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High Fidelity Widescreen Cinema

VistaVision Film Production and Style in Britain and the USA

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High Fidelity Widescreen Cinema:

VistaVision Film Production and Style in Britain and the USA

Steven Francis Roberts

A dissertation submitted to the University of Bristol in accordance with the requirements for award of the degree of Doctor of Philosophy in the Faculty of Arts, Department of Film and Television

September 2019

Abstract

In the 1950s, widescreen cinema transcended industry standards of aspect ratio and film size on an international scale. Since 2010, scholars have increasingly attended to widescreen cinema's multiple formats and global production contexts. New studies depart from the traditional critical focus on Hollywood's CinemaScope film directors. Scholarship in this widening field therefore requires a high degree of flexibility in order to detect transnational and collaborative influences on production and style, with the potential to incorporate untapped research methods and case study formats such as VistaVision.

Using a large 35mm/8 perf. film negative and the aspect ratio of 1.85:1 (width to height), VistaVision encouraged stylistic techniques associated with shot width, height, depth and sharp texture. This thesis examines influences on the production and style of VistaVision films in Britain and the USA at multiple historiographic levels, encompassing the international/national, film studios, stylistic trends, individual productions, and the creative agents who shaped film space (including studio managers, engineers, film producers, directors, cinematographers and set designers). Responding to the 'new film history' and production studies, my historical-textual account of VistaVision is supported by a wide variety of films, trade periodicals and archival sources from Britain and the USA.

The thesis expands on current analyses of widescreen films by comparing new shot scale/length data and the role of different formats, genres, national contexts, and compositional aesthetics in overlooked widescreen films. My multi-level account of VistaVision film production and style also shows the methodological value of focusing on film formats, which intersect with industrial structure, agency, creative process and transnational exchange. The thesis concludes by considering VistaVision's historical significance for later trends in wide frame/large format filmmaking, including IMAX.

Acknowledgements

Completion of this thesis was enabled by the generosity and feedback of many others.

The Arts and Humanities Research Council funded my PhD over 3.5 years, including travel to media institutions and libraries in Los Angeles, London, Exeter and Bradford. A travel grant from Bristol's Faculty of Arts allowed me to compare 1950s cinema formats displayed at the Cinémathèque Française in 2019, including VistaVison and Perspecta sound.

This thesis was nourished by the conscientious guidance provided by my impeccable PhD supervisors, Sarah Street and Helen Hanson. I am grateful for their critical input and contagious enthusiasm for film history which has energised our meetings over the past few years. I am also indebted to the South, West and Wales Doctoral Training Partnership for facilitating cross-institutional PhD supervision between the Universities of Bristol and Exeter.

My research was greatly helped by librarians and archivists, including Louise Hilton (The Margaret Herrick Library), Jonny Davies and Victoria Bennett (The British Film Institute), Charles Drazin (Film Finances), Phil Wickham (The Bill Douglas Cinema Museum, University of Exeter), Lucy Langley-Palmer and Jill Sullivan (University of Bristol Library).

My interest in VistaVision was sparked in 2014-15 when studying an MA in Film and Literature at the University of York, where the support of Judith Buchanan, Andrew Higson, Adam Kelly and Erica Sheen encouraged me to continue into postgraduate research. I am also grateful for countless conversations about widescreen while at Bristol and Exeter, particularly with my PhD student comrades and Film History to 1960 undergraduate students. Thanks also to VistaVision filmmaker Nick Eriksson for meeting me for an interview in Exeter in 2017.

Parts of this manuscript were proofread by Jordan Holland, Alex Morden Osborne, Xander Ryan and Amelia Seely - my special thanks to these four for their noble assistance! Jordan (later joined by Kanahaya Alam) repeatedly hosted me on research trips in London, while Dawn Frattini, Ross Melnick and their families made me feel at home in LA.

Finally, unreserved thanks go to my parents, for their loyalty and encouragement.

Author's Declaration

I declare that the work in this dissertation was carried out in accordance with the requirements
of the University's Regulations and Code of Practice for Research Degree Programmes and
that it has not been submitted for any other academic award. Except where indicated by specific
reference in the text, the work is the candidate's own work. Work done in collaboration with,
or with the assistance of, others, is indicated as such. Any views expressed in the dissertation
are those of the author.

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Introduction

Film [...] is appropriated by artists but at every stage in the creation and presentation of their work they are dependent upon, and often at the mercy of, the machine and its operators.¹

Halfway through the VistaVision adventure film, *The Mountain* (Edward Dmytryk, 1956), a rock climber (Spencer Tracy) crosses a narrow ledge to ascend the eponymous alp which had, until this moment, provided a distant and romantic backdrop. 'This is a bad place', he says in recollection before gripping the rockface. 'Either we make it, or we don't', his brother and belay partner (Robert Wagner) forewarns while threading their lifeline. Physical performances by Tracy and Wagner contribute to the spatial suspense and production team's 'interrelation of material decisions', to use Lucy Fife Donaldson's words.² As Tracy traverses the ledge, extreme shot scales and vertiginous camera angles show: a widescreen shot bisected by the rockface and distant forest floor; a hand searching the weathered surface of the wall/set for a secure hold; and, finally, a location shot framing the tall slab of mountain rock, in which the small red figure of the climber triumphantly climbs to the frame's upper edge. The width, verticality, depth and surface texture of the 'bad place' in *The Mountain* also help to distinguish the style of many VistaVision films from other formats and are terms which echo throughout this thesis.

When viewing VistaVision films like *The Mountain*, we can fluctuate between cinephilia and diegetic immersion, either being drawn toward or beyond details of their production. Additionally, recording and projecting images on upsized film marvellously, and,

¹ V. F. Perkins, Film as Film: Understanding and Judging Movies (Hammondsworth: Penguin, 1972), p. 40.

² Lucy Fife Donaldson, *Texture in Film* (Houndmills: Palgrave Macmillan, 2014), p. 6.

as V. F. Perkins might say, *mercilessly* showcases aspects of directing, cinematography and set design. By enlarging the frame area of 35mm film by a factor of 2.76 and using the tall-and-wide aspect ratio of 1.85:1 (width to height), VistaVision expanded stylistic choices and heralded the global diffusion of large film in the latter 1950s.³ In the years immediately following the introduction of Cinerama in 1952, filmmaking transcended the 1.37:1 aspect ratio established within Hollywood in 1932. This aspect ratio was a slight alteration of the 1.33:1 aspect ratio used for silent 35mm films since 1899.⁴ A total 97 VistaVision features were made in Britain, the USA and globally between 1954-61, satisfying the popular appetite for big and clear widescreen images. But the insights provided by VistaVision films like *The Mountain* and their production histories have remained invisible to film scholars.

This thesis examines the production and style of VistaVision films in Britain and the USA. My approach combines methods drawn from the 'new film history' and the burgeoning field of production studies, also known as media industry studies, to situate film style in the context of its production. These historical contexts range from international/national political economies and the film industry to individual studios, case study productions and the creative agents who shaped film space (including studio managers, engineers, film producers, directors, cinematographers and set designers). My argument is informed by VistaVision films, archival materials and print sources from Britain and the USA.

Key questions for my research included: what are the distinguishing features of VistaVision film production compared to other widescreen formats of the post-war era, and how did this shape film style between 1954-61? How did different production roles adapt to its double-frame negative and widescreen aspect ratio, and what does this reveal about their

³ John R. Bishop and Loren L. Ryder, 'Paramount's "Lazy 8" Double-Frame Camera', *American Cinematographer*, 34 (December 1953), 588-89, 606-07; Loren L. Ryder and Jack Bishop, 'VistaVision Moves Forward', *American Cinematographer*, 35 (November 1954), 552-53, 573-76.

⁴ John Belton, *Widescreen Cinema* (Cambridge, MA: Harvard University Press, 1992), p. 15. As the terms '1.33:1' and '1.37:1' were used interchangeably even after 1932, I follow Belton in referring to the Academy ratio as '1.33/7:1' where appropriate.

creative agency? Were there transnational correspondences of film space and style in VistaVision films made in Britain, the USA and further afield? How was the international exchange of VistaVision technology and film technique facilitated? Lastly, what are the most useful methods for contextualising and comparing VistaVision film production and style?

This thesis develops on current academic research into widescreen cinema's global production contexts. Emerging methodologies in this field require precision when it comes to pinpointing technological, collaborative and transnational influences on widescreen style. Fine-tuning our production methodologies can also help researchers to surpass what I would call the traditional scholarly focus on Hollywood's 'anamorphic auteurs' (typically, American CinemaScope films directed by Otto Preminger, Nicholas Ray, Douglas Sirk, Elia Kazan and Anthony Mann). By embracing a multi-level historiography and a more generous stylistic palette, I want to reframe widescreen film production as a complex process involving multiple creative agencies. This introduction will outline the key concepts and critical position put forward in this thesis. But first, how does VistaVision differ in design from other technologies used in the 1950s? Given that VistaVision has been viewed as an 'exhibitor-friendly' alternative to more extravagant widescreen formats, why does this system provide such a useful case study for historians of film production and style?⁵

The VistaVision Format

Reference to VistaVision has mostly been confined to brief entries within much larger histories of widescreen cinema.⁶ A lack of sustained textual analysis and engagement with VistaVision's production history can give a deterministic impression of the interplay between technological and stylistic change, compressing the production process and creative agency. Before exploring

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⁵ Peter Lev, *Transforming the Screen: 1950-1959* (New York: Charles Scribner's Sons, 2003), p. 120.

⁶ Belton, *Widescreen Cinema*, pp. 125-127; Leo Enticknap, *Moving Image Technology: From Zoetrope to Digital* (London: Wallflower Press, 2005), pp. 62-63; Lev, pp. 120-121.

these issues in more detail, I want to point out that the VistaVision format was fundamentally different in design to competitor systems. As Perkins wisely observes in my opening quotation, appreciating the extent to which filmmakers are dependent on technologies is fundamental to the history of film production. Simultaneously, distinguishing between the tools of the trade helps us to appreciate the very diffuse and specialised nature of production practices in the post-war widescreen era. Although technological constraints were not the sole influence on film production and style, the terms 'process' or 'system' that are sometimes used to summarise widescreen formats are appropriate given that practical workflows (and stoppages) were dependent on the efficiency of production equipment (including stocks, aspect ratios, lenses, and so forth).

The VistaVision logo offered its own typographical vista and clues as to the technology's appeal, especially when set against Paramount's 'mountain'. The prominent 'V' conveyed the verticality of its aspect ratio and visual precision, the latter also indicated by the 'Motion Picture High-Fidelity' tagline (figure 1). In their book, *Wide Screen Movies*, Robert E. Carr and R.M. Hayes provide more objective terms of reference which helps to distinguish VistaVision from other widescreen systems.⁷ These systems can be categorised in terms of their use of multiple cameras, anamorphic lenses and 65/70mm film, or several of these devices in combination.

VistaVision represented the first milestone in large format film production in the 1950s. The system exposed 35mm film horizontally in the camera at a rate of eight perforations per frame, as opposed to the normal four perf. pulldown. At the printing stage, the film negative was either reduced to standard proportions or preserved for use in large venues equipped with special horizontal film projectors. Prints derived from the large VistaVision negative could be

⁷ Robert E. Carr and R.M. Hayes, *Wide Screen Movies: A History and Filmography of Wide Gauge Filmmaking* (Jefferson, NC: McFarland, 1988). Used in combination with errata compiled by Daniel J. Sherlock, *'Wide Screen Movies* Corrections version 2.0', (2004) http://www.filmtech.com/warehouse/tips/WSMC20.pdf [accessed 21 June 2019].

magnified in widescreen theatres through a spherical lens with lower grain visibility and better definition than systems which immediately preceded it, such as multi-camera Cinerama and anamorphic CinemaScope films.⁸ Early VistaVision films were shot for presentation in variable frame sizes similar to RKO's cropped SuperScope films. However, Paramount soon standardised on the 1.85:1 frame, distinctively tall in comparison to CinemaScope (2.35:1-2.55:1) and Cinerama (2.65:1), and this became the main reference for creative decisions.



Figure 1. The VistaVision logo, as seen in the opening credits of White Christmas in 1954.

VistaVision's production history anticipates systems of the latter 1950s which combined even larger film gauges with wide-angle or anamorphic lenses, and frame sizes ranging 2.35-2.76:1. These include: Todd-AO 65, CinemaScope 55, MGM Camera 65 and Super Panavision 70. Of these, only VistaVision was used for high-volume film production and general theatrical release, providing a wider range of textual evidence and production contexts for me to draw on than specialised 55-70mm film systems would offer.

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⁸ Richard W. Haines, *Technicolor Movies: The History of Dye Transfer Printing* (Jefferson, NC: McFarland, 1993), p. 83.

In *Film as Film*, V. F. Perkins argues that filmmaking technique is dependent on machines but not dominated by mechanical constraints. This thesis is indebted to his flexible conception of the 'constant two-way traffic between science and style, technology and technique'. Perkins to specific examples of collaboration, Perkins illustrates how 'style is formed by a pattern of decisions', multiple roles and technological change. He also argues that stylistic choice has increased as 'technology has propelled the cinema steadily toward increased realism', and accords value to filmmakers who chose to use technology for subtle rather than spectacular ends. But we do not need to rely on transhistorical notions of technological change, such as the theory of cinema's gradual perfectibility, to account for the wide range of techniques used in VistaVision films, or base our selection of films on narrow style criteria. Instead of teleologically arguing that VistaVision technology brought cinema closer to realism, this thesis considers the historical contribution of film size and aspect ratio to production techniques. These technological details require some clarification.

Film consists of a flexible base coated with a chemical emulsion containing silver-based halide grains which react to light. The double-frame VistaVision film negative had a large capacity for film grains and thus visual details transmitted by light, at the cost of additional lighting and restricted camera mobility during production. However, granular details of film space were as much a product of stylistic choice on the part of the director, cinematographer or set designer, as they were film's indexical relation to physical reality. Taken to its fullest extent, Perkins' idea of a 'two-way street' also implies that film techniques can modify or run counter to technological limits. What can seem like a counterintuitive (or visually spectacular) response to aspect ratio or film size may be guided by a clear commercial, stylistic or mundane

⁹ Perkins, p. 48.

¹⁰ Ibid., p. 56.

¹¹ Ibid., p. 43.

¹² Indexicality: a term drawn from the semiotic theory of Charles Sanders Peirce and used in the 2000s to make ontological distinctions between the manner in which film grain and digital pixels capture light: Mary Ann Doane, 'Indexicality: Trace and Sign', *differences*, 18 (2007), 1-6.

practical rationale.¹³ Observing how VistaVision filmmaking was supported by other production facilities can also help to explain the rate at which filmmaking techniques were replicated internationally.

When VistaVision was adopted outside Paramount in the USA, undergoing what Robert C. Allen and Douglas Gomery call the process of 'technological diffusion', multiple factors came to influence the production and style of VistaVision films. ¹⁴ Therein lie diverse possibilities for what Perkins, and Belton, Sheldon Hall and Steve Neale in *Widescreen Worldwide*, call the 'appropriation' of widescreen technology. ¹⁵ The stylistic differentiation and diffusion of VistaVision was driven by industrial, discursive, technological and aesthetic factors. I explain how organisations and individuals in the British and American film industries negotiated these factors to present a dynamic history of VistaVision that has been unavailable to top-down, 'film factory' or auteur-oriented conceptions of film production. This also requires us to move flexibly between different levels of historical analysis. My next section introduces some of the key concepts which inform this multi-level analysis.

Historicizing Production: Industry, Process and Agency

In the 2010 edited collection, *Widescreen Worldwide*, John Belton, Sheldon Hall and Steve Neale introduce a progressive agenda for scholarship in the field, whereby the contributors' 'textual analysis is firmly rooted in the realities of shooting and production practices' found in the USA, Britain, Italy, Japan and Hong Kong. ¹⁶ By rooting my analysis of VistaVision in its historical context, I am able to weigh specific influences on film production and style in Britain and the USA. Responding to broader movements in transnational and production studies

¹³ Perkins, p. 48.

¹⁴ Robert C. Allen and Douglas Gomery, *Film History: Theory and Practice* (New York: McGraw-Hill, 1985), p. 115.

¹⁵ Perkins, p. 40; Widescreen Worldwide, ed. by Belton, Hall, and Neale, p. 4.

¹⁶ Widescreen Worldwide, ed. by Belton, Hall, and Neale, p. 3.

through my unique case study format will present an evolution in the recent debate regarding the global production contexts of widescreen cinema.

A major source of inspiration for the research and organisation of this thesis has been the historiographic model proposed by Amanda D. Lotz and Horace Newcomb in 2002, and updated in 2012, which outlines five levels at which media industry research operates: international and national political economy, industrial contexts, particular organisations or studios, individual film productions and the various personnel ('agents') involved in filmmaking.¹⁷ This multi-level approach can be broadly distinguished from top-down notions of industrial production. For example, the Marxist theoretician Raymond Williams characterized popular cinema as having 'industrial and commercial structures which, with their command of means and resources of production, impose [...] (marginally varied) unification'. 18 Williams references French, British and American cinema in his essay and yet his conditional notion of '(marginally varied) unification' leaves little room for a nuanced international application.¹⁹ By distinction, Lotz and Newcomb foreground the broadest and most individualised influences on production without insisting on a causal hierarchy, allowing the model to be adapted to different scenarios and sites of production. I am interested in the factors underlying these influences and the complex processes of hierarchical negotiation, creative appropriation, and collaboration which they give rise to.

Industrial factors broadly stem from the structure of filmmaking organisations and their relationship to distribution and exhibition. We can also speak of industrial standards which sanction ways of working and facilitate global trade. The fluid frameworks of production studies have enabled me to modulate between these multiple influences on VistaVision

¹⁷ Amanda D. Lotz and Horace Newcomb, 'The production of entertainment media', in *A Handbook of Media and Communication Research: Qualitative and Quantative Methodologies*, 2nd edn, ed. by Klaus Bruhn Jensen (Abingdon: Routledge, 2012), pp. 71-86.

¹⁸ Raymond Williams, 'British Film History: New Perspectives', in *British Cinema History*, ed. by James Curran and Vincent Porter (London: Weidenfeld and Nicolson, 1983), pp. 9-23 (p. 22).

¹⁹ Ibid, p. 22.

filmmaking. I describe how studios and filmmakers negotiated industrial standards to exploit VistaVision technology. I also compare how national film industries functioned internationally, building on the wide geographic scope of production studies in *Behind the Screen: Inside European Production Cultures*, edited by Petr Szczepanik and Patrick Vonderau, and *Production Studies, The Sequel!: Cultural Studies of Global Media Industries*, edited by Miranda Banks, Bridget Conor, and Vicki Mayer.²⁰

The influence of industrial factors is widespread but not absolute. It can be distributed and resisted across multiple areas of production activity. Lotz and Newcombe's reference to 'process' and' agency', terms which also feature prominently in the 'new film history' approach to authorship described by James Chapman, Mark Glancy and Sue Harper, has informed my evaluation of the contributions made by studio managers, producers, engineers, directors, cinematographers and set designers to VistaVision production.²¹ For example, in 1960, the former VistaVision engineer Walter Beyer informed readers of *American Cinematographer* that 'camera aperture dimensions are by far no longer important in Wide Screen Production', because 'the "composition aspect ratio" and the intended release form as decided by management are now dominating' use of the technology.²² In this case, it is crucial to remember that deference to studio management by film technicians - or 'operators', as Perkins refers to them in my opening quotation - occurred within a multi-vocal production hierarchy where collaboration and conflict were both possible, if not probable.

VistaVision film production sometimes resembles a sequential process of pragmatic checks and micro-negotiations between creative agents. I have been conscious to show how

²⁰ Behind the Screen: Inside European Production Cultures, ed. by Petr Szczepanik and Patrick Vonderau (New York: Palgrave Macmillan, 2013); Production Studies, The Sequel!: Cultural Studies of Global Media Industries, ed. by Miranda Banks, Bridget Conor, Vicki Mayer (New York: Routledge, 2015).

²¹ The New Film History: Sources, Methods, Approaches, ed. by James Chapman, Mark Glancy, and Sue Harper (Basingstoke: Palgrave Macmillan, 2007), p. 7.

²² Walter Beyer, 'Wide Screen Systems', in *American Cinematographer Manual*, 1st edn, ed. by Joseph V. Mascelli (Los Angeles: ASC, 1960), pp. 44-54 (p. 44).

the adoption of production technologies can interrogate industrial structures rather than just falling into place or being overdetermined by them. Examining industry-level factors also provides a useful historiographic pivot and middle-ground between transnational influences and the more localised contributions of organisations and individuals.²³ As Lotz and Newcombe recommend, 'the most effective production research will indicate an awareness of the multiple levels and seek to identify the interdependence of the influences, even if focusing upon particular cases, settings, and systems'; the authors also press for more historical and comparative examples to complement the large corpus of work on today's global media industry.²⁴ Analysing how VistaVision filmmaking was influenced on several 'levels', and in different national settings, has led to new insights which are unobtainable through monolithic models of film production. The exchange of VistaVision technology and production expertise also illuminates mobility within production hierarchies and between national contexts, helping to unearth the long history of globalised film production.

Tracking the exchange of film technique requires some attention to the industry's response to influential VistaVision films and contemporary production discourse. The diffusion of VistaVision was dependent on inter-studio and international circuits of knowledge exchange. Such exchanges may be officially convened, in the case of Paramount's provision of VistaVision engineers and worldwide presentations (figure 2), or more casually fulfilled, when based on a filmmaker's viewing habits at the cinema or fleeting interactions with overseas production crew. In-house or official production discourse was also moderated by industrial standards and organisational policies.

²³ Amanda D. Lotz, 'Industry-Level Studies and the Contributions of Gitlin's *Prime Time*', in *Production Studies: Cultural Studies of Media Industries*, ed. by Vicki Mayer, Miranda J. Banks, and John T. Caldwell (New York: Routledge, 2009) pp. 25-38.

²⁴ Lotz and Newcomb, p. 72.

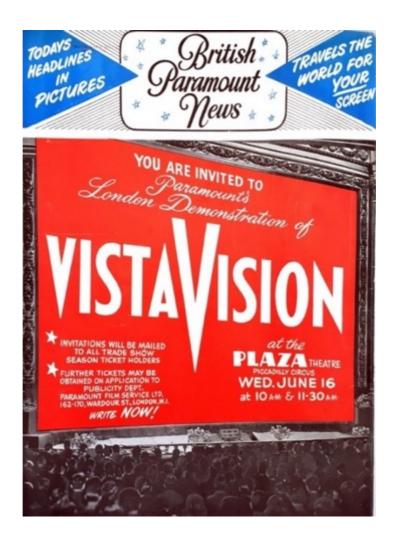


Figure 2. Newspaper advertisement for a trade demonstration of VistaVision in Britain.²⁵

As a discourse analysis of film production would imply, I focus more on how VistaVision was promoted and discussed within the industry than on how it was sold to cinemagoers. This is in part because an extensive amount of research by Ariel Rogers, John Belton, Keith M. Johnston, Sheldon Hall and Steve Neale has already shown how the popular experience of widescreen cinema was mediated by film marketing, distribution and exhibition practices which emphasised the immersive qualities of different widescreen formats.²⁶ In a

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²⁵ 'Paramount's London Demonstration', *Kinematograph Weekly*, 3 June 1954, p. 38.

²⁶ Ariel Rogers, Cinematic Appeals: The Experience of New Movie Technologies (New York: Columbia University Press, 2013), pp. 19-90; Widescreen Cinema, pp. 183-210; Keith M. Johnston, Coming Soon: Film Trailers and the Selling of Hollywood Technology (Jefferson, NC: McFarland, 2009), pp. 27-90; Sheldon Hall and Steve Neale, Epics, Spectacles, and Blockbusters: A Hollywood History (Detroit: Wayne State University Press, 2010), pp. 135-186.

study of VistaVision marketing materials, Tom Vincent has begun to show how Paramount's promotional activities may have cultivated the warm reception of VistaVison by exhibitor organisations in Britain.²⁷ Further boundary-crossing interactions between production cultures are in need of critical attention, including the professional periodicals or informal memos which enabled VistaVison filmmakers to modify and ascribe cultural value to their work. Overall, the adoption of VistaVision technology could be said to provide a strong example of 'how people work through professional organisations and informal networks to form communities of shared practices', as Vicki Mayer, Miranda J. Banks, and John T. Caldwell observe of contemporary digital film production.²⁸

While seeking to identify distinguishing traits of VistaVision film production and style, I am also aware that these very issues were likely targets for mythologization, promotion and career progression within the film industry. The VistaVision format offered a material interface for cultural negotiations between national film industries, organisations, and individuals and the production discourse reflects on these transactions in revealing ways. John T. Caldwell's notion of 'trade stories' has informed my discourse analysis. Prior to Caldwell, Robert C. Allen and Douglas Gomery also argued that the 'production of ideas about technology and technological change' need to be incorporated into studies of the film industry's innovation processes. ²⁹ These ideas are indicative of the competing priorities which pervaded film production. The international production discourse around VistaVision filmmaking is rich in technical detail and persisted over time in trade journals and internal studio documents, showing how the technology was implemented and affected working relationships in Britain and the USA. For example, when charting the diffusion of VistaVision, we are often made aware that American and British production companies presented their own hyperbolic

²⁷ Tom Vincent, 'Standing Tall and Wide: The Selling of VistaVision', in *Widescreen Worldwide*, ed. by Belton, Hall, and Neale, pp. 25-40.

²⁸ Production Studies, ed. by Mayer, Banks, and Caldwell, p. 2.

²⁹ Allen and Gomery, p. 125.

narratives of global reach. On the other hand, trade coverage could twin the virtuoso profiling of a filmmaker's attention to detail with VistaVision, or pair the burdens of a new technology with heroic examples of innovation.

Inspired by 'new film history' approaches, 30 I advocate a critical reflexive approach to the partial and potted nature of studio memos, minutes, scripts, publicity templates and technical papers. These are drawn from the Margaret Herrick Library, UCLA Library Special Collections, British Film Institute and Film Finances Archive. In published trade sources, cultural conceptions of filmmaking, or of the relationship between British and American cinema, are tied to editorial inclinations, targeted readerships and circulation remits, on which topics Anthony Slide's edited list of International Film, Radio and Television Journals proved a valuable reference guide.³¹ The in-depth features, Q&As and production updates from craft journals allowed interest groups to formulate creative responses to VistaVision technology and so 'sanction' new techniques deemed worthy of attention. As Patrick Keating has said of Hollywood's response to colour cinematography, trade organisations monitoring widescreen cinema 'shared several goals and ideals, but the overlap between them was never perfect, as each institution would prioritize those ideals in a manner consistent with its own institutional agenda'. 32 It is crucial to highlight the institutional context and aesthetic ethos which informed craft solutions, remembering that particular techniques are always selected from several alternatives. These techniques become evident when we turn to analyse the VistaVision films themselves.

³⁰ The New Film History, ed. by Chapman, Glancy, and Harper, p. 7.

³¹ International Films, Radio and Television Journals, ed. by Anthony Slide (Westport, CT: Greenwood Press, 1985).

³² Patrick Keating, *Hollywood Lighting from the Silent Era to Film Noir* (New York: Columbia University Press, 2010), pp. 201-202.

Widescreen Space and Transnational Influence

This thesis investigates film space in VistaVision films, and the creative practices involved in crafting its constitutive elements. I also compare VistaVision films with those made in different formats, genres and national contexts. In his analysis of widescreen composition and staging, Steve Neale introduces a valuable taxonomy from which I borrow when describing and comparing widescreen films. Spatial aspects of cinema have also been explored by David Bordwell, Noël Burch and Deborah Thomas.³³ However, Neale's approach is particularly useful to me because it is equally attentive to material aspects of production and the fictional world of the film, as he explains:

Here a set of distinctions needs to be drawn between profilmic space (the space in front of the camera at the point of filming), diegetic space (the space in and of the fictional world), cinematographic space (the spatial properties of the frame and the image on screen), and location space (the overall space of a set or location) [...] pro-filmic, diegetic and location space include depth, width and height. The cinematographic image is flat. It possesses height and width but not depth. However, the depth of diegetic space can be cued.³⁴

Such fine-grained distinctions are easily overlooked when viewing films. It is only by setting out these definitions that Neale can dissect what he describes as the palpable relation between frame and action in widescreen features directed by Anthony Mann. Neale's approach also

³³ David Bordwell, Janet Staiger and Kristin Thompson, *The Classical Hollywood Cinema: Film Style and Mode of Production to 1960* (New York: Columbia University Press, 1985), pp. 50-54; Noël Burch, *Theory of Film Practice* (Princeton: Princeton University Press, 1981), pp. 17-31; Deborah Thomas, *Reading Hollywood: Spaces and Meaning in American Film* (London: Wallflower Press, 2001).

³⁴ Steve Neale, 'The art of the palpable: composition and staging in the widescreen films of Anthony Mann', in *Widescreen Worldwide*, ed. by John Belton, Sheldon Hall, and Steve Neale (New Barnet: John Libbey, 2010), pp. 91-106 (p. 98).

lends itself to non-directing roles and aesthetic issues which escape his scope and circumvent the familiar 'bidirectional axis' of width/depth in widescreen cinema described by John Belton.³⁵

Material relations and possible theoretical tensions between Neale's descriptors pose an array of questions for us to explore when analysing widescreen space in VistaVision films. For example, does widescreen cinema's compression of cinematographic height also preclude a sense of verticality in the diegetic world? How did filmmakers negotiate the flatness of cinematographic space by cueing depth and imbuing texture? In films shot on location, how was the cultural representation of place shaped by the selective/synechdochal relationship between profilmic and location space? In studio scenes, how were production facilities altered to accommodate the expanded cinematographic space of VistaVision? How might Barry Salt's statistical approach to shot length and scale help us to relate film space in key sequences to the broader spatiotemporal structure of VistaVision films?³⁶ Finally, how do these aspects of film space and editing differ by genre, format and studio or filmmaker?

Engaging with film aesthetics also has an important role to play in expanding the 'dimensions' of widescreen studies. The sequence which I have described in *The Mountain* would appear to fulfil Sergei Eisenstein's vision for a cinema of verticality, when he proposed that the American film industry should adopt a variable frame for film presentation in 1930 (figure 3). Meanwhile, extreme close-ups display VistaVision's rendition of texture (figure 4), a concept which has been invigorated by Donaldson, Ian Garwood and Giulia Bruno in their studies of cinematography, set design and locations in cinema.³⁷ Different shot scales and soft/sharp camera focus conveys our proximity to these onscreen surfaces. Or, by contrast, our

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³⁵ Belton, Widescreen Cinema, p. 198.

³⁶ Barry Salt, Film Style and Technology: History and Analysis, 3rd edn (London: Starword, 2009).

³⁷ Donaldson, pp. 81-111; Ian Garwood, *The Sense of Film Narration* (Edinburgh: Edinburgh University Press, 2013), pp. 12-34; Giuliana Bruno, *Surface: Matters of Aesthetics, Materiality and Media* (Chicago: University of Chicago Press, 2014), pp. 35-54.

sense of scale may be destabilised by saturating the widescreen image with information, as Mary Anne Doane argues of Otto Preminger's CinemaScope close-ups. As with Donaldson's textural analysis of the CinemaScope Western, *Ride Lonesome* (Budd Boeticher, 1959), and VistaVision film, *Vertigo* (Alfred Hitchcock, 1958), Doane's work could be developed by comparing shot scales in the VistaVision format.³⁸

My choice of VistaVision films has partly been informed by the availability of trade and archival production sources. Also, an increasing number of VistaVision films are being restored and released on home video. But the main motive has been to respond to the focus on Hollywood auteurs inherited from debates about film in the 1950s and 60s, which would stifle the possibility of posing largescale questions about popular widescreen films of various genres. As contextualising films can open up more questions than it answers, I have tended to think of the relationship between style analysis, theory and historical research in complementary and competing terms. For example, how can theoretical notions of film space help to structure our investigation of film style, or, do VistaVision aesthetics test the bounds of abstract theory? If historical sources attest to particular stylistic influences, do VistaVision films bear this out, or, can key sequences reveal craft signatures which are underreported in the production discourse? How might a multi-level history of VistaVision nuance theories of technological innovation and diffusion? My approach shows how comparative textual analysis can only strengthen our contextual production histories, and vice versa.

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³⁸ Mary Ann Doane, 'Scale and the Negotiation of 'Real' and 'Unreal' Space in the Cinema', in *Realism and the Audiovisual Media*, ed. by Lúcia Nagib and Cecília Mello (Houndmills: Palgrave Macmillan, 2009), pp. 63-81 (pp. 77-80); Donaldson, pp. 49-111.



Figure 3. The Mountain: vertical/deep staging on location.



Figure 4. The Mountain: big close-ups cling to the surface of the set.

Accounting for different formats, film genres and national film industries gives my analysis of VistaVision's spatial aesthetics a historical context and firm grounds for comparison. Belton has noted that post-war American cinema featured a variety of genres to accommodate widescreen spectacle through musicals, historical epics, Westerns and

travelogues.³⁹ Comparing key sequences, shot length and scale in American VistaVision films with those made in Britain can underscore surprising correspondences and differences in the spatial iconographies of popular film genres in widescreen.

The concept of transnational cinema has attuned my research to the cross-cultural influences on VistaVision film production and style. Transnational cinema has featured in various film studies contexts since the late 1990s. One significant early contribution by Andrew Higson offered the complementary terms 'transnational' and 'local' as an alternative to the inward-looking and potentially isolationist historiography implied by 'national cinema'. In Film Architecture and the Transnational Imagination, Tim Bergfelder, Sue Harris and Sarah Street offered one pioneering response to Higson's intervention by viewing individual set designers as couriers of artistic expertise interlinking distinctive French, German and British studios, to argue that 'European cinema during the 1930s is best understood as a transnational cinema instead of a loose geographical cluster of essentially autonomous national cinemas'. As reviewed by Deborah Shaw in 2018, this field has grown to include transnational modes of production, distribution and exhibition; films with multiple locations, exilic and diasporic filmmaking; cultural exchange; transnational influences, stars, directors and collaborative networks. 22

This thesis contributes to our collective map of the global exchange of film production resources, while also drawing attention to transnational influences on VistaVision film style. On the one hand, a purely national comparison between VistaVision films made in the USA and Britain might conceivably contrast the former's cultural hegemony with the latter's

³⁹ Belton, Widescreen Cinema, p. 83, pp. 91-94.

⁴⁰ Andrew Higson, 'The Limiting Imagination of National Cinema', in *Cinema and Nation*, ed. by Mette Hjort and Scott MacKenzie (London: Routledge, 2000), pp. 63-74.

⁴¹ Tim Bergfelder, Sue Harris, and Sarah Street, *Film Architecture and the Transnational Imagination: Set Design in 1930s European Cinema* (Amsterdam: Amsterdam University Press, 2007), p. 29.

⁴² Deborah Shaw, 'Transnational Cinema: Mapping a Field of Study', in *The Routledge Companion to World Cinema* (London: Routledge, 2018), pp. 290-98 (p. 293).

parochialism, due to contrasting scales of production or the iconography of popular genres in each nation. On the other, charting transnational influence entails an openness to the possibility of meaningful stylistic correspondences between the British comedy, Hollywood Western or co-produced epic. It is important to relate questions of film space and style to the context of production in a structured way, with a view to uncovering the creative contributions of individual agents and much broader industrial factors.

'Resituating' Widescreen Cinema: Technology, Production and Style

This thesis critically responds to three research themes which pervade studies of widescreen cinema. Firstly, the most thoroughgoing studies of film style in 1950s widescreen cinema, namely those by Charles Barr, David Bordwell and Harper Cossar, have tended to focus on CinemaScope technology as it was used in the USA.⁴³ There are also journal issues of *Cinegrafie* and *Film History* dedicated in part or whole to CinemaScope.⁴⁴ *Widescreen Worldwide* evidences the diverse formatting options available to post-war filmmakers, though VistaVision itself evades thorough textual analysis - as Simon Howson highlights in his review of this collection, 'film studies still lacks an aesthetic history of the format that examines how filmmakers exploited the sharpness of the image and its "big screen" rather than widescreen attributes'.⁴⁵ The reason for this is partly practical and methodological: in researching this thesis, I have mobilised a large number of archival sources, including the papers of Paramount engineers Loren Ryder and Walter Beyer, much of which has not been seen before in the literature.

⁴³ Charles Barr, 'CinemaScope: Before and After', *Film Quarterly*, 16 (Summer 1963), 4-24; David Bordwell, *Poetics of Cinema* (New York: Routledge, 2008), pp. 281-326; Harper Cossar, *Letterboxed: The Evolution of Widescreen Cinema* (Lexington: University of Kentucky Press, 2011), pp. 94-184.

