapter reviews the literature of VFX labor history, LPT, industry practices, and identifies research gaps. In Chapter 2, LPT is applied to examine the film studios’ control, deskilling via outsourcing, and weak resistance. Chapter 3 focuses on AI as a disruptor in the industry and presents solutions to the discussed VFX problems in the form of union efforts and VFX companies’ own “makeshift strategies.” To ground the analysis in empirical and theoretical evidence, secondary research is employed.

Ensuring the focus of this paper, three research questions were formulated as guiding principles:

1. To what extent do studio control and artificial intelligence threaten VFX artists’ jobs and creative freedom in places like the U.S. and UK, and how do these issues affect their work environment?
2. Why have VFX artists’ efforts to push back proven weak compared to actors’ and writers’ strong unions, and how far can VFX unions overcome obstacles like short-term contracts and studio pushback?

3. How do AI advancements create ethical and financial problems for VFX artists, and can union efforts, guided by theories like Labor Process Theory, tackle these amid studios' cost-cutting?

These questions were formulated to expose the systemic undervaluation of VFX artists. They seek to interpret how factors like studio control, AI, and resistance affect labor conditions and evaluate the potential of unionization to empower artists in this industry.

The dissertation focuses on the 2010s to 2025, mainly in the U.S. and UK, which are the primary VFX hubs, to fully consider all recent union efforts and AI disruptions. The chosen timeline and geography allow for a targeted analysis of current labor challenges and global industry trends.

Methodology

This dissertation utilized secondary research to examine the aforementioned issues of VFX labor conditions. In this project, the research manifested as a review of various industry reports, academic literature, case studies, interviews, surveys, and an insightful documentary. This methodology was decided to synthesize existing data, as primary research was not feasible due to access limitations.

As for the key sources, *Life After Pi* (2014) is a case study that details the collapse of Rhythm & Hues, which declared Chapter 11 bankruptcy in 2013. Other sources include industry surveys (IATSE, 2022) and theoretical works, notably Thompson's (1983) book on the Labor Process Theory, all ensuring an evidence-based exploration. Furthermore, ethical considerations were a priority and carefully followed, as outlined in the ethics checklist (Appendix 1). Lastly, despite secondary research naturally lacking more targeted firsthand artistic perspectives, this was substantiated with secondhand ones, such as interviews and surveys. Thereby, this foundation will allow for a clear understanding of VFX labor challenges and also inform future primary research.

Chapter 1: Literature Review & Theoretical Framework

1.1 Introduction

This literature review aims to explore key academic and industry sources concerning labor in the visual effects industry. The structure follows three sections: the first part is a historical overview of the development of visual effects, the second one provides an outline of the evolving industry practices and important terminology, and the third section offers a theoretical grounding in the Labor Process Theory (LPT). All of the above aid in providing context that is crucial for analyzing the current labor conditions in the industry and examining gaps in the research around power, technology, and resistance, which will be further addressed in later chapters.

1.2 History of VFX Labor

Contrary to popular belief, visual effects are not a novel invention of the twenty-first century. Granted, the art form has evolved substantially with the inception of powerful computers capable of rendering complex three-dimensional graphics. Yet, to conceptualize how VFX became an essential part of filmmaking, its humble beginnings are worth tracing (Das, 2023, p. e304).

Georges Méliès is often credited as the father of VFX with his groundbreaking accomplishments in *A Trip to the Moon* (1902). The film pioneered methods to achieve unique effects such as stop-motion animation, double exposure techniques, and hand-painted backdrops. As a result, films like *King Kong* (1933) and *Jason and the Argonauts* (1963) became possible and are often praised for their early stop-motion impact. In nature, these effects were highly imaginative but also experimental at the time. However, they laid the foundation for all future VFX techniques, illustrating their narrative power from the beginning (Das, 2023, p. e304).

The early 1970s and 1980s were a transitional period for early VFX. Films such as *Star Wars* (1977) and *Blade Runner* (1982) saw the introduction of chroma keying and optical printers, techniques that enabled filmmakers to blend live-action footage with effects in a seamless manner. This addition completely revolutionized the industry, allowing for the majority of films to then rely on these methods. Because of this, VFX artists have been the unsung heroes of the filmmaking pipeline, even evolving substantially in the 1990s, when significant technological advances in Computer-Generated Imagery (CGI) allowed for the creation of plausible digital elements and their seamless marrying with live-action footage (Das, 2023, p. e305).

1.3 Evolution of Industry Practices

CGI was another major addition to the VFX pipeline that completely revolutionized the industry once more. Films such as *Terminator 2: Judgment Day* (1992) and *Jurassic Park* (1993) served as major turning points by heavily researching and pioneering jaw-dropping CGI effects that the world had never seen. Without CGI, it would not be possible to create characters and environments from scratch in such a detailed and realistic fashion (Das, 2023, p. e305).

Today, when given adequate time and resources, these artists can utilize a combination of the aforementioned techniques to accomplish magnificent feats, often producing manufactured imagery that is not just realistic but indistinguishable from reality. This shift in the industry has naturally led film studios to increasingly rely on the artists to “fix it in post,” forcing them to work overtime and paying them less than what they rightfully deserve, despite the artistic parity VFX shares with more publicly celebrated roles, such as directors and actors. Nonetheless, VFX now often constitutes a significant portion of major feature film production spending and is a growing component of budgets for television and commercials, signifying their importance (Curtin and Vanderhoef, 2014, p. 219). In essence, without the visual effects artists, films would solely rely on practical effects (i.e., effects that can only be achieved through camera tricks). Consequently, most of today’s grand blockbuster films would simply not exist.

The film and TV industry has come to rely heavily on VFX artists, whose work is now essential to most productions (Hanlin et al., 2020). Visual effects can range from subtle tweaks to fully digital environments and characters (Narayan et al., 2022, pp. 115-116). VFX artists are some of the few workers who are involved throughout the entire production process, starting as early as pre-visualization and staying on through to the final delivery of a film, sometimes even making changes after a film has been edited (Thompson, Powers, and Santos, 2024). Blockbusters today can include up to 2000 VFX shots, each requiring complex digital work. On top of that, last-minute changes and constant revisions are common, which only adds to the already intense workload and tight deadlines. This kind of work takes a high level of expertise across many disciplines, highlighting just how essential and overburdened VFX artists have become in filmmaking today (Turner, 2013, p. 9). This growing dependence on VFX raises an important question: why, despite their significant role, are VFX artists still undervalued and unfairly treated by the industry?

1.4 Defining Key Terms

In today’s filmmaking landscape, terms like VFX artists, CGI, and animators often overlap, and the lines between them can blur, especially as digital magic becomes the basis of modern cinema. Hence, for the purposes of this dissertation, it is important to define several essential terms that appear throughout. To begin, Visual Effects (VFX) can be defined as “Any change to the photography of a film or television show after it has been shot (IATSE, 2023, p. 23).” Building on this, Visual Effects (VFX) Artists primarily include digital artists who create VFX by working in post-production, which includes compositors, editors, animators, among a few others. Next, the VFX Pipeline refers to the end-to-end technical workflow through which VFX progresses, usually from the client-side data ingestion to the asset distribution to various teams, and, finally, the return of the completed shots back to the clients. It is a fundamental process that governs all subsequent internal processes and communication within the operations of vendors (IATSE, 2023, p. 25).

Transitioning into supplementary terms related to VFX, the UK government defined the Creative Industries in 2001 as those industries “which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property (UK Government, 2021).” Although, because not all creative occupations are in the Creative Industries, it is oftentimes more appropriate to discuss the Creative Economy, “...which comprises the whole Creative

Industries workforce (creative and non creative occupations), as well as those working in creative occupations in other sectors (Creative Industries Policy and Evidence Centre, 2022).” VFX artists are naturally part of the creative industries and economy, contributing both artistic expression and technical expertise to a sector.

In addition to these core concepts, a few supplementary terms, while either self-explanatory or less frequently used, will also be defined for clarity and completeness. For instance, Previsualization (Previs) is a technically demanding artistic process that is used to block out planned action in a scene before it is filmed; useful in illustrating how live-action and CG elements will interact, which helps directors plan the technical aspects of filmmaking (IATSE, 2023, p. 25).

Lastly, in the context of this project, Artificial Intelligence (AI) consists of emerging generative models and automation tools that are beginning to break into VFX labor by decreasing the demand for human input, which, in turn, increases managerial control and creates new ethical and legal dilemmas which are well-suited for analysis through Labor Process Theory, introduced below and used throughout this dissertation (Feuerriegel et al., 2023).

1.5 Labor Process Theory

In today’s capitalist society, life is structured by work (Thompson, 1983, p. 4). Labor Process Theory (LPT) was first discussed by Harry Braverman in his book, *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century* (1974, pp. 6-24). It emerges from Marxism and looks into the relationship between capital and labor. Essentially, how work is organized, controlled, and experienced under a capitalist system. In the context of this dissertation, LPT is used to dissect how film studios (employers) extract value from VFX and animation professionals (workers) and how said workers respond to the conditions that emerge. Since the definition of the labor process theory varies marginally among researchers, it is important to clarify how the term has evolved and how the concept is understood in this project. Hence, this dissertation adopts Paul Thompson’s interpretation from his book *The Nature of Work* (1983). With that in mind, the theory is comprised of three pillars: control, deskilling, and resistance. In simple words, control limits creative autonomy through strict oversight and studio-driven workflows (Thompson, 1983, p. 122). Next, deskilling reduces artist input by simplifying tasks or replacing them with technology (p. 90). Lastly, resistance emerges as workers organize to push back against exploitation (p. 117). Altogether, LPT is an invaluable tool as it aids in unpacking key structural issues like exploitation, undervaluation, and power imbalance in the VFX industry; all of which will be extensively analyzed in the second chapter using this theory.

1.6 Research Gaps & Rationale

A crucial part of conducting this literature review is identifying the gaps in the current research, establishing a foundation for this study, and further highlighting its necessity. Existing literature on the subject provides useful information about the conditions of VFX labor, however, a few key research gaps emerge as studies either lack theoretical grounding, overlook recent technological threats like AI, or fall short in connecting

power imbalances between studios and VFX firms to broader labor consequences. Hence, this section aims to identify these main gaps across academic and industry sources.

As a part of their research on power relations within the industry, business experts Parker and Cox discuss how the VFX industry is suffering from severe power asymmetries between film studios and smaller regional service vendors (SMEs), whose control over pricing, contracts, and workflow decisions is very limited (2013, pp. 1096–1099). These imbalances have been ingrained in global value chains through governance arrangements that limit the ability of SMEs to retain value, especially given the recent trend of film studios often offshoring labor in hopes of benefiting from tax and cost reductions (pp. 1096–1097, p. 1107). A clear argument is made by Parker and Cox about how the VFX industry is heavily molded by deregulation and studio consolidation on a global scale, which creates an oligopoly and makes the suppliers more vulnerable. With this in mind, despite the theory in the paper mapping out these global production systems effectively, it fails to account for the lived realities of the workers (pp. 1095–1096, p. 1099, p. 1101, p. 1107). This highlights a pattern in the current literature of overemphasizing the strategies of firms (film studios) as opposed to the laborers themselves (VFX artists), which creates a blind spot in addressing the lived realities of creative labor in today's capitalist landscape (pp. 1096–1097, pp. 1099–1100, p. 1102, p. 1106). In other words, the paper's focus is purely economic, analyzing how VFX firms navigate value capture, but it lacks critical reflection on the workers' perspective, conditions, and lived experience. Therefore, this dissertation fills that gap by applying a labor-focused framework (that being LPT) to the actual conditions of VFX workers, shifting attention from firm-to-firm power to studio-to-artist dynamics.

Another important gap that is worth examining is the lack of a critical, theory-based analysis of AI's impact, focusing specifically on the VFX industry. In 2022, as part of their research on this subject, Narayan et al. provided useful interviews with VFX artists discussing the role of AI. While the study addresses ethical, creative, and technical risks, it fails to analyze the labor conditions behind the artists' opinions through any theoretical framework to reveal how AI tools affect control, deskilling, and labor resistance, all of which are central pillars in LPT. There is no attempt to connect these changes in labor with capitalist restructuring or the broader precarity of creative work overall (pp. 114-119). As such, this dissertation will view AI as a mechanism of control and deskilling, examined through LPT, as opposed to treating AI solely as a tool.

Lastly, the literature revealed another noteworthy gap in the research: fragmented or fully incomplete unionization and industry solution models. Sources like the *2022 Workers Survey* by the International Alliance of Theatrical Stage Employees (IATSE) and case studies like *A Vanishing Piece of the Pi: The Globalization of Visual Effects Labor* by Curtin and Vanderhoef (2015) denote the unacceptable working conditions and structural fragility of the industry, but do not apply any systematic labor theory to examine the issue further. To analyze, the industry survey by IATSE collects useful empirical data from VFX artists such as burnout, work hours, and pay rates, but lacks a guiding theory to bring these findings together or explain their root causes (IATSE, 2022). Similarly, Curtin and Vanderhoef present numerous historical injustices, like the collapse of the VFX company, Rhythm & Hues, but treat them as isolated phenomena instead of examining the underlying logic of how labor is extracted in capitalism (Curtin and Vanderhoef, 2014, pp. 220-234). In brief, both texts advocate for better working conditions and unionization, but do not

articulate a specific framework for understanding the structural power, exploitation, and resistance efforts. Thus, this gap is bridged once more by explicitly grounding the investigation in the Labor Process Theory, which allows for the interpretation of industry patterns through its core axes of control, deskilling, and resistance.

1.7 Summary

The literature that was reviewed in this chapter showcases that despite many significant insights existing about the state of VFX labor, serious omissions still remain. Most importantly, an absence of a sustained emphasis on the workers' experience in terms of collective resistance, structural control, and skill erosion. In an effort to address these gaps, this project makes use of the Labor Process Theory to re-center labor in this investigation of the industry. The following chapter builds upon this theoretical foundation so as to dissect the conditions that VFX artists deal with today, but also how mechanisms of deskilling and control have shaped, and continue to shape, their exploration.

Chapter 2: Analysis of the VFX Labor Problem

2.1 Introduction

To preface, this chapter utilizes the Labor Process Theory (LPT) to examine the labor conditions present in the VFX sector. It focuses on the three key pillars of LPT: control, deskilling, and resistance. Issues like studio dominance, outsourcing, and fixed-bid contracts are analyzed, showing how they devalue the artists' autonomy and work. Also, through this theory, the chapter investigates how systemic structures suppress labor power, setting the stage for the third chapter, which focuses on the emerging threat of AI and discusses possible solutions to the problem.

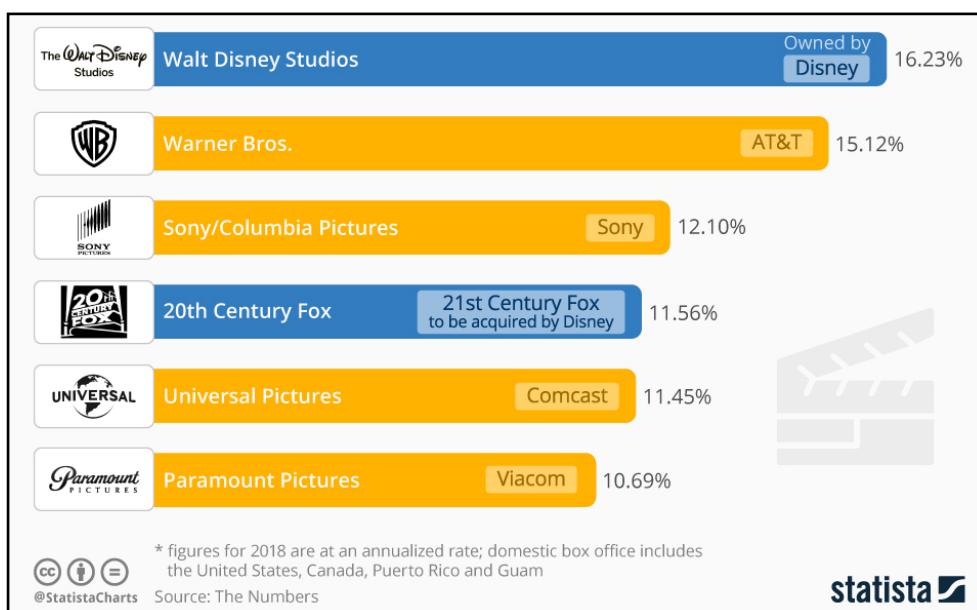
2.2 Control

To begin, it is important to frame the issue under LPT's control pillar. Accordingly, control refers to how employers impose authority over the labor process with the goal of maximizing surplus value, whether that is done directly or through structural means (Thompson, 1983, pp. 40–41, p. 122, pp. 151–152). In the VFX industry, this control is seen primarily through the following mechanisms: studio dominance, fixed-bid contracts, and a lack of creative agency, all of which contribute immensely to the undervaluation of artistic labor.