⁴⁴ 'CinemaScope: Larger than Life', *Cinegrafie*, 16 (2003), 217-312; 'American Widescreen', *Film History*, 15.1 (2003), 1-119.

⁴⁵ Simon Howson, *Widescreen Worldwide* review, *Senses of Cinema*, 60 (October 2011), http://sensesofcinema.com/2011/book-reviews/widescreen-worldwide-edited-by-john-belton-sheldon-hall-and-steve-neale/ [accessed 21 June 2019].

The orthodox focus on American CinemaScope films demonstrates an apparent preference for stories of progress and widespread trends, or variations within these, as opposed to innovations and global appropriations which may be short-lived but equally illuminating. CinemaScope was the most widely used format by Hollywood studios prior to Panavision in the 1960s, but it was not the only one. By comparing VistaVision with its main competitor, I diverge from single-format studies which ignore the market dynamics of product differentiation. I also incorporate technical experiments and short-lived devices into my account. The historiographic value of studying stunted innovation has been variously argued for by Kira Kitsopanidou, John Belton and Brian R. Jacobson. In the case of VistaVision and the auxiliary devices it inspired - such as horizontal film projection - obstructions to technological diffusion can point to broader structural issues and industrial workflows. More specifically, comparing VistaVision's sporadic usage across largescale, independent, experimental and short film production may help to explain the rarefied business models and applications of large format film elsewhere.

Secondly, this thesis departs from previous research through its commitment to more complex models of widescreen filmmaking and style, as informed by new production studies. Other widescreen studies which focus strongly on the film director have failed to integrate textual analysis with factors of production in a systematic way. Pauline Kael was perhaps the first to challenge the auteurist strain in Barr's classic analysis of CinemaScope films directed by Otto Preminger, Nicholas Ray and other Hollywood figures.⁴⁸ In *Letterboxed: The Evolution of Widescreen Cinema*, Harper Cossar's 'main goal is to examine widescreen

⁴⁶ Kira Kitsopanidou, 'The Widescreen Revolution and 20th Century-Fox's Eidophor in the 1950s', *Film History*, 15.1 (2003), 32-56; John Belton, 'Fox and 50mm', in *Widescreen Worldwide*, ed. by Belton, Hall, and Neale, pp. 9-24; Brian R. Jacobson, 'Fire and Failure: Studio Technology, Environmental Control, and the Politics of Progress', *Cinema Journal*, 57 (Winter 2018), 22-43.

⁴⁷ Belton, Widescreen Cinema, p. 18.

⁴⁸ Pauline Kael, 'Criticism and Kids' Games', Film Quarterly, 17 (Autumn 1963), 62-64 (p. 62).

aesthetics as experiments conducted by auteurs'.⁴⁹ I embrace the contribution of the director to shot composition and staging, which is a key indicator of VistaVision technology's influence on filmmaking technique. Particularly useful here is Barr's notion of the greater range for a 'gradation of emphasis' of action across the widescreen.⁵⁰ This thesis expands on studies which couch their analysis of composition and staging in auteurist terms, by considering the collaborative and constraining influences on directors and other creative roles. Restoring the role of technical and managerial staff shows the breadth of inputs, in synergy with production studies of film engineering by Helen Hanson and Luci Marzola.⁵¹

Thirdly, I will respond to the increasing amount of published work showing that widescreen formats interacted with global commerce and transnational styles in the 1950s and 60s. This will surpass the US-centric bounds of historical studies such as John Belton's *Widescreen Cinema* and *The Velvet Light Trap* 1985 special issue on 'American Widescreen', the latter published at a time of revisionism in film history methodology.⁵² My transnational approach also acts on the severe lack of historical research on British widescreen cinema. Sue Harper and Vincent Porter argue that British production saw 'a heterogeneous spread of styles' due to the importing of American widescreen systems; VistaVision films support the current re-periodisation of 1950s British cinema as a decade not of stagnation but of significant technological and stylistic change.⁵³

⁴⁹ Cossar. *Letterboxed*, p. 8.

⁵⁰ Barr, 'CinemaScope', p. 18.

⁵¹ Helen Hanson, *Hollywood Soundscapes: Film Sound Style, Craft and Production in the Classical Era* (London: British Film Institute, 2017), pp. 9-47. Luci Marzola, 'A Society Apart: The Early Years of the Society of Motion Picture Engineers', *Film History*, 28 (Winter 2016), 1-28.

⁵² 'American Widescreen', *The Velvet Light Trap*, 21 (Summer 1985), 2-80; Thomas Elsaesser, 'The New Film History', *Sight and Sound*, 55 (Fall 1986), 246-51.

⁵³ Sue Harper and Vincent Porter, *British Cinema of the 1950s: The Decline of Deference* (Oxford: Oxford University Press, 2003), p. 2; Bryony Dixon, 'Archiving the 1950s', in *British Cinema of the 1950s: A Celebration*, ed. by Ian MacKillop and Neil Sinyard (Manchester: Manchester University Press, 2003), pp. 208-10.

This thesis exploits the multi-level approaches of production studies to gauge transnational influence with more precision. As Andrew Higson and Richard Maltby conclude in relation to cultural exchanges between American and European cinema in the 1920s and 30s: 'one of the functions of the media industries, then, is to articulate, to stabilise, and of course to sell certain cultural identities, while at the same time marginalising others'.⁵⁴ In the context of widescreen cinema, cultural exchange has been argued to be encoded at the broadest level of international political economy in James H. Krukone's cold war history of the Russian Kinopanorama format, which was exhibited in New York on a limited basis via the US-Soviet Exchange Agreement.⁵⁵ At the more specific scales of organisations and individual productions, Steve Chibnall examines how British studios responded to the financial incentives which Hollywood attached to widescreen production.⁵⁶ Meanwhile, studies of transnational influence on film style risk getting caught between the two extremes of either ascribing variations in style to binary cultural differences, or viewing stylistic resemblances solely in terms of one national cinema dominating another.

Therefore, we should be aware that even culturally conscientious studies risk reinscribing a centre-periphery view of the power dynamic between Hollywood and 'global' cinema if they focus on American films. For example, Anna R. Cooper has critiqued *This is Cinerama* and *Three Coins in a Fountain* (Jean Negulesco, 1954, CinemaScope) for 'colonizing' European cities such as Rome through their touristic and anachronistic imagery.⁵⁷ Providing an alternate view of European practices, Federico Vitella has shown how Hollywood

⁵⁴ "Film Europe" and "Film America": Cinema, Commerce and Cultural Exchange 1920-1939, ed. by Andrew Higson and Richard Maltby (Exeter: University of Exeter Press, 1999), p. 23.

⁵⁵ James H. Krukones, 'Peacefully Coexisting on a Widescreen: Kinopanorama vs. Cinerama, 1952-66', *Studies in Russian and Soviet Cinema*, 4 (December 2010), 283-305.

⁵⁶ Steve Chibnall, 'The scope of their ambition: British independent film production and widescreen formats in the 1950s', in *Widescreen Worldwide*, ed. by Belton, Hall, and Neale, pp. 149-62.

⁵⁷ Anna R. Cooper, 'Colonizing Europe: Widescreen Aesthetics in the 1950s American Travel Film', *Transnational* Cinemas, 7.1 (2016), 21-33;

formats were 'hybridized and adapted to the local context' of Italian widescreen production.⁵⁸ In his study of Japanese widescreen films, Eric Crosby also argues that we can surpass dichotomies of cultural exceptionalism and imperialism by unearthing the role of creative agents and other local factors. Crosby details the period before widescreen production began in Japan, but during which filmmakers could have viewed American widescreen films and reinterpret these in their later stylistic practice. He therefore encourages film historians to monitor the global distribution and exhibition of widescreen features, stating, that 'film historians must be careful to tease out the various causal inputs [...] of transnational influence at the level of film style'.⁵⁹ Crosby's argument is more attentive to stylistic hybridity than Cooper's, but is partly based on circumstantial evidence and so could be enriched by considering other forms of cultural exchange, and on what levels these were facilitated. Engaging with the contemporary production culture and industrial structure yields more convincing results than deducing transnational influence from the films alone.

Thesis Outline

Each thesis chapter has been designed to explore a new layer of VistaVision's history, combining at least two of the levels outlined above (from international contexts to individual studios, productions and agents). At each level, I determine how the factors of industrial organisation, discourse and technique may have impacted technological change, film production or style in Britain and the USA.

Chapter 1 examines how Britain and the USA aimed to foster the international exchange of screen technologies which emerged between 1948-53, immediately before VistaVision. It

⁵⁸ Federico Vitella, 'Before Techniscope: The penetration of foreign widescreen technology in Italy', in *Widescreen Worldwide*, ed., by Belton, Hall, and Neale, pp. 163-72 (p. 172).

⁵⁹ Eric Crosby, 'Widescreen composition and transnational influence: early anamorphic filmmaking in Japan', in *Widescreen Worldwide*, ed. by Belton, Hall, and Neale, pp. 173-98.

also compares key trends in British and American innovation. The response of Rank, Paramount and other companies to post-war consumerism, policy and trade, in the form of theatre television, 3D and widescreen cinema, enables me to identify industry motives for VistaVision's later adoption in both countries and direct links with earlier innovations.

Chapter 2 investigates the stylistic differentiation of VistaVision from within the Paramount studio, its marketing campaign via horizontal film projection, and global demonstration. The chapter introduces and applies the concept of studio hierarchy to widescreen film history, by assessing the techniques and routines of quality control through which Paramount's studio management aimed to curate the style of VistaVision films. Production materials drawn from the Paramount Pictures collection and the papers of its chief engineer, Loren Ryder, show how VistaVision's introduction involved negotiating the Paramount studio hierarchy and blurring the professional divisions between executive, engineering and film production roles. It concludes with an overview of VistaVision's technological diffusion and constraints on this.

Chapter 3 focuses on widescreen style, thereby expanding on the smaller range of Paramount films referenced in Chapter 2 to compare shot scale and length across different formats, genres and national cinemas. By combining statistical and sequence analysis, the chapter identifies stylistic trends in early widescreen, westerns, comedies and travelogues. It analyses VistaVision films shot in popular genres of 1950s British and American cinema, while also highlighting transnational exchange and stylistic influence between these national contexts. The precision of my approach allows for some useful revisions to be made regarding past and present assumptions about the scale or editing of VistaVision films.

Chapter 4 turns to the matter of compositional aesthetics while situating these issues of verticality, horizontality, depth, and texture in the context of film directing careers. Key sequences show how stylistic traits promoted by Paramount in the 1953-55 period were

refracted by individual directing styles. Frank Tashlin's consumer comedies forms the basis of my style comparison of widescreen comedies made with different studios, stars and formats. Examining Alfred Hitchcock's long shots allows me to consider his approach to locations in VistaVision and the aesthetics of scale. Finally, I argue that Michael Powell and Emeric Pressburger's 'tribal' staging in VistaVision war films, made on location after they re-joined Rank, demonstrates a decisive difference in technique and aesthetic from their colourful CinemaScope films.

Chapter 5 uses two case studies, the film epics *War and Peace* (King Vidor, 1956) and *The Battle of the River Plate* (Michael Powell and Emeric Pressburger, 1956), which reveal how film style was shaped by internationally and professionally diverse production teams. Whereas previous chapters examined film production in terms of hierarchical studio relations (Chapter 2), or from the perspective of an individual role (Chapter 4), the concepts of collaboration and stylistic hybridity inform Chapter 5. The Film Finances Archive, Fred Zinnemann Papers, BFI Special Collections and memoirs assist me in documenting the collaborative input of film producers, directors, cinematographers and set designers. The chapter also identifies British countercurrents to the scale of widescreen epics in the form of independent, reflexive and experimental productions in VistaVision.

I conclude the thesis by identifying key themes, VistaVision's legacy for large format and widescreen film production, and potential directions for future research.

1. Post-War Innovation and Transatlantic Exchange

The technology behind VistaVision long predates its adoption for film production. Methods of horizontal film exposure and/or reduction printing similar in principle to VistaVision were patented throughout the silent era of cinema by Thomas Edison, Corrado Cerqua and Filoteo Alberini, in the USA, and John Powrie, in Britain. In 1926, during Hollywood's commercial trial of large film, widescreen and sound technologies, Paramount acquired the patent for a system originally invented by Edwin Clark that the studio would later develop and market as the VistaVision format. Given Paramount's disinterest in Clark's 1926 format following the conversion to sound, and the standardisation of the 1.37:1 frame in 1932, what conditions finally persuaded studios in Britain and the USA to revive VistaVision, in the early 1950s?

Following the multi-level approach outlined in my introduction, this chapter will focus on international developments that shaped screen technologies in the post-war era. It does this in two main ways. Firstly, by comparing how post-war consumerism, state policy and trade mutually affected and encouraged innovation within British and American cinema, immediately before the arrival of VistaVision. Theatre television, 3-D and widescreen technologies are a vital part of VistaVision's historical narrative, expanding the cinema experience in both countries from 1948-1953. Secondly, I gauge the extent of transatlantic exchange, whether in the form of technologies, techniques, expertise or films, and the cultural interchange of ideas and competing visions of commercial expansion. Of these technologies, widescreen cinema had the geographically widest impact on innovation and exchange.

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⁶⁰ Thomas A. Edison, Kinetographic Camera, US patent US589168A, 31 August 1897; Corrado Cerqua and Filoteo Alberini (assignor), Panoramic Moving Picture Apparatus, US patent US1680498A, 13 August 1928; John Hutchinson Powrie, Improvements in Colour Photography, UK patent GB190520662A, 5 October 1906. These patents can be read online at patents.google.com.
[accessed 30 July 2019].

⁶¹ Kenneth MacGowan, 'The Screen's "New Look": Wider and Deeper', *The Quarterly of Film Radio and Television* 11 (Winter 1956), 109-30 (pp. 124-25).

There is a considerable body of research devoted to technological change in American cinema, which often features as a 'ground zero' of innovation due to the global reach of Hollywood's major studios. In Douglas Gomery and Robert C. Allen's model, inventions are said to undergo innovation within the adoptee studio prior to their diffusion. During the innovation phase, a studio can be seen 'altering its past methods of production, distribution, and marketing' in co-operation with exhibitors, equipment manufacturers, and relevant interest groups.⁶² Gomery and Allen's concept of innovation, drawn from the economist Edwin Mansfield, is similar in meaning to David Bordwell and Janet Staiger's notion of 'retuning' and the industrial 'strategy of accommodation'. For Bordwell and Staiger, 'new' technologies such as synchronised sound had a 'ripple effect [which] modified adjacent technologies' and roles, or created new ones. 63 The diffusion of theatre television, 3-D and widescreen also shows how business ideologies rippled across trade demonstrations, promotional materials and press coverage in Britain and the USA.

By factoring industrial structure, techniques and discourse into its account of transatlantic innovation, this thesis develops on previous research which focuses on American narratives of post-war innovation or highly successful formats such as CinemaScope. Taking the long and geographically wide view of film history, I argue that the 'stages' of innovation and diffusion might blur into one another as ideas and techniques flow between innovation projects, organisations and national borders, representing less distinct phases of technological change than two sides of the same coin. That is, technologies developed at an earlier time or adopted from another country can undergo continual modification, re-marketing or spawn auxiliary methods in a different time period or place. This was facilitated by in-house research and engineering at Paramount and Fox, departments established during the transition to sound,

⁶² Allen and Gomery, pp. 114-15.
⁶³ Bordwell, Staiger, and Thompson, p. 245.

and of Rank's post-war subsidiaries such as Cinema-Television Ltd., GB-Kalee and British Optical and Precision Engineers. Ultimately, it was only through a combination of international research, marketing and business diplomacy that studios, manufacturers and trade associations could hope to standardise their favoured technologies.

My broader perspective alerts us to similarities between VistaVision and earlier theatre television, stereoscopic and widescreen technologies in Britain and the USA in design, marketing, and implementation. But I avoid the teleological notion that VistaVision was the perfect culmination of so many failed experiments. What can seem with the benefit of hindsight like a rational progression from one innovation project to the next can blind us to ad hoc factors. My research is influenced by Donald Crafton's history of the 'partly rational and partly confused' conversion to sound, where technological change takes place within the context of long-term and short-term decisions. ⁶⁴ Technological failures such as theatre television, 3-D and ersatz widescreen problematise the studios' outwardly efficient appearance. The studios were not seers. Business plans were susceptible to volatile conditions and new techniques sometimes responded to local or transnational developments as they arose, rather than very far in advance. The turbulent historical conditions which shaped technological change and trade between the British and American film industries are outlined in my next section.

Consumers, Policy and Trade in Post-War Britain and the USA

Like other technologies introduced by the American and British film industries in the 1950s and 60s, VistaVision developed in synchronisation with the aims of individual organisations and prevalent social and economic trends in Britain and the USA. The widescreen revolution is too complex to be viewed as the achievement of a few 'great men' managing the studios. We

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⁶⁴ Donald Crafton, *The Talkies: American Cinema's Conversion to Sound, 1926-1931* (Berkeley: University of California Press, 1997), p. 4.

should also avoid the short-hand and too easily misconstrued characterisation of VistaVision as 'Paramount's direct answer to Twentieth Century-Fox'. 65 Inter-studio rivalry was just one factor in a field of developments to which Paramount responded. Consumer appetites, structural changes caused by government intervention, and policy measures on the British-American film trade need to be factored into the innovation and diffusion of screen technologies. Contextual developments also influenced the discourse of organisations promoting theatre television, 3-D and widescreen cinema to the rest of the film industry.

As a socioeconomic phenomenon, the adoption of new screen technologies formed part of the industry's response to the continual decline in cinema attendance since 1946. In the USA, annual admissions fell from an estimated 4127 million in 1946, to 2396 million prior to the release of the first VistaVision film in 1954 (a 42% fall), and from 1635 to 1275 million in Britain over the same period (a 22% fall). Such figures are symptomatic of macro-patterns in urban demographics, affluence and cultural consumption confronting the film industry. As city populations dispersed, and the media and leisure industries diversified post-war society's collective sensorium, so traditionally urban-based cinemas in Britain and the USA had to compete with popular domestic and outdoor pastimes. In the USA, the drive-in theatre targeted suburban consumers. Both countries also developed screen technologies.

Competition from home television has been identified as a major influence on the postwar film industry and its efforts to lure audiences using novel screen technologies. Evidence that television negatively impacted cinemagoing is provided by national discrepancies in broadcasting and attendance figures. The USA experienced a television boom soon after World

⁶⁵ Douglas Gomery, *Shared Pleasures: A History of Movie Presentation in the United States* (London: University of Wisconsin Press, 1992), p. 242; Joel Finler, *The Hollywood Story*, 3rd edn (London: Wallflower Press, 2003), p. 185.

⁶⁶ Michael Conant, *Antitrust in the Motion Picture Industry* (Berkeley: University of California Press, 1960), p. 4; Stuart Hanson, *From Silent Screen to Multi-Screen: A History of Cinema Exhibition in Britain since 1896* (Manchester: Manchester University Press, 2007), p. 93.

⁶⁷ Gomery, *Shared Pleasures*, pp. 83-93; Hanson, *Cinema Exhibition in Britain*, pp. 94-104; Belton, *Widescreen Cinema*, pp. 69-84.

War II, whereas in Britain, television broadcasting did not begin on a commercial scale until the mid-1950s. It follows that the decline in annual cinemagoing in late 1940s America goes unmatched in Britain until the rapid 59% fall between 1954 and 1958, coinciding with the surge in television ownership among lower income British families.⁶⁸

Of course, television ownership needs to be seen within the broader context of consumerist trends, notably increased home ownership and domestically oriented lifestyle choices, which channelled money away from the cinema in both countries. As I will go on to explain in this chapter's section on theatre television, it is also important to recognise the film industry's efforts to learn and profit from television technology, as opposed to conceiving of the relations between post-war media purely in rivalrous terms. In addition to socioeconomic change, state intervention pertaining to the organisation of film production, distribution and exhibition in each country also had a role to play in moderating the rate of technological diffusion in Britain and the USA.

Policy in both countries imposed restrictive measures on the film industry. In the USA, the Paramount Case of 1948 decreed that Hollywood's five major studios were to be divested of their theatres, following more than two decades of top-down management and monopolistic practices involving block-booking, theatre zoning and clearance between runs. The case for vertical disintegration had previously been made to the US courts system in 1921 and 1938. On the latter occasion, *Variety* predicted that the Department of Justice's antitrust suit would harm Paramount the most due to its domination of film exhibition.⁶⁹ Paramount owned the largest theatre circuit of the five majors, equal to nearly one-eighth of all 'seats' in the USA, and set a trade record for its yearly income of \$39.2 million in 1946.⁷⁰

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⁶⁸ Hanson, Cinema Exhibition in Britain, pp. 93, 99-100.

⁶⁹ 'Appeal Shotgun Divorce: Industry Fears It May Spread', *Variety*, 20 July 1938, pp. 3, 22; Ernest Borneman, 'United States versus Hollywood: The Case Study of an Antitrust Suit', in *The American Film Industry*, edited by Tino Balio, rev. edn (London: The University of Wisconsin Press, 1985), pp. 449-62.

⁷⁰ Thomas Schatz, *Boom and Bust: American Cinema in the 1940s* (Berkeley: University of California Press, 1997), pp. 334-39.

In the late 1940s and 1950s, Paramount mitigated potential losses caused by declining cinema attendance and state intervention through a mixture of protectionist, product differentiation and corporate diversification strategies. Decisively, Paramount chose to invest its earlier profits in a series of formats including the intermediate film system of theatre television, stereoscopic Paravision, the so-called Panoramic Screen method of widescreen presentation, and VistaVision. As with other Hollywood studios, Paramount focused its efforts on a smaller number of lucrative films for international distribution through its membership of the Motion Picture Export Association. In 1952, just under 40% of Hollywood's net revenue came from international subsidiaries and film distribution according to a PEP study, with Britain becoming a major global destination for Hollywood's 3-D/widescreen films in the postwar years.

If the five major Hollywood studios represented an oligopoly in transition from the late 1940s, post-war British cinema was dominated by the duopoly of the Rank Organisation and the Associated British Picture Corporation (ABPC). Rank oversaw the Pinewood, Denham and Amalgamated Studios and the Gaumont and Odeon theatre chains, while ABPC owned Elstree Studios and ABC cinemas. As in the USA, sanctions were introduced to manage competition between these organisations and smaller independents during the 1940s and 50s.

The Board of Trade monitored theatre acquisitions and required Rank and ABPC to formally agree to moderation. When urban cinemas began to close they were also unlikely to be replaced due to Ministry of Work restrictions on 'luxury building' after the war, though the installation of screen technologies could be rolled into repairs caused by bomb damage, or in

⁷¹ Timothy R. White, 'Life After Divorce: The Corporate Strategy of Paramount Pictures Corporation in the 1950s', *Film History*, 2 (June-July 1988), 99-119.

⁷² Political and Economic Planning, *The British Film Industry* (London: PEP, 1952), pp. 157-65; Thomas H. Guback, 'Hollywood's International Market', in *The American Film Industry*, ed. by Balio, pp. 463-86; Paul Swann, *The Hollywood Feature Film in Post-War Britain* (London: Croom, 1987); Ian Jarvie, *Hollywood's Overseas Campaign: The North Atlantic Movie Trade*, 1920-1950 (Cambridge: Cambridge University Press, 1992), pp. 247-74; Mark Glancy, *Hollywood and the Americanization of Britain: From the 1920s to the Present* (London: I.B. Tauris, 2014), pp. 204-14.

the completion of projects stalled by the war.⁷³ Economic entrenchment streamlined Rank's operations in post-war Britain, prompting investment elsewhere. Similar to the organic manner in which Hollywood expanded overseas following domestic saturation, Rank rechannelled capital toward a fledgling distribution and exhibition circuit in the USA from 1957. The divorcement decree left some breathing room for the growth of art cinemas in the USA, which provided yet another means of transatlantic exchange that whetted the American appetite for British films and filled the supply gap left by Hollywood's post-war rationalisation of production.⁷⁴

British policy aimed to strike a difficult balance between stimulating domestic growth, on the one hand, and defending the film industry against complete domination by the American interests that were also integral to that industry's commercial activity. Rank General Film Distributors released films on behalf of its parent production company, British independents, Ealing (1944-56), and Hollywood output from Universal. ABPC and Rank also exhibited films from the Hollywood majors through their cinema chains. The most important forms of 'isolationist' state policy manifested in the Cinematograph Films Act of 1948, which increased the mandatory quota for exhibiting British features, and the dual establishment of the National Film Finance Corporation and British Film Production Fund (the 'Eady levy'), to direct finance toward meeting this quota. Leading British independents such as London Films, Hammer and Warwick were the target beneficiaries of British film finance. However, Hollywood studios were able to qualify for the legislated sponsorship simply by making more films in Britain, which also allowed the major American production companies to use up any 'frozen' earnings

⁷³ Hanson, *Cinema Exhibition in Britain*, p. 80; Allen Eyles, *Odeon Cinemas 2: From J. Arthur Rank to the Multiplex* (London: Cinema Theatre Association, 2005), pp. 43-46.

⁷⁴ Eyles, pp. 62-63; Sarah Street, *Transatlantic Crossings: British Feature Films in the USA* (London: Continuum, 2002), pp. 140-68.

that they could not withdraw to the USA (as mandated by the Anglo-American Film Agreement of 1948).⁷⁵

British and American cinema have a long history of shared trade in part due to their proximity, Anglophone basis, and the Hollywood studios' aggressive infiltration of British film production, distribution and exhibition. In the 1950s, the transatlantic development of screen technologies was motivated by socioeconomic changes which led cinema attendance to decline, albeit at different rates in Britain and the USA, throughout the post-war era. British-American trade was also consolidated by commercial responses to national policy in both countries, much of which had the unforeseen consequence of refocusing Hollywood and Rank's attention on their overseas markets. Although new screen technologies would become an important vehicle for commercial and cultural exchange by the introduction of widescreen cinema in 1953, policies which responded to matters of national interest did not always align with the material realities of production and exhibition. Symbolic of governmental oversight regarding the transatlantic film business is Hollywood's boycott of British distribution in response to the Dalton import duty of 1947-48, which Margaret Dickinson and Sarah Street rightly describe as 'probably the most notorious incident in the history of film industrygovernment relations'.76 Even the production of domestic stereoscopic films for the Telekinema at the state-sponsored Festival of Britain in 1951 experienced fluctuations in government financial support during the planning phases. Policymakers struggled to negotiate complex transnational aspects of film business. Starting with theatre television, the transatlantic exchange of research, technology and audiovisual product will allow me to further interrogate these national borderlines.

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⁷⁵ Margaret Dickinson and Sarah Street, *Cinema and State: The Film Industry and the Government, 1927-*84 (London: British Film Institute, 1985), pp. 170-98.

⁷⁶ Ibid., p. 190.

Theatre Television

The industry's post-war aim of transmitting live television to film theatres was once described by Gomery as a 'missing link' in the innovation of widescreen cinema. Theatre television demonstrates that the film industry was not slow to respond to the post-war decline in audience figures, in fact developing 'participatory' cinema technologies well before the arrival of widescreen and 3-D in the early 1950s. While the research of Gomery and Timothy R. White has examined the industrial context of theatre television in the USA, Baird and Rank's activities in this field evades comparison in recent histories of British cinema exhibition by Stuart Hanson and Richard Farmer. Nor have we considered how theatre television relates to Paramount's broader innovation strategies, as in Kitsopanidou's examination of 'the multiple interactions and exchanges taking place between [the] two quasi-simultaneous innovation projects' of Eidophor television and CinemaScope at Twentieth Century-Fox. As Rank and Paramount were the main studios to adopt VistaVision in the 1950s, it is important to track any local or transnational developments which may pre-empt later innovation trends.

Technologies and scales of application differed in Britain and the USA, though Paramount and Rank both saw theatre television as a way to profit from and generally manage the rise of a potential rival medium. In the USA, Paramount made its first serious commitment to television through a joint investment with Twentieth Century-Fox in Scophony Corporation of America in 1942, formerly an ailing British manufacturing company. The American acquisition of Sycophony was soon shut down by a US Justice Department antitrust suit, but Paramount Television Productions persisted in constructing an adaptable technology with

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⁷⁷ Douglas Gomery, 'Theatre Television: The Missing Link of Technological Change in the U.S Motion Picture Industry', *The Velvet Light Trap*, 21 (Summer 1985), 54-61.

⁷⁸ Timothy R. White, 'Hollywood's Attempt at Appropriating Television: The Case of Paramount Pictures', in *Hollywood in the Age of Television*, ed. by Tino Balio (London: Unwin Hyman, 1990), pp. 145-63; Hanson, *Cinema Exhibition in Britain*; Richard Farmer, *Cinemas and Cinemagoing in Wartime Britain*, 1939-45: The Utility Dream Palace (Manchester: Manchester University Press, 2016).

⁷⁹ Kitsopanidou, p. 33.

minor support from DuMont Laboratories, a manufacturer and television station owner which they were buying into. In 1950, Paramount appointed Paul Raibourn, former treasurer and director of DuMont Laboratories, as president of Paramount Television Productions. (A DuMont branded television also features prominently in the first VistaVision film, *White Christmas*, when the main characters gather around the set to watch the 'Ed Harrison Show', a fictional variation on the CBS Ed Sullivan Show.) Paramount made television programmes in its Los Angeles station (KTLA) and established or purchased interests in other stations spanning Chicago, New York, Pittsburgh and Washington D.C., which the studio described as a 'transcontinental' network.⁸⁰

Paramount was foremost among Hollywood studios in terms of television station ownership and was first into the theatre television race. Paramount's unique theatre television technology, the intermediate film system (IFS), allowed television shows to be shown on cinema screens by receiving and rapidly converting electronic images to 35mm film on-site. From April 1948, Paramount launched IFS in Chicago, Los Angeles and New York cinemas. In future, Paramount planned to outbid emergent broadcasters in the purchase of televisation rights to spectator events, by using any revenue generated by admission to see theatre television. Paramount's television stations and theatre installations represented an early effort to get ahead of the USA's three broadcasting networks, ABC, NBC and CBS. Paramount's chief engineer and incumbent director of the Society of Motion Picture Engineers (SMPE), Loren Ryder, highlighted that the public could not yet enjoy home television on the large scale of wireless radio, and that, 'during the interim the theatres should determine the extent and manner of their participation'. Ryder hoped that television could aid cinema by helping 'to

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⁸⁰ George T. Shupert, 'An Answer to High TV Costs Film Network Expansion Plan', in *The Radio Annual and Television Yearbook*, ed. by Jack Alicoate (New York: Radio Daily Corp., 1950), p. 1146; White, 'Appropriating Television', pp. 148-62; Bernard F. Dick, *Engulfed: The Death of Paramount Pictures and the Birth of Corporate Hollywood* (Lexington: The University Press of Kentucky, 2001), p. 41.

⁸¹ Gomery, 'The Missing Link', pp. 56-59; White, 'Appropriating Television', p. 152.

build stars, personalities and interest' around new film releases - it was therefore Paramount's role to shepherd the new medium toward this potential synergy.⁸²

The theatre television experience also shares a logic with widescreen and 3-D technologies of the post-war era, all of which were designed to attract dwindling audiences and differentiated from watching television on the small screen at home. The public demonstration of theatre television in late 1930s Britain predates the USA's activity in this field. In 1938-1939, Baird Television and Scophony Ltd. pioneered close-circuit relay television in London cinemas such as the Marble Arch Pavillion, which used a 15 x 12-foot screen. The size and immediacy of theatre television lent itself to the broadcasting of spectator events such as sports, plays and speeches. The feeling of 'being there' was complemented by the communal response to action as its unravelled – the notion that fellow cinemagoers were either an extension of the audience onscreen or were sharing an exclusive view of momentous events. The head of Rank's Cinema-Television Ltd., A. G. D. West, described the televised showing of a boxing match at Marble Arch 'to an excited and enthusiastic audience who had paid up to two guineas (ten dollars at that time) for their seats', some of whom 'stood up and cheered' when the victory bell tolled. At the 1947 Conservative conference in Brighton, West and his colleagues installed a large television screen in a theatre to accommodate any audience overflow. West reported that 'many of the visitors preferred the close-up of the speakers on the large screen to the more distant view' of speeches by Winston Churchill in the main conference hall.⁸³

British theatre television resumed after the war albeit on a more limited scale than in the USA, which had a 'running start' in potential international markets according to J. Arthur Rank, then embroiled in talks with the British government and BBC over transmission rights.⁸⁴ In a 1945 white paper published by Lord Hankey's Television Committee, which had heard

⁸² Loren L. Ryder, 'Theatre Television', American Cinematographer, 29 (January 1948), 12-14, 29 (p. 29).

⁸³ A. G. D. West, 'Development of Theater Television in England', *Journal of the SMPE*, 51 (August 1948), 127-68 (pp. 135-36, 154).

^{84 &#}x27;Rank in Television Research', The Film Daily, 3 October 1945, p. 1.

arguments from Rank, it was stated that inter-war theatre television 'was used with some success on occasions where events of outstanding public interest were televised', and furthermore, that 'the cinema industry and the British Broadcasting Corporation working in cooperation and not as competitors in the exploitation of television' would be beneficial in the near future. In November 1948, the BBC permitted Rank to transmit its programmes across London on an experimental basis. With Baird's devices now consolidated under Rank's Cinema-Television Ltd., television content could be relayed from the BBC and Rank's Pinewood Studios to Gaumont and Odeon cinemas. It was anticipated that Rank, through its Bush Radio subsidiary, would eventually manufacture television receivers to spread its own programming (rather than depend on BBC material). Rank's early projections for a television network echoed the national scope of Paramount's USA ambitions, and would source content from London studios, theatres, sports grounds and concert halls (figure 5).

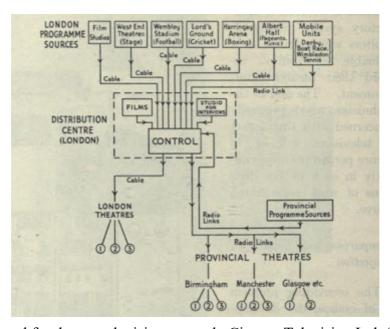


Figure 5. Proposal for theatre television network, Cinema-Television Ltd. (Rank), 1948.⁸⁷

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⁸⁵ Ibid., p. 142; Asa Briggs, *The History of Broadcasting in the United Kingdom*, 5 vols (Oxford: Oxford University Press, 1961-95), IV (1979), pp. 161-73.

⁸⁶ Geoffrey Macnab, J. Arthur Rank and the British Film Industry (Abingdon: Routledge, 1993), pp. 206-09.

⁸⁷ West, p. 140.

The narrow distribution of theatre television shaped its cultural form, supporting Michele Hilmes' argument that the reach of British and American television in general 'was limited and its address was a mixture of the local and the national' in the decade after war.⁸⁸ Nevertheless, geographically diffuse organisations observed and opted into these localised developments in theatre television. SMPE members made a three-month tour of England, France and Germany in 1945 to study European examples of theatre television and potential applications in the USA. In parallel, West visited American television stations, including Paramount's Chicago unit, on behalf of Rank's Cinema-Television Ltd; West argued that 'cinema needs a new sort of vitalized view' before the SMPE in New York in 1947, to include larger screens and higher resolutions than those seen in inter-war Britain.⁸⁹ British-American competition in this field was at its most direct in 1953, when London was able to view the coronation of Elizabeth II via theatre television at four of Rank's Gaumont and Odeon theatres. or at Paramount's flagship Plaza cinema, where the IFS system was on temporary display.⁹⁰ Paramount also transmitted colour footage to London hospitals through its affiliate Chromatic Television, and which, according to Cine-Technician, 'was vivid on the small screens, but less clearly defined on the large screen'. 91 However, large screen televisions were collectively contending with the historic boost in television set ownership due to the general public's desire to see BBC coverage of the coronation at home.

British and American plans for television production and theatrical presentation evaporated due to the rival success of public service/commercial home television, but the same principle informs the display of live events on outdoor and cinema screens today, and which

⁸⁸ Michele Hilmes, *Network Nations: A Transnational History of British and American Broadcasting* (Abingdon: Routledge, 2012), p. 167.

⁸⁹ 'SMPE Survey to Report Europe's Television Status', *Motion Picture Herald*, 14 July 1945, p. 16; 'Rank Looks to Television as New Field to Conquer', *Motion Picture Herald*, 14 July 1945, p. 15.