2.2.1 Studio dominance

In Hollywood (the film industry), six major studios dominate the market, known as the “Big Six.” These are: Disney, Fox, Paramount, Sony, Universal, and Warner Bros (Kuehn and Lampe, 2023, p. 2). This means that VFX companies are structurally subordinate to the film studios, which possess complete financial and distribution power (Parker and Cox, 2025, p. 1101). This power imbalance is reinforced by documented policy, such as international tax rebate schemes and production incentives, which shape global outsourcing decisions and undercut vendor leverage. As a result, studios become gatekeepers by coercing production companies to secure financing solely through their own networks that they control (Noam, 2009, p. 107).

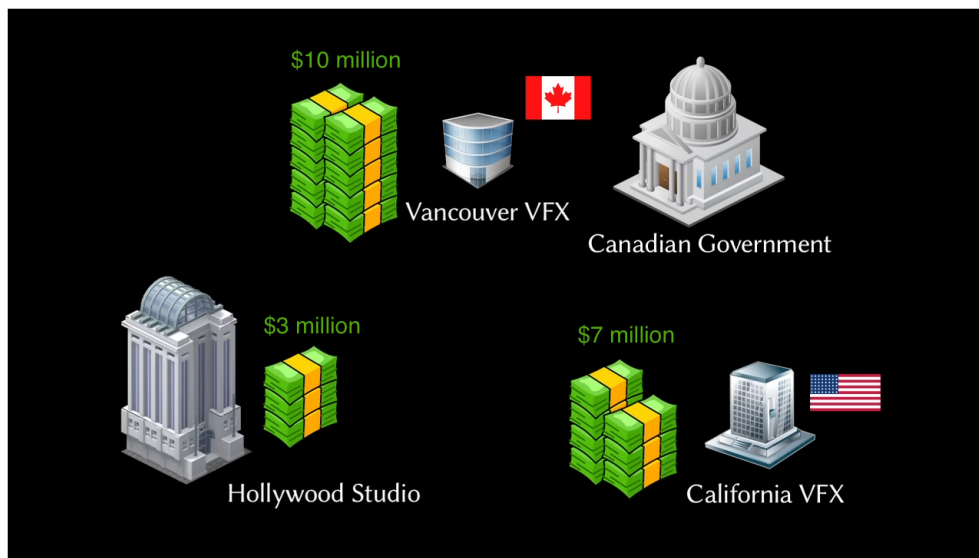
Figure 1: The 'Big Six' film studios, as reported by Statista in 2018, prior to the 2019 Disney-Fox merger (Richter, 2018).



In the early 1950s, the vertical disintegration of film studios resulted in a model of outsourcing labor through contracting, especially utilized in VFX today. These major studios have now shifted the majority of the production risk to the VFX vendors by becoming “nerve centers” of disintegrated networks, meaning that they control creative decisions and the flow of information, even when actual work is done elsewhere (Curtin & Vanderhoef, 2014, pp. 224–226).

On top of that, film studios today constantly go after international subsidies to minimize costs, such as the 33% tax rebate in Canada (Curtin & Vanderhoef, 2014, pp. 220–235). This is an effective cost-cutting strategy, however, it forces the VFX vendors to underbid. For example, if a studio assigns a \$10 million VFX project to a Canadian-based VFX vendor, the Canadian government would offer a tax rebate of around \$3 million (given the rate of 33%). Therefore, in reality, the studio only pays \$7 million. This creates a problem since, to remain competitive, a U.S.-based VFX vendor would have to bid just \$7 million for the same work, which means the vendor would need to absorb the \$3 million gap itself, just to win the project (Life After Pi, 2014, 07:52–08:19). In extreme circumstances, VFX companies might decide to open new divisions outside of the country to remain competitive. Such was the case with Rhythm & Hues, which was forced to open a facility in Vancouver, Canada, for this reason (Life After Pi, 2014, 8:36).

Figure 2: Tax-subsidization procedure graphic (Life After Pi, 2014)



Moreover, another unfair phenomenon illustrating studio dominance in the industry is the fact that VFX artists, despite contributing to around 49 of the 50 top-grossing films every year, receive no share in the profits (Life After Pi, 2014, 3:49–3:54). Interestingly, not only are studios aware of this, they are actively perpetuating it, with some executives openly stating: “If I don’t put a visual effects shop out of business... I’m not doing my job,” indicating how they intentionally pressure vendors to the point of collapse (Curtin and Vanderhoef, 2015, p. 226). This phenomenon highlights the systemic nature of this issue; the undervaluation of the artists is baked into the business model through cost-cutting and control mechanisms; it is not accidental by any means (Curtin & Vanderhoef, 2014, pp. 222–233).

Taking the above into account, Thompson's notion of control through institutional restructuring is evident in the structural dominance of film studios, which enables control using cost, timeline, and labor conditions (1983, pp. 90–91, p. 112, pp. 150–152, p. 177). To summarize, film studios can extract the maximum value possible while, at the same time, systematically eroding the bargaining power and perceived worth of VFX labor; all by utilizing these control mechanisms, which are rooted in structural dominance, cost pressures, and centralized creative authority.

2.2.2 Fixed-bid contracts

The second main problem relating to the control pillar of LPT is the fixed-bid contract model. This refers to film studios negotiating VFX contracts based on a flat fee per shot or project, regardless of costly changes that the VFX artists might be required to perform in the future (Curtin & Vanderhoef, 2014, pp. 225–227, pp. 233–234). This highlights a classic control maneuver, though the use of contractual mechanisms that separate labor effort from compensation (Thompson, 1989, p. 44, pp. 75–76, p. 150).

These contracts usually fail to include specific clauses for “overages” (additional costs due to creative changes), which allows directors to shift their vision mid-production without considering VFX costs, since the vendors will be forced to absorb the costs regardless (Curtin & Vanderhoef, 2014, p. 222, pp. 225–227, p. 234). John Hughes, co-founder of the, now bankrupt, VFX company Rhythm & Hues, clarified the problem with overages, saying: “Unless they can prove there was a clear change of direction... we don't get much in the way of overages” (Life After Pi, 2014, 13:20–13:41).

To compare, other filmmaking departments follow different, often fairer, contract models. To illustrate, on live-action sets, everyone is paid hourly, and revisions always incur costs. On the other hand, VFX is bound to a bid price with no comparable structure (Life After Pi, 2014, 16:00–17:05). In sectors like construction, for instance, workers have a clear blueprint in place to help build a structure; as such, a fixed pay structure makes sense. But, in VFX, workflows are non-linear, which are speculatively revised constantly, rendering the fixed pay structure highly unsuitable for them. In other words, VFX artists are some of the few departments in film that agree to a fixed price for their work, which does not entitle them to increased pay, even if substantial last-minute changes come up.

In connection with the theory, fixed-bid contracts enable employers to intensify labor without increasing compensation for the workers, hence achieving “cost containment through labor intensification,” an undeniable form of control imposed by film studios (Thompson, 1989).

2.2.3 Lack of creative agency

The final VFX problem under LPT's ‘control’ pillar is the lack of creative agency of the artists. This is about VFX workers having minimal say in artistic decisions and rarely meeting with directors, despite being highly skilled creatives (Life After Pi, 2014, 14:10). This contrast between expectations and workflow can lead to artists reworking the same shots numerous times, wasting time while weakening their sense of pride and control over their creative work (Narayan et al., 2022, pp. 115-116). Sometimes, artists reach version 30+ of a single shot before approval is given, leading to a constant loop of changing feedback passed through

various intermediaries (Life After Pi, 2014, 14:53–17:05). According to Hughes, it is common that the directors will be “...heading towards a vision [...] for six months and then all of the sudden they turn around and they're heading off in an entirely different direction” (Life After Pi, 2014, 15:53). This showcases just how unpredictable the VFX revision process can be.

In short, it becomes apparent that this vendor model allows for a top-down system in which creative control remains with the studios, and VFX vendors are only responsible for carrying out their tasks and following instructions. Therefore, artists do the work but do not have much say in the overall creative direction as it is tightly controlled by the studio at the top of this chain (Parker & Cox, 2013, pp. 1096–1097, p. 1102, p. 1107). By minimizing the artists' input, limiting their agency, the industry reinforces the myth that VFX labor is just technical execution, as opposed to creative authorship, facilitating both symbolic and economic undervaluation; these artists are not respected creatively nor paid what they deserve.