⁹⁰ 'Paramount Puts in TV at the Plaza', *Kinematograph Weekly*, 12 February 1953, pp. 1, 32; 'Coronation Theatre TV is Acclaimed', *Motion Picture Daily*, 3 June 1953, p. 7.

^{91 &#}x27;Technicians' Coronation Triumph', Cine-Technician, 19 (July 1953), p. 89.

have been explored by Helen Wheatley in *Spectacular Television*. ⁹² The short-term impact of theatre television would be to realign the interests of the American and British film industries around their main asset: cinema. Film studios were preoccupied with battling engineering problems and official bodies instead of bringing theatre television systems to an (inter)national audience, leading them to focus on other screen technologies. Central to the failure of theatre television was the film industry's lack of control, to varying degrees, over the means of production, distribution and exhibition.

Like Paramount's approach to widescreen four years later, the studio upheld the IFS for its compatibility with exhibition and differentiated it from the allegedly impractical product of RCA-Fox-Warner Bros. Radio Corporation of America (RCA) won the interest of Twentieth Century-Fox after studio president Spyrous Skouras was inspired by a Baird demonstration in Britain in 1939.⁹³ After the war, RCA's 'direct projection' system upscaled the same technology used for home television to magnify electronic images instantaneously onto the cinema screen, without first being converted to film as the IFS required. Prompted by several demonstrations of direct projection including a public show at Fox's Philadelphia theatre in June 1948,⁹⁴ Paramount reported five areas in which it felt its rival RCA had neglected the needs of post-war exhibitors (Table 1). Paramount was unsympathetic to any method which imposed auxiliary equipment, the removal of theatre seats or what it perceived as disruption to operating procedures where alternatives existed. Eight months into Paramount's testing period, Ryder stressed that both direct projection and the intermediate system work 'in a theatre of any size', and asked theatre and technical organisations to 'join in a common effort' toward standardisation in this field.⁹⁵

⁹² Helen Wheatley, Spectacular Television: Exploring Televisual Pleasure (London: I.B. Tauris, 2016), p. 51.

⁹³ Kitsopanidou, p. 33.

⁹⁴ Roy Wilccox and H. J. Schlafly, 'Demonstration of Large-Screen Television at Philadelphia', *Journal of the SMPE*. 52 (May 1949), 549-60.

⁹⁵ Loren Ryder, 'Television: Now and Tomorrow', *Motion Picture Herald*, 24 July 1948, p. 26.

Table 1. Summary: Theatre Television Methods, as Compared by Paramount. 96

Technical	The Direct Projection Method	The Intermediate Film Method
Features	(RCA-Fox-Warner Bros.)	(Paramount)
Programme	Instantaneously projects the TV	Records shows on celluloid, ready for
	show in theatres, potentially	the most convenient moment in the
	interrupting features.	theatre programme.
Content	Displays the TV show in its native	Conversion to film enables preshow
	format, as it is being recorded.	editing: 'desirable from an
		entertainment point of view'.
Space	Fits into 'an extremely small	Occupies the projection booth,
	percentage' of cinemas. Seats	requiring between 50-200 sq. ft.
	might have to be removed.	depending on the model, but the main
		exhibition space is unchanged.
Light	Requires directional screens and	Can be used in the 'largest theater with
	extra voltage due to projector's low	the largest screen with regular
	light output	illumination'.
Viewing	Interlaced electronic image may	Intermediate system uses traditional
	cause eye irritation.	film and so there is no added risk of
		viewing discomfort.

Paramount's effectiveness as an autonomous force for industrial change was restricted by the loss of its exhibition arm. Despite its advertised compatibility, the IFS proved more costly than RCA's system, and rapid film processing required a high level of maintenance. The divorcement decree meant that Paramount could not rely on circuit-wide installation and formerly affiliated theatres which initially installed the IFS soon abandoned the technology due to poor returns. Paramount divorced from its 1,450 cinemas, and though the US Justice Department had rewarded the studio's early divestiture by allowing 650 cinemas to be

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⁹⁶ Richard Hodgson, 'Theater Television System', *Journal of the SMPE*, 52 (May 1949), 540-48.

consolidated under United Paramount Theaters Inc., it was a legal obligation that this company should be separately owned and operated.⁹⁷ Fox's initial experience with theatre television contrasts that of Paramount for the reason that it delayed divestiture of its theatres until July 1953 through a court appeals process.⁹⁸ Attracting a wider range of theatre owners would be equally important when Paramount came to promote 3-D and widescreen formats.



Figure 6. Tatler newsreel theatre with Baird cathode-ray TV projection, London 1938.99

A fatal issue common to British and American theatre television systems was their dependence on existing techniques of distributing content. Both Paramount and Rank had restricted access to radio frequencies, which were allocated piecemeal for expressly non-commercial purposes by the FCC and BBC, respectively. After the Paramount Case of 1948,

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⁹⁷ Dick, p. 38; Gomery, 'The Missing Link', p. 58.

⁹⁸ RKO is credited as another early 'divorcee'. Timothy White notes that 'although RKO entered into its divorcement decree before Paramount came to terms with the Justice Department, RKO didn't accomplish divorcement until 8 May 1950', after Paramount: Timothy R. White: 'Hollywood's Attempt to Appropriate Television: The Case of Paramount Pictures' (PhD thesis, University of Wisconsin-Madison, 1990), p. 93. ⁹⁹ West, p. 135.

the Federal Communications Commission (FCC) ceased licencing the convicted studios, and so no more stations could be acquired. Film studios also inherited what Asa Briggs calls the 'line struggle' of television networks. ¹⁰⁰ Prior to the Second World War, Baird and the BBC had experimented with low-definition broadcasts on a 30-line resolution basis. As West explained, 'such a coarse texture of picture rendered the transmission of small detail impossible, and the programme, although interesting, had little entertainment value'. ¹⁰¹ The BBC's 405-line standard was also tested by Baird in 1938, at a small newsreel theatre in London on a screen measuring 10 x 7.5 feet (figure 6). After the war, RCA proposed the 625-line image as a transatlantic norm. Dominant broadcast standards fell below the image quality of 35mm films, and the whole enterprise had collapsed before the 1000-line images deemed proximal to cinema standards materialised. ¹⁰²

3-D Cinema

By applying the same basic technology in a novel context, theatre television could be differentiated from the small screen at home. By the early 1950s, the industry sought 3-D and widescreen formats to provide a clearer break with television and sell cinema as a distinctive site of aesthetic pleasure. At a whirlwind business meeting on 2 June 1953, Paramount president Barney Balaban informed his stockholders that 'wide screen and 3-D have caught the public imagination and the excitement is spreading throughout the world. I just returned from Europe and was amazed at the tremendous interest in this subject that greeted me wherever I went'. From 1948, Paramount had begun to spend up to 40% of its earnings on buying outstanding stock in order to shrink its capital structure after the divorcement of its theatres.

¹⁰⁰ Briggs, p. 447.

¹⁰¹ West, p. 129.

Briggs, pp. 173, 448; Ryder, 'Theatre Television', p. 14; 'Rank Looks to Television', p. 15; West, p. 158.
 Los Angeles, The Margaret Herrick Library (MHL), Loren L. Ryder Papers, Scrapbook no.2 1950-67,

^{&#}x27;Summary Report: Annual Stockholders Meeting', 2 June 1953.

Paramount's annual revenue hit a post-war low of \$3.3 million in 1949 and it was important to present a steady pattern of growth. Balaban's report also promised an increase in quarterly earnings for April, May and June over the same months in 1952, to coincide with the premiere of Paramount's first 3-D film, *Sangaree* (Edward Ludwig, 1953), and *Shane* (George Stevens, 1953), a Western shot in the 1.37:1 aspect ratio, but which the studio had decided to exhibit in 1.66:1 via widescreen 'masking'.

As with theatre television, Paramount would introduce its own 3-D and widescreen techniques, though these were not without parallels on both sides of the Atlantic. In the USA, the independently produced adventure film, *Bwana Devil* (Arch Oboler, 1952), distributed by United Artists, provided the keynote for Hollywood's 3-D film cycle with its visceral tagline, 'a lion in your lap, a lover in your arms!' This first 3-D feature of the post-war period was shot in the Natural Vision process, a paradoxical trademark which encapsulates the technology's spectacular approximation of human perception. The techniques seen in *Bwana Devil* thrillingly stimulated the process of stereopsis that spectators daily used to orient themselves. The technology underlying Natural Vision had been developed in Italy and Germany in the 1930s. It worked by recording and projecting two images of the same shot, each offset to mimic the binocular displacement of the human eyes (also called 'horizontal parallax'). The shot was filmed simultaneously by two cameras, set at a fixed distance of 3.5 inches apart ('interaxial spacing'). One image could be sent to each eye through the use of polaroid glasses, and so force the brain into reconciling the overlapping visual fields to yield depth. 105

Although not without technical faults, *Bwana Devil* did facilitate the illusion that the space of the auditorium was contiguous with that of film's diegetic world by introducing volume to the flat surface of the screen. As an *International Projectionist* report stated after

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¹⁰⁴ White, 'Corporate Strategy', p. 103.

¹⁰⁵ Ray Zone, *3-D Revolution: The History of Modern Stereoscopic Cinema* (Lexington: The University Press of Kentucky, 2012), pp. 7-16; Ray Zone, 'A Window on Space: Dual-Band 3-D Cameras of the 1950s', *Film History*, 16 (Fall 2004), 216-28.

one such encounter with Bwana Devil: 'Natural Vision 3-D is startling, despite its present mechanical limitations [...] distant hills in 3-D really look distant - miles behind the screen. Nearer objects actually look closer; and actors may come within arm's reach'. ¹⁰⁶ To paraphrase Tom Gunning, 1950s 3-D cinema showed filmmakers 'willing to rupture a self-enclosed fictional world for a chance to solicit the attention of the spectator'. 107 Stereoscopic qualities most often extended to establishing the setting and ambience, which provided the background to 3-D cinema's most shocking 'trick' elements. 108 Whether receding beyond or lurking toward audiences, the persistence of stereoscopy over the duration of a film made constant demands on the viewer to participate.

Natural Vision did not have a monopoly on stereoscopy and the technologies used to deliver this experience differed by production company and national context. Paramount alternated between the in-house Paravision process and Technicolor's Dynoptic system to produce a total of six 3-D features for release between 1953-1954. 109 According to intra-studio correspondence in the Walter Beyer papers, held by UCLA, three Paravision units were adapted from rear projection rigs first developed in 1937 by Paramount's special effects engineer, Farciot Edouart, for 'outdoor' action films such as Geronimo! (Paul Sloane, 1939) and The Forest Rangers (George Mashall, 1942). 110 In the late 1930s, Edouart had designed a system whereby two images of the same background could be projected across adjoining screens each 24 feet wide, permitting actors to roam freely before the backdrop as if they were really on location. Formerly, projected backgrounds had been restricted to screen as narrow as 8 feet,

¹⁰⁶ Robert A. Mitchell, 'Visibility Factors in Projection', *The International Projectionist* 28 (May 1953), 7-

¹⁰⁷ Tom Gunning, 'The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde', in Early Cinema: Space, Frame, Narrative, ed. by Thomas Elsaesser (London: BFI, 1990), pp. 56-62 (p. 57).

¹⁰⁸ Miriam Ross, 3D Cinema: Optical Illusions and Tactile Experiences (Houndmills: Palgrave Macmillan, 2015), p. 48.

¹⁰⁹ R. M. Hayes, 3-D Movies: A History and Filmographic of Stereoscopic Cinema (Jefferson, NC: McFarland, 1998), pp. 34-38; Zone, 'Dual-Band 3-D', p. 224.

¹¹⁰ University of California Los Angeles Special Collections (UCLA), Walter Beyer Papers, box 3, folder 7, 'Summarising Report on 3-D Cameras', 22 March 1953.

though as Edouart commented in 1939, 'it is of very little use to have a [rear projection] process which can put Gary Cooper in Paris, or Barbara Stanwyck in Wyoming, if such scenes must be restricted to close shots of one or two players, or if the movements of the actors must be restricted'. This 'widescreen' system of rear projection depended on the alignment of two (later three) projection heads. Simply by realigning the rig, Paramount could record the two overlapping images needed to produce stereoscopic depth in cinemas.

In early 1951, when Natural Vision and Paravision were yet to appear in the USA, the British Film Institute (BFI) was preparing for the state-sponsored Festival of Britain (3 May -30 September 1951). London's futuristic Telekinema, built to help mark the centennial of the Great Exhibition of 1851, screened live television and 3-D shorts in striking fashion. The Telekinema incorporated a Cinema-Television Ltd. projector courtesy of Rank, which, by the use of a turntable and rail system, could be swung out of the way to make room for two interlocked 3-D film projectors provided by the British Thomson-Houston Company with filters by Polaroid. The Telekinema showed newsreels, football coverage, and information about the venue sourced from the BBC, alongside live interviews conducted in the entrance foyer which Wheatley has described as a spectacular form of 'public television'. 112 Four 3-D shorts were made especially for the Telekinema under a BFI-appointed supervisor, Raymond Spottiswoode. Two animated 3-D shorts, Now is the time (1951) and Around and Around (1951), were produced in partnership with the National Film Board of Canada and directed by Norman McLaren using a hand-drawn stereography technique. There were also two documentary 3-D shorts, A Solid Explanation (Peter Bradford, 1951) and Royal River (Brian Smith, 1951), which incorporated footage of London Zoo and the Thames. 113

¹¹¹ Farciot Edouart, 'Paramount Triple-Head Transparency Process Projector', *Journal of the SMPE*, 33 (August 1939), 171-84 (p. 180).

¹¹² Wheatley, p. 37.

¹¹³ Raymond Spottiswoode, 'Progress in Three-Dimensional Films at the Festival of Britain', *Journal of the SMPTE*, 58 (April 1952), 291-303; Norman Jenkins, 'The Cash Customers at the Festival of Britain Telecinema', *Journal of the SMPE*, 58 (April 1952), 304-11; Zone, 'Dual-Band 3-D', pp. 220-21; Sarah

Whether through their setting, actors or action, 3-D films made in Britain and the USA offered distinctively local blends of naturalism and spectacle. The success of the Telekinema prompted Spottiswoode to co-found Stereo Techniques Ltd., which made seventeen 3-D shorts and one lost feature, *Diamond Wizard* (Dennis O'Keefe/Montgomery Tully, 1954). Often foregrounding British landscapes, Stereo Techniques shorts metamorphosed the instructional and observational documentary traditions through spectacular 3-D strategies which Keith M. Johnston, adapting John Grierson's phrase, has dubbed 'the stereoscopic treatment of actuality'. Stereo Techniques displayed an awareness of its provincial scope in the narrative documentary, *Vintage* '28 (Robert M. Angell, 1953), which portrayed an American car enthusiast who remarks on the 'funny little English lanes' which provide a subtle three-dimensional backdrop. Contrasting this documentary approach to British locales, *Sangaree* (Edward Ludwig, 1953), *Those Redheads from Seattle* (Lewis R. Foster) and *Jivaro* (Edward Ludwig, 1954) were set in distant places or time periods, but mostly filmed in the Paramount studio by the economical Pine and Thomas unit.

However, viewing 3-D cinema purely in terms of national difference overlooks variances in studio strategy. Paramount pushed back against what Belton calls the USA's 'low-budget 3-D exploitation films' such as *Bwana Devil*, Warner Bros.' *House of Wax* (Andre De Toth, 1953) and Universal's *It Came From Outer Space* (Jack Arnold, 1953), through its diverse output. In contrast to the frivolousness of *Bwana Devil*, the studio's *Cease Fire!* (Owen Crump, 1953) was filmed in a warzone using non-professional actors to provide a gritty perspective on the Korean War. Countering the accusation that 3-D thrills unnecessarily juvenilised cinemagoers was Paramount's precise targeting of youngsters through its animation

Easen, 'Film and the Festival of Britain', in *British Cinema of the 1950s*, ed. by MacKillop and Sinyard, pp. 51-63; Becky Conekin, 'The Autobiography of a Nation': The 1951 Festival of Britain (Manchester: Manchester University Press, 2003), p. 55.

Keith M. Johnston, "An unlimited field for experiment": Britain's stereoscopic landscapes', in *British Rural Landscapes on Film*, ed. by Paul Newland (Manchester: Manchester University Press, 2016), pp. 71-85 (p. 73).
 Belton, *Widescreen Cinema*, p. 115.

shorts. The Casper vehicle *Boo Moon* was filmed in Stereotoon by Paramount's subsidiary Famous Studios and was a soft-edged 3-D sci-fi when compared to the shock tactics of *It Came from Outer Space*, using slower and clearly signalled emergence cues that are still noticeable when viewed flat today. Paramount was exploiting 3-D 'in a more conservative way than other studios', the Independent Exhibitors' *Film Bulletin* observed with some ambivalence, as the studio disclosed it would prioritise story over shock tactics. ¹¹⁶ In Britain, Stereo Techniques' 3-D animation and ballet films diverged from its common strand of location-based documentaries (figure 7). Another fringe development was the use of Spottiswoode's single-unit 'Stereospace' camera to produce Warner Bros.' horror film *The Mask* (Julian Roffman, 1961) in Canada, with surreal 3-D sequences by Slavko Vorkapić.

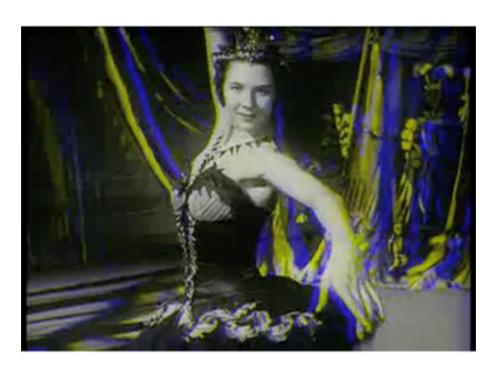


Figure 7. The Black Swan: Dame Beryl Grey emerges in 3-D.

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¹¹⁶ 'Story, Not Gimmicks, To Be Featured in Paramount 3Ders', *Film Bulletin*, 23 March 1954, p. 12; 'Quickie 3-D Era Over, Big Pix Are Coming, Sez, Pine', *Variety*, 10 June 1953, p. 5.

Despite its stylistic incoherence, the idea of a national 3-D cinema surfaced during the transatlantic exchange of stereoscopic films and in related trade discussion of so-called British naturalism versus American spectacle. Summarising the British reception of the Telekinema, Spottiswoode wrote that 'it was to be expected that certain of the more tradition-bound critics should regard the stereofilm as just one step nearer to complete naturalism, and they viewed with alarm the prospect of highly three-dimensional film stars should Hollywood take up this new kind of movie'. 117 And yet, the performance of Dame Beryl Grey in *The Black Swan* (Leonard Reeve, 1952) had provided Britain with its own version of the stereoscopic star. Hollywood B-movie producer Sol Lesser, best known for the Tarzan series, distributed five Stereo Techniques shorts in the USA and foregrounded Beryl's performance in promotion to build anticipation ahead of his own 3-D features (figure 8). Lesser's package, titled 'Royal Flush', referenced both the shorts' cultural British origins and screen-bursting sensory appeal. Himself no stranger to Hollywood showmanship, Spottiswoode demonstrated British 3-D shorts at a Pacific Coast section meeting of the SMPTE that was reportedly 'of great interest to the group [...] heightened by a charming sense of humor and understanding of his audience'. 118 Spottiswoode's company and its distribution partners exported Britain's 3-D films in hyperbolic terms, using the film as a leaping board for tactile marketing tropes.

For film historians, examples of 3-D film demonstrations, distribution and exhibition present the interplay between transnational and local factors more clearly than stereoscopic production. Ray Zone adds that, though the Festival of Britain was held immediately before *Bwana Devil* was released in the USA, 'it's not clear to what extent the 3-D films of the Telecinema influenced Hollywood production'. Putting rare cases such as the BFI-McLaren shorts, Paramount's *Cease Fire!* and Warner Bros.' *The Mask* aside, filmmakers tended to

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¹¹⁷ Spottiswoode, 'The Festival of Britain', p. 300.

¹¹⁸ Philip G. Caldwell, 'Pacific Coast Section Meeting', *Journal of the SMPTE*, 60 (March 1953), p. 312.

¹¹⁹ Zone, 'Dual-Band 3-D', p. 221.

fashion 3-D styles without the input of foreign crew, locations, or techniques. Widescreen production gradually introduced more and more of these elements to domestic filmmaking.



Figure 8. Sol Lesser's sensual poster for the U.S. distribution of British 3-D (cp. Fig. 8). 120

The arrival of Hollywood 3-D features provided an additional incentive for British exhibitors to upgrade and a vehicle for Stereo Techniques shorts to support the programme. In Johnston's analysis, 3-D installations were nevertheless confined to under 5% of British cinemas due to local reluctance surrounding conversion costs, reel-change interruptions caused by dual projection, architectural constraints, and state restrictions on the importing of 3-D

¹²⁰ Image sourced from and used with permission of Bob Furmanek, '3-D Features and Shorts 1952-1962', http://www.3dfilmarchive.com/golden-age-3-d [accessed 1 September 2019].

spectacles. Rank distributed Pola-Lite 3-D glasses through its manufacturer, GB Kalee. ¹²¹ 3-D installations were concentrated in independent cinemas instead of Odeon, Gaumont and ABC. For example, Paramount's *Sangaree* was shown flat on Rank's Odeon circuit *after* being displayed in 3-D at a London cinema independently managed by Eros. ¹²² The multi-format exhibition of *Sangaree* and other stereoscopic films is symptomatic of the growing availability and popularity of flat widescreen cinema from mid-1953, which foreshortened the 3-D film cycle. As with 3-D, widescreen would require some degree of collaboration between studios and exhibitors. It also had a dramatic ripple effect on American and British production which resonates with current industry practice.

Ersatz Widescreen

In the post-war era, individual companies proposed their own wide aspect ratios to replace the 1.33/7:1 Academy standard for film production and presentation. Paramount's initial approach to widescreen cinema is encapsulated by a witticism which, according to an archived transcript, its vice-president in charge of production used to open a trade presentation on widescreen masking techniques in March 1953, one month before their use with *Shane*: 'I see among this audience, old-timers, fellows that I grew up with in that better end of the business known as exhibition [...] I heard from Goldwyn that most of them were out of business'. Described in *The New York Times* as a 'labour negotiator, rather than a movie producer', Y. Frank Freeman had been vice-president in charge of Paramount's theatre operations, from 1935-1938, before becoming head of studio operations in Los Angeles. Almost immediately clarifying

¹²¹ Keith M. Johnston, 'Now is the time (to put on your glasses): 3-D film exhibition in Britain, 1951-55', *Film History*, 23 (Spring 2011), 93-103; Keith M. Johnston, 'A Technician's Dream? The Critical Reception of 3-D Films in Britain', *Historical Journal of Film, Radio and Television*, 32 (June 2012), 245-65.

¹²² Eyles, p. 40.

¹²³ MHL, Paramount Pictures VistaVision Material, box 2, folder 10, 'Comments by Mr. Y. Frank Freeman', 21 March 1953, p. 1.

^{124 &#}x27;Y. Frank Freeman Dies at 78', The New York Times, 7 February 1969, p. 37.

Freeman's stance was his sarcastic reference to producer Samuel Goldwyn, whose comment that there were too many small theatres for the good of the industry had sparked an open complaint from the Allied States Association of Motion Picture Exhibitors, a fierce supporter of independent exhibitors and the 1948 antitrust suit. Paramount could strategically extend an olive branch to Allied during the promotion of widescreen cinema and so broaden its appeal, in Freeman's words, 'to every exhibitor, big or small'. 126

Paramount's March conference had primarily been organised to propose short-term measures for widescreen exhibition in the wake of Cinerama. By topping the American boxoffice in 1952, *This is Cinerama* (Merian C. Cooper) impressed upon Hollywood the demand for what John Belton terms a 'more participatory kind of motion picture experience' that would provide an alternative to large screen television and 3-D.¹²⁷ 'Countering 3-D's aesthetics of emergence', William Paul elaborates, 'Cinerama and its widescreen derivatives offered an aesthetics of merger' between screen and viewer.¹²⁸ Deploying a tri-camera/projector system to present images in the aspect ratio of 2.65:1 across a deeply curved display, *This is Cinerama* included point-of-view shots of rollercoaster rides and aerial photography of tourist landmarks which emulated adventurous post-war pass times. By the end of the 1950s, *This Is Cinerama* was the eighth-highest grossing film of all time in the USA-Canada domestic market, depreciating the value of non-widescreen features.¹²⁹ In order to profit from their inventory of films, Paramount and other studios rushed to upscale production and exhibition methods for general widescreen release.

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¹²⁵ 'Goldwyn Hears from Sindlinger and Snaper Hears from Goldywn', *Variety*, 23 September 1953, p. 7. Allied's suspicion that the Theatre Owners of America union was sympathetic toward studio affiliation helped to delay the unification of American exhibitors under one trade organisation until 1965: 'Allied States Flays MPTOA, ATA as "tools" of Producers-Distribs', *Variety*, 17 September 1947, p. 6.

¹²⁶ MHL, Paramount Pictures VistaVision Material, box 2, folder 10, 'Comments by Mr Y. Frank Freeman', 21 March 1953, p. 2.

¹²⁷ Belton, Widescreen Cinema, p. 76.

¹²⁸ William Paul, 'The Aesthetics of Emergence', Film History, 5 (January 1993), 321-55 (p. 339).

David Pratt, 'Widescreen box office performance to 1959', *The Velvet Light Trap*, 21 (Summer 1985), 65-66; 'Big (Widescreen) Pix Key to Big Biz in Future, Declares Par's Hartman', *Variety*, 17 June 1953, p. 7.

Paramount spearheaded Hollywood's widescreen revolution with a press preview of *Shane* on 6 April 1953, followed by the 14 April premiere in New York on a Hurley Company display measuring 30 by 50 feet. The method of presenting *Shane* involved masking the extreme top and bottom of the square-like Academy image using aperture plates on the film projector at Radio City Music Hall. The elongated mid-portion of the picture was then magnified using a wide-angle lens and projected in Paramount's recommended dimensions of 1.66:1. A moderately curved screen was installed to imitate Cinerama. Posters advertising the New York premiere touted the 'Great Panoramic Screen' as part of a well-received marketing campaign by Paramount's publicity director, Jerome Pickman. Pickman's department had merged with the production studio in 1951; this streamlined structure, combined with the slowdown in Paramount production from 1953, encouraged a film-by-film style of marketing. Subsequently, MGM and Disney chose to mask their films in the aspect ratio of 1.75:1, while Universal and Columbia chose 1.85:1 for their preferred frame dimensions. Fox abstained from widescreen masking, instead focusing on their superior CinemaScope system for film production and exhibition.

There has been scholarly interest in widescreen masking techniques used by Paramount and other Hollywood studios in 1953-54, though this has mainly been judged from the broadest industrial level of film history. Belton describes masking techniques as *ersatz* widescreen to highlight their provisional and substandard nature when compared to the longer lasting appeal of Cinerama and CinemaScope. When applying this label, historians need to be clear about subtle differences in studio innovation and the extent of malpractice.

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¹³⁰ 'First Presentation of "New Aspect" at New York's Radio City Music Hall', *Showmen's Trade Review* 58 (1953), 24-25.

¹³¹ Striking Ad Approach to Selling "Shane" in N.Y. Debut', Boxoffice, 16 May 1953, p. 38; 'Showmen Are Doing 3D & Widescreen', Film Bulletin, 1 June 1953, p. 30.

¹³² White, 'Corporate Strategy', p. 66.

Paramount differentiated their ersatz widescreen proposal in the booklet, *The New Aspect in Motion Pictures* (1953), which provided exhibitors with the necessary data to calculate which screen proportions would be architecturally viable. By theoretically correlating screen dimensions from 16 x 9.8 ft. up to 50 x 30ft. with vertical sightlines, horizontal viewing angles and projection distance factors for the 1.66:1 aspect ratio, Paramount aimed to accommodate the widest range of exhibition venues. According to the studio, this aspect ratio had been chosen because 'it comes closest to what people normally see in everyday life' and is applicable to 'almost all theatres', unlike Cinerama. Later that year, the British Kinematograph Society reported that 94% of approximately 4,700 film theatres in Britain could accommodate the similar aspect ratio of 1.65:1 without structural alterations, whereas CinemaScope would fit within only 13.5% of theatre prosceniums. Paramount also recommended that a metalized surface be used for the widescreen exhibition of stereoscopic films. Variety praised this small publication as a 'comprehensive analysis of exhib needs' which sustained Paramount's appeal to cinemas of all sizes. 135

Despite its apparent compatibility with American and British theatres, the flaws of ersatz widescreen damaged Paramount's reputation early on. A lack of product identity confused trade commentators, who sometimes misapplied the 'Paravision' label to Paramount's flat widescreen showings, as Carr and Hayes point out. ¹³⁶ One interesting facet of this trade discourse is that, while film historians now refer to post-war formats including Cinerama, CinemaScope and VistaVision as examples of 'widescreen cinema', in the 1950s,

¹³³ 'Present Aspect Ratio Permits 13.5% of Brit. Houses to Use C'Scope', *Variety*, 30 December 1953, p. 13. ¹³⁴ MHL, Paramount Pictures VistaVision Material, box 2, folder 10, 'The New Aspect in Motion Picture Presentation' booklet, 1953, pp. 1-18.

¹³⁵ 'Par's "How To" Exhib Guide', *Variety*, 13 May 1953, p. 5. 'Exhibs Demand Widescreen Economy, Swing to Simpler Depth Systems', *Variety*, 15 April 1953, p. 7.

¹³⁶ Carr and Hayes, p. 218. For example, it was incorrectly reported that 'Paravision, Paramount's wide screen process, will receive its premiere soon when "Shane" opens': The International Projectionist, 28 (April 1953), p. 27; 'Hall Tests Screens For "Shane" Booking', Motion Picture Daily, 7 April 1953, p. 2. Paravision premiered with Sangaree (in 1.66:1) on 4 June 1953 in New York, one month after Shane.

this latter term was occasionally reserved for unbranded ersatz techniques. Freeman and Ryder also refer to the 'New Look Screen' and the 'Paramount panoramic screen' in the studio's widescreen booklet - terms which slipped in and out of general usage in 1953. Paramount's wavering between names reveals the temporary nature of their proposals, as opposed to the branded production-exhibition technologies such as Cinerama. Ignoring production and catering to hypothetical exhibition scenarios undercut Paramount's attempt to introduce flexible standards. During a review of cinemas for the launch of VistaVision, Paramount's chief of distribution, Al Schwalberg, admitted that 'there wasn't too much knowledge of the physical make-up of theatres' around the time that the studio produced widescreen guidelines in 1953. Placing the burden of masking on exhibitors, Paramount films were 'shown in a variety of sizes', making it 'difficult to license *Shane* as a widescreen entry'. 137

In addition, ersatz widescreen had aesthetic faults. Aperture plates cropped landscapes and actors not originally composed for widescreen exhibition, 'eliciting rancor from viewers miffed at the resultant decapitations and amputations', as Rogers argues. The aesthetic limitations of ersatz widescreen are reflected in despondent reactions to *Shane*'s trade preview in Britain. There are such damning responses as Penelope Houston's review:

Stevens has impressively enlarged the Western legend [...] One can only protest, though, at the way in which Paramount has tried to enlarge the film itself. As seen at the trade show, on the wide screen of the Plaza cinema [in London], the meticulously careful compositions were mutilated time and again; tops of heads disappeared from the top of the screen, hands were cut off at the wrists at the bottom, gestures vanished out of the frame, the photography suffered in clarity and detail.¹³⁹

¹³⁷ 'Homeoffice Teams Hit Field, As Par Sells "Scientifically", *Variety*, 9 June 1954, p. 10.

¹³⁸ Rogers, Cinematic Appeals, p. 23.

¹³⁹ Penelope Houston, 'Shane and George Stevens', Sight and Sound, 23 (October 1953), 71-76 (p. 72).

An assenting *Monthly Film Bulletin* report admitted that 'the conditions under which *Shane* was trade shown at the Plaza Cinema make it difficult to be fair to it'. ¹⁴⁰

The 2015 re-release of *Shane* in multiple aspect ratios by the DVD distributor Eureka goes some way to recapturing the ersatz widescreen 'experience'. My analysis of Eureka's 1.66:1 copy of *Shane* finds six shots where figures are clearly cropped, such as when Joe exchanges a sad glance with a fellow mourner over the grave of Stonewall Torrey (figures 9 and 10). In the Academy 1.37:1 version, the vertical axis is used to dynamically capture the gravedigger standing at ground level (figure 9); in 1.66:1, Joe's mournful look is obscured at the uppermost frame edge (figure 10). It should be noted that my analysis assumes the film was precisely masked in 1.66:1 in 1953, which may not have been the case in all cinemas, nor does it capture the magnification of grain that resulted from blowing up Academy ratio films onto very large screens in 1953, as the DVD copy was directly scanned from original film elements. Comparing different versions does emphasise how Stevens's delicately framed shots left a narrow margin for error and so likely made Paramount's technical missteps more noticeable to post-war audiences.

One month before the *Shane* premiere, Paramount announced it would prepare future films for widescreen exhibition by using new camera viewfinders with 'marks that have been added so that important action does not go too high nor too low in the frame'. ¹⁴¹ It is difficult to know if the technique was consistently enforced. Sixteen Paramount films including *Those Redheads from Seattle, Sabrina* (Billy Wilder, 1954) and *Rear Window* (Alfred Hitchcock,

¹⁴⁰ K. R., Shane film review, Monthly Film Bulletin, 20 (January 1953), 132-33 (p. 133).

¹⁴¹ MHL, Paramount Pictures VistaVision Material, box 2, folder 10, 'The New Aspect in Motion Picture Presentation' booklet, 1953, p. 9.

1954) were likely protected for widescreen exhibition using the new viewfinder markings, having commenced production between the policy change and adoption of VistaVision. 142



Figure 9. *Shane* in 1.37:1.



Figure 10. *Shane* in 1.66:1.

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¹⁴² Sabrina was protected for widescreen while also filling the full 1.33/7:1 frame according to: MHL, Paramount Pictures Production Records, box 158, folder 1, Frank Caffey to Russell Holman, 10 July 1954.

Widescreen Arrives in Britain

The arrival of widescreen cinema in Britain had a transnational influence on film production and style. Whereas theatre television and 3-D innovations facilitated some transatlantic exchange within research, distribution and exhibition, widescreen simultaneously harnessed the creative resources of multiple film studios in both countries. Why is this? Based on evidence presented in this chapter, the industrial and technological constraints which led to the downfall of other post-war technologies are key factors. Widescreen was also the technology which Hollywood studios most heavily invested in. *Sight & Sound* emphasised Britain's openness to American influence in July 1953 and presaged the industry's transition from sporadic innovation to widescreen production:

Recent events make it clear that we now have to distinguish broadly between four types of film production: the poor old flatties, 3-D, CinemaScope, and the 'new widescreen' or 'giant panoramic screen' - both of which, seemingly designed as a kind of makeshift appetiser, have been presented in London [...] Great Britain, meanwhile, remains almost entirely at the consumption end [...] Greater things are so far limited to promises of some rather weird projects in association with American interests.¹⁴³

The article goes on to list forthcoming British-American productions in widescreen and 3-D, including the CinemaScope musical, *Gentleman Marry Brunettes* (Richard Sale, 1955), with studio sequences shot at Shepperton, MGM British and the Paris Studio Cinema, and financing supplied by its Hollywood distributor, United Artists. According to *Sight & Sound*, such projects are 'weird' because of their spectacular fusion of transatlantic technologies, stars and

¹⁴³ 'In the Picture', Sight and Sound, 23 (July 1953), 2-4 (p. 2).

film genres. Over the next year, these apparently bizarre combinations would become commonplace in British widescreen production.

The diffusion of CinemaScope accelerated Britain's conversion to widescreen, advanced by Hollywood studios and American distribution deals with production companies willing to make films in this anamorphic format with a very wide aspect ratio of 2.55:1. Early British examples followed the ersatz method of protecting 1.33/7:1 films for widescreen exhibition, including the adventure films *West of Zanzibar* (Harry Watt, 1954) and *Star of India* (Arthur Lubin, 1954). In mid-1953, Fox engineer Earl Sponable and president Skouras toured Europe to prepare manufacturers for the premiere of CinemaScope with *The Robe* (Henry Koster, 1953) later that year. In Britain, the operation would involve Taylor, Taylor and Hobson (to supply projector lenses), British Optical and Precision Engineers (screens), GB Kalee, RCA, Western Electric Company, and British Thomson-Houston (sound heads and projector parts). Anamorphic camera lenses would also be manufactured in Britain by Rank's British Optical and Precision Engineers, later joined by Bausch & Lomb. With the right distribution deal, CinemaScope films made in Britain could reach a broader audience than the standard product. According to Fox publicity, global CinemaScope installations included 21,135 theatres in North America and 16,857 European cinemas by the end of 1956. Inc.