2.3 Deskilling

In the context of the VFX industry, LPT's deskilling pillar can be defined as the systemic reduction of labor autonomy and skill through structural and technological changes aimed at increasing managerial oversight and reducing labor power (Thompson, 1983, pp. 73–80, 90–92). In practice, this can be distinguished into three interrelated categories: workflow fragmentation, outsourcing and automation, and the loss of authorship and creative input.

2.3.1 Workflow fragmentation

The first way in which artists are deskilled is through the fragmentation of workflows, referring to creative tasks being broken down into smaller, repetitive roles. Consequently, this limits the worker's involvement to only a fraction of the overall project, which reduces their situational awareness and creative input (Thompson, 1983, pp. 74–75, 103–104, 232–233, 257–258). In a way, this observation mirrors Braverman's original formulation of LPT inasmuch as it divides the planning (conception) and execution (labor), removing skill growth and holistic engagement from the equation completely (1983, pp. 67–81, 118).

Specifically, in the VFX pipeline, it is commonplace for artists to be confined to isolated tasks such as modeling or rotoscoping. Said tasks are undoubtedly crucial to the workflow; however, their nature makes them highly disconnected from the overall vision of a scene, which unfortunately turns creative work into isolated units (Vanishing Pi, 2015, p. 229). Although, with the inception of generative AI models, tools such as Slapshot allow for these tasks to be completed almost entirely by a computer, in an automatic fashion, using powerful artificial intelligence (Miller, 2025). AI's disruption into the creative industries and, more specifically, the VFX industry will be discussed further in Chapter 3: Resistance, Unionization, and AI as New Frontier.

What exacerbates this issue of segmented pipeline dynamics is the vendor hierarchy. To explain, film studios divide the work that they assign to VFX vendors internally as well as externally because of the fact that they outsource that work to multiple vendors at once. This magnifies fragmentation and reduces the overall artistic cohesion within a given VFX project (Parker and Cox, 2025, pp. 1101-1102). Results tend to feel less

connected and unified with this approach, seeing as studios hire numerous VFX companies to do parts of the work. In addition to this, this practice generates detachment and wasteful repetition. In the case of Rhythm & Hues, for example, artists talked about spending months on creating CGI water for *The Life of Pi* (2012) film, which utilized large fluid dynamic simulations that take time to render, only to be forced to redo them due to the entire visual directions being changed mid-project (Life After Pi, 2014, 14:53–15:29).

The above constitutes a clear example of the artists' roles becoming purely functional, eroding the link between labor and creative identity. In LPT and Thompson's terms, this illustrates alienation through segmentation (1983, pp. 50, 88, 89).

2.3.2 Outsourcing

The issues of outsourcing work have been touched upon earlier, but this sub-chapter will elaborate on the issues and examine them through the lens of the deskilling pillar of LPT. To define, outsourcing refers to the offshoring of labor to countries that provide benefits like tax incentives, pressuring artists to accept precarious work that pays them less and allows them minimal creative say (Parker and Cox, 2025, p. 1096). The example of Canada's 33% tax rebate was mentioned before; however, countries like the UK offer their versions of this, which forces vendors in the states to underbid on projects with hopes of remaining competitive, causing cheaper labor and financial strains (Vanishing Pi, 2015, pp. 226-230). The VFX companies hire the artists on short-term contracts and oftentimes expect them to relocate internationally, depending on where the work is currently based (Life After Pi, 2014, 09:10–09:19). Some artists, like Dave Rand of the defunct Rhythm & Hues, stated living in hotels because every company he worked for ended up shutting down, showcasing the extreme circumstances this strategy forces the artists to resort to (Life After Pi, 2014, 10:19). Parker and Cox argue that this approach splits production across modular networks, completely decentralizing responsibility and reducing the bargaining power of labor in the industry (2025, p. 1101-1102). In essence, these modular networks are the result of the splitting of a large creative project into smaller, more standardized blocks assigned to different companies. The problem is that workers find it harder to view the clear picture of any given project as they are scattered around different vendors, hindering communication.

In brief, studios outsource by breaking down large projects into smaller, repetitive tasks. Hence, VFX artists only need to work on isolated parts as opposed to full sequences. Over time, this limits their creative input, and their role turns execution-focused, no longer about artistry. This simplification is deskilling at its core, the complex, skilled work is now reduced to routine labor for the workers.

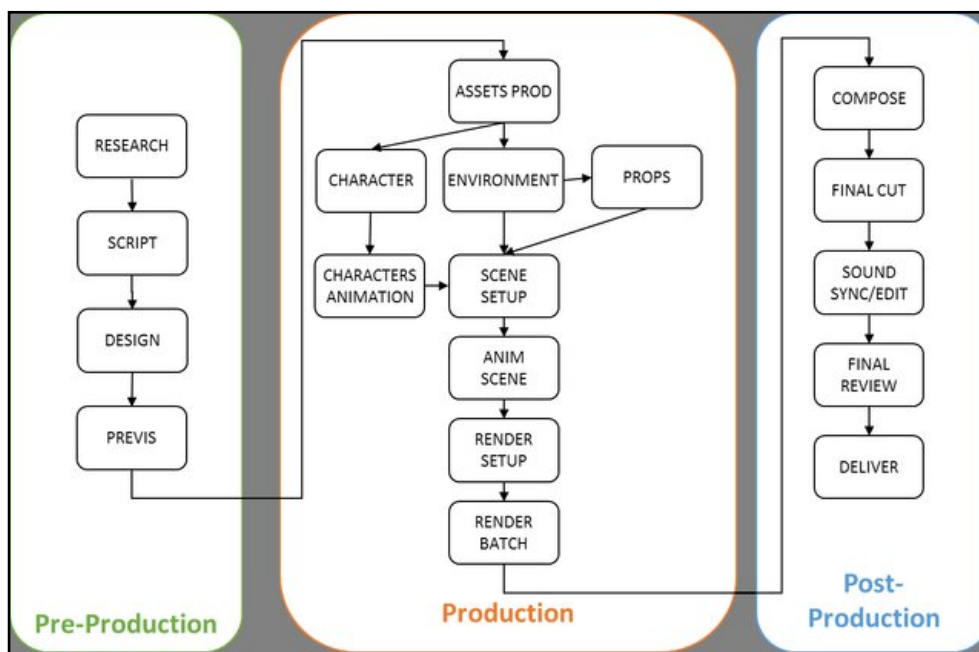
2.3.3 Loss of authorship and creative input

The last issue of deskilling in VFX manifests through limited creative authorship. The theory dictates that deskilling can also mean "the erosion of workers' input in decisions." Thompson refers to this as the "separation of conception from execution" in his book (Thompson, 1983, pp. 5–6, p. 75).

In the VFX pipeline, workers seldom get the chance to directly meet with key creatives, such as directors, despite their work allowing for the visual definition of elements in a project (Life After Pi, 2014, 14:10). The

chain of command is greatly apparent in VFX work, with most of it being filtered through numerous layers of producers and supervisors leading to a noticeable disconnect between artistic vision and execution.

Figure 3: Typical VFX Pipeline graphic (Bouville, Arnaldi and Gouranton, 2016)



On top of this, artists can sometimes go through 20–30 versions of a shot, which, on its own, is common for a VFX shot. The peculiarity lies in the fact that the artists change the shots based on feedback from people they never even interact with (Life After Pi, 2014, 14:53-17:05). Frustration is unavoidable in these scenarios and artists often lose their creative pride due to this, which is an important trait of any professional holding an artistic identity.

Worst of all, even when the artists, after countless hours spent on a project, manage to succeed, they are often blatantly denied screen credits or public acknowledgement, such as being cut off during their speech at the Academy Awards. Such was the case with Rhythm & Hues, which won the Oscar for their work on the *Life of Pi*, and halfway through their speech, the artists were muted allegedly for speaking for an extended duration (Life After Pi, 2014, 22:55-23:32). This systemic disregard signals that their role is not valued equally to others in filmmaking, despite their contributions.

Taking everything into account, this is another unmistakable case of deskilling under LPT. The artists are not allowed much in terms of creative input, since they are seen as button-pushers, not artists. This issue also highlights how they are not just undervalued technically, but also on a cultural level.

2.4 Resistance

In its simplest form, Labor Process Theory (LPT) frames resistance as the ways in which workers push back against managerial control and structural constraints. The workers can respond collectively, individually, overtly, or covertly, and usually exist under systems of real subordination; in systems where workers are directly managed and have minimal control over how they accomplish their work (Thompson, 1983, p. xvi,

pp. 52–59, 98–100, 122–125, 162–167). In the VFX industry, resistance manifests as attempts at unionization, international cooperation, and vocal concern about pay, sustainability, and recognition. Unfortunately, such efforts are deeply flawed due to structural and institutional confines; namely, job insecurity, fear of retaliation, and “gig” contract models.

2.4.1 Unionization barriers

VFX workers’ contracts differ from many other creative roles in the sector as they most often operate as freelancers or on short-term rolling contracts (Curtin and Vanderhoef, 2015, p. 224; *Life After Pi*, 2014, 09:10-09:15). In other terms, studios hire workers for a single project at a time, which does not guarantee them future work or security in any way. For this reason, it becomes increasingly difficult for artists to start a movement when everyone is constantly on the move.

Furthermore, workers in this sector have historically been completely excluded from traditional labor guilds in Hollywood after the industry shifted to digital formats, which contrasts with more fortunate departments like cinematography or props, which have been included. As a consequence, they have been missing crucial benefits like inherited protections or collective bargaining options (Curtin and Vanderhoef, 2015, pp. 231-232). Also, most VFX workers avoid speaking up for fear of retaliation, with a 2022 IATSE survey revealing that 88% of VFX artists feel that they cannot negotiate better working conditions alone (IATSE, 2022, p. 20). Meaning, studios might stop hiring them if they decide to complain. Alarming, not even VFX veterans are excluded from this problem, often ending up with no savings or support due to their negotiating powerlessness, with a long-time VFX artist exclaiming: “I’ve been in this job for over 20 years... and don’t have a nickel of retirement to show for it” (IATSE, 2022, p. 21)” This further emphasizes why collective action is so important.

Worst of all, however, is the film studios’ stance on the matter. With many outright avoiding the rare unionized vendors, which indirectly discourages most artists from even attempting to organize (Curtin and Vanderhoef, 2015, p. 232). Indeed, *Rhythm & Hues* demonstrated this clearly by avoiding any confrontation with film studios, with hopes of staying in business during a stage of aggressive bidding wars for projects (*Life After Pi*, 2014, 06:38-06:55).

In this case, the literature reveals how the VFX workforce is fragmented, utterly unprotected, and afraid, with unionizing seeming like a career risk to many.

2.4.2 Role of BECTU, IATSE

The International Alliance of Theatrical Stage Employees (IATSE) in the United States and the Broadcasting, Entertainment, Communications and Theatre Union (BECTU) in the United Kingdom are unions representing media and entertainment workers and stage crew professionals in film and TV, and are both actively recruiting VFX workers as of recent, with BECTU representing around 20% of UK’s VFX workers and IATSE representing around 170,000 of the workforce in America (Pavlo, 2017, p. 111; Jacob, 2023). Yet, these figures are still low, and the unions are far from achieving full industry recognition.

The unions have signed mutual support agreements in an effort to shield workers who work internationally, especially given the industry's trend of outsourcing (Turner, 2013, p. 10). In the case of some VFX houses, social media was used in an attempt to foster international collaboration, with Rhythm & Hues workers protesting on digital forums, Twitter, and Facebook groups (Life After Pi, 2014, 24:36–25:12). However, legal and major geographic barriers halt efforts to form a real transnational labor coalition (Curtin and Vanderhoef, 2015, p. 232-233). Still, all artists would benefit from this happening and wish for this change, but living in different countries under different legislations makes this hard to accomplish.

Some best-practice guides exist in the industry, such as minimum wage standards, and the 2013 Visual Effects Society (VES) white paper offer bidding recommendations, but these remain weak, provided that the industry still lacks legal enforceability in most cases (Curtin and Vanderhoef, 2015, p. 234). This challenge was summarized well by VFX supervisor Joe Pavlo in a 2017 interview, stating that: “We need this because the studios and business interests never stop lobbying the government in the other direction (p. 114).” All in all, one thing becomes apparent: without policy backing and legal enforceability, unions are only really able to gain ground on a symbolic level, which is simply not enough.

2.4.3 Structural obstacles

As previously mentioned, VFX employment relies on a recurring project model that excludes some benefits. To explain, this introduces a “permalence system”, where the artists are always working, similarly to a full-time job, but are only hired on a freelance basis, which offers them no retirement benefits, sick leave, job security, etc (IATSE, 2022, p. 20). Adding to this, there exist noticeable pay disparities and benefit gaps with artists earning less than staff, due to their freelancing nature, and rarely receiving pension contributions, healthcare, or overtime pay (IATSE, 2022, p. 22). What is more, the industry has also normalized extreme hours with no pay protection whatsoever. This is supported in the Rhythm & Hues case, once again, where the artists worked through exhaustion only to be laid off days after winning the Oscar (Life After Pi, 2014, 17:52; 23:16). As noted by one producer: “The final instructions are arriving later and the work is being delivered sooner, not just for the movie itself but for trailers, for teasers, for marketing, for campaigns, for overseas, for international vs. domestic, for different versions. Literally, the pressure is on all sides of this cooker (Cohen 2007, quoted in Curtin and Vanderhoef, 2015, p. 225).”

It is natural that VFX workers feel powerless in today's creative industry, as they do not receive much support from unions. This is a major issue that contributes to their undervaluation and is wholly supported by LPT. As Thompson noted, resistance is fundamentally about reclaiming voice and dignity in the labor process (Thompson, 1983, p. xvi, pp. 6, 237–238).

2.5 Summary

This chapter looked at factors that undermine VFX labor, namely the control mechanisms and job precarity discussions. Also, early signs of hope, like unionization and international collaboration efforts, were introduced. The next chapter explores these emerging efforts further as solutions, but also an analysis of artificial intelligence as a new threat, which challenges both current labor protections as well as the very nature of authorship in the VFX industry.

Chapter 3: Resistance, Unionization, and AI as New Frontier

3.1 Introduction

This chapter investigates AI's disruption of the VFX industry, focusing on its impact as analyzed through the Labor Process Theory, and looks into unionization attempts by BECTU and IATSE, finishing with an evaluation of some VFX firms' own "makeshift strategies" to solve prevalent issues in the sector. It draws on key sources like Narayan et al. (2022) and SAG-AFTRA (2023) and showcases resistance to AI-driven control and deskilling, with an emphasis on why collective action is necessary.

3.2 The Disruption of AI in VFX

In recent years Artificial Intelligence has completely changed how VFX workflows are executed because of new AI-powered tools such as the aforementioned Slapshot for denoising and automated rotoscoping jobs, Foundry's CopyCat that allows for easier facial replacements, and Disney's proprietary Identikit, which generates realistic computer-generated characters (Narayan et al., 2022, pp. 115–116). Naturally, given that these new tools can aid in noticeably reducing production times, VFX vendors like Industrial Light & Magic (ILM) have rushed to adopt them into their pipelines (p. 115). This further exacerbates the issue of fragmented workflows discussed in the previous chapter, showing a shift in VFX labor from a more creative nature to a supervisory one (Curtin & Vanderhoef, 2014, pp. 225-229).

A 2022 study that surveyed 300 entertainment industry leaders found that 75% of respondents believe that VFX roles focusing on creating concept art or rotoscoping are seeing significant job reductions (Narayan et al., 2022, p. 117). Unquestionably, AI-generated outputs only require a small amount of human input, which threatens the artists' creative identity and symbolic authorship. In a sense, since machines can generate art or complex effects without much human intervention, the workers fear that their work will become less meaningful. This also mirrors deskilling issues historically found in VFX, where digital tools, albeit more rudimentary ones, eroded craft autonomy (Curtin & Vanderhoef, 2014, pp. 220-231).

What is more, AI tools raise ethical concerns that exacerbate the undervaluation of VFX labor, since studios often use artists' data without consent (Narayan et al., 2022, pp. 117-125). This is done in order to train large AI models, but legal nuances allow for this to be achieved without compensation. To explain, interpreting who owns the rights to the data is very complicated since IP ownership of AI-generated assets is still unclear as the technology is still new and the laws do not reflect this properly yet (Narayan et al., 2022, p. 121).