As with 3-D, British shorts provided an initial testing ground for CinemaScope, easing Hollywood subsidiaries and British independents into feature production. These include Fox's 'CinemaScope specials' series of sixty-four shorts, which ranged from British Movietone

December 1953), 359-71 (p. 366).

See also, Bob Furmanek's sample of 1950s ersatz widescreen films, sourced from contemporary trade papers, http://www.3dfilmarchive.com/home/widescreen-documentation [accessed 2 August 2019].
 Herbert E. Bragg and John Belton, 'The Development of CinemaScope', *Film History*, 2 (November-

¹⁴⁶ 'Skouras Studied UK Lens Bottleneck', *Motion Picture Daily*, 24 August 1954, p. 1; 'Bausch & Lomb Plans Lens Plant in Britain', *Motion Picture Daily*, 2 August 1956, p. 1; 'Bausch & Lomb to Build Plant in the UK', *Kinematograph Weekly*, 9 August 1956, p. 6.

 ¹⁴⁷ Columbia University Library, Sponable Collection, box 106, Publicity - General, 1956-56, 'CinemaScope - 1956', quoted in *Widescreen Worldwide*, ed. by Belton, Hall, and Neale, p. 145.

newsreels to Michael Powell's fantastical The Sorcerer's Apprentice (1955). The newsreels focused on British royalty, political and cultural life, and include Coronation Parade (Charles G. Clarke, 1953), Birthday Parade (Paul Wyand, 1954), Pageants and Pastimes (Paul Wyand, 1954), and a documentary about the Commonwealth tour, Flight of the White Heron (Jack Ramsden and Paul Wyand, 1954). The first CinemaScope feature made in Britain was the historical adventure, Knights of the Round Table (Richard Thorpe, 1953), which combined American financing from the Hollywood subsidiary MGM-British, local crew including cinematographers Frederick Young and Stephen Dade, and Arthurian landmarks such as Tintagel castle in South West England. By the time British VistaVision film production began in January 1955, Hammer studios already had plans to make eight CinemaScope featurettes with Joseph Losey and regular studio directors. Alexander Korda's London Films was due to make two CinemaScope features, the romance *The Deep Blue Sea* (Anatole Litvak, 1955) and war film Storm Over the Nile (Zoltan Korda and Terence Young, 1955), both sealing distribution deals with Fox. Rank was slower to respond to widescreen than the Hollywood subsidiaries and independents, though it did trial CinemaScope for five shorts targeted at international distribution in 1955 before transitioning to VistaVision. 148

Early examples of CinemaScope films made in Britain and the USA reveal aesthetic flaws related to the format's design. Using an anamorphic lens originally sourced from the French inventor Henri Chrétien, CinemaScope gained its wide scope by compressing the image during production and decompressing in film projection (*anamorphosis* derives from the Greek *ana*/'again' + *morphosis*/'shaping', which can be translated as 'reshape'). The curvature of the glass on the anamorphic lens caused figures to bulge at the centre of shots and to narrow at the frame edges. In Bordwell's words, 'faces in the center of the frame contracted Scope mumps,

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¹⁴⁸ Chibnall, pp. 149-52, 159; 'UK "Wide Open" For British Independent Productions', *Motion Picture Daily*, 4 April 1955, pp. 1, 6.

whereas in long shots, figures on the sides were pinched rail-thin'. The distortions of CinemaScope can be seen when comparing repeat British Movietone coverage of the annual Trooping of the Colour in 1.37:1 and 2.55:1 (figures 11 and 12). Both shots take a side-view of the royal guard, with *Birthday Parade* reproducing a greater field of view thanks to its horizontal frame. The three rows of soldiers, which the commentator ironically describes as standing in 'faultless and immaculate array', vary in stature in the foreground of the CinemaScope film. The CinemaScope lens also restricted depth of field, particularly in colour cinematography. The style of early CinemaScope features is compared with VistaVision in Chapters 3 (shot scale and length) and 4 (composition).



Figure 11. Trooping of the Colour 1952 coverage: British Movietone in 1.37:1.



Figure 12. Trooping of the Colour 1953 coverage: British Movietone in 2.55:1.

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¹⁴⁹ Bordwell, *Poetics of Cinema*, p. 291.

In the long run, American interests played an important role in kickstarting widescreen production in Britain. In Denis Gifford's *The British Film Catalogue*, a total of 330 widescreen features are recorded to have been made in Britain between 1954 and 1970, of which, 57% (188 films) had an American company in the position of producer and/or distributor. 150 Prior to the arrival of VistaVision, the imperfect anamorphic format offered the only credible widescreen alternative to 'ersatz' masking techniques. Unlike in the USA, Cinerama was seen in Britain after CinemaScope, premiering with This Is Cinerama on 30 September 1954, which included footage of Edinburgh Castle. No Cinerama films were shot entirely in Britain or by British production companies. On the other hand, the large film formats which emerged after VistaVision in the USA were not adopted in Britain until the 1960s in part due to legislation. From 1960, 65/70mm film productions could qualify for payments from the British Film Fund Agency. The Cinematograph Act amendment also meant that exhibitors were liable to pay the Eady levy when projecting Cinerama product and large film, the latter previously exempt because it fell under the category of 'non-35mm film' intended as a concession to narrowgauge exhibition. The amendment was predicted to generate an additional £250,000 for the production fund each year.¹⁵¹ Another beneficial effect of large film formats for British production was that Panavision introduced better anamorphic lenses when it co-developed MGM Camera 65 in 1957, thus surpassing Bausch & Lomb's lens models that had been used by Fox since The Egyptian (Michael Curtiz, 1954).

¹⁵⁰ Denis Gifford, *The British Film Catalogue: Fiction Film 1895-1994*, 3rd edn (London: Fitzroy Dearborn, 2001). Gifford's inclusion of widescreen formats in this most recent edition of the *Catalogue* may represent an unacknowledged historiographic breakthrough, though his preferred terms ('scope', 'vista') do not fully differentiate between the various formats used in British production.

¹⁵¹ 'Wide-Screen' Films Now Subject to U.K. Levy', *Motion Picture Daily*, 17 March 1960, pp. 1, 4; 'Levy to Cover Todd-AO, Cinerama, Camera 65', *Daily Cinema*, 18 March 1960, pp. 1, 10; 'Reject Plea to Exempt Cinerama from U.K. Levy', *Motion Picture Daily*, 14 April 1960, p. 4.

Conclusion

In theatre television, 3-D and widescreen technology, the British and American film industries found several techniques for expanding the big screen experience during a period of declining cinema attendance, difficult economic changes and state intervention. Given the commercial ties between Hollywood studios and Britain during the post-war era, it is unsurprising to find synchronous innovations in film production, distribution and exhibition. More interesting is the two-way nature of transatlantic exchange and the variety of methods for achieving this. Significantly, the argument advanced in Sight & Sound, that British companies remained on the receiving end of American innovation, is tempered by Britain's domestic innovation, plans for expansion and the selective appropriation of imported formats. Theatre television was active in Britain before the USA, and even if Rank's plans remained national in scope, organisations in both countries facilitated transatlantic demonstrations and research visits. 3-D and widescreen cinema extended the British-American interchange of techniques to film distribution and exhibition. When widescreen gained Hollywood's backing in 1953, production took shape around a combination of American interests and British opportunism. There are two additional issues that I would like to develop in the next chapter, which investigates the differentiation of VistaVision from the studio-level perspective.

Firstly, it will be useful to consider if the innovation strategies behind theatre television, 3-D and widescreen cinema overlapped with VistaVison in any way. Even a retroactive, short-term solution such as ersatz widescreen demonstrates Paramount's appeal to exhibitors on the grounds of compatibility, a theme we also see in studio discourse around its IFS method of theatre television. Meanwhile, the failure of ersatz widescreen and IFS with exhibitors betrays Paramount's rhetoric of compatibility and the competing priority of inventory management, or, the studio's preference for in-house innovation as opposed to bargaining for new techniques from competitor organisations. Paramount's so-called conservative approach to 3-D

Paravision, which involved retrofitting existing rear projection rigs and downplaying the novelty phase of technological change in marketing, provides a further example of this self-sufficient approach to innovation. It is also important to incorporate the representation of studio strategy by cross-referencing graphical promotion, trade articles and transcripts of demonstrations, which featured in the present chapter. Trade materials in the 1950s show how the expanding cinema screen often doubled as a blank canvas and contested space for the 'projection' of local and transnational growth strategies devised by Paramount Pictures and the Rank Organisation.

Secondly, post-war innovation introduced spectacular and participatory forms of entertainment which varied from one format to the next. Theatre television was lauded for its immediacy and scale when compared to home television. 3-D cinema ruptured the flatness of cinematographic space by allowing images to emerge before/recede behind the screen. Widescreen cinema was designed to engulf the viewer and stimulate peripheral vision through screen curvature and horizontal aspect ratios. Post-war screen technologies offered an experience similar to the 'cinema of attractions' which Tom Gunning associates with early film (specifically, pre-1906), where travel, tricks, close-ups and direct address put the 'new' technology of cinema on display in the manner of a fairground sideshow. It was similarly 'this harnessing of visibility, this act of showing and exhibition' that the post-war film industry hoped would differentiate their product and lure audiences into the cinema.¹⁵² The flow of spectacular technologies and techniques between Britain and the USA could be viewed as a common effort to respond to alarming business prospects, though the industrial community was also complex, and technological change foregrounded the competing interests of engineers, exhibitor organisations, independent production-distribution companies and the more established movie conglomerates.

¹⁵² Gunning, 'Cinema of Attractions', p. 56.

The major studios made efforts to adapt more convenient formats which differed from the exhibitionism of the Telekinema, Cinerama, and Natural Vision in the early 1950s. Mainstream strategies of accommodation raised aesthetic, technical and commercial questions, such as: which technologies would be best suited to high volume production? How might these technologies benefit a production company seeking international distribution? Were styles, themes and stories associated with national cinema still viable in 3-D and widescreen cinema, or, to what extent would the global exchange of formats alter local practices? Initial optical flaws inspired a list of ghoulish terms. If actors were not decapitated in ersatz widescreen and avoided contracting CinemaScope mumps, they were just as likely to transform into a 'ghost' in 3-D (the official term used by the Motion Picture Research Council, or MPRC, to refer to doubled stereoscopic images caused by misaligned projector filters). When a draft MPRC report titled 'Improvement of Quality in Wide Screen Motion Pictures' initially came out in favour of anamorphic widescreen formats, Paramount's Ryder pointed out, 'this is a flat statement that anamorphic quality, definition and grain reduction is better than that obtained by the double-frame [VistaVision] process. This is wrong. '154

Widescreen and 3-D formats of the early 1950s conspicuously compressed film space in the very process of re-vamping cinema for post-war audiences. In Britain and the USA, Paramount's VistaVision offered the first pragmatic response to this cinema of distractions. In the next chapter, I will consider how Paramount differentiated its format according to its evolving innovation strategies, which will also involve narrowing my historical focus.

¹⁵³ UCLA, Walter Beyer Papers, box 3, folder 8, MPRC information bulletin no.2, 2 April 1953, pp. 2, 3, ¹⁵⁴ UCLA, Walter Beyer Papers, box 2, folder 1, Loren Ryder to W F Kelly, 20 July 1954, p. 5.

2. VistaVision's Stylistic Differentiation and Diffusion

This system, to which we have given the name of VistaVision, entailed a good deal of designing, redesigning and testing, all of which was of only passing interest to the creative showman. To him the fact that a bigger, brighter, clearer picture appeared on the screen was significant for, show-wise, here was a better medium for expressing the story.¹⁵⁵

In the years 1948-1953, the appearance of theatre television, 3D and widescreen formats such as Cinerama and CinemaScope expanded the cinema's heterogeneous appeal in Britain and the USA. Screen technologies took shape around changes in popular consumption, economic and structural upheavals within the post-war film industry. In the period of 1953-55, Paramount continued to contribute to technological innovation, by making a concerted effort to foreground what its chief engineer described as VistaVision's 'bigger, brighter [and] clearer picture' and its contribution to film narrative. Following Paramount's stylistic differentiation of early VistaVision films, the format was trialled by other studios as it diffused in the USA, Britain, France and Japan. But what techniques did the introduction of VistaVision give rise to, and how did Paramount's industrial position, structure and internal discourses shape the filmmaking process? Paramount's organisational priorities help to explain why a variety of production techniques emerged from the same historical context.

While describing local and international trends in technological change in the previous chapter, I referenced the relatively unified actions of Paramount's most senior staff, including Barney Balaban (president), Y. Frank Freeman (production), Al Schwalberg (distribution),

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¹⁵⁵ MHL, Loren L. Ryder Papers, Scrapbook no. 4 1954-55, 'Engineering and Showbusiness', *American Engineer* (March 1955), 13-15 (p. 15).

¹⁵⁶ Ibid.

Jerome Pickman (publicity) and Loren Ryder (engineering). It is important to note that when senior staff are referred to, we are also invoking the collective effort of the departments which they head. Organisations are not ideologically homogenous entities, but subject to individual and departmental aims. The present chapter, therefore, considers innovation from within the studio itself, investigating Paramount's production hierarchies, quality controls, marketing narratives, acts of showmanship and engagement with overseas studios. Production managers, their assistants and engineers all exercised their agency to shape the look of early VistaVision features. By considering film production and style at the studio level, our historical analysis becomes more fine-grained than in Chapter 1.

This chapter is indebted to scholarly histories of film studios, their operational norms and styles, much of which began to be published in *Screen* journal in the 1970s and 80s. Studio-level scholarship on Hollywood includes early articles by Tino Balio, Edward Buscombe, Douglas Gomery, Tom Gunning, Richard B. Jewell and Thomas Schatz, some of which are collected in Janet Staiger's *The Studio System*.¹⁵⁷ Foundational accounts of British production companies and their differentiation strategies have been written by Charles Barr, John Ellis, Andrew Higson, Sarah Street, and Sue Aspinall and Robert Murphy, in their edited collection on Gainsborough.¹⁵⁸ These film histories vary in the nuances of their approach, but all unpick

¹⁵⁷ Tino Balio, 'Charles Chaplin, Entrepreneur: A United Artist', *Journal of the University Film Association*, 31 (Winter 1979), 11-21; Edward Buscombe, 'Notes on Columbia Pictures Corporation', *Screen*, 16 (Autumn 1975), 65-82; J Douglas Gomery, 'Writing the History of the American Film Industry: Warner Bros and Sound', *Screen*, 17 (Spring 1976), 40-53; Tom Gunning, 'Weaving a Narrative: Style and Economic Background in Griffith's Biograph Films', *Quarterly Review of Film Studies*, 6 (1981), 11-25; Richard B. Jewell, 'How Howard Hawks Brought "Baby" Up: An "Apologia" for the Studio System, *Journal of Popular Film and Television*, 11 (Winter 1984), 158-65; Thomas Schatz, *The Genius of the System: Hollywood Filmmaking in the Studio Era* (London: Faber and Faber, 1988); *The Studio System*, ed. by Janet Staiger (New Brunswick, NJ: Rutgers University Press, 1995).

¹⁵⁸ Charles Barr, "Projecting Britain and the British Character": Ealing Studios', *Screen*, 15 (Spring 1974), 87-121 and (Summer 1974), 129-63; John Ellis, 'Made in Ealing', *Screen*, 16 (Spring 1975), 78-127; Andrew Higson, *Waving the Flag: Constructing a National Cinema in Britain* (Oxford: Oxford University Press, 1995), pp. 98-175; Sarah Street, 'Alexander Korda, Prudential Assurance and British Film Finance in the 1930s', *Historical Journal of Film, Radio and Television*, 6 (1986), 161-79; Sarah Street, *British National Cinema* (London: Routledge, 1997), pp. 29-31; *Gainsborough Melodrama*, ed. by Sue Aspinall and Robert Murphy (London: British Film Institute, 1983).

organisational structures in ways that critically departed from the director-focused auteurism seen in France, Britain and the USA during the 1950s and 60s.

In this chapter, I refer primarily to studios as hierarchical organisations, rather than, for example, studio *space*.¹⁵⁹ Recent production studies are distinguishable for their forensic approach to hierarchical and collaborative filmmaking processes. Whereas previous film histories might look at one organisation's management over an extended period or during critical moments such as the transition to sound, there is now a tendency to theorise individual efforts to share or silo time, energy and expertise within studio routine. Vicki Mayer, Miranda J. Banks and John T. Caldwell emphasise this current curiosity 'to look up and down the food chains of production hierarchies', to be supported by 'empirical data about production: the complexity of routines and rituals [...] roles, technologies and the distribution of resources'. Film histories which exemplify what Mayer, Bank and Caldwell call the 'ground up' approach to undervalued expertise include Helen Hanson's research on sound engineers at Warner and RKO, Erin Hill on women clerical workers at MGM, Fox and Warner, and Donna Kornhaber on producers and animators at Disney, Warner and Pixar. ¹⁶¹

I use archival sources to recapture the perspectives of technicians or middle managers who fall through the gaps in romantic accounts of genius directors versus studio presidents. For example, Paramount studio manager Frank Caffey and chief engineer Loren Ryder are omitted from Bernard F. Dick's otherwise detailed studio history, *Engulfed: The Death of Paramount Pictures and the Birth of Corporate Hollywood*, which instead relies on the archive

¹⁵⁹ Ben Goldsmith and Tom O'Regan, *The Film Studio: Film Production in the Global Economy* (Lanham, MD: Rowman and Littlefield, 2005); Brian R. Jacobson, *Studios Before the System: Architecture, Technology and the Emergence of Cinematic Space* (New York: Columbia University Press, 2015). ¹⁶⁰ *Production Studies*, ed. by Mayer, Banks, and Caldwell, pp. 2, 4.

¹⁶¹ Production Studies, ed. by Mayer, Banks, and Caldwell, p. 6; Hanson, Hollywood Soundscapes, pp. 78-110; Erin Hill, Never Done: A History of Women's Work in Media Production (London: Rutgers University Press, 2016), pp. 90-126; Donna Kornhaber, 'The Producer in Animation: Creativity and Commerce from Bray Studios to Pixar', in Beyond the Bottom Line: The Producer in Film and Television Studies, ed. by Andrew Spicer, A. T. McKenna, and Christopher Meir (London: Bloomsbury, 2016), pp. 145-60.

of executive film distributor George Weltner.¹⁶² Paramount's introduction of VistaVision offers a dynamic example of innovation within the studio. As Paramount was the only Hollywood studio not to license CinemaScope for film production in the early 1950s, questions naturally arise regarding its unique organisational context and influence on VistaVision film production and style. I will follow Staiger in describing Paramount's alternate strategy as the process of production differentiation, or, 'the practice in which the firm stresses how its goods or services differ from other ones'.¹⁶³

Paramount's 'stress' on difference manifests itself in memos between executives, studio managers, production managers, technicians and film crew about technique. Paramount production records inform this chapter's first two sections on Paramount's conversion to VistaVision. Tom Vincent astutely notes that, in current historical surveys, 'VistaVision is generally positioned as being a poor competitor to the more popular CinemaScope and is largely described only in terms of its technical process'. This marginal positioning obscures the human energy expended to accommodate and differentiate film formats. Building on Vincent's account of VistaVision's marketing, my archival evidence shows how technical issues of aspect ratio and resolution affected techniques relating to shot framing, camera focus and film stock. Of course, the extent to which top-down decision-making cultivates stylistic change requires us to look more closely at the films themselves.

I have not taken it as a given that Paramount's differentiation strategies were as allencompassing or successful as the studio's marketing materials might suggest. Any historical account of VistaVision's promotion must account for its ultimate minor status in relation to the widely adopted CinemaScope format, whether due to internal disagreements over film style, or outside resistance to VistaVision's diffusion. Filmmaking generally 'involves contingencies

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¹⁶² See esp. his account of 1950s Paramount: Dick, pp. 44-85.

¹⁶³ Bordwell, Staiger and Thompson, p. 97.

¹⁶⁴ Vincent, p. 26.

and failures as much as intentions and plans', to use the words of Petr Szczepanik and Patrick Vonderau. Contingencies intensified in the 1950s, when Paramount relied on independent production labour to reduce fixed costs and made more films overseas. My final two sections alternately show the reach and restrictions of studio strategy. Through its style, narrative and double-frame exhibition, *Strategic Air Command* encapsulates the stylistic features and showmanship described in the preceding chapter sections. On the other hand, the stunted diffusion of VistaVision among international studios reminds us of the material constraints which Paramount's format had to contend with.

Innovation within the Paramount Studio: From Superama to VistaVision

Paramount tested a limited number of widescreen technologies prior to committing to VistaVision. Before VistaVision was unveiled, and simultaneous with the introduction of Paramount's Panoramic Screen, *White Christmas* was considered for a wide-angle lens technique marketed as Superama. Superama was researched and developed between 1945 and 1953 by Douglas Leigh, a Broadway manager and entrepreneur known for popularising neon signage in Times Square, and partner Ralph Hogue. Leigh described the Superama lens as 'similar to CinemaScope', only it did not use anamorphic optics and so was claimed to produce a sharper image with up to eighty-four degrees of coverage, intended for exhibition in aspect ratios ranging from 1.66:1 to 2.66:1. To complement Superama, and provide a counterpart to Cinerama, the Leigh-Hogue partnership developed a more extravagant 'Glamorama' format

¹⁶⁵ Szczepanik and Vonderau, p. 6.

¹⁶⁶ From the early 1940s, Hollywood film studios began to pool their labour and equipment and produce fewer films in-house, a trend which was consolidated by the 1948 divorcement from exhibition and looming economic losses. This move away from mass production to a more specialised and transitory style of filmmaking is described by Janet Staiger as the 'package-unit system' of production, on account of the producer's ability to assemble film projects by selectively drawing on the pooled resources (CinemaScope license fees notwithstanding): Bordwell Staiger and Thompson, *The Classical Hollywood Cinema*, p. 330. ¹⁶⁷ 'Now It's Glamorama and Superama, 2 Leigh Lenses in Widescreen Derby', *Variety*, 27 May 1953, pp. 7, 20.

which had a wide-angle 105 degree lens and was foreseen to be used on deeply curved screens for roadshow release. 168

Paramount's interest in Superama was equally informed by competition from Fox and the studio's flexible exhibition policies, as already demonstrated in the late 1940s and early 1950s with theatre television and then ersatz widescreen. Paramount's preferred aspect ratio was, however, not immediately arrived at due to internal disputes over the proposed proportions and pliancy of its policy. The progress of these negotiations was a direct reflection of Paramount's organisational structure and staffing, which I will briefly outline.

Like Freeman, Barney Balaban's career began in the exhibition sector, managing Paramount's Balaban and Katz chain of theatres in Chicago. One of Balaban's first acts after succeeding Adolph Zukor as Paramount president in 1936 was to appoint Freeman as vice-president in charge of production, a role which provided relative autonomy from the other New York executives (figure 13). Paramount's films achieved commercial success into wartime and without the interference of the New York central office which had characterised the studio's filmmaking activities prior to Balaban's appointment. However, Freeman frequently travelled between the West and East Coast, necessitating a hands-off approach to production. Gomery and Clara Pafort-Overduin state of Freeman that 'it was his assistants who actually ran the show' on a daily basis. 170

¹⁶⁸ 'Leigh Plans Demonstration of 2 Wide-Angle Systems', *Motion Picture Daily*, 28 May 1953, p. 4.

¹⁶⁹ White, 'The Case of Paramount Pictures', pp. 50-54.

¹⁷⁰ Douglas Gomery and Clara Pafort-Overduin, *Movie History: A Survey*, 2nd edn (New York: Routledge, 2011), p. 144.

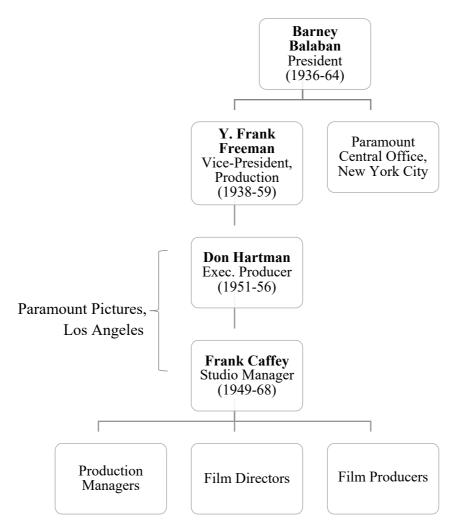


Figure 13. Outline of Paramount Pictures production hierarchy, 1953-55.

The strategic adoption and testing of the Hogue-Leigh Superama lens in 1953 is symptomatic of the studio's bi-coastal operation. Hartman and Caffey were able to make practical modifications to production in Freeman's stead, demonstrating the malleability of executive strategy. To the studio executives, the lens appeared to accommodate Paramount's gradual entry into widescreen film production and pragmatic conversion of theatres, without the optical distortions that would become an all-too-evident feature of ersatz widescreen techniques. Balaban upheld Superama's compatibility with general release and image quality, informing Paramount stockholders:

the release prints can play in any theatre without a single modification of the equipment or the print, and when played on the panoramic large screen, the picture can become of greater size and still retain better picture quality and resolution than any picture demonstrated to date.¹⁷¹

To Paramount's West Coast managers, producers and film directors, the Superama lens represented a technological novelty to be negotiated through the modification of film technique. In February 1953, film director Michael Curtiz requested time to experiment with Hogue-Leigh lenses to discover the 'range of possibilities if we would care to use them for *White Christmas* or other Paramount productions in the future', and 'to definitely show how this lens operates with different camera angles, lighting effects and focus changes in long shots, medium shots and close-ups'. 172

Curtiz made films in several formats as he shuttled between studios during the 1950s, such as *The Egyptian* (2.55:1 CinemaScope) for Fox, followed by *The Proud Rebel* in 1958 (1.85:1 spherical lens) and *The Adventures of Huckleberry Finn* in 1960 (2.35:1 Panavision) for Goldwyn's Formosa Productions. But Curtiz's late career is most closely associated with the five VistaVision films he directed for Paramount, where his apprenticeship in widescreen began with the Superama tests of 1953. Curtiz's trials encompassed a mixture of exterior shots in various light conditions around Los Angeles, to research depth of field, camera movement and framing on the vertical axis - all points of contention with widescreen cinematography. This was followed by a day in the studio for an intimate scene of up to three minutes, 'to be filmed in one shot, panning and dollying and placing the actors so we can avoid single close

¹⁷¹ MHL, Loren L. Ryder Papers, Scrapbook no.2 1950-67, 'Summary Report: Annual Stockholders Meeting', 2 June 1953.

¹⁷² MHL, Paramount Pictures Production Records, box 236, folder 8, Michal Curtiz to D.A. Doran, 6 February 1953.

ups'. 173 Curtiz's fluid shooting style also aligned with Hartman's commercial aim of reducing camera set-ups.

In Superama, Hartman saw a commercial opportunity to spectacularly upscale studio techniques. He was urged on by Fox's trade shows of CinemaScope throughout 1953. By May, twenty-five theatres planned to replicate the Radio City Music Hall configuration used to premiere *Shane* (to mixed reviews), compared with over a thousand orders for CinemaScope. Such figures convey a clear trend, especially when cross-referenced with Fox's report that at least 1200 orders had been fulfilled by December that year. Aware that CinemaScope's iconic 2.55:1 aspect ratio had left a strong impression on the industry, Hartman pleaded with Ryder to stop masking 1.33/7:1 films, in favour of experimenting with wider aspect ratios:

At your meeting this afternoon with Michael Curtiz, and all concerned, I wish you would emphasize my feelings that if wide screen is going to be effective at all, the future will not be made by cutting off the top and bottom of [1.33/7:1] pictures in order to attain the wide ratio. I hope we are thinking alike in that part of the Curtiz test at least will be shot and composed for 2 to 1 [...] It is only in this way, in my opinion, that we can prove or disprove whether we actually have something to compete with Cinemascope.¹⁷⁶

Paramount's widescreen aspect ratio took shape around top-level concerns regarding film exhibition in an era of antitrust decrees and declining cinema attendance. Ryder rebuffed Hartman's proposal in August 1953, writing that the 'New York group have decided in favour

¹⁷³ Ibid

¹⁷⁴ '25 Exhibitors Will Change to Para. Wide-Screen Ratio', *Motion Picture Daily*, 30 April 1953, p. 3; 'The 3-D and Wide-Screen Furor', *Harrison's Reports*, 18 April 1953, p. 64.

¹⁷⁵ Charles R. Daily, 'Progress Committee Report', *Journal of the SMPTE* 62 (May 1954), 333-63 (p. 340).

¹⁷⁶ MHL, Paramount Pictures Production Records, box 236, folder 8, Don Hartman to Loren Ryder, 3 July 1953.

of shooting [...] a picture that will play on the 1.66:1 screens that are being installed throughout the country'. Page 2.17 Ryder also asked the camera department head, Jack Bishop, to implement a system of protecting for 1.33/7:1 by exposing the full frame aperture, 'to retain an acceptable picture in all of the unmodified theatres', adding that, 'there is no thought that there will be any quantity of theatres modified to 1.85:1 or 2:1 by the time of the release of this picture [White Christmas]'. Despite the central office's lack of foresight regarding widescreen trends and cautious approach to theatre conversion, Hartman continued to advocate wider aspect ratios when VistaVision was introduced.

Paramount's first double-frame camera units were adapted from Fox Natural Color camera units, originally manufactured by William P. Stein & Company in the 1920s. Fox Natural Color was one of many subtractive two-colour precursors to the superior three-strip Technicolor format. Fox Natural Color produced two separation negatives in a single camera with a beam splitter and two film elements which passed before one of two apertures equipped with a red-orange or cyan-green filter, unlike most two-colour formats, which used bipack film in a single gate. The uncommon twin-aperture design of Fox Natural Color cameras was compatible with Paramount's needs, as Bishop simply cut out the separation between the twin apertures to expose the full area of each eight-perforation negative frame. Since Paramount achieved the desired frame size by exposing 35mm film horizontally, and Fox Natural Color used a standard negative pull-down movement, the cameras had to be turned on their side. Initially, two retrofitted cameras were made available for *White Christmas*, equipped with Leica camera lenses and a sound-proofing blimp to make them suitable for the soundstage.¹⁷⁹

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¹⁷⁷ MHL, Paramount Pictures Production Records, box 236, folder 8, Loren Ryder to Don Hartman and others, 14 August 1953.

¹⁷⁸ Ibid

¹⁷⁹ Bishop and Ryder, 'Paramount's "Lazy 8", p. 606.

On 24 September 1953, Caffey stated that the 'horizontal camera' was being used alongside regular (35mm/4 perf.) cameras to film *White Christmas*. 180

Decisions about frame sizes display the tensions between Paramount's exhibitororiented strategies and the burdens which these placed on middle management and early
widescreen technique. Part of the problem was that studio policy regarding set design and
framing was evolving while films were still in production. *White Christmas* was one such
transitional film. Caffey approached Freeman for clarification regarding *White Christmas*during one of the latter's infrequent visits from the East Coast, telling Ryder: '[Freeman] said
it was decided in New York that we would design, compose and build our sets to shoot our
pictures in the 1.66 aspect ratio, but to shoot them so they could be exhibited in 1.66, 1.75 or
1.85'.¹⁸¹ The executive preference for the aspect ratio of 1.66:1 is reiterated in a technical paper
written by Bishop and Ryder for *American Cinematographer* in December 1953, by which
point Paramount's 'horizontal camera' was also being referred to as 'the lazy-8' (on account
of being lent on its side).¹⁸² However, by the release of *White Christmas* in October 1954,
Paramount's marketing had begun to stress the height and width of 1.85:1, regardless of the
film's confusing pre-production (figure 14).

Hartman and Caffey share much of the responsibility for Paramount's shift from variable framing centred around 1.66:1, or what the studio called 'loose 1.66:1', to using 1.85:1 as its preferred release format and common datum for composing all shots in VistaVision. One factor was the need for clear standards to ensure that VistaVision filmmakers could supply consistent product. In May 1954, Hartman informed Caffey: 'I firmly believe we should start shooting at once in 1:85 ratio as the term "loose" 1.66 is too vague [...] poor composition will

¹⁸⁰ MHL, Paramount Pictures Production Records, box 236, folder 8, Frank Caffey to Eugene Frank, 24 September 1954.

¹⁸¹MHL, Paramount Pictures Production Records, box 236, folder 8, Frank Caffey to Loren Ryder, 18 August 1953.

¹⁸² Bishop and Ryder, 'Paramount's "Lazy 8", p. 588.

continue in all pictures unless we have a standard and not a 'loose' method of shooting', adding that he had persuaded Freeman on this matter. Hartman gave as an example 'the way the feet of the dancers are cut off from time to time in *White Christmas* [...] obviously the most interesting part of a dance number is the feet'. Hartman gave as an example 'the way the feet of the dancers are cut off from time to time in *White Christmas* [...] obviously the most interesting part of a dance number is the feet'. Hartman gave as an example 'the way the feet of the way the feet of the dancers are cut off from time to time in *White Christmas* limiteresting part of a dance number is the feet'. Hartman gave as an example 'the way the feet of the way the feet of the



Figure 14. VistaVision takes 'advantage of Maximum Screen Height and Width!'. 185

 ¹⁸³ MHL, Paramount Pictures Production Records, box 178a, folder 7, Don Hartman to Frank Caffey, 29
 May 1954.
 ¹⁸⁴ Ibid.

¹⁸⁵ MHL, Loren L. Ryder Papers, Scrapbook no.3 1950-54, 'VistaVision and its consideration for the capabilities of the human eye' booklet, 1954. For digitised versions of documents described as 'booklets' in this chapter, see: http://www.widescreenmuseum.com [accessed 28 August 2019].

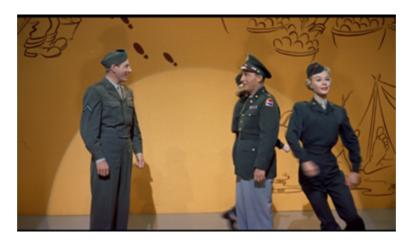


Figure 15. White Christmas: 'Cut off' feet as Curtiz dollies in during a dance (cp. figure 14).

A second factor in Paramount's adoption of the 1.85:1 aspect ratio as standard was the need to showcase VistaVision due to sustained competition from the spectacular horizontality of CinemaScope, as Hartman had foreseen. VistaVision's new proportions were advertised by Paramount as a participatory feature which did not compromise on theatre compatibility. Ryder's booklet for exhibitors emphasised that 'VistaVision is a FLEXIBLE SYSTEM and it is a COMPATIBLE SYSTEM [...] It plays best in ratios close to 1.85/1.'186 By contrast with CinemaScope, VistaVision films were 'not to be played in an aspect ratio greater than 2/1. Paramount pictures are photographed with height which gives them stature and an artistic proportion that is lost by reducing screen height'.'187 In addition to stressing VistaVision's frame height, the exhibitors' booklet carried a postcard displaying VistaVision's eight-perforation negative to explain how the format achieved its resolution, which was made available in multiple languages (figure 16).

Paramount's rationale for adopting VistaVision over Superama can be summarised in terms of inventory, flexibility and clarity. Rather than pay for licenses to use another

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¹⁸⁶ MHL, Loren L. Ryder Papers, box 4, folder 37, 'A Statement by Paramount to all Exhibitors', 1954.

¹⁸⁷ Ibid.

company's tools, the studio's engineers could adapt existing cameras to the specifications of the Clark patent, which Paramount had acquired in 1926. VistaVision also matched Superama's flexibility for exhibitors and filmmakers, both avoiding Cinerama's cumbersome three-camera/screen set-up and CinemaScope's anamorphic lenses. Unlike Superama, VistaVision had the added benefit of a wider film negative that none of the other existing formats could compete with in terms of visual clarity, the importance of which had been proven by the reception of ersatz widescreen and early CinemaScope films. Innovation within the studio also needs to be seen in the context of Paramount's production hierarchy.