Interestingly, another group of workers in the creative industry successfully agreed to ensure that they receive proper compensation and consent for AI-generated digital voice replicas, those being the actors. This was part of SAG-AFTRA's 2023 agreements with Ethovoc and Replica Studios in response to the strikes earlier that year; a major milestone for those creatives, but VFX artists lack similar protections (SAG-AFTRA, 2023). Their exclusion from the strikes and, by extension, benefits from the reached agreements denote their marginalization and, once again, highlight the need for stronger union alliances.

3.3 AI Through the Lens of Labor Process Theory

Similarly to how issues that contribute to the undervaluation of VFX workers were previously analyzed using the Labor Process Theory, the new AI threat can also be carefully analyzed in this way.

3.3.1 Control

In terms of control, AI tools that enable VFX shots to be revised are leveraged by film studios to help strengthen their managerial dominance even further, which was foretold by LPT (Thompson, 1983, p. 122; Narayan et al., 2022, p. 117). As a result, studios use this software to demand quick changes from the artists, thereby enforcing control over them. In fact, workers are urged to work long hours without overtime pay so as to enforce studio deadlines, with the excuse that they can now use these fancy new automated pipeline tools, which maximize surplus value (Thompson, 1983, p. 122; Narayan et al., 2022, p. 117). Lastly, it is important to repeat that these artists do not have any power in countering this AI-driven control, as opposed to SAG-AFTRA actors who were able to secure AI consent clauses as part of their agreement (SAG-AFTRA, 2023; Curtin & Vanderhoef, 2014, pp. 224-233). Once more, the necessity of collective union action is emphasized through these sources, as they detail AI's control but do not offer individual resistance strategies to combat it.

3.3.2 Deskilling

Moving on to deskilling, artists have become mere editors of AI outputs in this new age, with VFX automating more and more complex VFX tasks such as rotoscoping, which abides by LPT's deskilling thesis (Thompson, 1983, p. 90; Narayan et al., 2022, p. 119). The systemic risk that this fact presents is that the artists' skills are being increasingly devalued, since there are no protections like SAG-AFTRA's residuals (SAG-AFTRA, 2023; Parker & Cox, 2013, p. 1107). In an ideal future, unions would be able to reframe VFX as true art, however, these sources do not reveal any personal perspectives of artists to support this, despite showing evident deskilling.

3.3.3 Resistance

Actors and writers successfully fought against AI, and now VFX artists advocate for human creativity's unique value to resist being enriched by AI. In other words, they argue that AI is worse than humans at doing creative work. Unfortunately, methods of informal resistance tend to fail when not officially backed by unions, as was the case with the February 2013 organized demonstration outside the Dolby Theatre in Los Angeles, with over 500 VFX workers converging to draw attention to this unsustainable business model that drives VFX vendors like Rhythm & Hues into bankruptcy (Life After Pi, 2014, 21:15–21:32). Again, SAG-AFTRA's 'No Fakes' act, which requires consent and compensation for using digital replicas of performers, provides a model, but VFX artists lack this as of now. In short, sources do not fully explore the artists' reluctance to organize due to AI, possibly due to fear of repercussions, but one thing is for certain: resistance for these artists remains weak, especially for an industry that has been introduced to dramatic and rapid AI changes (SAG-AFTRA, 2023). Is there even a light at the end of the tunnel?

3.4 Limitations of Labor Process Theory in Explaining AI

Indeed, Labor Process Theory is an effective tool to examine the role of AI in deskilling and intensifying control in the VFX industry, however, the theory indeed has a few shortcomings when it comes to some of AI's ethical issues, like studios making use of the artists' work to train AI models without consent or regarding the ownership of AI-generated assets, which cannot be covered holistically (Thompson, 1983, pp. 90–122; Curtin & Vanderhoef, 2014, p. 229).

Also, the theory can overlook affective labor, referring to instances where artists are emotionally connected to their craft, which was also not fully described by the sources due to a lack of first-hand accounts that discuss this particular issue.

3.5. Resistance and Unionization: Strategies and Solutions

Building on the new challenges that AI introduces, this section explores how VFX artists can be offered a pathway to combat previously discussed problems, but also AI's systemic labor issues and disruptions through unionization efforts by IATSE and BECTU.

3.5.1 Union Efforts to Address Issues

In order to help alleviate some of the aforementioned issues, the IATSE and BECTU unions in the U.S. and UK, respectively, are campaigning actively to unionize VFX workers, with their core goals being to address exploitation and working conditions (BECTU, 2017). To illustrate, they hope to challenge unfair dismissal and discrimination, legal rights regarding contracts, and, most importantly, finally ending unpaid overtime and excessive work hours for the artists (Pavlo, 2017). In a 2017 Interview, VFX supervisor Joe Pavlo emphasized the significance of unions, remarking that they provide crucial support, offer representation, and provide legal support at times when members face individual disputes (p. 114). Additionally, the unions can reach agreements, as was seen with SAG-AFTRA earlier, or even engage in political lobbying to influence government policies (2023). Fortunately, these unions have seen prior success, with BECTU managing to secure some benefits like paid holiday for freelancers as well as limitations to prevent unhealthy work hours (Pavlo, 2017, p. 114).

Moreover, gaining full union recognition and building collective bargaining power is a key future objective for these unions, which workers believe is one of the sole paths to achieving noticeable improvements in their conditions, given that individual negotiation has been established to be highly ineffective. (Pavlo, 2017, p. 113; Turner, 2013, p. 10).

3.5.2 Strategies Under Pressure

This section looks at the “makeshift strategies” that some VFX firms opt for, given the high global competition and financial instability in the industry. As was revealed in Chapter 2, film studios are the “gatekeepers” within a global production network that VFX companies also operate in (Parker and Cox, 2013, p. 1095). Said studios take advantage of tax incentives and global competition in order to drive down costs, a “race to the bottom” as Parker and Cox put it, which results in VFX firms experiencing immense pressure (p. 1096). VFX vendors often find themselves at the “bottom of the food chain” in terms of budget

allocation for projects due to being largely dependent on the limited number of high-budget, effects-heavy films that studios commission every year (p. 1100). Thus, the VFX companies themselves have resorted to a number of strategies to help combat parts of the issues, without needing to rely on any third parties, such as unions, to do so.

Firstly, some vendors adapt by selecting specific market segments to target. To explain, they aim to specialize in particular niches based on the films' budgets and required workflow, as a way to manage their key costs (Parker and Cox, 2013, p. 1101). What is especially common for smaller vendors is targeting lower-budget films, going against the majority, and focusing on less costly "low-technology" or "out-of-the-box" software, as opposed to solutions that require extensive in-house R&D (p. 1102). On the other hand, some larger firms may choose to invest heavily in infrastructure and a core workforce to tackle complex, high-budget projects, hence utilizing a form of differentiation by scale and the management of research-heavy digital pipelines (p. 1102). A few companies even adopt an "upscaling" strategy, which involves emphasizing managing temporary workers for big projects, which provides flexibility benefits in comparison to maintaining a large permanent workforce (p. 1105).

Secondly, many firms decide to work on subsections like television, commercials, and other visual media to reduce their dependence on the volatile VFX industry (Parker and Cox, 2013, p. 1105). This has the benefit of cross-subsidization, meaning that vendors can utilize profits that they receive from these projects to help support other endeavors that may be less profitable (p. 1107). However, this strategy may not be as effective depending on other sectors that the same dominant media conglomerates may also control (p. 1107).

Lastly, VFX companies may opt for a mimicking strategy of repositioning themselves in the value chain. This is reserved for a small number of lucrative vendors, though, as it involves imitating aspects of the film studios, such as producing their own films. However, there is a reason only a handful of companies choose this: it is difficult to succeed in this venture, and most do not even compete with the studios; rather, they are required to collaborate with the studios themselves on this strategy (Parker and Cox, 2013, p. 1106).

3.6 Summary

Chapter 3 revealed the role of AI in VFX control and deskilling, unionization efforts that show promise via IATSE and BECTU, but also weak artist resistance. It became clear that VFX workers cannot effectively improve these circumstances by themselves, highlighting the importance of collective bargaining. This sets the stage for the dissertation's conclusion, reiterating key findings on VFX labor challenges and unionization in an AI-driven industry.

Conclusion

In conclusion, this individual project investigated the systemic undervaluation of VFX artists in the U.S. and UK between the 2010s and 2025, in which studio power, AI-caused disruptions, and fragmented resistance erode the creative identity and job security of the artists (Narayan et al., 2022, pp. 117–125).