Figure 16. A postcard-ad sells the aesthetic benefits of double-frame film production. 188

Product Differentiation and VistaVision Technique: Frame, Focus, Stock

As the example of framing *White Christmas* began to indicate, Paramount's differentiation of VistaVision was characterised by a collective effort to balance stylistic variety with product consistency. Technological constraints, directing styles and genre expectations (the musical should showcase film stars dancing in full-body shots), and their potential effect on the marketing of VistaVision, reverberated up and down the decision-making chain. To ensure that

¹⁸⁸ Ibid.

stylistic choices illuminated the format's selling points, Caffey and Hartman established differentiation strategies throughout the first year of VistaVision film production. They adopted a routine of inspecting dailies so that Paramount's films would impress upon audiences the clarity and scope of VistaVision. Together they advised on framing, camera focus and the use of monochrome or colour stock, in collaboration with the studio's engineers and Technicolor.

In May 1954, after Hartman issued his dictum on 'poor composition' in early VistaVision films, Frank Caffey asked the production manager on *To Catch a Thief* (Alfred Hitchcock, 1955), C. O. Erickson, to ensure it would 'play, perfectly, at 1.85:1'.¹⁸⁹ From this point on, the question of whether or not filmmakers would also have to protect their shots for the narrowest screens would be dealt with on a case-by-case basis, according to the practicalities of each production. For example, *To Catch a Thief* was not framed for 1.33/7:1 presentation because it created 'set problems in the studio', according to Caffey.¹⁹⁰ Unlike the narrative film with studio scenes, it would be relatively easy to frame the travelogue *VistaVision Visits Norway* (James FitzPatrick, 1955) for 1.33/7:1 because the full aperture could be indiscriminately filled with outdoor scenery. As Caffey informed the home office:

As far as Fitzpatrick is concerned, I recommended to him that his picture be composed for an aspect ratio of 1.85/1 (which is our VV key aspect ratio), but at the same time to protect the picture so it could be shown 1.33/1. This is no problem to him as he is shooting exterior work and has ample sky and foreground to completely fill the negative [film frame] in the 1.33 while composing for 1.85.¹⁹¹

¹⁸⁹ MHL, Paramount Pictures Production Records, box 215, folder 19, Frank Caffey to C.O. Erickson, 29 May 1954.

¹⁹⁰ MHL, Paramount Pictures Production Records, box 158, folder 1, Frank Caffey to James Fitzpatrick, 10 July 1954.

¹⁹¹ MHL, Paramount Pictures Production Records, box 158, folder 1, Frank Caffey to Russell Holman, 10 July 1954.

When required, the VistaVision camera crew used ground glass markings as a framing reference - a practice which Paramount had used for ersatz widescreen. Roger Manvell predicted that VistaVision film directors would adopt an 'expanding suitcase' style of staging, in which actors would be counterintuitively confined to the centre of widescreen shots to avoid being cropped when the projectionist lined up the film for different aspect ratios. ¹⁹² However, only the lower frame edge of VistaVision was cropped to switch between ratios. As headroom remained constant, VistaVision film directors could then push actors and objects right to the top and sides of the frame, whereas Fox discouraged edge-framing in CinemaScope films due to the lateral bulge of anamorphic lenses. ¹⁹³ This allowed Paramount to draw audience's attention to the critical upper portion of the frame, which selected theatres were being prepared to show in excess of Fox's long and narrow format.

Another interesting facet of this early period of VistaVision filmmaking is that Paramount's most prestigious projects, low-cost features, and shorts were all scrutinised by the studio's managerial staff, regardless of their budget allocation or associated production values. The micro-management of early VistaVision films is demonstrated by Hartman's response to a second problem area for Paramount's format: camera focus.

Interior shots presented challenges when focusing the VistaVision cameras due to the cinematographer's dependence on artificial light, particularly in scenes with deep sets. In the Pine-Thomas produced Western, *Run For Cover* (Nicholas Ray, 1955), Matt Dow (James Cagney) attends a church service. The large set is covered from multiple camera angles of the choir and congregation, lit by Daniel L. Fapp using a pale light which appears to stream in from the windows and imparts a solemn air. The serene atmosphere is then shattered by the entry of two gunmen, at which point the church members calmly rise and turn to face the aggressors.

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¹⁹² Roger Manvell, 'The Battle of the Systems', Films and Filming, 1 (October 1954), 8.

¹⁹³ MHL, Paramount Pictures Production Records, box 158, folder 1, Frank Caffey to C.O. Erickson, 10 July 1954. On Fox, edge-framing and CinemaScope, see Bordwell, *Poetics of Cinema*, pp. 292, 302, 309.

By having a mass of faces stare back at the intruders in deep-focus VistaVision, followed by a reaction shot of the main gunman, film director Nicholas Ray questions the conventional power dynamic between outlaws and civilians in Westerns (figure 17). The shot recalls the interplay between the unwavering Vienna (Joan Crawford) and lynch-mob in the bar of Ray's *Johnny Guitar* (1954), with the exception that the aggressors of *Run For Cover* are here outnumbered by a mass of civilians staged in great depth and width.

Run For Cover is not a prestigious picture like Hitchcock's To Catch a Thief. The Pine and Thomas unit had already endeared itself to the studio for its economical approach to stereoscopic Paravision films. Hartman's response to dailies of this sequence in Run For Cover is nevertheless indicative of the equal importance placed on the early VistaVision films. Referring 'particularly to the church and choir-singing scenes', Hartman told Caffey, 'if on the one hand we are going to promote VistaVision throughout the world by proclaiming its chief virtues are clarity and sharpness, and on the other hand are going to have such fuzzy and out-of-focus scenes as the above-mentioned ones, we will condemn VistaVision to oblivion, in my opinion'. 194 Judging by the final cut, the soft camera focus Hartman criticised in dailies would have been exacerbated by Ray's uniform emphasis on stoical facial reactions from foreground to background. Ray later specialised in groupings of three to four actors in his CinemaScope melodramas, Rebel Without a Cause (1955) and Bigger than Life (1956), though would return to directing large crowds in the 1960s for the Technirama production, King of Kings (1961).

Other early VistaVision films use deep focus cinematography to incorporate background elements within the tall and wide frame. John David Rhodes has described in detail how *White Christmas* scoped out VistaVision's vertical and horizontal axes in 'the busiest and most expansive of mise-en-scénes: tap dancers descending from offscreen space above the

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¹⁹⁴ MHL, Paramount Pictures Production Records, box 178a, folder 7, Don Hartman to Frank Caffey, 29 May 1954.

frame, or else being hurled up into the image from below'. 195 Meanwhile, the opening of the stage to reveal a snowy landscape during the finale offers a fleeting example of VistaVision's spectacular depth. These dimensions are matched by Peter (Dean Martin) and Jerome's (Jerry Lewis) first view inside the towering circus tent in Paramount's second VistaVision feature, 3 Ring Circus (Joseph Pevney, 1954). After a London trade demonstration featured clips of White Christmas, 3 Ring Circus and Strategic Air Command, and which was attended by future VistaVision adoptees Rank and Laurence Olivier, the British Royal Photographic Society stated that VistaVision's 'definition, from extreme foreground to extreme background, is nothing less than astounding'. 196



Figure 17. Run For Cover: the church stands united in a wide and deep interior set.

Deep focus cinematography is used to capture crowds, capacious sets, and pick out individual characters in early VistaVision films. Betty (Rosemary Clooney) can be spotted alone at the back of a crowded party after arguing with Bob in White Christmas. In The

¹⁹⁵ John David Rhodes, 'White Christmas, or Modernism', *Modernism/modernity*, 13 (April 2006), 291-308 (p. 286). ¹⁹⁶ 'VistaVision', RPS Photographic Journal, 94 (August 1954), 215a.

Desperate Hours, home invader Glen Griffin (Humphrey Bogart) communicates with his accomplice who is eavesdropping on the family's telephone conversations upstairs (figure 18). André Bazin has observed of Wyler's deep staging that only 'a few degrees' shift in the angle of a glance [would] be capable of causing an entire scene to lose its symmetry'. Yet, the 'dramatic currents that flow across the image' do shift, into, up, and across the frame once Cindy (Mary Murphy) takes the call and the crooks watch, as the family watches them in return, over the course of a minute. It is important to acknowledge this methodological challenge of describing movement within a shot or sequence while relying on frame excerpts. The individual frame belongs to a series of shots which can provide pacing and meaning.



Figure 18. The Desperate Hours: Vertical staging combined with deep camera focus.

In addition to advising on framing and focus, Hartman and Caffey expressed a preference for using VistaVision-trained camera crews to maintain standards. Whereas VistaVision film directors including Curtiz, Ray and Wyler fluctuated between studios and

¹⁹⁷ André Bazin, 'William Wyler, or the Jansenist of Directing', in *Bazin at Work: Major Essays and Reviews From the Forties and Fifties*, ed. by Bert Cardullo, trans. by Alain Piette and Bert Cardullo (London: Routledge, 1997), pp. 1-22 (p. 17).

formats in the 1950s, cinematographers Loyal Griggs, Daniel L. Fapp and Haskell Boggs would between them light more than one third of all VistaVision films while working solely for Paramount, including the early releases *White Christmas, 3 Ring Circus* and *Run For Cover*. Two other frequent VistaVision cinematographers were Robert Burks and Charles Lang. Newcomers were allowed to familiarise themselves with VistaVision in the studio prior to production - Jack Cardiff spent two weeks at Paramount before lighting Paramount's coproduced epic, *War and Peace*. 198 After Lee Garmes was confirmed as cinematographer on *The Desperate Hours*, Caffey stated that the studio would 'discourage his bringing in a [camera] crew in view of the fact that he will be shooting VistaVision and we would rather give him a crew trained in VV', to include Paramount's choice of gaffer and head grip. 199 As I will go on to explain, curating Wyler's camera crew was strategic because *The Desperate Hours* was also the first in a minority of VistaVision films shot in black-and-white.

Along with widescreen formats and international locations, Eastmancolor monopack stock enhanced the spectacular appeal of post-war cinema. Just under half of Hollywood's film releases were in colour by 1955.²⁰⁰ Paramount insisted that oversized 35mm/8-perf. film would help VistaVision films to stand out from the chromatic mass. For example, during a meeting in May 1954, production manager Kenneth Deland's suggestion to use standard-size library footage of sky for Farciot Edouart's background plates in *The Ten Commandments* (Cecil B. DeMille, 1956) was rejected by Caffey and supervising art director, Hal Pereira. Pereira affirmed that 'company policy is against such procedure', as the grainy texture of library stock would jar with the clear VistaVision photography taken on location by Griggs.²⁰¹ Meeting

¹⁹⁸ Derek Hill, 'Jack Cardiff's VistaVision Venture', *American Cinematographer*, 37 (December 1956), 732-34, 746.

¹⁹⁹ MHL, Paramount Pictures Production Records, box 65, folder 8, Frank Caffey memo, 24 August 1954. ²⁰⁰ Lev. p. 108.

²⁰¹ MHL, Paramount Pictures Production Records, box 205, folder 39, *The Ten Commandments* production meeting transcript, 17 May 1954. Hal Pereira also sketched the Panoramic Screen for marketing material, which is reproduced in John Belton, 'The curved screen', *Film History*, 16.3 (2004), 277-85 (p. 279.)

transcripts and memos reveal Paramount's precise approach to the aesthetic variables of different stocks in early VistaVision films. For such issues, Caffey and Hartman frequently relied on the expertise of Paramount engineers and the Technicolor laboratory.

Technicolor was a proponent of VistaVision due to the clear prints that could be achieved, particularly when compared to the first grainy CinemaScope prints.²⁰² Technicolor's synergy with Paramount was endorsed in articles printed in trade journals and the in-house publication, *Technicolor News and Views*, under the name of Technicolor president, Herbert Kalmus.²⁰³ Technicolor's key contribution to VistaVision was its optical printer with eight-sprocket intermittent movement, which was designed to shrink the double-frame Eastmancolor film to a set of 35mm/4 perf. matrices prior to striking a dye transfer print. The reduction process also shrunk the grain structure of VistaVision films, resulting in what Richard Haines describes as 'ultrasharp' 35mm prints for use with standard film projectors.²⁰⁴ By engaging in what is described as an 'experimental work' in a signed agreement between Paramount and Technicolor on 17 September 1954, the dye transfer printing of *White Christmas* became Technicolor's first contribution to the field of wide area film.²⁰⁵

For purposes of budget, mood, or genre, a number of VistaVision films were made in black-and-white. During the production of *The Desperate Hours*, Ryder circulated a seven-point memorandum on monochrome VistaVision, including recommended F-stops, light levels and Bishop's choice of which sensitive Eastman X-series stocks to use for night, day and interior shots. Ryder admitted that he and Bishop were overcompensating to ensure 'proper depth of field' in early VistaVision films, as 'it may be possible to reduce these [light] levels at a later date, but we should protect ourselves at the start'. ²⁰⁶ VistaVision cinematographers

²⁰² Haines, p. 77.

²⁰³ Herbert T. Kalmus, 'President's Message', *Technicolor News and Views*, 16 (September 1954), 2.

²⁰⁴ Haines, p. 83; Vincent, p. 27.

²⁰⁵ MHL, Paramount Pictures Production Records, box 236, folder 8, Technicolor agreement, 17 September 1954.

²⁰⁶ MHL, Paramount Pictures Production Records, box 65, folder 8, Loren Ryder to Frank Caffey, 7 October 1954.

were honoured in 1956, when Oscars for cinematography were awarded to Paramount's *The Rose Tattoo* (Daniel Mann, 1955; d.p. James Wong Howe), in monochrome, and *To Catch a Thief* (d.p. Robert Burks), in colour. Of the twenty-six VistaVision films produced in black-and-white by Paramount, *The Desperate Hours, The Rose Tattoo, The Tin Star* (Anthony Mann, 1957; d.p. Loyal Griggs), *Fear Strikes Out* (Robert Mulligan, 1957; d.p. Haskell Boggs) and *The Black Orchid* (Martin Ritt, 1958; d.p. Robert Burks) stand out for their rich blacks in night-time scenes.

Quality control also demanded the creation of a new technician role. Paramount and Technicolor assigned special camera mechanics to VistaVision features, paying them a weekly salary equivalent to that of camera operator.²⁰⁷ When the studio was too busy to loan its own VistaVision camera mechanics out to United Artists for *The Pride and the Passion* (Stanley Kramer, 1957), filmed in Spain, Caffey referred production manager Stanley Goldsmith to the expertise of Technicolor and the Rank Organisation nearby in Britain.²⁰⁸ John Marlow, head of the Camera Repair and Maintenance Department of Technicolor London, was the VistaVision engineer assigned to Burks' camera crew on *To Catch a Thief.*²⁰⁹

Examining VistaVision's history at the studio-level provides a firm context for the analysis of individual features, production process and film style. Textual analysis can also be compared to gauge Paramount's influence and put archival evidence of production differentiation in critical perspective. The showcasing of VistaVision generated tension between the studio and production team of *To Catch a Thief*. Studio instructions on camera focus contravened Hitchcock's probing reaction shots, such as when Foussard (Jean Martinelli) stares down John Robie (Cary Grant) in *To Catch a Thief*, which tended to soften backgrounds

²⁰⁷ MHL, Paramount Pictures Production Records, box 158, folder 1, *Williamsburg: Story of a Patriot* production budget, 24 April 1956.

²⁰⁸ MHL, Paramount Pictures Production Records, box 157, folder 1, Frank Caffey to Stanley Goldsmith, 7 October 1955.

²⁰⁹ MHL, Paramount Pictures Production Records, box 215, folder 21, C. O. Erickson to Frank Caffey, 6 July 1954.

(figure 19). Caffey previewed daily rushes in Los Angeles and reported back to the Hitchcock unit in France. On 16 June 1954, he telegrammed Hitchcock's production manager to inform him that 'VistaVision demonstrations in London and Tokyo today enormously successful stressing sharpness and clarity and it is important we maintain this standard'. ²¹⁰ Caffey insisted that 'slates 69 take two [of Martinelli] and 47 take two [of Charles Vanel] are too soft behind actors and will be very jarring. Balance [this with] work we have seen to date of longer shots [as] these scenes breathtakingly beautiful'. ²¹¹ Further memos reminded the unit of studio standards regarding sharp vistas and their integration.

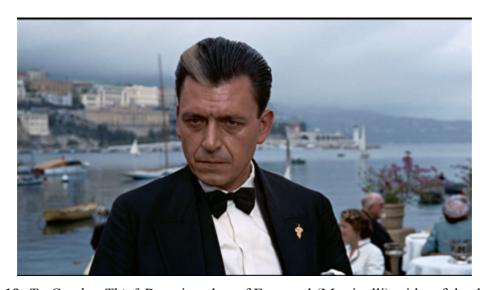


Figure 19. To Catch a Thief: Reaction shot of Foussard (Martinelli) with soft background.

Shooting overseas granted additional autonomy. Daniel Steinhart has argued that the 'studio's moment-to-moment vigilance of logistical and creative decisions was weakened on foreign productions', which is characteristic of what he calls post-war Hollywood's 'flexible mode of production'. 212 *To Catch a Thief* provides evidence of these struggles between studio

²¹² Daniel Steinhart, 'A Flexible Mode of Production: Internationalizing Hollywood Filmmaking in Postwar Europe', in *Behind the Screen: Inside European Production Cultures*, ed. by Szczepannick and Vondderau, pp. 135-151 (p. 148).

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MHL, Paramount Pictures Production Records, box 215, folder 21, Frank Caffey to C. O. Erickson, 16
 June 1954.
 Ibid.

management and international production units. Through framing, camera focus and colour cinematography, detailed panoramas of the French Riviera in *To Catch a Thief* complement Paramount's stylistic differentiation of VistaVision. On the other hand, the studio's exacting standards for close-ups were evidently snubbed by Hitchcock, leading Erickson and Burks to excuse themselves to Caffey: '[Burks] asked me to tell you that there may be some shots in which the background is out of focus in order to get the sort of dramatic close-up that Hitch requires [...] and we are not deliberately disregarding your instructions or being careless.'²¹³ Deference to the director would suggest that the personalities of the unit were as important for VistaVision filmmaking as physical proximity to the Los Angeles studio. Disentangling these conflict scenarios requires constantly adjusting our level of analysis, between studios, production team dynamics and film style.

When it came to marketing *To Catch a Thief*, the valuable Hitchcock brand name would certainly have made up for his ignoring stylistic instructions regarding VistaVision. Paramount's promotional campaign was flexible enough to absorb any damage done by the unit's appropriation of VistaVision, as several key ingredients were always present in any given 'package'. The studio acknowledged that it had placed equal emphasis on story, stars and technology in its *White Christmas* promotion, recalling the multi-faceted tactics used to sell Paravision films described in Chapter 1. Whereas Cinerama was the main star of *This is Cinerama*, Paramount's metaphor was more modest, describing VistaVision as a supporting member of the ensemble cast in *White Christmas*. ²¹⁴ *White Christmas* subsequently topped the box-office in the USA and positioned second in Britain the next year, but Paramount's promotional materials had done little to foreground its house format. A public poll taken after

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²¹³ MHL, Paramount Pictures Production Records, box 215, folder 21, C. O. Erickson to Frank Caffey, 1 June 1954. This exact disagreement was recounted by Hitchcock during an AFI interview in 1972: *Alfred Hitchcock: Interviews*, ed. by Sidney Gottlieb (Jackson: University Press of Mississippi, 2003), p. 96. ²¹⁴ 'VistaVision Sans Sweeping Slogans: Just Another 'Star' in Paramount's Galaxy', *Variety*, 13 October 1954, p. 10. Belton, *Widescreen Cinema*, pp. 96-99; Johnston, *Coming Soon*, pp. 31-38.

the New York premiere documented aesthetic appreciation for the film, though discovered that 'most patrons polled were hazy as to the name of the system [...] asking such questions as 'how are they able to get everything so big and clear?'²¹⁵

After internal studio politics and the finer details of marketing, the choice of setting was another limiting factor regarding brand awareness of VistaVision. The mostly interior setting of *White Christmas* seemed closer to the film's source text, *Holiday Inn* (Mark Sandrich, 1942), than contemporary outdoor spectacle. The film lacked an establishing statement to match the ride-film elements of *This is Cinerama*. Even the apartment plot of *How to Marry a Millionaire* (Jean Negulesco, 1953) afforded a brief aerial sequence in CinemaScope. A review of *White Christmas* in *Variety* argued that 'VV's impact, while giving a full-stage impact to this musical, should be even greater when applied to outdoor and action-drama stories'. ²¹⁶ Glimpses of forthcoming VistaVision films such as *To Catch a Thief* had whetted the appetite for location shots which could exploit VistaVision's full scope.

Paramount's fourth VistaVision release, *Strategic Air Command*, definitively broke with the setting and what Linda Mizejewski refers to as the nostalgic army-buddy story of *White Christmas*.²¹⁷ Images of aircraft on practice atomic-bombing runs provided a modernistic framework within which to flaunt VistaVision's compositional possibilities and resolution of detail at sheer shot scales. The film's flagship status placed additional strain on VistaVision films produced around the same time, with Hartman saying of *Run For Cover* that 'this picture may well be released ahead of *Strategic Air Command* and will do serious damage to VistaVision if any future photography continues to resemble' that which he had criticised for poor quality.²¹⁸ The film is also historically significant for launching horizontal VistaVision

²¹⁵ 'John Q Public Likes V-V', *Motion Picture Daily*, 15 October 1954, p. 6.

²¹⁶ White Christmas review, Variety, 1 September 1954, p. 6.

²¹⁷ Linda Mizejewski, 'Minstrelsy and Wartime Buddies: Racial and Sexual Histories in *White Christmas*', *Journal of Popular Film and* Television, 36 (2008), 22-29.

²¹⁸ MHL, Paramount Pictures Production Records, box 178a, folder 7, Don Hartman to Frank Caffey, 29 May 1954.

film projection internationally. My next section considers Paramount's product differentiation in conjunction with key film sequences and showmanship strategies.

Loren Ryder, Showmanship and Strategic Air Command

In addition to reduction-printing VistaVision to standard four-perforation prints, Technicolor made double-frame Eastmancolor prints that had to be threaded horizontally in special VistaVision film projectors. Projecting the full eight-perforation Eastmancolor frame increased screen luminosity and reduced the magnification of grain, even on large screens measuring over 50 ft. wide. Double-frame projection was initially used in just two theatres, in Los Angeles and New York, for the release of *White Christmas* in October 1954. Between March and May in 1955, *Strategic Air Command* was shown in double-frame proportions in eleven theatres across the USA and in Toronto and London.²¹⁹ Ryder curated the North American screenings, which used film projectors manufactured by the Century company in the USA.

Ryder was Paramount's head of sound recording and chief engineer from 1928-56. His final years at Paramount encompassed theatre television, improvements in stereoscopic film projection for drive-in theatres, and, with Bishop, the development of VistaVision cameras, also advising on VistaVision film production. In oral history interview records, studio executive Eugene Zukor commended Ryder's leadership qualities and ability to move between the technical and commercial worlds, describing him as 'our chief technician as far as executive value was concerned'. This quality of existing between worlds has required me to cross-reference a variety of sources to fully appreciate Ryder's engineering activities. The Loren L. Ryder papers, held by the Margaret Herrick Library, contains transcripts of speeches, memos

²¹⁹ Vincent, p. 39 (fn. 63); Alain Dorange and Gerhard Witte, 'VistaVision Presented in Horizontal Projections', https://www.in70mm.com/news/2015/vistavision/index.htm [accessed 3 September 2019]. ²²⁰ MHL, Academy Oral History Collection, OH124 (1997), Eugene Zukor interviewed by Douglas Bell.

and technical papers which illuminate Ryder's engineering and showman activities in connection with the differentiation of early VistaVision films.

Double-frame showings of *Strategic Air Command* were engineered to immerse the audience in the film's visual and sound space. Ryder created an itinerary and checklist for Paramount technicians Homer Mendenhall, Frank LaGrande and Charles West, who oversaw theatre modifications and rehearsals prior to double-frame screenings of *Strategic Air Command*.²²¹ The modifications were informed by a detailed survey of thirty-two American cinemas which Ryder had initially orchestrated for the general release of *White Christmas*. Ryder rated theatres based on criteria such as the current provision for a clear image and sound reproduction, and a slightly curved screen capable of showing the 1.85:1 aspect ratio.²²² For a trade presentation at New York's Radio City Music Hall in April 1954, Paramount had screened both CinemaScope and VistaVision in the same width so as to the make the latter seem 38% taller in the aspect ratio of 1.85:1.²²³ Ryder sustained this practice, asking technicians to note the screen width in all surveyed theatres showing CinemaScope films, if applicable.

Unlike previous military melodramas such as *From Here to Eternity* (Fred Zinnemann, 1953), *Strategic Air Command* has overt propagandistic elements that begin immediately with its dedication to the U.S. Air Force in the credits sequence. Outdoor scenery and bomber jets, filmed in co-operation with military advisors, offered a source of spectacle and means to differentiate VistaVision in *Strategic Air Command*. In *American Cinematographer*, cinematographer William Daniels commented on the film's dual appeal. While 'the production

²²¹ MHL, Paramount Pictures VistaVision Material, box 2, folder 10, 'Theatre Recommendations for "Strategic Air Command|" Double Frame Presentation', 14 March 1955.

²²² According to Ryder's instructions, 'a theatre should only be considered excellent if it has a good quality screen of proper size, adequate light, a sharp picture and no picture jiggle or color fringing. The sound quality should also be satisfactory': MHL, Loren L. Ryder Papers, box 4, folder 37, 'Instructions for Filling out VistaVision Theatre Survey Questionnaire', 7 September 1954, p. 3.

²²³ '20th Raps Par for "Brickbats" Vs. CinemaScope', Variety, 5 May 1954, p. 5.

is the first-large scale, outdoor film photographed in VistaVision', Daniels stated, 'it is also the first motion picture affording the public rare and breath-taking aerial views of the Air Force's B-36 planes in flight'.²²⁴ Significantly, the film was made during the Bomber Gap period, a moment in the cold war between 1954-56 when it was suspected that the USA was falling behind the Soviet Union in strategic bomber production. Anxious media reports of a lack of B-52, B-36 and B-47 bombers helped to justify a \$1.4 billion investment in the US defence budget.²²⁵ Analysing key sequences from *Strategic Air Command* helps historians to imagine how its carefully curated exhibition may have enhanced the film's framing, cinematography and sound, as well as its political message.

Strategic Air Command interweaves narratives of marital and military struggle. The film provides a modernistic view of American military operations through the perspective of a married baseball player and Second World War veteran, Dutch Holland (James Stewart), who is ordered back into the Air Force. The film is frank about the anxieties of a married middleclass man uprooted to the SAC base, his difficult reintegration into the military, and the question of whether or not the cold war constitutes a 'real war'. In this way, the film exercises narrative tensions between the boy's own adventure of military service and marital bliss in post-war suburbia. Stewart provides a credible performance as the everyman and experienced pilot drawn out of reserve, having served as an officer in the air force during the Second World War. Easing Stewart's character's concerns in the 1950s are the surface appeal of the bomber's machinery and the weightless pleasure of flight as he embarks upon missions to increasingly distant airbases which, due to the adventurous tone, can feel like a metonymic extension of the baseball diamond featured at the start.

²²⁴ William Daniels, 'Photography at 40,000 Feet', American Cinematographer, 36 (September 1955), 523-

²²⁵ Julien Mercille, 'Critical Geopolitics and the 1950s Bomber Gap', *Geopolitics*, 13 (July 2008), 498-518.

Framing. The bomber makes 'star entrances' throughout Strategic Air Command to underline moments of transition in Dutch's career and family life. Our first glimpse of the bomber jet also primes the audience for the verticality and width of the VistaVision frame being flaunted in venues selected for double-frame projection. At the start of the film, Dutch jogs onto a sports field to start a baseball game. Almost immediately, the distant rumble of a jet engine is heard. When Dutch reaches the batting position, he stops and twists around to peer into the far corner of the field, leaving the remaining two-thirds of horizontal space primed for action in medium long shot. In one take, an aircraft appears, a dot on the far horizon. Travelling toward the foreground, the plane crosses the sky and exits via the top left corner of the shot, at which point both the camera and Dutch's head tilt back in order to view the underbelly of the bomber jet (figure 20). The moment lingers a little longer, as a giant shadow passes over, followed by a close-up of Dutch who is gazing skyward with a faint smile. Later shots in the jet's cabin activate the side and top frame edges by carrying dialogue across the cockpit or between the lower and upper gunnery deck.



Figure 20. Strategic Air Command: A bomber jet activates VistaVision's tall frame.

Colour cinematography. VistaVision was promoted by Paramount and Technicolor on the basis of its clear resolution and colourful appearance. As Vincent notes, Paramount even recruited optometrists who praised VistaVision as 'sharp and clear to the edge'. 226 However, ersatz widescreen and VistaVision screenings which used an aperture plate in the projector to gain the desired aspect ratio also restricted the amount of light that could pass through to the screen. CinemaScope film projection could reach up to 13,500 lumens brighter than VistaVision films shown in the 1.85:1 aspect ratio.²²⁷ Low light levels reduced the intensity of colour values. Wide-angle lenses compounded the problem by distributing light unevenly across the screen, so that the edges appeared dim or out of focus. These projection faults directly contradicted claims that VistaVision offered a sharper, more pleasurable viewing experience. The eight-perforation Eastmancolor print admitted a greater amount of light through the large frame area to the screen. Simultaneously, the installation of a curved screen evened out focus and light distribution by compensating for the greater distance ('throw') between the wide-angle lens and the screen edges.²²⁸

From the airbase hangar to tours of international air space, deep focus colour cinematography is used to glamourize the bomber jet in Strategic Air Command. Although Strategic Air Command did not encompass the chromatic range of White Christmas's costumes and music hall sets, switching between land and aerial settings allowed for artificial and natural light to be incorporated into the colour scheme. The film employed two cinematographers. Daniels handled the land cinematography, including the suburban scenes, airbase offices and runways. His cinematography leaned towards the metallic-blues and greys of the colour spectrum which showcase the bomber's reflective surface and clean edges. Actors staged by

²²⁶ Vincent, p. 30; 'VistaVision: The New "Eye-Deal" in Motion Pictures', Kinematograph Weekly, 4 November 1954, back page.

²²⁷ 'Light Requirements for Wide-Screen Projection', *International Projectionist*, 29 (September 1954), p. 15. 228 John Belton, 'The curved screen', *Film History*, 16.3 (2004), 277-85 (p. 279).

Anthony Mann were also incorporated into shots, providing a reference for the material scale of the bombers (figure 21). Thomas Tutweiler was responsible for the aerial scenes. Different periods of day saturate the screen with alternating navy, amber and pale blue blocks of colour. The white vapour trailing from the aeroplanes was artificially created to ensure that the subject stood out against the colourful panorama, as shooting the aircraft at extreme distances appeared to freeze movement (figure 22). These contrasting colour schemes would have been clearly delineated in bright double-frame projection.



Figure 21. Strategic Air Command: The bomber in Daniels' cold metallic-blue hangar.



Figure 22. Strategic Air Command: Tutweiler's aerial shot showcases natural warm light.

Sound. The contribution of spectacular sound to Strategic Air Command deserves further attention, given Ryder's survey of speaker systems to be used alongside its premiere in VistaVision. Paramount used Perspecta sound for its VistaVision films instead of the magnetic stereophonic sound system that Fox initially sold in conjunction with CinemaScope. Whereas Fox's system allowed sounds from discrete sources (dialogue, sound effects, etc.) to be played from different speakers simultaneously, in Perspecta, all sound had to be directed in unison from one theatre horn to the next. While not as sonically dynamic as magnetic stereophonic sound, Perspecta prints did provide the exhibitor with a compatible alternative as they could be played monoaurally. If the theatre manager chose to purchase left, right and centre speakers, then an inaudible control frequency recorded on the Perspecta track automatically adjusted the speaker volume so that all sound would appear to derive from different locations, according to the action onscreen. Strategic Air Command may have gained more from the increased amplification of Perspecta sound than its poor uni-directionality, as dramatic shifts in the soundtrack volume demonstrate.²²⁹

The opening sequence of *Strategic Air Command* cues depth by presenting a long take in which the source of the sound can only be glimpsed on the distant horizon. By stimulating one of the senses (aural) and depriving the other (vision), we are encouraged to follow the action as it gradually unfolds in the upper third of the frame. A more shocking crescendo follows a dialogue sequence between Dutch and his wife Sally (June Allyson), who are arguing about the cramped conditions of military quarters when compared to their suburban home. The dialogue halts and the music fades to a near inaudible level on the soundtrack, which is then overwhelmed by the bomber thundering 'overhead' (the aircraft seen in the trailer version of

²²⁹ Belton, *Widescreen Cinema*, p. 135. According to the projector manufacturer, Century, double-frame VistaVision showings also raised the upper frequency range of Perspecta playback from 8,000 to 16,000 Hertz, as the soundtrack ran at double-speed (180ft per minute) to match standard frame rates. The higher pitch threshold of double-frame VistaVision may have lent itself more to the childrens' choir during the finale of *White Christmas*, than the low rumble of aircraft in *Strategic Air Command*: James Morris, 'The VistaVision Horizontal Projector', *International Projectionist* 29, (October 1954), 16-17, 27 (p. 17).

this sequence is omitted in the final cut, which relies on sound). After Dutch is dismissed by General Hawkes (Frank Lovejoy) on health grounds, he embraces Sally and the jet engines are again heard. The spike in volume offers a visceral distraction from Dutch's mixed loyalties to the air force and his wife. Rather than resolve these conflicting ideals of patriotism and the nuclear family, the film subjugates them to spectacle. Hawkes calls the couple over to view 'our new B-47', adding, 'we'll have four new wings by the end of the year'. An audacious eyeline cut transitions from a two-shot to an aerial sequence with bombastic male vocal score, toning down Dutch's ambivalent departure by ending on a triumphal note of national progress.

Strategic Air Command featured heavily in Paramount's promotional campaign for VistaVision, providing a varied showcase of new production and projection technology in narrative form - something Cinerama had not yet done. Marketing tended to feature aerial scenes and intimate romance, mapping these story elements onto VistaVision's spatial latitude. The film's trailer promised 'a story far-ranging and spectacular, yet as close to you as a kiss'. Kinematograph Weekly informed the British trade that the format 'sweeps you from horizon to horizon... from earth to sky' thanks to its tall-and-wide aspect ratio - the poster also proclaimed the film's naturalistic colour, star cast and melodramatic plotline through adjacent portraits of Stewart and Allyson.²³⁰ Other marketing differentiated the theatre layout, for example, showing the curved screen and diagrams of the horizontal projector used at the London Plaza cinema.²³¹ After viewing *Strategic Air Command* in double-frame projection at the Plaza, Bernard Harman praised the film's dynamic combination of high-resolution skyscapes and performances: 'without any question the huge picture on the screen is sharper and more perfect in every detail than anything we have previously seen. Even the fabric of dresses and the texture of human skin come out with a startling clarity'.²³²

²³⁰ Colour poster for Strategic Air Command The Kinematograph Weekly, 5 May 1955, pp. 26-27.

²³¹ VistaVision advertisement, *Kinematograph Weekly*, 9 June 1955, pp. 12-13.

²³² Bernard Harman, Strategic Air Command review, The Daily Film Renter, 15 June 1955, p. 2.

As noted in this chapter's opening quotation, Ryder considered many members of the trade were more interested in the theatre experience, spectacle and story delivered by VistaVision films than the technology itself. To this end, he curated North American screenings of important VistaVision releases including White Christmas and Strategic Air Command, advised on production issues such as lighting levels in *The Desperate Hours*, and authored Paramount's VistaVision booklets from a showmanship perspective. Paramount's glossy postwar vision of technological change also differentiated VistaVision, either symbiotically, through the aerial photography of military hardware in *Strategic Air Command*, or directly, by translating the minutiae of VistaVision's design into accessible rhetoric. Paramount's differentiation of VistaVision always to some degree involved promoting the studio's scientific prowess and economic value to the broader industry. On receiving a technical achievement Oscar for developing VistaVision with Bishop, Ryder made a presentation to the Academy Awards Committee. Ryder situated VistaVision in a long tradition of wide frame and large format film technologies, dating back to Edison in the 1890s. ²³³ Ryder tailored his presentation to the Academy's sympathies by focusing on Hollywood's engineering heritage and future technological development.