Using the Labor Process as a theoretical foundation, contributing issues were revealed, such as the outsourcing to countries with tax-incentive, like in Canada, that intensify labor precarity or the ways in which the studios make use of fixed-bid contracts, or even the AI-driven tools, like Slapshot's rotoscoping tool, which have the drawback of reducing artists to editors, and issues relating to the use of data by studios without consent (Curtin & Vanderhoef, 2014, pp. 225–227; Parker & Cox, 2025, p. 1101).

It became clear that, in the VFX sector, resistance is weak compared to others, such as actors and writers. Studio retaliation and gig contracts contribute to this weakness for the IATSE and BECTU unions, leaving artists utterly powerless in voicing their concerns (IATSE, 2022, p. 20; SAG-AFTRA, 2023; Pavlo, 2017, p. 114).

In addition, some VFX companies decided to take matters into their own hands, opting for “makeshift strategies” like targeting low-budget films, which, unfortunately, have a minimal impact on structural exploitation, rendering them largely futile (Parker & Cox, 2025).

Admittedly, this dissertation was partly lacking regarding the research methodology, namely, being limited by the decision to rely solely on secondary research. Henceforth, more targeted, firsthand artist opinions would help substantiate some claims further. Moreover, LPT is not sufficient in covering some of AI's emotional and legal nuances (Thompson, 1983). Therefore, primary interviews and the exploration of more theoretical frameworks could aid future research on the topic. By and large, by focusing on the workers themselves, this dissertation exposes an urgent need for collective action to restore VFX artists' dignity in an AI-driven, capitalist industry.

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Appendices

Appendix 1



School of Arts and Creative Technologies

RESEARCH ETHICS CHECKLIST FOR TAUGHT STUDENTS

FOR PROJECTS USING DEPARTMENT LEVEL ETHICS PRE-APPROVAL

This checklist is to be used **ONLY** for research work by ACT students who wish to use the Department Level Ethics Pre-Approval to accommodate the ethical risks of their proposed research work.

Students must ensure that their proposed research work can be accommodated by the restrictions in this Checklist. If not, you will be unable to conduct the work without further Ethical scrutiny by the ACT Ethics Committee as the work is considered to have higher ethical risks. To apply for additional Ethics approval, you must submit the Research Ethics Clearance Form for review by the ACT Ethics Committee. However, please note that some modules DO NOT permit students to submit individual Ethics applications.

All students who use the Department Level Ethics Pre-Approval for their work must complete this checklist and include the following as Appendices to their assessment reports:

- This completed Checklist;
- Example Participant Information Sheets and Participant Informed Consent Forms, if appropriate;

Please note that if this Ethics Checklist is associated with an assessment that has an **anonymous submission** (i.e. if you are using your Exam Number, Y123456 for submission) you **MUST** redact your name and any other information that would identify you as an individual from the appendices before submission.

Please note that your assessment markers will compare the submitted assessment work to this Ethics Checklist, Information Sheets and Consent Forms to ensure compliance.

You are also required to conduct this research work in compliance with the General Data Protection Regulation (GDPR). Information on how to ensure compliance is available on the ACT Ethics VLE site.

Before completing this Research Ethics Checklist for Taught Students, please consult the ACT Ethics VLE Site for guidance and further information.

SECTION 1: STUDENT AND PROJECT DETAILS

Box 1A: Student Details	
ALL students must complete this box	
Student Name OR Exam Number for Anonymous Submission	Y3912832
Degree Title	BA in Business of the Creative Industries
Stage (e.g. 2 nd year Undergraduate)	Third Year Undergraduate
Role in Project (e.g. Team Leader)	Researcher

Box 1B: Project Details	
ALL students must complete this box	
Module Title and Module Code	Individual Project (BCI) TFT00088H-S1-2-A
Project Supervisor Name and Email Address	Nathan Townsend nathan.townsend@york.ac.uk

Box 1C: Project Details	
ALL students must complete this box	
Project Title	The VFX Collapse: What makes visual effects the most exploited creative labor in Hollywood?
Project Submission Date	21/05/25

Please complete Section 2: Research Ethics Concerns

SECTION 2: RESEARCH ETHICS CONCERNS

Box 2A: Checklist of Research Ethics Questions		YES	NO
ALL students must complete this box			
1	<p>Will the project involve conducting work that would typically require NHS Ethics approval?</p> <p>That is, will you be working with any of the following as participants, if recruited specifically due to their involvement with the NHS:</p> <ul style="list-style-type: none"> - Patients and Users of the NHS, - Relatives or carers of patients and users of the NHS, - NHS staff? <p>OR will you be using or accessing NHS premises or facilities as part of the work?</p>		X
2	<p>Will the project involve conducting work that would typically require His Majesty's Prison & Probation Service Ethics approval?</p> <p>That is, will you be conducting research with staff and/or offenders in prison establishments, National Probation Service (NPS)/Community Rehabilitation Companies (CRC) regions or within His Majesty's Prison and Probation Service (HMPPS) Headquarters?</p> <p>OR will you be conducting research on HMPPS premises?</p>		X
3	<p>Will you be working with vulnerable participants (e.g. those under 18, people with learning disabilities, people with mental impairment due to health or lifestyle, people who are terminally ill or recently bereaved etc.)?</p> <p>Note that if you are unsure whether someone you would like to work with could be considered vulnerable under the circumstances, you are required to discuss your concerns with the module leader, your supervisor and/or Ethics Chair. It is generally expected that any student working with vulnerable groups would submit the longer Research Ethics Clearance form.</p>		X
4	Will you be identifying any of the participants in your outputs?		X
5	Will you be discussing sensitive or potentially upsetting or distressing topics with participants?		X
6	Is it reasonably foreseeable that the work could involve causing physical or emotional distress to participants or researchers?		X
7	Is it reasonably foreseeable that the participants could disclose or discuss participation in illegal activities (e.g. drug use)?		X

Box 2A: Checklist of Research Ethics Questions		YES	NO
ALL students must complete this box			
8	Is it reasonably foreseeable that the participants could disclose confidential or sensitive information (e.g. financial data, sensitive organisational data)?		X
9	Will you be deliberately misleading the participants in any way?		X
10	Will you be filming or making recordings of people without their knowledge and consent (e.g. covert filming of people in non-public places)?		X
11	Will you be researching or discussing issues relating to terrorism or political extremism as part of your work?		X
12	Will you be collecting online data that has been generated by human participants (e.g. social media data) from closed, restricted forums (i.e. from closed communities or those that require approved membership to view, e.g. restricted Facebook groups)?		X
13	Will you be identifying anyone from online data that has been generated by human participants (e.g. social media data) from either open or closed forums (i.e. by including information that could make the individual identifiable, such as direct quotes or usernames)?		X
14	Could the work involve potentially damaging property and/or the natural environment?		X
15	Will the work involve animals?		X
16	Is it reasonably foreseeable that the work could result in any anticipated university/institutional risk (e.g. adverse publicity or financial loss)?		X
17	Will you be compensating participants with financial inducements OTHER THAN reasonable incentives (e.g. chocolate, cake) for the inconvenience?		X
18	Will you be paying participant expenses?		X
19	Will you be conducting any of the work for this project OUTSIDE of the UK?		X

If you have answered “YES” to ANY of the questions in Box 2A: Checklist of Research Ethics Questions:

The Department Level Ethics Pre-Approval together with this Research Ethics Checklist for Taught Students MAY be insufficient to accommodate the ethical risks of your proposed work.

Some lower-risk ethical issues can be accommodated without further Ethical scrutiny provided that you agree to follow a process that is considered appropriate. These situations and processes are described on the ACT Ethics VLE site.

IF there is a suitable procedure to manage this ethics issue, please complete Box 2B to provide further details of how you intend to manage the ethical issues associated with your proposed work in consultation with either the module convenor or your assessment supervisor.