Finally, it is important to note that not all VistaVision films selected for public double-frame projection were Paramount films. After Paramount's *White Christmas, Strategic Air Command, To Catch a Thief* and *The Seven Little Foys* (Melville Shavelson, 1955) and *The Far Horizons* (Rudolph Maté, 1955), came Rank's *The Battle of the River Plate* on 10 October 1956 at the Odeon Leicester Square. Kalee manufactured the two VistaVision projectors installed at the Odeon. Double-frame VistaVision film projection was threatened by the rise of 70mm film as a release format from the mid-1950s and the need for exhibitors to switch seamlessly between different film sizes, something which Paramount's projector was incapable

²³³ MHL, Loren L. Ryder Papers, box 5, folder 45, 'Academy Awards Committee' script, 10 March 1955.

of doing. The Odeon Kalee projectors were consequently replaced with Rank's preferred multiformat projector, manufactured in Italy by Cinemeccanica.²³⁴ While Ryder could sell the idea of progress in American engineering to the trade, real technological constraints would influence VistaVision's wider diffusion.

Other Studios: VistaVision's Diffusion and Constraints

The diffusion of VistaVision can be divided into three periods. First, from late 1953 to early 1955, Paramount promoted VistaVision and was the sole studio to produce films in this format. From July 1955 to 1957, VistaVision films appeared from several non-Paramount filmmakers and the format had a stronger presence in cinemas than at any other point in its history, with a steady 20-25 films being released each year. From 1958 onwards, no new production companies adopted the format and the supply of VistaVision films falls year on year, first halving from twenty-five to thirteen and then dwindling to ten, before flatlining in the final two years (Table 2). The macro-trajectory of VistaVision filmmaking is analogous to a flare or firework, beginning with a narrow trail, followed by a brocade which branches in several directions, before leaving a dim afterimage that can be dismissed in a couple of blinks. Why did VistaVision travel as far as it did, only to then fade into relative obscurity?

The situation looked promising for VistaVision's diffusion in the mid-1950s period, when several production companies adopted the format. Rank announced its early commitment to VistaVision filmmaking following Paramount's trade demonstrations in London in June 1954 and began shooting its first such film, *Value for Money* (Ken Annakin, 1955), in January the following year (Table 3). Rank's selection of technology seemed influenced as much by the virtues of the VistaVision system as it did the politics of Anglo-American industrial relations. There was, on the one hand, an overall desire to penetrate foreign markets by

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²³⁴ Enticknap, p. 63; Eyles, p. 43.

upscaling British films. On the other were structural pressures that made VistaVision the most economical choice for Rank, as a vertically integrated organisation, beginning with its difficult negotiations over the use of CinemaScope in British Gaumont and Odeon theatres.

Table 2. No. of VistaVision Features Released Per Year, Listed by Company and Nation.

Company	1954	1955	1956	1957	1958	1959	1960	1961	Total
Paramount	2	14	16	18	13	9	1	1	74
Rank Org. (UK)		5	5	4					14
MGM			1			1			2
Universal			1						1
Warner Bros.			1						1
United Artists				1					1
Remus (UK)			1						1
London Films		1							1
Daiei (Japan)				1					1
UGC (France)				1					1
Yearly Totals	2	20	25	25	13	10	1	1	97

Table 3. Paramount's 'Global VistaVision Timetable' of 1954 Demonstrations.²³⁵

Month	Date	City	Cinema				
June	16	London, Britain	Plaza				
	16	Tokyo, Japan	Ernie Pyle				
	20	Manila, Philippines	Avenue				
	21	Paris, France	Paramount				
	25	Singapore	Cathay				
	25	Rome, Italy	Supercinema				
	30	Frankfurt, Germany	Turm Palast				
July	3	Bombay, India	Eros				
	11	Sydney, Australia	Metro				
	15	Melbourne, Australia	Metro				
	16	Mexico City	Mexico				
	21	Havana, Cuba	Payret				
	27	Carcas, Venezeula	Castellana				
August	3	Sao Paulo, Brazil	Marrocos				
	7	Lima, Peru	Tacna				

²³⁵ 'The Global VistaVision Timetable', *Paramount International News*, June 1954, p. 3.

Rank refused to agree to the extended theatre runs which Twentieth Century-Fox proposed for CinemaScope films, leading the Hollywood studio to book films with Rank's competitors. Rank then suspended its theatre installations of Fox's cherished stereophonic sound system because of costs in February 1954. Several meetings between Spyros Skouras, Arthur Rank and John Davis in early 1954 made no difference to the stalemate, though Fox did eventually relax its stereophonic sound policy - too late for Rank. Despite having installed CinemaScope in over 500 theatres, the likelihood of Rank also paying Fox's license fee to use an anamorphic lens in film production faded along with business relations between the two companies due to disagreements over film exhibition. ²³⁶ Unburdened by stereophonic sound, CinemaScope rapidly diffused within film exhibition, and over half of British theatres were equipped to screen the format by the end of September 1955 according to the Board of Trade (13% with multi-channel sound). ²³⁷

Foreign widescreen formats did not simply flood British studios in the early 1950s. The non-subsidiaries either chose which production technology made business sense to them or declined the offer. Much as Hammer and other British independents mined the distribution incentives attached to anamorphic technologies, Rank would select a format that best suited the scale of its infrastructure and aspirations. Since VistaVision films did not require the installation of stereophonic sound systems and could be displayed on CinemaScope screens, the format allowed Rank to retain its existing theatre outlays for general release films. Following Paramount's lead, Kalee invested in a system for creating anamorphic prints of VistaVision films in addition to variable projector lenses that could accommodate a range of aspect ratios, including those used in VistaVision and CinemaScope films.²³⁸ Anamorphic

²³⁶ 'CinemaScope: No Agreement Yet', *Kinematograph Weekly*, 25 February, 1954, o. 3; 'Skouras Again: Talks with Rank', *Kinematograph Weekly*, 20 May, 1954, p. 7; 'Silverstone: Why We Split With Rank', *Kinematograph Weekly*, 7 October, 1954, p. 7. See also, Eyles, pp. 39-43.

²³⁷ 'More Than Half Equipped to Show CinemaScope', Kinematograph Weekly, 5 April 1956, p. 29.

²³⁸ 'Anamorphic VistaVision Prints to be Supplied', *Motion Picture Herald*, 13 November 1954, p. 28; 'Rank Variable Lens Launched in London', *Variety*, 15 September 1954, p. 12; Enticknap, p. 63.

VistaVision prints did not come to fruition, but it does signal CinemaScope's dominance to historians. Despite an initial warm reception from British exhibitor groups,²³⁹ VistaVision films and Perspecta sound would typically rely on screens and speakers installed for CinemaScope.

Beyond its logistical flexibility for general release, VistaVision accommodated Rank's taste for showmanship. This is demonstrated by the company's installation of horizontal VistaVision projectors at Odeon Leicester Square and its interest in the American film market. Rank's Managing Director, John Davis, wrote of his intention to quite literally 'open up the screens to British pictures' overseas through a dual focus on a 'film's story content and the way in which it is presented'. VistaVision featured prominently in speculation on both sides of the Atlantic that Rank was attempting to infiltrate the American market by widening distribution and upscaling film production. Hen Rank constructed its first American Odeon cinema, on Broadway in New York, it strategically emphasised the lavish strain of its production schedule rather than its mainstay of comedies by choosing *The Battle of the River Plate* as the opening VistaVision film. At least eight other VistaVision films were released through Rank Film Distributors of America, in a variety of genres.

With the exception of Paramount, Rank and MGM, other studios appear to have sampled VistaVision by making one film. In Hollywood, all of these VistaVision films obtained their scale through outdoor settings or large production design, including Warner Bros.' *The Searchers* (John Ford, 1956), Universal's *Away All Boats* (Joseph Pevney, 1956), and United Artists' *The Pride and the Passion*. After making *High Society* (Charles Walters,

²³⁹ Vincent, pp. 32-34.

²⁴⁰ John Davis, 'Efficiency and Economy in Films', *The Financial Times*, June 1954, pp. 81-82.

²⁴¹ 'Rank Ups Budgets For U.S. Rivalry', *Variety*, 22 February 1956, p. 7; Peter Burnup, 'Rank to Push Circuit in US', *Motion Picture Herald*, 18 December, 1954, p. 22; 'In the Picture: British Films', *Sight and Sound*, 25 (Spring 1956), 169-70; "Massive Scale" of Rank Future Programme', *Kinematograph Weekly*, 10 January 1957, p. 7.

²⁴² 'Rank to Open America's First Odeon', *Kinematograph Weekly*, 12 December 1957, p. 149.

1956), a musical appropriately set in a capacious mansion, MGM facilitated a second VistaVision production only because when Hitchcock joined the studio, to direct *North by Northwest* (1959) as an independent, he was not accustomed to working in any other format. The non-committal approach to VistaVision apparent in the USA is also true of production companies elsewhere. In France, UGC co-funded *Oeil Pour Oeil [Eye for An Eye]* (André Cayatte, 1957), a film featuring desert vistas which compete with *The Searchers* for visual depth. In Japan, Daiei Studios made the now lost period drama *Jigoku Bana [Flowers of Hell]* (Daisuke Itô, 1957). Due to the cost of VistaVision, Daiei was unable to sustain long-term production cycles to compete with other Japanese widescreen films.²⁴³ The fact that *Oeil Pour Oeil* did not inspire Cayatte's peers to adopt VistaVision conforms to the general decline in France of widescreen film production in the late 1950s, with the prominent exception of the French anamorphic formats that were appropriated by New Wave directors like François Truffaut (and concurrently, by independents in Britain).²⁴⁴

Two factors limited the VistaVision system's adoption from the beginning and explain its sporadic use in film production. First, there was a widely reported shortage in VistaVision equipment. Whereas the VistaVision film negative altered every aspect of camera design from the capacity of the magazine to the mechanical teeth which pulled the film, it was quicker to append anamorphic lens attachments and expand the viewfinder on the camera. Unlike Fox, Paramount did not charge studios to use VistaVision. It also did not have the facilities to mass produce cameras in-house. The studio seemed powerless before a growing waiting list for VistaVision technology from suppliers Technicolor and Mitchell. As such, Paramount withheld

²⁴³ Joseph L. Anderson and Donald Richie, *The Japanese Film: Art and Industry* (Princeton, NJ: Princeton University Press, 1982), p. 253.

²⁴⁴ Colin Crisp, *The Classic French Cinema*, 1930-1960 (Bloomington: Indiana University Press, 1997), p. 139; Douglas Smith, "'Up to our eyes in it': theory and practice of widescreen in the French New Wave', *Studies in French Cinema*, 17 (2017), 113-28 (p. 119); Chibnall, 'The Scope of Their Ambition', in *Widescreen Worldwide*, ed. by Belton, Hall, and Neale, pp. 153, 155.

the few cameras in its possession (a mere six units as of August 1954).²⁴⁵ Due to demand, Paramount had to move secretively when allowing Fitzpatrick to 'cut in line' and collect a Technicolor VistaVision camera from the Hitchcock unit in France to begin the *VistaVision Visits...* series. Caffey forewarned Erickson:

I have sent you several cables in connection with the Fitzpatrick Travelogue emphasising the importance of no publicity and keeping this under the Paramount banner only to prevent other people from finding out that he is utilising a [Technicolor] VistaVision camera for shooting a travelogue when independents and major studios are screaming for its use.²⁴⁶

Independent producers Frederick Brisson and Stanley Kramer complained about the shortage of VistaVision cameras in the American trade press. The backlog of orders did not begin to clear until September 1954, when it was promised that VistaVision cameras were finally *en route* to Rank in Britain and producer Brisson for *The Girl Rush* (Robert Pirosh, 1955), a co-production between Paramount and Independent Artists.²⁴⁷ In early 1955, Technicolor converted for rental fourteen three-strip colour cameras to match Paramount's VistaVision specifications, bolstering the small supply of Stein and Mitchell VistaVision cameras in circulation. The Rank Laboratories at Denham were also ready to manufacture VistaVision cameras and equipment from October 1957.²⁴⁸

 ²⁴⁵ 'Continuous V'Vision Flow at Para; Lazy 8 Cameras Slowing Exhib', *Variety*, 1 September 1954, p. 10.
 ²⁴⁶ MHL, Paramount Pictures Production Records, box 158, folder 1, Frank Caffey to C. O. Erickson, 10 July 1954.

²⁴⁷ 'VistaVision Gifted to Industry, But Other Producers Ask "When", *Variety*, 31 March, 1954, p. 3; 'Indie Producers Blunted Romance with VistaVision', *Variety*, 21 April, 1954, p. 3; 'Paramount Due for 15 VistaVision Cameras', *Variety*, 18 August 1954, p. 7.

²⁴⁸ 'VistaVision in the Laboratory', *Kinematograph Weekly – Studio Review*, 3 October 1957, pp. 14-15.

Had more cameras been in circulation and sooner, it is likely that the volume of production would have been higher: Brisson had projected an additional five unmade VistaVision films, while twelve of Rank's films announced for VistaVision did not materialise in 1956 as reportedly planned.²⁴⁹ To stretch the short supply available, it became a requirement to share cameras between films in simultaneous production. For example, in Britain, *As Long As They're Happy* (J. Lee Thompson, 1955) did not use VistaVision despite producer Raymond Stross having authorised the addition of seven musical sequences in order to upscale the comedy for that format. The reason given was that budgets could not cover stoppages caused by sharing a VistaVision camera with another production.²⁵⁰

A second cause for the stunted diffusion of VistaVision may be that filmmakers became all too aware of its associated costs including camera hire, maintenance and the consumption of twice as much film per frame when compared to standard 35mm filmmaking. The writing on the wall may have been evident to Paramount as early as October 1956, when, during the production of *Funny Face*, Frank Caffey noted down the increased weekly and fixed costs of VistaVision over standard 35mm film production. ²⁵¹ Caffey accounted for film negative usage, printing and laboratory costs, the camera technician's wages, and camera units. The note is not addressed to any other staff for circulation, though its appearance dovetails with Paramount's subsequent slowdown in VistaVision production (as reflected in the studio's post-1957 release pattern, recorded in Table 2). Less risk-averse and well-financed independents persisted with VistaVision in full awareness of its higher price. The production accountant of Big Ben Films

²⁴⁹ 'Indie Producers Blunted Romance with VistaVision', *Variety*, 21 April 1954, p. 3; "Massive Scale" of Rank Future Programme', *Kinematograph Weekly*, 10 January 1957, p. 7.

²⁵⁰ 'Cameras in Short Supply Veto VistaVision', *Kinematograph Weekly*, 16 September 1954, p. 39.

²⁵¹ MHL, Paramount Pictures Production Records, box 79a, folder 11, Frank Caffey's typed costings headlined 'Funny Face', 22 October 1956.

forecast that the additional cost of using VistaVision for *Richard III* would amount to £23,000, a third of which would go towards raw stock.²⁵²

Table 4. Example of VistaVision Film Costs (Britain).²⁵³

Title	Overall	VistaVision Film	VistaVision Film Negative Costs				
	Cost	Negative Cost	as a Percentage of Overall Costs				
Richard III	443,209	7,730 (Colour)	1.7%				
The Battle of	274,071	12,315 (Colour)	4.4%				
the River Plate							
The Iron	208,806	8,452 (Colour)	4%				
Petticoat							
Another Time,	134,281	2,143 (B&W)	1.5%				
Another Place							

It is telling that all films made in VistaVision in Britain had the backing of a conglomerate (i.e., Rank) or prestigious independent. The considerable resources allocated to these films, including expenses demanded by large format colour stock (Table 4), reflects their international box-office and prestige values. Powell and Pressburger's *The Battle of the River Plate* was Rank's most extravagant VistaVision production, belonging to a cycle of British widescreen war films which include *Dunkirk* (Leslie Norman, 1958) and *Bridge on the River Kwai* (David Lean, 1957).²⁵⁴ *The Iron Petticoat* (Ralph Thomas, 1956) was a cold war comedy starring Hollywood stars Bob Hope and Katherine Hepburn. Thomas' comedy was funded through a transatlantic distribution deal between Harry Saltzman, MGM and John Woolf's Romulus Films, the latter of which also co-financed Olivier's *Richard III*. For comparison,

²⁵² London, Film Finances Archive (FFA), box 127 (*Richard III*), G E Allen to Film Finances, 21 October 1954.

²⁵³ FFA, box 127 (*Richard III*), Statement of Production Costs, 31 March 1956; FFA, box 156b (*The Battle of the River Plate*), Statement of Production Costs, 21 September 1956; FFA, box 164 (*The Iron Petticoat*), Statement of Production Costs, 23 June 1956; FFA, box 227 (*Another Time, Another Place*), Statement of Production Costs, 9 February 1958. Film negative costs can be found in the official budget summaries boxed with each film, as above.

²⁵⁴ Robert Murphy, *British Cinema and the Second World War* (Continuum: London, 2000), p. 248.

Paramount's *Another Time, Another Place* (Lewis Allen, 1958) was a black-and-white, quota quickie with a 'British stand-in producer'.²⁵⁵ Paramount's opportunistic use of governmental resources and black-and-white stock would have helped to alleviate the additional cost of VistaVision.

To summarise, fewer VistaVision films were made in Britain than in the USA, though due to the smaller scale of British widescreen production, VistaVision's contribution was proportionally similar in both countries. In the USA, VistaVision features accounted for 15% of all widescreen features distributed by the eight major Hollywood studios between 1954-61, excluding those widescreen films made in Britain.²⁵⁶ Britain produced sixteen VistaVision feature films, or 12% of all widescreen features released over the same period, fourteen of which came from Rank during 1955-57 when VistaVision was most visible on the cinema marquee signs.²⁵⁷

Industrial, economic and aesthetic factors contributed to VistaVision's abandonment by film studios by 1961. External factors include the rise of competitor formats which also used large film to output high resolution images. Multi-format projectors which could take 35mm and 70mm release prints undercut Paramount's emphasis on VistaVision's 'flexibility' regarding general release exhibition. Widely used Eastmancolor stock should also be factored into the decline of double-frame film production. As Vincent and Barry Salt note, the increased sensitivity of Eastmancolor type 5250 stock allowed other general release formats to encroach on the aesthetic values of VistaVision from 1959.²⁵⁸ That said, VistaVision film releases sharply declined one year before this innovation in colour stock. The diffusion of CinemaScope and cost of VistaVision film production offer overriding causes for obsolescence. While expense clearly contributed to the unpopularity of the VistaVision system in the late 1950s,

²⁵⁵ FFA, box 227 (Another Time, Another Place), John Croydon to Robert Garrett, 28 September 1957.

²⁵⁶ Based on statistics for widescreen film releases recorded by Finler, p. 372.

²⁵⁷ Based on widescreen film entries in Gifford, *The British Film Catalogue: Volume 1*.

²⁵⁸ Vincent, p. 36; Salt, Film Style and Technology, p. 321.

'expense' is always relative to the finances behind a particular studio or film project. It is useful to gauge VistaVision's affordability in different production contexts.

Conclusion

Paramount filmmakers faced several constraints as the studio promoted VistaVision to exhibitors, their patrons, and other production companies domestically and internationally in the 1953-55 period. Even before the launch of *White Christmas*, Paramount catered to what it saw as the industry's most pressing needs and thus attempted to avoid the very scenario we associate with mainstream cinema of the early 1950s: that of Hollywood studios dragging the industry into the widescreen era by way of revolution. Paramount was reluctant to force an overhaul of theatre design and assumed that the commercial value of VistaVision would be 'felt over a long haul as audiences come to recognise its photographic advantages' for themselves. As such, the company initially placed the burden of product differentiation not on exhibitors or marketeers, but on its filmmakers in the studio. Studio management routinely inspected dailies and issued memos to curate the style of VistaVision films, ensuring that they were framed for small and large theatres, or focused clearly, so as to substantiate the format's 'Motion Picture High-Fidelity' tagline. Other techniques that risked image distortion, such as the use of various stocks and library footage, were carefully monitored.

The year 1955 brought an evolution in differentiation strategy as Paramount, wary of CinemaScope's rapid diffusion, began to lean more on its marketing resources to sell VistaVision features, especially overseas. A twenty-minute short, *Paramount Presents VistaVision*, described the virtues of the system to cinema audiences from January. The travelogue format used for *VistaVision Visits Norway* resurfaced in April 1955, offering

²⁵⁹ '20 Features Least Par Can Produce: Need That Many to Absorb Overhead', *Variety*, 13 October 1954, p. 62.

demonstrations of VistaVision via natural and urban panoramas sourced from America, Europe and Asia throughout the year. Simultaneously, Paramount engineers and manufacturers facilitated double-frame presentations of Strategic Air Command in first-run venues in the USA, Toronto and London, deploying the VistaVision double-frame film projectors that had previously been confined to two theatres, in New York and Los Angeles. Accompanying marketing meaningfully integrated VistaVision's aesthetic selling points with the story of Strategic Air Command, unlike the tentative packaging of White Christmas. At last, VistaVision was exhibited in its largest proportions on an international scale. The style of early VistaVision films such as Strategic Air Command subsequently received recognition from trade commentators and filmmakers alike. During a production meeting, Cecil B. DeMille referenced Tutweiler's cinematography in *Strategic Air Command* as an example of the depth he would like for the exodus scene in *The Ten Commandments*. ²⁶⁰

While shedding light on a previously underexamined period in Paramount's history, this chapter has capitalised on recent methodological developments through its dynamic combination of production and style histories. Production records can inform our analysis of key shots and sequences, drawing critical attention to seemingly innocuous details such as softly focussed backgrounds and edge framing. Textual analysis can in turn test the veracity of archival evidence of studio input. Schatz describes studio filmmaking as 'less a process of collaboration than of negotiation and struggle'. 261 Granular textual details can show how creative struggles manifest, crystallising hierarchical studio relations. For example, the inclusion of a shot formerly deemed unusable by studio managers tells us something about the extent of their influence. Comparing additional films or primary sources introduces further necessary contextual evidence. However, as with gathering empirical data on production

²⁶⁰ MHL, Paramount Pictures Production Records, box 205, folder 39, *The Ten Commandments* production meeting minutes, 3 June 1954, p. 5.

²⁶¹ Schatz, *The Genius of the System*, p. 12.

hierarchies and studio operations, examining films requires its own special methods. While isolating the odd shot or sequence from Paramount's early production schedule might be a useful way to highlight an instance of conflict or single differentiation technique, charting more generalised influences on film style requires robust methods for comparison.

Chapter 3 introduces statistical methods for the analysis of shot scale and length to compare the variables of format, genre and transnational influence on film style. I also measure the extent to which Paramount's early differentiation techniques resonate with my British-American sample. Given the commercial rivalries of the early 1950s, we might expect VistaVision films to look quite different to CinemaScope films, but without further analysis our comparisons are reliant on generalisation. It is also important to consider the stylistic influence of the different production contexts and popular genres which are encountered when we trace VistaVision's diffusion, and by what means the exchange of techniques occurred. Although VistaVision continued to be used on a more limited basis than anamorphic technology in Britain and the USA due to technological or economic constraints, several studios had at least sampled VistaVision by the mid-50s. Its diffusion was geographically wide, if erratic, leaving behind the rich and varied selection of films to which I now turn.

3. Shot Scale/Length: Format, Genre and (Trans)national Trends

The two previous chapters contextualised VistaVision's emergence and diffusion from international and studio-level historical perspectives. They also highlighted the commercial exchange of film technologies between Britain, the USA and internationally. To some extent, this involved drawing on specific films to illustrate common trends or isolate differentiation strategies. Chapter 3 harnesses my earlier arguments pertaining to international exchange and granular issues of technique, but it also transcends the work done thus far through a more sustained textual-statistical comparison of shot scale and length in VistaVision films.

As I have begun to argue, there were creative dynamic reasons for stylistic variety in the post-war era of widescreen cinema. I have not measured precisely how far-reaching or varied these stylistic changes were. Therefore, what are the most suitable comparative methods for gauging stylistic change? Did the production techniques favoured by Paramount have any real impact on the look of films? Following the diffusion of VistaVision, did filmmaking techniques travel outside the USA and how were these interpreted by the format's international adoptees? For example, how did VistaVision interact with popular film genres in Britain and the USA? Finally, how do my results relate to current scholarship on widescreen style? Through stylistic comparison, I test the bounds of connections which academics and film critics commonly make between widescreen formats, genres and national cinemas. My arguments intertwine three approaches which have previously been used to compare CinemaScope films: statistical, genre and sequence analysis.

For some working assumptions about widescreen film production and style, we can look back to reports in *American Cinematographer* that, as the screen widened, films would

become more theatrical.²⁶² It was supposed that fewer cuts would be necessary to maintain continuity as the camera could capture actors moving dynamically within an expanded area from a fixed perspective, as a theatregoer typically views the stage. The close-up, it was predicted, would become less common as the human face now appeared larger in scale and would be plainly visible. Shot scales would therefore be recalibrated, using more distant shots for dialogue in widescreen tableau. At the extreme end of the shot scale, outdoor vistas and vast architecture would gain an inherent advantage before audiences due to the widened scope of the image. The relationship between these two elements of shot length and scale would also provide the building blocks for academic research on widescreen cinema.

Counting shots and their length has been undertaken for comparative purposes by David Bordwell, Janet Staiger and Kirstin Thompson, Charles O'Brien, Tom Gunning and Barry Salt. ²⁶³ Comparing films on the basis of shot scale and length has also been practiced ad hoc in earlier criticism and film journalism. For example, André Bazin explained the nuances of the long take in 1940s Hollywood films directed by Orson Welles and William Wyler by enumerating shots. ²⁶⁴ Bazin's arguments would also presage Charles Barr's aesthetic defence of CinemaScope in 1963. Moreover, shot scale and running times are part of the industrial discourse of film production, for example, in segmenting shooting scripts into close ups, medium shots and so on, or for regulating exhibition by reel length. Statistics have helped to moderate our impression of the film industry's willingness for widescreen experimentation. Bordwell points out that Hollywood widescreen films which consistently withdrew the camera from close encounters, restrict movement and minimize cutting rates were also products of

²⁶² Charles G. Clarke, 'Practical Filming Techniques for Three-Dimension and Wide-Screen Motion Pictures', *American Cinematographer*, 34 (March 1953), 107, 28-29, 38; 'Cinemascope - What It Is; How It Works', *American Cinematographer*, 34 (March 1953), 112-13, 31-34.

²⁶³ Bordwell, Staiger, and Thompson, p. 388; Charles O'Brien, *Cinema's Conversion to Sound: Technology and Film Style in France and the U.S.* (Bloomington: Indiana University Press, 2005); Tom Gunning, *D.W. Griffith and the Origins of American Narrative Film* (Urbana: University of Illinois Press, 1994); Salt, *Film Style and Technology*.

²⁶⁴ Bazin, 'William Wyler', pp. 10-11.

technological constraint and, though they have a considerable stylistic legacy, were more common in the first half of the 1950s.²⁶⁵

In the previous chapter, I analysed the stylistic differentiation of the VistaVision format to draw some conclusions about agency within Paramount's production hierarchy. Scholars of widescreen cinema have come to their own conclusions about stylistic differences between the two main general release formats of the 1953-55 period. Arguments by Bordwell, Sam Roggen and Salt regarding statistical trends in film style have revolved around CinemaScope films, especially the aberrations of early anamorphic lenses which included shallow depth of field and visual bulging caused by the thickness and curvature of the glass. ²⁶⁶ There have been some interesting suggestions as to how VistaVision technology might have been used to advantage by filmmakers, typically in contrast to the early flaws of CinemaScope, but scholarly comment has been brief or echoes 1950s marketing texts. There has been a reluctance to make clear distinctions between those aspects of VistaVision advertised as selling points and the format as it is actually deployed and experienced in our viewing of films. I draw on the strengths of qualitative/close and quantitative/statistical analysis to elucidate some of the styles associated with formats, genres and national cinemas in the post-war widescreen era.

My first chapter section evaluates existing methods of widescreen film analysis, working through some of the uses and challenges of comparing films on the basis of shot data, typologies for different scenes, directing styles or genre iconographies. Subsequent sections evolve these methods by comparing early CinemaScope and VistaVision films, American Westerns, British comedies and travelogues, with continued reference to Neale's spatial taxonomy outlined in my thesis introduction.²⁶⁷

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²⁶⁵ Bordwell, *Poetics of Cinema*, p. 304.

²⁶⁶ Salt, *Film Style and Technology*, pp. 316-318; Bordwell, *Poetics of Cinema*, pp. 281-326; Sam Roggen, 'Gradation of Emphasis in the CinemaScope Westerns of Anthony Mann: A Style Analysis', *Projections*, 10 (Winter 2016), 25-48.

²⁶⁷ Neale, 'the art of the palpable', p. 98.

The comparison of genre films allows me to respond to some of the stylistic questions raised by my earlier statistical analysis, such as: How much change in shot length and scale was there over time? Do films cohere to our own genre expectations regarding shot length and scale? How influential were American practices on British cinema? What is the relationship between statistical data, genre and individual sequences, or potential for methodological oversights? The kinship between genre and film space has not been fully utilized in widescreen film analysis. Whereas in Chapter 2, I have tended to focus on the width/height of cinematographic space in combination with the depth of the set or outdoor scene immediately before the camera (pro-filmic space), Westerns, comedies and travelogues have been selected to engage with diegetic and location space in VistaVision films. The close connection between Westerns and widescreen landscapes, and comedies with 1950s British national cinema, allows me to gauge technological and transnational influences on the space of film genres. In these latter chapter sections, I am equally interested in the rhythmic transitions between spaces that can defy clean categorisations of genre in terms of shot scale or length. As the following section emphasises, film genre is only just beginning to occupy a more prominent position in the stylistic analysis of widescreen films.

Sequences, Genres, Statistics: Comparative Approaches to Widescreen

The stylistic analysis of widescreen films initially revolved around individual shots and sequences. Trends within film genres and statistical averages did not feature in assessments of scenes showcasing the film director's signature approach. In the 1963 essay, 'CinemaScope: Before and After', Charles Barr contrasted montage and analytical editing with widescreen techniques in which the action unfolds over the width and duration of a single shot, creating a 'gradation of emphasis' across the widescreen.²⁶⁸ Barr argued that the spacious CinemaScope

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²⁶⁸ Barr, 'CinemaScope', p. 18.

frame allowed the viewer additional freedom to interrelate salient details, as staged by the director. His examples include a sequence from the Western *River of No Return* (Otto Preminger 1954), in which Kay (Marilyn Monroe) and Harry (Rory Calhoun) are marooned near a farm after rafting out of town. Kay then accidentally drops her bundle into the water. As we pan to the right, Harry and Matt (Robert Mitchum) talk in the foreground, while the bundle appears twice in the background. Both Barr and V. F. Perkins note the thematic significance of this moment in which the natural elements rid Kay of her worldly possessions, marking a fresh start.²⁶⁹ The occasion, argues Barr, is conveyed subtly through Preminger's medium long shot of the bundle floating away: 'the significance of detail is not announced, it is allowed to speak for itself', whereas 'the traditional method would be to make its significance unmistakable by cutting in close-ups'.²⁷⁰

Rather than respond directly to this by now familiar scene from *The River of No Return*, I want to consider how Barr's approach might be adapted to compare a variety of widescreen films not filmed in CinemaScope by Hollywood auteurs. One adaptable aspect of Barr's approach is his sequence analysis. This gives ample room for close engagement with shooting technique, significant details within the widescreen frame (the bundle, for example), characterisation (Kay's materialism, or lack thereof), themes (town versus farming country), and narrative development (the unorthodox encounter with Calder). The admittedly brief comments of Barr and Perkins have prompted Bordwell, Cossar and Patrick Keating to revisit this scene and consider how widescreen cinema altered staging, narrative and other aspects of film style.²⁷¹ On the other hand, specific questions about the extent of stylistic change in widescreen films is less important in Barr's essay. As John Gibbs and Douglas Pye note in their

²⁶⁹ V.F. Perkins, 'River of No Return', Movie, 2 (September 1962), p. 18.

²⁷⁰ Barr, 'CinemaScope', p. 11.

²⁷¹ David Bordwell, 'Widescreen Aesthetics and Mise en Scene Criticism', *Velvet Light Trap*, 21 (Summer 1985), 18-25; Cossar, *Letterboxed*, pp. 101-19; Patrick Keating, *The Dynamic Frame* (New York: Columbia University Press, 2019), pp. 270-71.

own analysis of Preminger's widescreen style, Barr's timely intervention was partly motivated by the contemporary orthodox focus on close-ups and virtuoso editing, emblematised for Barr by negative responses to widescreen in the writings of Roger Manvell, Gavin Lambert (*Sight & Sound*) and George Kaplan (*Scene*).²⁷² For Barr, the subtlety of the wide riverbank shot in *The River of No Return* offers the main justification for analysis. Directing techniques, such as long takes and lateral staging, elevate the auteur status of Otto Preminger, Vincente Minnelli, Nicholas Ray and other Hollywood figures considered insignificant in the eyes of others.²⁷³

Subsequent research has sought to expand on Barr's evaluative approach to widescreen style, aiming to distribute their critical attention more evenly over a handful or large sample of films. Taking a comparative-typological approach to film style, Harper Cossar aims to nuance what he describes as 'the canonical thinking with regard to widescreen's influence - longer takes, more lateral framing, fewer close-ups', as signified by Barr's study.²⁷⁴ Cossar confines his analysis of 1950s CinemaScope films to a set of techniques (close-ups, camera angle, etc.) within opening sequences, interior dialogue, 'outdoor vistas', and moving shots directed by Preminger, Frank Tashlin, Nicholas Ray and Douglas Sirk. These parameters provide the template for his fine-grained comparison of directing styles in Hollywood Westerns, comedies, and melodrama films, exceeding the bounds of Barr's more targeted critical motivations. In Cossar's words, his typology 'allows a consistent analysis across the board, not simply doting on scenes of attraction or spectacle'.²⁷⁵ Besides its consistent treatment of varied sequences, Cossar's approach is noteworthy for its attention to film genre, an issue to which I will now turn.

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²⁷² John Gibbs and Douglas Pye, 'Preminger and Peckinpah: seeing and shaping widescreen worlds', in *Widescreen Worldwide*, ed. by Belton, Hall, and Neale, pp. 72-73. An earlier version of Barr's essay was printed as 'Wider Still and Wider', *Motion* (Summer 1961), 30-33.

²⁷³ See also, Bordwell, 'Mise en Scene Criticism', pp. 18-25. For an alternate view of Barr's CinemaScope essay in relation to his immediate critical circle, see John Gibbs, *The Life of Mise-en-scène: Visual Style and British Film Criticism, 1946*–78 (Manchester: Manchester University Press, 2013), pp. 223-235.

²⁷⁴ Cossar, *Letterboxed*, p. 97.

²⁷⁵ Ibid., p. 100.

The stylistic comparison of widescreen films has proven to be a complex issue for film scholars because of the need to research minute changes at different layers of generality, from the key sequence to several films grouped by format, genre or director. On the one hand, the concept of genre provides a leaping board for broad-level style analysis because of its immediately recognisable spatial iconographies which span a great number of films. For example, Cossar notes of Sirk's *The Tarnished Angels* (1957) that, 'within the melodrama, widescreen serves the opposite function it serves in the western; the latter allows for open spaces to be marvelled at, while melodrama "happens inside" (here referring to psychological interiority and domestic settings). ²⁷⁶ This immediately provides a clear framework for more detailed scrutiny. One danger here is that we take an overly reductive view of the space of film genres or ignore what Neale refers to as their potential for 'hybdrization and overlap'. ²⁷⁷ This is something which Cossar's approach partly discourages by examining, for example, outdoor vistas in widescreen Westerns *and* melodrama films, whereas a less productive method might base analysis on a narrowly defined taxonomy of genre conventions, only to then confirm the value of these predetermined categories. ²⁷⁸

To understand how VistaVision technology may have interacted with genre conventions, we need to scale back our analysis from the sequence to the film's broader structure and to compare this with other examples. Cossar provides a highly specific study of how certain techniques are used in common scenarios present in multiple genres. It is not within the scope of his exacting typology and selection of films to consider how these various elements interrelate in terms of their exact frequency (is the close-up statistically less common than other shot scales in the 1950s Western?), or porousness (at what point do outdoor vistas become

²⁷⁶ Ibid, p. 159.

²⁷⁷ Steve Neale, *Genre and Hollywood* (London: Routledge, 2000) p. 210. On taxonomic genre criticism, see Tom Ryall, 'Genre and Hollywood', in *The Oxford Guide to Film Studies*, ed. by John Hill and Pamela Church Gibson (Oxford: Oxford University Press, 1998), pp. 327-38.

²⁷⁸ For example, what Cossar calls the action-melodrama 'generic hybridity' of *The Tarnished Angels*: Cossar, *Letterboxed*, p. 173.

incomparable set-pieces, or 'scenes of attraction' to be doted on?). These bigger questions could then show how film genres overlapped or changed on a structural level to incorporate widescreen technology, contrasting with Cossar's fine-grained examination of evolving directing techniques within a fairly static conception of genre conventions: 'the manifestation of the author's "voice" within standard generic formulas'.²⁷⁹

Other scholars use statistical analysis to record and compare stylistic change in widescreen films, using a range of sample sizes. For example, Roggen's statistical study of Anthony Mann's CinemaScope Westerns has shown that focusing on an individual director and genre brings to light longer average shots lengths (ASL) than had been detected in Salt's study of the broadest trends in film technology and style. 280 Roggen is also able to contextualise Mann's style through his observations about film genre and formats, for example, 'CinemaScope musicals, melodramas, and crime films tend to have a higher ASL, whereas westerns, adventure films, and science fiction are cut more rapidly', or that 'the western genre often urged filmmakers to make abundant use of the very long shot'. 281 Turning to sequence analysis, Roggen shows how Mann's characteristically longer takes and long shots incorporate staging, framing, lighting, set design, colour, and music to guide the eye and ear within abandoned frontier towns, forts and cattle ranches (or how the very wide close-up retains these elements in the background). Idiosyncratic directing techniques are thereby situated within genre conventions and spatial iconographies in mutually illuminating ways. Roggen does not compare these techniques with those of other directors as does Cossar, though acknowledging the frequency of different shot types does lead him to show how film genres might structurally correlate in the widescreen era.

²⁷⁹ Cossar, *Letterboxed*, p. 100

²⁸⁰ Roggen, p. 28.

²⁸¹ Roggen, pp. 29, 33

My comparative analysis harnesses the strengths of sequence, genre, and statistical analysis while also differing from those approaches described above in vital ways. Previous scholarship has overwhelmingly attended to the CinemaScope format as the prime example of widescreen aesthetics. Two VistaVision films feature in Roggen's sample of CinemaScope, though not enough to make conclusive comparisons between the two widescreen formats. In his study of anamorphic films released between 1953-65, Marshall Deutelbaum emphasises that 'none of my conclusions about the basic compositional strategies common to anamorphic films apply to VistaVision', as the latter's stylistic peculiarities requires separate analysis.²⁸² By basing my comparison around early CinemaScope and VistaVision, the two main release formats of the early to mid-1950s, I respond definitively to academic hypotheses regarding the VistaVision format. This approach also represents an important historiographic intervention. Without comparative reference points, the CinemaScope format can seem like a shorthand for widescreen style in general, in this way ignoring the technological diversity of production and exhibition in the 1950s. For example, Barr's essay excludes VistaVision in favour of dichotomy, arguing that CinemaScope and masked (1.85:1) widescreen films, while breaking with 1.33/7:1, ultimately offer less participatory realism than 'the really big pictures' in Cinerama and 70mm roadshows.²⁸³ By reincorporating VistaVision, we can judge whether widescreen cinema's stylistic heterogeneity exceeds binary contrasts between Academy/wide, or general release/roadshow-oriented formats, and basing our arguments on the dynamics of production differentiation instead of teleological evolutionary theories of cinema.

The extent of stylistic change in this period can be better gauged by showing how genres accommodated technological change and transnational influence. Previous scholarship has largely confined itself to established Hollywood genres, viewing these in terms of their

²⁸² Marshall Deutelbaum, 'Basic principles of anamorphic composition', Film History, 15.1 (2003), 72-80 (p. 73). ²⁸³ Barr, 'CinemaScope', p. 4.

conventions rather than potential transformations in the widescreen era. Genre conventions are then used as the familiar background against which directing styles can be evaluated or distinguished from those films marked as routine fare, including the Hollywood epics such as *The Robe* which bear a strong commercial connection with widescreen technology. One advantage of researching the diffusion of VistaVision is that this has involved embracing a greater variety of non-canonical widescreen texts and popular genres in Britain and the USA. Film genres are active and reactive, having a fundamental influence on the space of a film and able to shapeshift in response to historical changes including technological innovation. Film genres not only engage with general areas (outdoor versus indoor) but sub-generic sites (the backstage musical and road comedy) and diegetic spaces (the Western ranch, homestead and jail). Moreover, there are genre traditions and cycles associated with national cinemas. Within my sample, I have wanted to show how film genres cross-fertilize and/or complicate the usual academic correlations between widescreen, spatial iconography and national cinema in accordance with VistaVision's diffusion and varied use.

The above concerns are reflected in my chosen films. My initial comparison of CinemaScope and VistaVision shot data is informed by the arguments of Barr, Bordwell and John Belton that format differences are most clearly foregrounded in early examples, either because they were curated by the studios or used limited technology and large aspect ratios. Notably, all five CinemaScope films sampled used the 2.55:1 aspect ratio (later restricted to 2.35:1) and early lens models by Chrétien (*The Robe* and *How to Marry a Millionaire*) or Basuch & Lomb. If there are shot scale/length distinctions to be made between the two formats due to their different aspect ratios or technological constraints, this sample of ten early films gives a strong chance of revealing these. My next group of films instead focuses on diachronic change in the frequency and use of close-ups in VistaVision up to 1961. I illustrate these developments with reference to American Westerns, as these span the full period of

VistaVision film production. My third statistical selection of films revolves around British comedies to track long shots and the influence of American VistaVision techniques. No data was recorded for my fourth section on international travelogues, which are unavailable to view, and for which I have aimed to reconstruct and examine key sequences using archived continuity scripts. My next section begins with an explanation of the type of data recorded for this study.

Early CinemaScope and VistaVision Films

To pinpoint where VistaVision might diverge from current interpretations of widescreen style, I collected data on the first five CinemaScope films (2.55:1) for analysis alongside the five earliest VistaVision films that are also available to view in the aspect ratio of 1.85:1. Each shot was categorised according to a conventional body-scale system, based on the extent to which the actor is visible within the frame:

- Big close-up (BCU): only the head is visible within the frame.
- Close-up (CU): head and shoulders only.
- Medium close-up (MCU): upper body down to chest.
- Medium shot (MS): upper body down to hips.
- Medium long shot (MLS): upper body and legs down to shins.
- Full shot (FS): the full height of the actor fits within the frame.
- Long shot (LS): the frame is up to three times as tall as the actor.
- Very long shot (VLS): more distant than long shots (e.g., a distant dot in frame).

Typically, statistical studies have not distinguished between the latter two types of long shot. As scholars have often commented on the extreme depth of VistaVision, however, I have felt it necessary to take up Salt's suggestion that future analyses could subdivide the standard

category of 'long shot' into full shots and very long shots of the type described above.²⁸⁴ Shots in which an actor's head was not visible, such as inserts or empty landscapes, were recorded as 'other'. To account for the fact that some films inevitably have more shots than others, I also normalised these results to a figure that represents the frequency of this shot scale type were it to occur every 500 shots, for more proportionate comparison (the original unconverted data can be viewed in my Appendix). The overall number of shots was tallied and divided by the running time, excluding opening and closing titles, to yield an average shot length (Table 5).²⁸⁵

On first impression, early VistaVision films (after table partition) appear to deviate little from the first CinemaScope films. The mean figure for VistaVision ASLs (10.7 seconds) is only slightly quicker than that of early CinemaScope films (13.4 seconds). The first films in each format - *White Christmas* and *The Robe* - almost match in average shot length, both clearly exceeding the 10-11 second range which Bordwell, Staiger and Thompson regard as typical for sound films made in Hollywood before 1960.²⁸⁶ Not all films uphold the traditional view that widescreen cinema encouraged longer takes, however. As can be glimpsed in Table 5, and contextualised with additional data, VistaVison films with particularly slow cutting are those with extended musical sequences such as *White Christmas* (15.1 seconds) and *The Seven Little Foys* (Melville Shavelson, 1955) (13.4 seconds), or drama with protracted dialogue such as *Richard III* (Laurence Olivier, 1955) (22 seconds). By contrast, VistaVision Westerns including *Run For Cover* (5.9 seconds) and later *Last Train From Gun Hill* (John Sturges, 1959) (7.4 seconds), or comedies with calamitous action such as *The Geisha Boy* (Frank Tashlin, 1958) (7 seconds), are cut twice as fast on average. Similarly, we can find

²⁸⁴ Salt, Film Style and Technology, p. 142.

²⁸⁵ Average shot lengths were rebalanced for PAL DVDs as they have a faster frame rate of 25 FPS (compared to NTSC and BluRay). With the exception of the additional long shot category, my methods follow those outlined by Barry Salt, 'Statistical Film Analysis (Basic Concepts and Practical Details)' http://www.cinemetrics.lv/salt.php [accessed 1 September 2019].

²⁸⁶ Bordwell, Staiger, and Thompson, p. 62. In a random sample of 100 films from 1952 to 1957, Barry Salt also calculated an ASL of 11 seconds: Salt, *Film Style and Technology*, p. 317.

CinemaScope films released within weeks of each other which alternately uphold and refute the common conception of slow cutting in widescreen, from the longueurs of dialogue in *How to Marry a Millionaire* (21.3 seconds) to the rapidly cut battle sequences in the Arthurian adventure, *Knights of the Round Table* (6.5 seconds). While the technology itself offers some explanation for fluctuations in cutting in these early films, VistaVision's outliers also strongly cohere to Cossar and Roggen's expectations regarding film genre and style.

Table 5. Shot Scale (per 500 shots) and ASL (secs) in Early CinemaScope and VistaVision.

Film	Date	A	В	C	M	M	M	F	L	V	Oth.
		S	$\overline{\mathbf{C}}$	Ü	C	S	L	S	$\overline{\mathbf{S}}$	Ĺ	
		L	U		U		S			S	
The Robe	1953	15.8	0	13	43	120	96	140	66	9	12
How to Marry a Millionaire	1953	21.3	0	14	91	107	46	121	36	20	65
Beneath the 12-Mile Reef	1953	9.9	0	16	34	116	106	103	60	27	39
King of the Khyber Rifles	1953	13.8	0	9	26	134	57	135	113	13	13
Knights of the Round Table	1953	6.5	0	13	113	97	78	106	74	3	17
White Christmas	1954	15.1	0	5	45	202	90	87	42	5	24
Run For Cover	1955	5.9	0	4	65	142	103	70	85	21	8
Strategic Air Command	1955	10.9	0	16	114	128	64	43	36	14	86
The Far Horizons	1955	8.3	0	10	44	97	89	119	96	35	11
The Seven Little Foys	1955	13.4	0	15	43	99	99	130	80	5	30

Turning to the extreme poles of the shot scale spectrum, early VistaVision and CinemaScope films again seem to counterbalance one another. On average, the most distantly shot films have a similar amount of combined very/long shots: *King of the Khyber Rifles* (Henry King, 1953) (113 LS/13 VLS), filmed in CinemaScope and set in colonial India in the nineteenth-century, and *The Far Horizons* (Rudolph Maté, 1955) (96 LS/35VLS), a Western

filmed in VistaVision. High averages for very long shots which showcase shooting locations are echoed by VistaVision camerawork in the biblical epic *The Ten Commandments* (35 VLS), the comedy road movie *Hollywood or Bust* (30 VLS), and Rank's desert war film *The Black Tent* (18 VLS). Meanwhile, films with the highest average close-ups for VistaVision and CinemaScope overlap with *Strategic Air Command* (16 CU) and *Beneath the 12-Mile Reef* (Robert D. Webb, 1953) (16 CU), as they do for medium close-ups for *Strategic Air Command* (114 MCU) and *Knights of the Round Table* (113 MCU). Interestingly, the most polarised VistaVision film in terms of shot scale is *Strategic Air Command*, due to its combination of close-ups and distant aerial shots (marked as 'Other'). As described in Chapter 2, promotion drew attention to this film's dually appealing intimacy and empty spaces, enabled by its military melodrama plotline.

More conventional than CinemaScope in pacing and similar in the extremes of its shot scale, did VistaVision present an alternative option to filmmakers upon its arrival in 1954, or just more of the same? In order to discern statistical differences between CinemaScope and VistaVision, we need to consider the mid-range of shot scales which I have so far excluded from discussion. The framing of actors has been seen as a distinguishing trait of both formats. Paramount's insistence on marketing VistaVision as having a 'big-screen' rather than widescreen aspect ratio has led scholars to comment on the height of VistaVision as an alternative to CinemaScope's horizontal staging. John Belton writes:

The first few VistaVision films, *White Christmas* and *Strategic Air Command*, adhered to this [vertical] aesthetic, stressing image height rather than width. Whereas characters in CinemaScope films tended to recline on sofas or easy chairs (*How to Marry a Millionaire*) or sprawl on the ground (*Rebel Without a Cause*), those in VistaVision

films tended to sing and dance (White Christmas) or stand at attention (Strategic Air Command).²⁸⁷

While Belton's observation certainly applies in specific shots, in Table 5, we can see that full shots of upright actors in fact appear more common in CinemaScope than in the VistaVision titles he mentions. VistaVision did not encourage full shots as a general tendency, even if some VistaVision filmmakers were able to imbue their mise-en-scène with a greater sense of verticality by other means of camera angle and staging actors within towering settings.

Dialogue sequences are mostly responsible for variances in shot scale between the two major widescreen formats. In early CinemaScope films such as *The Robe* (Henry Koster, 1953) and *How to Marry a Millionaire* (Jean Negulesco, 1953), three to six actors are regularly seen communicating across the wide frame in full shots before the camera moves in for more conventional groupings and shot-reverse-shot dialogue (figures 23 and 24).²⁸⁸ In VistaVision, the number of medium/medium long shots more often *matches or outweighs* full shots. This primacy of medium/medium long shots is a distinctive feature of early VistaVision films relative to CinemaScope. As the format was equipped with a wider range of spherical lenses and narrower aspect ratio than early CinemaScope, VistaVision encouraged the more intimate framing of up to four speakers per shot. For example, *White Christmas* and *Strategic Air Command*, with their couple-driven narratives, make repeated use of four and two shots (figure 25 and 26).

In a four-part dialogue sequence from *White Christmas*, shots are taken down the length of a narrow train carriage set. As noted in Chapter 3, a number of *White Christmas* sets were constructed with frame sizes as narrow as 1.66:1 in mind, before Paramount standardised on

²⁸⁷ Belton, *Widescreen Cinema*, p. 126.

²⁸⁸ This CinemaScope technique is also known as 'clothesline' staging: Bordwell, *Poetics of Cinema*, p. 307.

1.85:1. Shot scales play on these cramped conditions for humour. We begin the sequence with a full shot of Bob (Bing Crosby) scolding Phil (Danny Kaye) for boarding the same train as the Haynes sisters, Betty (Rosemary Clooney) and Judy (Vera-Ellen). Bob threatens Phil that he will go and look behind the door at the end of the train carriage for the sisters, in a diagonal medium long shot that allows for Bob to be framed on the left with the door visible on the right. Having primed the empty space for action, Berry and Judy open the door and approach. At this point we move into a medium long shot for socially awkward dialogue, retaining a slight diagonal so that Phil can be shown watching on in boyish glee (Figure 25). The camera then cuts between a medium close-up of Phil and medium shot of Bob with the sisters to highlight their subliminal exchanges, before deploying a full shot to show the group signalling for drinks from the barman at the frame edge. As the group sit down at a table together, Phil says 'this is cosy, boy-girl, girl-boy', verbalising the sequence's spatial comedy, which pivots on medium and medium long shots.

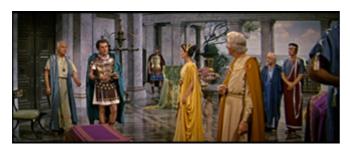


Figure 23. The Robe: large group dialogue in FS.

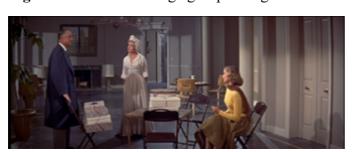


Figure 24. How to Marry a Millionaire: FS.



Figure 25. White Christmas: MLS.



Figure 26. Strategic Air Command: MS.

Contrary to the view that VistaVision favoured full shots, the flexibility of the format encouraged filmmakers to retain more intimate shot scales and combine this with new widescreen framing practices in dialogue. A wider aspect ratio than Academy allowed for empty spaces to be primed around the characters, while being narrower than CinemaScope, tighter framings could be used. More frequent cuts during VistaVision dialogue also help to account for the format having a slightly quicker ASL than early CinemaScope films like *The Robe*. In the sequence where Marcellus (Richard Burton) enters in full shot to deliver his despatches before a group of nine assembled officials and guards (figure 23), the shot runs for over a minute before cutting. Both dialogue sequences which I have described begin with frontal staging (of different complexity) before deploying shot-reverse-shot techniques.

Looking elsewhere for general signs of VistaVision's uniqueness, scholars have commented on its high-resolution close-ups and potential to relieve actors of the unbecoming facial 'mumps' evident in early CinemaScope films. Sheldon Hall suggests that VistaVision, 'a format which could satisfactorily sharpen and enlarge the essential detail in close-up, and for combination in montage, might well have been appealing' to Alfred Hitchcock, whose penchant for reaction shots was noted in Chapter 2.²⁸⁹ Peter von Bagh puts the focus on actors in VistaVision films including Cary Grant, James Stewart, Jerry Lewis and Marlon Brando, writing that the latter's '*One-Eyed Jacks* sums up – both in its wonderful gallery of characters and in Brando's own somehow displaced Rio – how great VistaVision was in relation to acting: persons [...] and environments were defined with an exactitude that was breath-taking, at best a very special art of close-up'.²⁹⁰ The survival of the close-up into the widescreen era was very much on Paramount's mind when it launched VistaVision. As Loren Ryder argued in one of his several trade presentations: 'If we are to gain full advantage of the large screen, we should

²⁸⁹ Sheldon Hall, 'Dial M for Murder', Film History, 16.3, (2004), 243-55 (p. 245).

²⁹⁰ Peter von Bagh, 'The Dream of VistaVision', in *Cinegrafie*, 17 (2004), 315-23 (p. 323).

shoot with more scope and we should work in longer shots. But we should be able to use close shots when required and without a fuzzy background'.²⁹¹ Ryder's concern about using close-ups without focal fuzziness or diffused light is very much in keeping with his studio's promotional discourse around the sharpness of VistaVision.

Judging from the results in Table 5, the limitations of CinemaScope did not completely prevent filmmakers from incorporating very intimate shots. The subsequent introduction of VistaVision did not then lead to an upsurge in the use of widescreen close-ups, let alone bigclose ups. The discrepancy between what types of shot are noticed and their statistical frequency in widescreen films does not invalidate previous observations, even if these shot types might occur less or more often than we expect given the attention paid to them. Rather, it points toward some of the relative merits of statistical versus close analysis. The numbers should not override our fine-grained impressions, which are often needed to make sense of these statistics in significant scenes. On the other hand, the statistics set some useful parameters for extrapolating general trends from particularly rewarding textual examples. Gunning reflected on the value of holding these two approaches in view at his keynote lecture for the cinemetrics conference, 'A Numerate Film History?', at the University of Chicago in 2014:

It always worries me a little bit that people looking at lists of shots and the length of shots, and comparison of those, will begin to see patterns that possibly have very little to do with their own experience. On the other hand, the hope, the expectation, is that the numbers will allow us not only to be precise in describing our experience, but to look at it from another point of view - to test it, in a certain way, and to relate it to patterns of numbers that appear.²⁹²

²⁹¹ MHL, Loren L. Ryder Papers, box 5, folder 45, Ryder script for presentation to AMPAS and Industry Council, 11 December 1955, p. 8.

²⁹² Tom Gunning, 'Your Number is Up! Questioning Numbers in Film History' (1 March 2014)

For Gunning, analysis begins with a moment-by-moment experience of the film which is then checked against the data. It is useful to then select individual sequences which might shed light on the statistics, which do not discern texture from type, or quality from quantity. In this way, each method offers its own kind of descriptive precision, as further examples reveal.

The statistics show the rarity of big close-ups and relative infrequency of close-ups in early VistaVision and CinemaScope films, but they do not account for differences of aspect ratio which inform our visual experience of the close-up in each format. The trade definition of a Cinemascope close-up was itself contested in the early 1950s: close-ups were either unnecessary, as facial responses could be gleaned from more distant shot scales on the big screen, or enhanced, because two faces and backgrounds would fit. While commentators including Jean Cocteau and André Bazin may have learned to like 'air around faces' in CinemaScope close-ups in *The Robe* (figure 27), the same airiness would have dissipated the density and claustrophobia of Robert Mulligan's sideways portrait of Anthony Perkins, as the struggling baseball player Jimmy Piersall in *Fear Strikes Out* (1957) (figure 28).²⁹³





Figure 27. The Robe: a 'contextual' CU (2.55:1). Figure 28. Fear Strikes Out: CU (1.85:1).

In CinemaScope, we are able to view Marcellus' confrontation with Caligula (Jay Robinson) in the social context and full view of Rome's high society, in soft-focus behind. In

²⁹³ André Bazin, 'CinemaScope: The End of Montage', in *André Bazin's New Media*, ed. and trans. by Dudley Andrew (Oakland: University of California Press, 2004), pp. 292-98 (p. 296).

VistaVision, Perkins' widescreen close-up is used almost as a special effect, capturing the melodrama of taut lines, shadows and sweat in extreme detail at moments of psychological crisis. Another pattern supported by existing scholarship is that comparing VistaVision films across genres will yield stronger comparative evidence of stylistic change. Drawing on these different methods, my next section tracks the space of the VistaVision Western in relation to the altering use of close-ups from the late 1950s.

American Westerns

During the final moments of the *The Far Horizons*, the close-up vies with the film's hitherto visually dominant landscapes for critical attention. The Shoshoni tribeswoman Sacajawea (Donna Reed) is parting company with Lieutenant William Clark (Charlton Heston) after their meeting and becoming infatuated during a long U.S. military expedition from Washington to the Pacific, in the years 1803-06. Having returned to the White House to conclude the campaign, Sacajawea encounters Clark's former fiancée Julia (Barbara Hale) and begins to feel like an intruder. Her letter of political goodwill and personal farewell is discovered and read to Clark, initially by Julia in the White House, and then by Sacajawea in voice-over as we lap-dissolve to the latter's carriage and then an interior medium shot. The camera dollies-in to a close-up on Sacajawea as her voice-over continues, telling Clark to remember her ('when you see a river of white water dancing in the sun, or clouds hanging high above the mountains') and wishing him happiness in the future, even if their memories of one another fade. A tear runs down her cheek as the camera cuts to a brief landscape shot of a river and mountains under a blue sky, over which the end title appears.

In his essay, 'The Evolution of the Western', Bazin questioned whether the widescreen would add anything 'decisive' to the genre given its already 'wide open spaces', adding that 'the most convincing examples of the use of CinemaScope have been in

psychological films' such as the melodrama *East of Eden* (Elia Kazan, 1955).²⁹⁴ Bazin concludes, 'the western, whether in its standard proportions, in VistaVision, or on a superwide screen, will remain the western we hope our grandchildren will still be allowed to know'.²⁹⁵ Several post-war Westerns home in on characters in a manner that Bazin might have associated with widescreen melodrama. In particular, the above scene from *The Far Horizons* contradicts our statistical view of the widescreen Western being littered with long shots of landscapes, instead dwelling on an introspective close-up which lasts over a minute before giving a brief glimpse of a natural vista. The nuanced tightening of space from medium shot to close-up within one long take is also something that falls outside the cleancut categories required for shot scale data, rewarding closer sequence analysis.

In this section, I will compare two sequences from the widescreen Western that pivot on the genre's proximity to open landscapes but also withhold this through close-ups or other means. Finer distinctions can be then made about the diegetic space of the films and changes in VistaVision shooting technique over time. For example, there is the fundamental distinction between outdoor/indoor areas, such as the voice-over description of rivers and mountains that *The Far Horizons* uncomfortably elides with the racial identity of Sacajawea (who is portrayed by a white actress). Alongside these are recurring sites that resonate within the fictional world of the film, including the final shot of the fir-lined river which Sacajawea and Clark navigated in earlier scenes, now memories. In *The Searchers* (John Ford, 1956) and *One-Eyed Jacks* (Marlon Brando, 1961), the recurring space of the porch offers a threshold between the familiar iconographies of hearth and wilderness in late nineteenth-century America. Scale, length and other shot elements are radically different, however, contradicting Bazin's predictions about the unchanging 'wide open spaces' of the widescreen

²⁹⁴ André Bazin, 'The Evolution of the Western', in *What is cinema?*, 2 vols, ed. and trans. by Hugh Gray (London: University of California Press, 2005) II, pp. 149-157 (p. 157).
²⁹⁵ Ibid., p. 157.

Western into the late 1950s.²⁹⁶ It also provides an opportunity to compare and recontextualise *The Searchers*, a canonical text, with a recently restored Western, *One-Eyed Jacks*.

The opening sequence of *The Searchers* that I would like to analyse begins with a door opening onto the wilderness and ends with Ethan (John Wayne) walking over the porch and into the family home. Shot scale, length and other details convey the significance of Ethan's small journey over the threshold. The camera follows Martha (Dorothy Jordan) outside, transitioning from an interior medium shot of her back to the very long shot and pan which holds Ethan and the desert in focus as we come to a standstill. Martha places her hand on the porch pillar which is positioned centre-fame in the immediate foreground. It is by far the longest shot in the sequence (19 seconds), gradually registering the massive background and the small figure of Ethan within it. The steady pacing is indicative of both the gravity and peculiarity of the encounter. As becomes clear once inside the home, Ethan is returning from fighting for the Confederacy, but all are aware that the war ended three years ago. It is also during this ensuing scene that we learn, through glances and gestures, of the unspoken desire between Ethan and his brother's wife. As reflected in the steady shot lengths, the characters require a moment of pause to recognise the approaching figure (the first line of dialogue is the question, 'Ethan?'), whose sudden appearance is unforeseen and yet has been longed for by Martha.

The family fold out onto the porch in full shot and subsequent medium shots show them conversing in small groups. Lucy Edwards (Pippa Scott) is shown standing on the wooden boards with her dog in full shot. By contrast, Ethan is framed alone on horseback against the wilderness in four shots of increasingly intimate scale, from very long to medium shot, as he approaches. Whereas the sequence begins by moving out into the wilderness, the shots of Ethan are static and taken from the same camera position: they must 'wait' for Ethan, like Martha.

²⁹⁶ Ibid., p. 157.

The camera positioning is also indicative of the familial confines, at the foot of the porch by the horse-pitching posts. Camera and home open themselves up to the surrounding landscape but do not roam freely, only receiving from it. The static shot of Ethan emerging takes in the beauty of the scenery by being inertly exposed to it, just like the homestead.

Shot scale and camera positioning establish and puncture the divisions between inside and outside, home and desert, as the outsider Ethan encroaches upon these spaces. As Ethan finally shakes hands with his brother Aaron (Walter Coy) in medium shot, he looks up toward the family. We cut to Ethan and the family standing before the house in long shot, with the pitching posts again in the foreground, mirroring the previous camera position. It is also the first time that Ethan is seen within the context of a domestic setting and this is registered by the fact that he does not step into the house immediately. Martha greets him with 'welcome home' at the foot of the steps in medium shot, followed by a long shot of her leading him up the stairs and back into the darkened house. Significantly it is Ethan, and not Martha's husband, who follows immediately behind her. The film's opening shot also diminishes the husband's physical and familial presence by withholding his entrance. Martha is staged on one side of the porch pillar and in ambiguous relation to Ethan, who is framed approaching next to her.

This opening sequence is so closely associated with Ford's Western oeuvre and familial themes it has not been directly compared with other VistaVision films on the basis of shot scale or length. Michael Budd testifies to the kinship between Ford's authorial vision, the opening of *The Searchers*, and its counterpart at the end when Ethan leaves the homestead behind:

The encounter of home and wilderness is more than a theme in Ford's Westerns: it is a central, formative viewpoint, a way of looking at the world. The viewpoint is communicated visually by a *frame* within the larger frame. Shots looking through

doors, through windows, gates, porches, and canopies bring indoors and outdoors into juxtaposition.²⁹⁷

Given this emphasis on the doubling of frames, it is strange that Budd does not acknowledge its material expansion with Ford's adoption of VistaVision for *The Searchers*. The movement through the doorway and stripping away of the 'frame within the larger frame' during the opening sequence is all the more noticeable because of the transition from a small aperture to the expansive VistaVision frame. Similarly, Barr describes a widescreen technique in *Spartacus* (Stanley Kubrick, 1960), where the contrast between 'openness and the cooped-up images showing the gladiators' existence helps express the general contrast between luxury and oppression'.²⁹⁸ Unlike the cramped horizontality of *Spartacus*' training camp, VistaVision's upper and lateral frame edges recede to reveal the tall and wide landscape in *The Searchers*. The juxtaposition of space does not also mean contrast in tone, as in Barr's example. The camera's entry onto the porch in *The Searchers* is more ambivalent because it shows that the space of the Edwards' family home is contiguous with an environment that is both beautiful and harsh, and occupied by enigmatic outsiders. This vulnerability of the home will be the cause of its ruin later in the film.

In addition to an example of Fordian space, the opening sequence of *The Searchers* encapsulates aspects of 1950s widescreen space. The scale and length of shots resemble typical aspects of early VistaVision and the Western genre. Long takes are used selectively and less often than in early CinemaScope, scanning the massive landscape which is shown in very/long shots. As expected, medium shots are the most frequent shot type for dialogue, used to group the family in twos as they exchange brief words, contemplate and greet Ethan. Like

²⁹⁷ Michael Budd, 'A Home in the Wilderness: Visual Imagery in John Ford's Westerns', in *The Western Reader*, ed. by Jim Kitses and Gregg Rickman (New York: Limelight Editions, 1998), pp. 133-48 (p. 134). ²⁹⁸ Barr, 'CinemaScope', p. 9.

CinemaScope, shot-reverse-shot is eschewed in favour of frontal staging for dialogue. The most intimate shot is a medium close-up of Aaron, as he steps down from the porch, while close-ups are avoided entirely, reflecting its minimal usage in early widescreen. *One-Eyed Jacks* inverts a number of these techniques.

One-Eyed Jacks starred and was directed by Marlon Brando under the name of his filmmaking company, Pennebaker Productions, with distribution by Paramount. Like The Searchers, which was the first film produced by C. V. Whitney Pictures, with distribution by Warner Bros., One-Eyed Jacks fits the general trend of studios' enrolling independent expertise in the 1950s. At Paramount's great expense, Brando's film had a convoluted production process as Kubrick abandoned his directing role and filming was delayed several times by Brando.²⁹⁹ Home viewing copies of One-Eyed Jacks were unavailable until its restoration by the Film Foundation and premiere at the Cannes film festival in 2016, in the original aspect ratio of 1.85:1. Like Ethan, Brando's Rio emerges from the landscape and crosses over the threshold into the home of another, only this time, we are aware of the principal characters and the exact nature of their relationship. One-Eyed Jacks opens with a failed bank heist in 1880s Mexico, after which the perpetrators Rio and Dad Longworth (Karl Malden) are cornered and decide to separate. After Longworth goes to fetch horses for their getaway, Rio is captured and told that Longworth has abandoned him to imprisonment in Sonora. Five years later, Rio escapes prison with Chico (Larry Duran) only to discover that Longworth is prospering as a Sheriff in Monterey California, where Bob Amory (Ben Johnson) is planning another bank robbery. The coastal setting adds suspense to Rio's vengeful return to Longworth, during which the rhythmic crashing of the waves can be heard in the background.

Extreme shot scales heighten tension. When Rio momentarily leaves Bob to track down Longworth's seaside home, he is filmed on horseback in very long shot through the narrow

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²⁹⁹ Edward Buscombe, *One Hundred Westerns* (London: British Film Institute, 2006), pp. 146-48.

lattice of the porch railings. Longworth is sleeping on a hammock in the foreground. A medium long shot shows Longworth's wife, Maria (Katy Jurado), humming tunefully and looking out of the front window. As she casually alerts Longworth to their 'visitor', he stirs and looks through the railings, at which point sinister music drowns out the waves. A series of tightening shots show Longworth, in big/close-ups, registering Rio approaching, in very/long shots. Longworth instructs Maria to close the window and hand over his gun, establishing the divide between inside/outside which is also a separation of past criminal/present family ties.

Stepping down from the porch to find Rio dismounting, the two talk by the horse-pitching posts. While dialogue between Longworth and Maria plays out in a familiar frontal MLS set-up, the tense conversation between Longworth and Rio in shot-reverse-shot reduces this sequence's ASL to a rapid 5.5 seconds. As Rio wishes to rob the town bank with Bob, and so does not reveal that he is fully aware of Longworth's betrayal, he is eventually welcomed onto the porch to drink tequila. Budd has written of Ford's Westerns that, 'placed between enclosure and vast space, porches are a characteristic location for mediating heroes'. Similarly, for Brando, the porch offers an opportunity for Longworth and Rio to dissect one another over drinks before entering the home itself, which involves both characters pretending that they have no current reason to fight one another.

One-Eyed Jacks presents several contrasts with The Searchers and early VistaVision, as determined by the narrative scenario and shooting technique. Unlike The Searchers, the sequence revolves around the encounter between the two men as Longworth's family is barricaded inside. The meeting of Rio and Longworth is pervaded by their past ills, whereas the initial appearance of Ethan in The Searchers is at worst ambiguous. The appearance of Rio in these very long shots differs to the opening of The Searchers, thanks to contrasts in framing and shot scale. The porch of One-Eyed Jacks belongs to a privileged Sherriff and is adorned

³⁰⁰ Budd, p. 137

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with a smooth painted hand railing, whereas the threshold in *The Searchers* is made of bare logs. Ford frames the shot at a diagonal angle so that the porch roof juts out at one end, creating a greater sense of depth. Compared to the naturalistic and airy framing of Martha and Ethan, Rio's materialisation between the smooth railings foreshortens the distance between him and Dad Longworth because they appear flat when framed head-on (figures 29 and 30). Big close-ups not seen in *The Searchers* or early VistaVision preclude spatial context in *One-Eyed Jacks*, overemphasising Rio's nearness to Longworth (figures 31 and 32).



Figure 29. The Searchers: Framing Ethan.

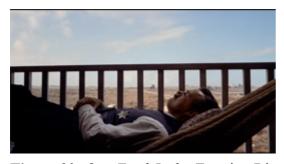


Figure 30. One-Eyed Jacks: Framing Rio.

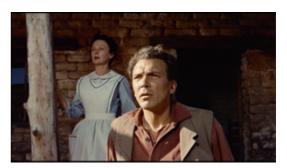


Figure 31. The Searchers: MCU of Aaron.



Figure 32. One-Eyed Jacks: BCU of Dad.

In addition to parting with early VistaVision, the elaborate framing, rapid shot-reverse-shot dialogue, and ten big close-ups that we see in *One-Eyed Jacks* reinforce the trends that have been observed in anamorphic films of the 1960s. Bordwell states that, between 1956-60, fewer CinemaScope films tend to surpass the ASL of 13 seconds, while 'directors of the 1960s began cutting faster and dwelling on big faces'.³⁰¹ Interestingly, John Sturges also began using

³⁰¹ Bordwell, *Poetics of Cinema*, p. 322.

more close-ups and faster average cutting over the course of his two VistaVision Westerns in production between 1956-58. Looking further afield, big close-ups of Clint Eastwood and Henry Fonda feature memorably in *The Good, the Bad and the Ugly* (Sergio Leone, 1966) and *Once Upon a Time in the West* (Sergio Leone, 1968), both Spaghetti Westerns in Techniscope (2.35:1). Brando's organisation of scenery may recall what Barr termed an 'orgy of formalism' in the early SuperScope Western, *Vera Cruz* (Robert Aldrich, 1954), but also heralds the planimetric widescreen compositions of New Wave cinema in France and Italy in the 1960s.³⁰² Examining individual sequences can draw out the nuances of general trends in shot scale and length, flagging stylistic elements that differentiate or span formats, genres and national cinemas.

British Comedies

In the previous section, I showed how the VistaVision Western deployed close-ups, long shots and framing to establish different relations between characters and with their fictional environment. While the widescreen Western is closely associated in statistical and close analysis with wide open spaces, I showed how landscapes are just one of several features which the VistaVision format transfigured. There are particular diegetic spaces such as the porch which belong, if not exclusively, to the Western's iconography and themes of home versus wilderness, families and outsiders. Spaces and themes which recur in the genre are useful because they show up historical influences like the adoption of VistaVision and stylistic change. *The Searchers* unravels its landscape in one long take and delicately frames its characters. The more frequent use of big-close ups and formalistic composition in *One-Eyed Jacks* compressed the interspace between home and wilderness, while still retaining familiar narrative tropes of exposure, confrontation and mediation facilitated by these spaces.