<p>Box 2B: Further Details</p> <p>Complete this box if you answered “Yes” to any question in Box 2A AND there is an identified procedure to manage the ethical risks in this situation.</p> <hr/> <p>Provide details of the nature of the ethical risks that you identified by answering YES to questions in Box 2A and describe the process that you will follow to minimise the risks.</p> <p>Please note that if you answered YES to Question 17 and/or 18:</p> <p>Will you be paying your participants? If research participants are to receive any payments, reimbursement of expenses, or any other incentives or benefits for taking part in your research, please give details, indicating what and how much they will receive and the basis on which this was decided.</p> <p>Payment must follow the University’s policy. Please note that the policy includes maximum limits and researchers should note that they may pay less than these, as appropriate.</p> <hr/>

Alternatively, the associated risks of your proposed work may be sufficiently low risk that an appropriate approach can be agreed with the ACT Ethics chair without requiring submission of the ACT Research Ethics Clearance form. Your supervisor/module convenor may contact the ACT Ethics on your behalf to identify an agreed process on a case-by-case basis. If your supervisor has discussed your proposed work with the ACT Ethics Chair via email, please complete Box 2C: Case-By-Case Agreed Process.

Box 2C: Case-By-Case Agreed Process			
<p>Students must complete this box IF they have answered “YES” to any questions in Box 2A AND there is no identified procedure to manage the ethical risks of the proposed work.</p> <p>Note, that most students will need to submit a ACT Research Ethics Clearance form and this case-by-case process approach is ONLY suitable for work that can be considered low risk.</p>		YES	NO
1	Has your project supervisor or module convenor discussed the proposed work and associated ethical risks with the ACT Ethics Chair via email?		

Box 2C: Case-By-Case Agreed Process		YES	NO
<p>Students must complete this box IF they have answered “YES” to any questions in Box 2A AND there is no identified procedure to manage the ethical risks of the proposed work.</p> <p>Note, that most students will need to submit a ACT Research Ethics Clearance form and this case-by-case process approach is ONLY suitable for work that can be considered low risk.</p>			
2	Was your project supervisor or module convenor able to agree a process to manage the low risks associated with your proposed work?		
<p>IF YES to BOTH questions please provide further details of the anticipated risks of the proposed work and the process that was agreed with the ACT Ethics chair. Please include dates of the email correspondence AND the name and email address of supervisor/module convenor involved.</p>			

If the associated risks of your proposed work cannot be accommodated through an identified procedure or through a case-by-case agreed process then, provided the module convenor permits it, you will need to submit an application to the ACT Ethics Committee for review using the Research Ethics Clearance Form. But, please note that some modules do NOT permit students to submit individual applications to the Ethics Committee.

Please complete Section 3: Data Protection

SECTION 3: DATA PROTECTION

In order to comply with the General Data Protection Regulation (GDPR) you **MUST** adhere to the data usage and storage principles described in Box 3A: Checklist of Data Protection Questions.

Box 3A: Checklist of Data Protection Questions		YES	NO
ALL students must complete this box			
1	<p>Will you guarantee that you will inform all people whose personal and/or special category data that you are using:</p> <ul style="list-style-type: none"> • What data you will be collecting and why; • How you will be storing the data; • The legal basis under which you are storing the data; • When/if/how the data will be destroyed? <p>Please note that using a GDPR Compliant Project Information Sheet will ensure you meet these requirements.</p>	X	
2	Will you guarantee that IF you use a portable device to collect electronic data you will transfer that data to your University Google Drive account or University Filestore as soon as possible after the interview AND delete it from your personal device?	X	
3	Will you guarantee that the data will ONLY be accessible to the project team AND that IF the project team extends beyond the University of York that you have consulted the University's IP and Legal team to ensure appropriate data protection safeguards are in place?	X	
4	Will you guarantee that you will ONLY use Google Forms OR Qualtrics to host online surveys that collect personal and/or special category data?	X	
5	Will you guarantee that you are collecting the MINIMUM amount of data necessary for the intended project?	X	
6	Will you guarantee that IF you are storing or accessing data from OUTSIDE the European Economic Area (EEA) you will access the data through your University of York Google Account connected to the University of York Virtual Private Network (VPN)?	X	
7	Will you guarantee to destroy all physical AND electronic data EITHER after your module marks have been ratified by the Board of Examiners OR 10 years after last requested access?	X	

Box 3A: Checklist of Data Protection Questions		YES	NO
ALL students must complete this box			
8	IF storing electronic data for 10 years after last requested access, will you guarantee to EITHER use a University Google Drive account OR an approved data repository service to store the data?	X	
9	Have you screened your project against the Data Protection Impact Assessment (DPIA) screening questions AND if required conducted a DPIA and submitted a copy to the Data Protection Officer for review?	X	
10	If capturing audio, will you use an encrypted device for recording (e.g. an Apple iOS device or encrypted voice recorder)?	X	
11	Where data is held on an encrypted portable device (e.g. laptop, tablet) will you back it up to a University approved service as soon as possible and perform periodic checks to ensure data is being backed up appropriately?	X	
12	Will you ensure confidential information is encrypted before it is transmitted/shared digitally?	X	
13	Please detail what other protections will be used for digital data (e.g. access/edit permissions, procedural safeguards re downloads/making copies, remote access via VDS/VPN, 2 factor authentication)?		
	Give answer here: Password Protected, access/edit permissions, 2 Factor Authentication		
14	Confirm you have reviewed the user commitments under the Policy for the safe use of University information on devices . Detail anything in the user commitments that will pose a challenge in carrying out your proposed research.	X	
	Give answer to the second element of question 14 here:		N/A
15	Will you ensure that personal data or confidential data held on paper are stored in a lockable filing cabinet or container, and/or a locked room in secure premises?	X	
16	How will devices be physically protected (e.g. in transit, when not in use or left unattended)?		
	Give answer here: Device will not be left unattended and will be stored away in a locked area accessible only to me.		

Box 3A: Checklist of Data Protection Questions		YES	NO
ALL students must complete this box			
17	Will you ensure the device(s), accounts, or storage area(s) used to store data are not accessible to any unauthorised parties?	X	

Box 3B: Checklist of Data Retention Questions		YES	NO
ALL applicants must complete this box			
1	How long will you keep personal data after the project, in what form and for what reason? https://www.york.ac.uk/library/info-for/researchers/data/sharing/		
	Give answer here: I will not be keeping personal data after the project		
2	When will the research data be destroyed, by whom, and how? https://www.york.ac.uk/library/info-for/researchers/data/sharing/#tab-2		
	Give answer here: Data will be destroyed by me by deleting the files and will be done once my degree is complete.		
3	Will any personal or special category data (i.e. data that is not truly and irrevocably anonymised) be deposited in an archive or external repository? https://www.york.ac.uk/library/info-for/researchers/data/sharing/#tab-4 Move on to Question 5 if you have answered ‘no’		X
4	Where personal data are to be transferred to an archive or repository, please confirm that your Information Sheet will: (i) cover the archiving and reuse of any personal data and participant agreement to this, (ii) explain to participants the benefits of any data sharing, (iii) indicate where possible whether research data will be deposited in a named, recognised repository (e.g. Archaeology Data Service, UK Data Service, York’s institutional repository, etc.)		

Box 3B: Checklist of Data Retention Questions		YES	NO
ALL applicants must complete this box			
5	Where you have special category personal data or criminal data, will it be destroyed in line with an agreed retention policy (set by the University, the data provider, or approved by this ethics committee)? You may enter 'N/A' if you are not collecting this type of data	N/A	

Before submission of your assessment work, you must complete Section 4: Student Agreement. This completed Checklist must be included as an Appendix to your assessment report, together with examples of your Project Information Sheets and Informed Consent Forms.

SECTION 4: STUDENT AGREEMENT

Box 4A: Student Agreement		YES	NO	N/A
ALL students must complete this box.				
1	I confirm that the work conducted for the above project has met all the statements as expressed in this Research Ethics Checklist.	X		
2	I confirm that the work conducted for the above project was guided by the University's ethical rules and regulations.	X		
3	I have included example Project Information Sheets and Informed Consent Forms as Appendices to my report, if applicable.			X
4	I confirm that I have adhered to the ACT requirements for storing personal and special category data compliant with the General Data Protection Regulation (GDPR). Note that GDPR compliance guidance can be found on the ACT Ethics VLE site.	X		
5	I confirm that, if applicable, all payments made to personnel in relation to this project have complied with financial regulations.			X
Student Name (or Exam Number for Anonymous Submission)		Y3912832		
Date		12/05//25		

Box 4B: Supervisor Agreement		YES	NO
1	I have reviewed this Research Ethics Checklist.		
2	I have reviewed the Project Information Sheets and Informed Consent Forms, as applicable.		
Supervisor Name		Nathan Townsend	
Signed		Nathan Townsend	
Date		13/5/2025	