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³⁰² Barr, 'CinemaScope', p. 9.

If these stylistic fluctuations in return underline how certain Western spaces are long lasting, what happens when VistaVision travels beyond the national confines of quintessentially American imagery to Britain, where it mixed with spatially diverse genres like the comedy?

Genre studies by Marcia Landy, Robert Murphy and Sarah Street explore and problematise the common association between British cinema, Ealing comedies and realism in the post-war era. 303 Vista Vision and widescreen cinema features only fleetingly within academic discussion of British cinema and genre in the 1950s, and then only dwelling on films that bear a connection to well-known directors such as Bridge on the River Kwai (David Lean, 1957).³⁰⁴ The confluence of Hollywood widescreen technology and Rank's economical production regime in Britain has warranted some comment. At Pinewood, VistaVision was introduced by Rank at a time when the company's austerity economics favoured the commercially tested and low-maintenance comedy genre. Of course, Rank did approve of more high-stakes and technically difficult VistaVision productions such as *The Black Tent* and The Battle of the River Plate. These war films represent Rank's process of selective expansion in the 1950s, during which time six comedies would represent the company's default investment in VistaVision: Doctor at Sea (Ralph Thomas, 1955), Value for Money (Ken Annakin, 1955), Simon and Laura (Muriel Box, 1955), An Alligator Named Daisy (J. Lee Thompson, 1955), The Big Money (John Paddy Carstairs, 1956), and Doctor at Large (Ralph Thomas, 1957). Harper and Porter regard Rank's comedies as a poor match for the scope of VistaVision:

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³⁰³ Marcia Landy, *British Genres: Cinema and Society, 1930-1960* (Princeton: Princeton University Press, 1991); Robert Murphy, *Realism and Tinsel: Cinema and Society in Britain 1938-48* (London: Routledge, 1989); Sarah Street, *Colour Films in Britain: The Negotiation of Innovation 1900-55* (London: British Film Institute, 2012).

³⁰⁴ Landy, pp. 175-76; Street, *Colour Films*, p. 112; Petrie, *The British Cinematographer*, pp. 48-52; Harper and Porter, pp. 209-10; Murphy, *Second World War*, p. 248; Hall and Neale, pp. 182-89.

Not all Rank films that used VistaVision made the most of the medium; *An Alligator Named Daisy, Value for Money*, and *Simon and Laura* (all 1955) were all essentially *Kammerspiel* films, predicated on intimacy, and as comedies they would have worked better in a more limited aspect ratio. The wide-screen format simply dissipated the energies of the pro-filmic events.³⁰⁵

While intimacy was important for cueing the audience through humorous reaction shots and exchanges, a variety of settings allowed VistaVision comedies to create bigger gags, emphasise locations or hybridise with other genres. In this case, individual set-pieces often buck general trends noted by Harper and Porter. British VistaVision comedies take place in factory towns, music halls, mansions, parks, bars and boats. The long shot, big set design and staging were also deployed within these spaces to convey prevalent social themes. Post-war leisure and the end of rationing, social mobility and perennial class differences, distinctions between the regions and the capital, or urban and green space, all help us to make sense of the purely material aspects of pro-filmic space in VistaVision comedies. American techniques also had a transnational influence on efforts to upscale the comedy genre through distant shot scales and longer takes in Britain.

Hollywood's widescreen films were foremost in mind during the production of these early VistaVision comedies. It is important to remember that, by the time Rank's first VistaVision film began production in January 1955, the current stylistic reference point for widescreen cinema in Britain was CinemaScope rather than the one VistaVision feature released in 1954, *White Christmas*. Many of these early CinemaScope films were a mismatch for comedy, with their sense of outdoor adventure, vast set design, and ASLs ranging over the 10-11 second norm. Whatever the subtle variances within these iconic trends, both the

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³⁰⁵ Harper and Porter, p. 210.

long take and largescale staging came to represent orthodox Hollywood approaches in Britain, as VistaVision film director Ken Annakin stated:

When I first started shooting "Value for Money", I tried hard to follow the American theory: I devised longish takes and avoided close-ups, but I was brought back to the close-up time and time again by the need to tell the story with proper effect. This point was made forcibly in one amusing scene in the film, when I attempted to avoid a close-up. It just did not seem funny and it was not until I moved into close-up that my unit (who are pretty severe critics) suddenly appreciated the 'take' that was the clue to the comedy. 306

It is unsurprising to find that, in a statistical comparison between the five earliest VistaVision films made in the USA with those from Britain, we see fewer long shots and more close-ups in the British sample due to its cluster of comedies. Even if American CinemaScope films initially represented the dominant stylistic model, VistaVision technology evidently made the process of cross-Atlantic appropriation a little easier for comedy film directors who relied on quick-fire close-ups to generate laughs. For example, there are dialogue sequences in *Value for Money* with fewer cuts which echo those of early CinemaScope films, such as Ethel's (Susan Stephen) first appearance in the film as she enters the office and begins 'talking shop' with her manager. But these are eventually punctuated by closer shots. Annakin's stated avoidance of 'longish takes' in VistaVision also comes through in his brisk ASL of 8.8 seconds (see Appendix), while Ralph Thomas' three VistaVision comedies, with ASLs ranging 11.7 to 11.9 seconds, are not much closer to the so-called 'American theory' mentioned by Annakin.

³⁰⁶ Ken Annakin, 'Shooting for VistaVision', *Kinematograph Weekly*, 14 April 1955, p. 38.

Since the intimate scale of Rank's 1950s comedies was informed by British institutional settings and localities, it is easy to see how the adoption of technologies used by Hollywood studios was viewed in terms of national difference or carried awkward stylistic baggage for film directors in Britain. However, comedy film directors, cinematographers and set designers who appropriated VistaVision occasionally collaborated on the use of long shots for diverse social and comedic ends.

VistaVision eventually came to be recognised as a format in its own right with distinctive aesthetic qualities. According to Annakin, the most remarkable stylistic element of *Value for Money* was its infrequent long shots, which he self-consciously deployed:

There is, of course, not much point in VistaVision unless the director sets out to use the virtues of the system. Sets must be chosen and shots planned to make use of the depth, and I quickly found myself tending to line up my shots in such a way that, although the picture is essentially an "English comedy", the width and depth of scene genuinely made it into a "big picture". ³⁰⁷

In fact, Annakin's combined averages for long and very long shots is slightly higher than any other British VistaVision comedy, and comparable to Frank Tashlin's two American 'domestic' VistaVision comedies, *Artists and Models* (1955) and *Rock-a-bye Baby* (1958). Film director J. Lee Thompson also singled out *Value For Money* for its surprising sense of scale, 'notably a long shot of a bus in a deserted market square' captured on location in Batley, Yorkshire by cinematographer Geoffrey Unsworth (figure 33). The scene described by Thompson evidences the use of depth for spectacular comedic purposes, as Annakin has several

³⁰⁷ Annakin, 'Shooting for VistaVision', p. 38.

³⁰⁸ J. Lee Thompson, 'VistaVision in Production', *Kinematograph Weekly*, 15 December 1955, p. 89.

women converge on the bus and publicly drag their husbands across the street as recompense for their impromptu visit to a London music hall. A medium shot of the same sequence would not capture the co-ordinated nature of the gag in the manner achieved by Annakin's distant camera or present the same opportunities for staging and composition.

Rank comedies aspired to create spectacular spaces which closely followed director Ken Annakin's credo that 'sets must be chosen and shots planned to take advantage of the depth' in VistaVision.³⁰⁹ For example, in Annakin's *Value for Money*, art director Alex Vetchinsky designed deep interiors within a rag merchant's workspace. The shabby texture of North England's factories is later contrasted with the colourful and capacious music hall in London (figure 34). The musical dance sequence, 'Toys for Boys', lays out the singers in dynamic diagonal staging from left to right, and foreground to background, in long shot. Walking along the width and depth of VistaVision, a spotlight guides the eye and the two lead singers to pick out British star Diana Dors, as Ruthie West. The set is modernist in its clean design. Medium close-ups of the Batley factory owner Chayley (John Gregson) show his reaction to the spectacle. Later, in pursuit of both personal fame and Ruthie's favour, Chayley conspires with the Mayor to fund the construction of a new leisure centre for Batley. The combination of dancing models and modern architecture in London's music hall offers Chayley a vision for the future that is objectifying in its excess.

Other VistaVision comedies made use of locations and urban life in London, proximal to Rank's Pinewood studio. J. Lee Thompson argued that London Zoo and Osterley Park offered an ideal space for shooting his comedy An Alligator Named Daisy (1955) in VistaVision, without which format 'ordinary long shots just could not give you the same depth and definition'. 310 After encountering a troubled sailor on his steamboat return trip to London,

³⁰⁹ Annakin, 'Shooting for VistaVision', p. 38. ³¹⁰ Thompson, p. 89.

businessman Peter Weston (Donald Sinden) discovers that a baby alligator has been abandoned in his luggage. After losing his department store job due to the chaos caused by his new pet, Weston disobeys the advice of Moira (Jeannie Carson) and releases the alligator into the park. When Peter has a change of heart and returns to the park, Thompson uses a long shot to stage him and Moira, humorously searching for the alligator unbeknownst to one another on opposite sides of the frame. The width of the aspect ratio sets Peter up for a fall, as the distance from Moira quickly evaporates and he must make a bashful confession about returning to collect Daisy.



Figure 33. Value for Money: VLS.



Figure 34. Value for Money: LS.

VistaVision cinematography, set design and the casting and staging of actors shaped humorous set-pieces in widescreen interiors. For example, in *An Alligator Named Daisy*, Peter and his family travel to the paternal home of his fiancé Vanessa (Diana Dors). The manor house exterior was filmed on location at Osterley Park House in West London. Thompson's art director, Michael Stringer, worked on the manor interiors which create surreal class-based humour using width and depth. Colonel Geoffrey Weston (Roland Culver) becomes lost in the seemingly endless corridors which are designed to stretch out around him. Struggling to find his way due to the sheer opulence of the house, the Colonel comments that it is a 'good thing there aren't any snipers'. The treatment of aristocratic space as foreign territory lightly mocks the Colonel's dated 1940s outlook and the perceived chasms between Britain's wealthier post-

war citizens. Similarly, in *Doctor at Large* (Ralph Thomas, 1957), Dr. Simon Sparrow (Dirk Bogarde) is bedazzled by an expanding wardrobe in the home of a more successful and wealthier medical practitioner.

All of Rank's VistaVision comedies make light of the professional middle-classes' very particular social distinctions. Rank's VistaVision gags also preclude radical social critique because they rarely venture beyond the romantic and economic concerns of well-to-do characters, incorporating their places of work, leisure, and property. Some VistaVision films stretch this general rubric. *Doctor at Sea* (Ralph Thomas, 1955) transposed the medical hierarchy to a naval one. The ship's bridge affords long shots of the seascape and deck. It is also the closely guarded terrain of Captain Hogg (James Robertson Justice), who becomes increasingly agitated as it is invaded by Muriel (Brenda de Banzie) and Hélène Colbert (Brigitte Bardot) over the course of the film, but whom Hogg is forced to carry in order to gain promotion.

Like the unveiling of Dors in *Value for Money*, Bardot's star entry in her first English-speaking role is worth closer attention. After docking in Rio, Dr. Sparrow (Dirk Bogarde) and crew visit two bustling night clubs of recessive design. Bardot is encountered singing in the first club, initially with her back to the camera, and then winding through the crowd in full shot. Cutting to a long shot, Bardot and camera travel over to the bar with Sparrow unawares drinking in the foreground at the right of the shot. Even after noticing Hélène standing directly over him, Sparrow is reluctant to approach her when the song finishes and she rejects his friends' advances. Later in the same scene, the situation is reversed. Bardot and three others speak in the foreground to the right of the bar, while Sparrow sits at the left of the frame. He then gets up and lingers in the background without ever making eye contact with Bardot, instead watching the dancers with his back to the camera (in soft focus due to the foreground emphasis). Staggered staging in depth along with slight camera adjustments allow Thomas to

fit the group of five in VistaVision's 1.85:1 aspect ratio. In contrast to the one-way encounter between Chayley and Ruthie in *Value for Money*, staging within the long shot highlights the mutual romantic hesitancy which divides Sparrow and Hélène. This was Bardot's first English-speaking role.

Remus was the only other British production company besides Rank to make a comedy film in VistaVision. The Iron Petticoat was produced at Pinewood, featured two American stars with transatlantic appeal, and was distributed by MGM. In its opening sequence, *The Iron* Petticoat is the closest that Britain comes to responding to the aerial photography of Strategic Air Command. Russian MiG aircraft are filmed mid-flight and moving fast and low over the ground, intercut with dialogue between American Air Force officers who are planning for their interception. Once grounded, Captain Kovelenko (Katherine Hepburn) is placed under the tutelage of U.S. Major Lockwood (Bob Hope) to convert her to American political ideologies. Subsequent scenes take place in the US, Britain and Russia. Thomas uses more long shots than in his first VistaVision film, taking advantage of deep and airy sets of a fashionable London lingerie store, KGB operations room, and Pall Mall hotel. Art director Carmon Dillon's touch is equally felt across the sets of Doctor at Sea, Simon and Laura, and Richard III (Laurence Olivier, 1955), the other VistaVision films on which she worked consecutively before returning to collaborate with Thomas. All four films have a clean simplicity in shape and colour in bars, television studios and palaces, the backgrounds of which are sometimes indented with geometric window panels or alcoves (figure 35). The film also contains a limited number of location shots for scene transitions, including Buckingham Palace and Piccadilly Circus. One of the few sequences involving actors on location is the film's finale, featuring a mock USSR airplane hangar festooned with red flags and onlookers framed horizontally beneath the wing of an aeroplane in very long shot (figure 36).



Figure 35. The Iron Petticoat: deep sets.



Figure 36. The Iron Petticoat: VLS.

Long shots in the British VistaVision comedy situate characters in socially awkward or charged romantic situations, utilizing widescreen space for humorous and spectacular ends. Real locations often undergird these situations, whether that is through the British regional lens of *Value For Money*, the London parks of *An Alligator Named Daisy*, or the ocean backgrounds of *Doctor at Sea*. In Unsworth's opening image of a band marching through the cobbled streets of Batley on a rainy day, it is tempting to find further evidence for British cinema's association with Northern urban-industrial townscapes and realism. Before assimilating a film like *Value For Money* into national tradition, one should note the transnational context of its style and production. If the Batley of *Value for Money* does supply anything resembling 'That Long Shot Of Our Town From That Hill', as Andrew Higson characterizes establishing shots from British 'kitchen sink' films like *The Loneliness of the Long Distance Runner* (Tony Richardson, 1962), these long shots were inflected by imported technology, styles, and trade discourse favouring VistaVision's depth and distant shot scales.³¹¹

The incorporation of musical genre elements, locations, international stars, and what were perceived to be American VistaVision styles upscaled the comedy film in Britain. These stylistic techniques are evident in set pieces and dialogue which have gone unmarked by

³¹¹ Andrew Higson, 'Space, Place, Spectacle', Screen, 25 (July-October 1984), 2-21 (p. 5).

scholars either because of their infrequency or visual subtlety, which also challenges our statistical and sequence analysis methods to be responsive to stylistic change within genres.

Travelogues and Tourism: VistaVision Visits...

From the arid Monument Valley of *The Searchers* to weathered English towns, outdoor locations pervade the VistaVision examples described thus far. By foregrounding formats and offering inimitable vistas, location shooting came with aesthetic and economic advantages that were highly desirable to American and British production in the post-war era of declining cinema admissions. The landscape shot in particular provided visual confirmation of VistaVision's advertised scope. The slower cutting and more distant shot scales of some films in turn allowed for the setting's appeal as real location, as opposed to non-descript background, to come through. Dana Benelli closes her chapter on the travelogue by observing its overlaps with fiction films in which locations feature prominently, opening up the possibility of taking pleasure in these:

The travelogue tradition constitutes a latent presence within any landscape imagery, even while it is a background to narrative action [...] it takes only such routine cinematic situations as camera placement at a great enough distance to allow the landscape to compete with narrative action for viewer attention, or screen duration of a shot that extends sufficiently to allow a viewer to read its narrative content and then shift his or her attention to the background, for the compelling power of documented reality to become an attraction in its own right.³¹³

³¹² R. Barton Palmer, *Shot on Location: Postwar American Cinema and the Exploration of Real Place* (Newbrunswick, NJ: Rutgers University Press, 2016), pp. 116-117; Belton, *Widescreen Cinema*, 91-94; Street, *Colour Films*, pp. 135-142.

³¹³ Dana Benelli, 'Hollywood and the Travelogue', in *Virtual Voyages: Cinema and Travel*, ed. by Jeffrey Ruoff (London: Duke University Press, 2006) pp. 177-194 (p. 193).

While widescreen cinema offered a greater visual area to scan the background, the routine techniques described by Benelli are also complicated by trends in shot scale and length. *One-Eyed Jacks* shifted between obfuscating and glorifying its Californian location photography, which garnered Charles Lang an Academy Award nomination, while rapidly cut battle sequences in *Knights of the Round Table* left less time to absorb the delights of Britain's West coast in CinemaScope. Rank's *Hell Drivers* (Cy Endfield, 1957), by an American director living in exile from the House Un-American Activities Committee, offers bold examples of rapid cutting which transform the country lines of Buckinghamshire and West Sussex into a passing blur.

The widescreen travelogue, by distinction, weaved a voice-over narrative around real places and even entire nations, which provided a verbal gradation of emphasis instructing the audience to explore highlights within the shot. Locales were interpreted by this commentary and visually transfigured by the widescreen camera's focal properties and desired frame size. Travelogue shorts foregrounded the studio's new formats through landscape shots and were commercially desirable for exhibitors. Paramount promoted early VistaVision features overseas through its marketing materials, trade demonstrations with film clips and Q&A sessions with studio representatives like Loren Ryder. However, there would be a waiting period before a sufficient quantity of VistaVision features then in production made it to theatres. Exhibitors in Britain and the USA were suffering from a lack of product due to the general downturn in production while Hollywood studios concentrated their efforts on making a more limited number of 'first' features. Short travelogues served the dual economic function of providing a quick taster of widescreen cinema's aesthetic potential and padding out the cinema programme. Historical research also shows that the VistaVision Visits... series and British equivalents were thematically dense, focusing on national culture, politics, military and outdoor travel, and reveals the shot scales used to document these topics. (VistaVision

travelogues are listed in my filmography.) The theme of tourism more generally resounded through several VistaVision fiction films which offered variations on consumer trends.

Paramount echoed the strategies used for other widescreen formats by launching the nine-part VistaVision Visits... travelogue series (1954-56). In parallel with developments at Paramount, Cinerama sets the benchmark for widescreen travelogues in myopic fashion. Belton states that 'the first five Cinerama features were American-oriented', using stereotyped representations which in his words, 'renders Italy through opera at La Scala in Milan and Scotland through a parade of bagpipes' in *This is Cinerama*. ³¹⁴ *Cinerama Holiday* (Robert L. Bendick and Philippe De Lacy) offered a variation on transatlantic travel by having Swiss tourists visit the USA while Americans travel Europe, which reveals just as much about postwar America's self-image as its outlook. CinemaScope was associated with travel through newsreel and travelogue shorts, the latter of which began with the Italian train journey *Vesuvius* Express (Otto Lang, 1953). While the aerial photography of This is Cinerama provides panoramic views, the more accessible modes of transport featured in travelogues simulate holidaying for the aspiring tourist or vicarious viewer. The VistaVision short, Key to the Future (Michael Kidd, 1956), actually presented the spectator with means of travel at the end of screenings. It was filmed in VistaVision and colour for the General Motors annual 'Motorama' convention, which toured the USA in 1956, and featured forthcoming car models from Chevrolet, Pontiac and others 'in settings of spellbinding scenic beauty'. 315 During the first show at the Waldorf Astoria Hotel in New York, the screen was raised just as the cars sped toward the camera so that the real models could roll forward toward the audience.

James A. Fitzpatrick produced the early *VistaVision Visits*... series before his retirement, including the first Norway instalment, Japan and Mexico. Fitzpatrick was long

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³¹⁴ Belton, *Widescreen Cinema*, pp. 91-92.

^{315 &#}x27;Vista Vision Has Become Might Big Business', *Paramount World* (February 1956), p. 33.

established in the travelogue trade. His career was properly established by MGM's distribution of his 'Fitzpatrick Traveltalks' series in the 1930s and he then worked with this studio until directing the VistaVision series for Paramount in 1954. For the Spain, Gibaraltar, Austria and Hawaii segments, Paramount relied on producer Carl Dudley who had his own London-based production company. Paramount collected 50% of the Eady levy money to which Dudley was entitled. 316 After VistaVision Visits, Dudley and Richard Goldstone, director of the Austria episode, would go on to co-direct South Seas Adventure (1958) in Cinerama with three others. Jack Eaton produced the Panama and Arizona ('Sun Trails') travelogues, having worked on shorts for Paramount since the 1930s. All the VistaVision Visits instalments were therefore entrusted to veteran producers with specialisms in the travelogue format. The representation of place in two instalments can be compared by focusing on their opening and closing shots. These typically follow a pattern of establishing the general area in long shots before moving in to capture local life, and then reversing this process at the end of the film to leave a lasting impression of natural beauty or military might. This context-focalisation pattern is a rhetorical strategy which gives the impression of a larger totality than is represented in the film. The word 'visits' itself indicates the brevity of the encounter, designed to show national highlights in the style of compression which Belton associates with Cinerama.

The first VistaVision travelogue took few risks with the format, focusing on mountains, farms, harbours and folk music around the highlands of Bergen and Oslo. In contrast to later travelogues which incorporate street-level urban life and military activity, Norway is viewed in terms of its bucolic aspects. Consider the dominance of long shots in the opening sequence, from Technicolor's continuity scripts (beginning after the credits):

³¹⁶ MHL, Paramount Pictures Production Records, box 158, folder 1, Russell Holman to Charles West, 17 August 1955.

10 Sky shot-Sunset	14 MS Ship	18 LS Coastline
11 Sky shot-Clouds	15 MS Sea-Mountain	19 LS Village
12 Sky shot-Sunset	16 LS City by the sea	20 LS Coastline

13 MS Sea coast 17 LS Basts in habour 21 LS Snow on mountains³¹⁷

The dominance of landscape is identifiable in the descriptive tags and particular shot scale categorisations. The initial scenes offer a plethora of views via standard formulae such as the 'sky shot' and long shots which are relative to distances from landscapes rather than people. The ending reverses from local life back to static shots of natural imagery, requiring the script to distinguish camera movement, human and distant ('D') landscape typologies for shot scale:

24 LS Goats on hill	28 MLS Couples dance	32 LS-Couples dance-pans
25 LS Woman milks goat	29 MS Group of people	33 LDS River through valley
26 MLS Riders-pans to couple	30 LS Couples dance	34 MDS River- The End.
27 LS People in costumers	31 MS Man plays violin	-people ³¹⁸

Individual shots isolate farmers, musicians, and local business owners for attention. The groups may be tourists or natives, though a *Monthly Film Bulletin* review notes the main focus is on 'inhabitants of the highlands – farm workers and tent-dwelling Lapps' filmed in 'a setting not yet overworked by such films'.³¹⁹ As a piece of montage, the closing sequence gives the impression of a land untouched by touristic commerce. As a potential catalyst for tourism, the Norway instalment simultaneously represents and invades this untouched territory in

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³¹⁷ MHL, Technicolor collection, box 48, folder: *VistaVision Visits Norway* – shot-by-shot continuity 1954, continuity script, 10 October 1954, p. 1.

³¹⁸ Ibid n 2

³¹⁹ VistaVision Visits Norway review, Monthly Film Bulletin, 21 (January 1954), p. 183.

alternating shot scales, indicating the exclusivity and spatial range of its VistaVision footage.

The closing image of the running water freezes local life in a timeless poetic image.

There is an indication that journals like *Monthly Film Bulletin* became aware of the VistaVision series' rhetorical tropes and compressions. Reviewing *VistaVision Visits Mexico*, it was found that 'water foregrounds, once again, prove particularly effective on the large, curved screen'. However, the same reviews notes that group shots came across as artificially posed and racially stereotyped, giving a false impression of the levity of Mexico's laws or supposed happy naivete of lower class lifestyles; Paramount even inserted a flotilla of two passing boats advertising the Paramount studio and VistaVision logo. ³²¹

Not all VistaVision travelogues featured agrarian themes. *VistaVision Visits Panama* was oriented around modernity and military might, focusing on American defences around the Canal Zone. In contrast to the distantly shot and tranquil opening for Norway, the Panama episode being with a bustling scene. Medium long shots feature palm trees, traffic, a Panama flag, airport, people exiting a plane, statues, golf players and a skyscraper. The travelogue becomes more overtly militaristic around shot 66 of 80, however. The travelogue closes with various perspectives of marching soldiers, followed by medium shots and close-ups of an Air Command building, radar tower and ship in the canal. Closer shot scales suggest the investment in surface details of technology and uniforms, contrasting with the distant treatment of Norway. Beginning with the 'context' of bustling urbanity also hints at a causal relation between America's presence and modernisation. Finally, by dwelling on America's lasting influence in colonial territories, the repetition of the water trope suggests a radically different kind of continuity to that of Norway's perennial peacefulness.

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³²¹ Ibid., p. 129.

³²⁰ VistaVision Visits Mexico review, Monthly Film Bulletin, 22 (January 1955), p. 129.

Due to overlaps in location space, the VistaVision travelogues raised anticipation for the international backdrops that were promised for forthcoming VistaVision features. Headlined 'VistaVision Around the World', a Paramount survey informed the British trade that 'international acceptance of VV is shown by recent selection for feature film production in Hollywood, England, Italy, Spain and Puerta Rico'. 322 Paramount's notion of 'international acceptance' is somewhat diminished by the fact that it was primarily British and Hollywood companies which exported location-based productions to the countries surveyed like It Started in Naples (Melville Shavelson, 1960; Paramount), The Spanish Gardener (Philip Leacock, 1956; Rank) and Away All Boats (Universal). 323 That these images were in fact coming from a limited number of Western production companies informs the exotic viewpoint of many VistaVision location films. In the USA, the theme of tourism latent in the travelogue was recapitulated in several VistaVision features such as Funny Face (Stanley Donen, 1957) and To Catch a Thief (Alfred Hitchcock, 1955). Split-screen and travel shop windows double or triple the VistaVision frame to extract 'highlights' from the overall location space. Some films provide a more direct overlap with the travelogue genre. It Started in Naples initially helps historians to imagine how the VistaVision Visits... may have looked and sounded, by beginning with an establishing shot of the Naples bay which is described in grandiose voice-over. The tone then quickly changes as we cut to a shot of a train station and the commentator, Michael Hamilton (Clark Gable), haughtily draws our eye to the space's untidiness and unsavoury characters. In Hollywood or Bust (1956), Frank Tashlin also deploys travelogue iconography associated with Cinerama before turning the Grand Canyon into a site for large-scale gags.

In Britain, Rank produced six VistaVision travelogues which contributed to the County Pride series of shorts, highlighting Buckinghamshire, the Isle of Man, Guernsey,

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^{322 &#}x27;VistaVision Around the World', Kinematograph Weekly, 19 April 1956, p. 16.

³²³ The co-productions include War and Peace (USA/Italy) and Spanish Affair (USA/Spain), however.

Glamorganshire, Weymouth and Essex. These inward-looking films recall the national parameters of the British 3D shorts of the early 1950s (see Chapter 1) and were far exceeded in scope by Paramount's intercontinental travelogue series. On the other hand, Rank announced 'the most important international production programme in British studio history' for its schedule of 1950s features, including four titles 'filmed in VistaVision and colour against breath-taking backgrounds' in Europe, Africa and South America.³²⁴ Rank paradoxically invoked British cinema history to promote its corporate aim of being unfettered by national bounds. And this did not necessarily mean transatlantic trade with the USA. Interviewing Rank's John Davis, Kinematograph Weekly reported on its front page that 'VistaVision films will be made for the international market, not just the US'.325

More wide-ranging travel and tourism infiltrated British comedies, espionage and war films. Rank's *House of Secrets* (Guy Green, 1956) counterpoints the gaiety of *Funny Face* by interspersing criminal activities with location shots of Paris. As American technologies represented a commercial opportunity to grab the international market, the landscape shots was a key ingredient for Rank's war films. Variety stated that, in The Black Tent (Brian Desmond Hurst, 1956), 'effective use is made of the desert and oases of the area, a desert ruins smacking of antiquity [...] providing a striking backdrop for a well worked out narrative'. 326 Brian Desmond Hurst acknowledges the touristic qualities of his Libyan setting in a series of long shots, which show Captain David Holland (Anthony Steel) spying on unsuspecting Nazi soldiers as they sight-see in the Roman desert ruins. Since the film was a star vehicle for the 'pictorial advantages of VistaVision and Technicolor', Variety was able to predict that 'while lacking in U.S. marquee names, the feature, released in this country by Rank's newly-formed

^{324 &#}x27;Filmed in the Four Corners of the World', *Kinematograph Weekly*, 3 May 1956, pp. 59-62.

^{325 &#}x27;Rank to produce 100 p.c. VistaVision says John Davies', Kinematograph Weekly, 16 December 1954, p. 191. ³²⁶ *The Black Tent* review, *Variety*, Wednesday June 12, 1957, p. 6.

distribution arm here, should rate okay for the action market'.³²⁷ Rank's remaining two war films in VistaVision were directed by Michael Powell and Emeric Pressburger, featuring Mediterranean islands in *Ill Met By Moonlight* (1957) and Montevideo harbour nightclubs in *The Battle of the River Plate* (1956). The location staging and compositional strategies of Tashlin, Hitchcock and Powell and Pressburger will be examined further in Chapter 4.

Conclusion

Tracking stylistic trends in VistaVision films is a complex issue. This chapter has begun to show the quality and extent of stylistic change in VistaVision films through comparative approaches. This process was enabled by triangulating statistical, sequence and genre analysis to detect changes that might be less visible than expected given the clear dividing lines which others have drawn between widescreen formats, genres and national cinemas; my results alert historians to these subtle differences and overlaps.

Historians have commented on VistaVision's utilisation for full shots, close-ups and depth in long shots. Examples of early CinemaScope and VistaVision films appear to counterbalance one another at the extreme ends of the shot scale, though dialogue sequences divide the two formats with early VistaVision tending to use more medium/medium long shots than CinemaScope thanks to the narrower aspect ratio. While early VistaVision films were sometimes cut more quickly than those in CinemaScope, genre differences in shot lengths provided more convincing grounds for comparison. However, statistical frequency deals in broad brushstrokes which miss finer differences between formats, including the different qualities of aspect ratios and image resolution which we observe upon closer analysis. Correlating statistical and sequence analysis offers complementary methods for detecting the quality and quantities of stylistic techniques. These stylistic differences between formats take

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³²⁷ Ibid., p. 6.

seriously historical factors of product differentiation rather than relying on CinemaScope as a shorthand for widescreen style.

A combination of statistical and qualitative approaches were then used to show how the style of VistaVision films shaped meaningful sequences, changed over time and crossed genre/national boundaries. While most obviously associated with the rural expanse, VistaVision Westerns such as *The Far Horizons, The Searchers* and *One-Eyed Jacks* shifted between interior and outdoor spaces that nuance easy assumptions regarding outdoor spectacle. These shifts memorably occur at the specific iconographic space of the porch in several Westerns. However, I showed how *One-Eyed Jacks* used more big close-ups, flamboyant editing and composition in its negotiation of this threshold space than *The Searchers*, parting with early VistaVision films. Far from dwelling on wide open spaces, the widescreen Western responded to the stylistic flexibility afforded by VistaVision by changing over time.

British comedies present a surprising array of spaces in VistaVision by importing techniques which upscaled the genre for widescreen presentation. Paramount's differentiation strategies fixated on depth, tall framing and sharpness. Even if these did not have a dramatic impact that can be detected in shot scale or length statistics, they were recognised in Britain and had a stylistic influence. Transnational product demonstrations, widescreen film distribution and aesthetic discourse shaped film style in set pieces, set design and star entrances. These findings expand significantly current academic discussion regarding the restricted scope of early widescreen in British cinema.

Finally, the travelogue is a documentary genre almost entirely defined by the scale of its location, rather than the diegetic space of fiction films. The widescreen travelogue captures industrial commercial influences on the stylisation of place. Travelogues also help us to make a useful distinction between the expanded cinematographic frame and much larger location space, off-screen. Paradoxically, the widescreen travelogue cycle of the 1950s could be said to

have provided a narrow view of the world due to its touristic representation of place. These tropes were noted in critical discourse and other films which blended with the genre. The genre hybridity presented and stimulated by VistaVision can be detected in the overlaps between comedy/musicals and melodrama/travelogues. Tourism, which is predicated on location space, also pervades genres as diverse as the thriller and war film. My following chapter revisits these genres through widescreen films directed by Frank Tashlin, Alfred Hitchock, and Michael Powell and Emeric Pressburger. A combination of statistical and sequence analysis methods will underline VistaVision's potential for stylistic difference more strongly than large-scale trends. The refraction of aesthetic attributes by staging and composition allows me to elucidate VistaVision's texture, depth, scale, horizontality and verticality.

4. Shot Composition and Staging: Widescreen Aesthetics

The previous chapter demonstrated that stylistic change can look remarkably different once we adjust the scope of analysis from general to localised trends. My reference to specific shots such as Marlon Brando's close-ups or the tour bus sequence in *Value for Money* also shows the importance of switching between *modes* of analysis, since statistics can reveal the quantity but not the aesthetic qualities of shots. An establishing shot may be rudimentary, where another shot of the same scale delivers narrative details through elaborate means. Although trends in shot scale and length can suggest some illuminating stylistic changes, the particulars of staging and composition add a level of complexity that can dramatically alter the mise-en-scène. Film historians have more often looked to these aspects of the film director's expertise when distinguishing between widescreen styles. With reference to CinemaScope, David Bordwell affirms that 'we can learn a great deal about cinematic technique, particularly staging and composition, by studying how talented directors managed the distended image', and the idiosyncratic patterns arising therefrom invite close analysis.³²⁸

Post-war commentators who came out in favour of widescreen based their analysis on auteurist conceptual frameworks and aesthetics of film realism. The more we factor in the production context, the more we can prise open pervasive auteurism and avoid monolithic concepts of widescreen realism. There is no single version of realism. The meaning of this term and the implied aesthetic attributes alter in different contexts. Any study of widescreen aesthetics should therefore take into account the historically situated discourse from which we inherit now standard concepts such as Charles Barr's gradation of emphasis. VistaVision shot composition and staging poses questions for widescreen cinema's genealogy of realist aesthetic

³²⁸ Bordwell, *Poetics of Cinema*, p. 283.

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discourse, by asking us to consider other spatialities: surface texture, extreme depth, and verticality.

For Barr, widescreen cinema involved a greater freedom of selection for the viewer than the Academy ratio. The use of long takes and long shots enhanced this proximity to everyday perception, offering continuity of time and space. Preminger's unobtrusive guidance of the eye was, paradoxically, the boldest mark of his style. On the other hand, flashy compositions which flattened widescreen space or drew undue notice to the frame edges ignored widescreen cinema's immersive potential: 'in general, what they say about the camera makes a good working rule for 'Scope: if you notice it, it's bad'. In this case, the spectator should not be held captive by widescreen pyrotechnics, but 'be led to focus on detail, and to look from one thing to another within the frame with the emphasis the director intends'. 330

The concept of an alert spectator which recurs through Barr's article is the clue to his aesthetic criteria and method of analysis. Widescreen cinema was not just a means of producing images of scope and complexity to substitute real perception, which, after Bazin, he refers to as 'the quest for total cinema'. Roving the expanded space for meaning involved active physical (or at least visual) and mental participation in the events unfolding onscreen. Watching widescreen cinema was a form of film criticism, or, more precisely, a testing ground and potential stimulus for closer analysis. One's sense of being in a cinema dissolved as scenes and thoughts unravelled. Widescreen cinema represented the possibility of immersion: if not total, then intellectual.

Barr's forging of widescreen aesthetics as a discursive field within film criticism was one of the great transatlantic exchanges of cinephile film culture, occurring more or less in synchronisation with the auteurist emphases in *Cahiers du cinéma, Movie, Film Culture*, and

³²⁹ Barr, 'CinemaScope', p. 9.

³³⁰ Ibid., p. 18.

³³¹ Ibid, p. 23; André Bazin, 'The Myth of Total Cinema', in in *What is cinema?*, 2 vols, ed. and trans. by Hugh Gray (London: University of California Press, 2005) I, pp. 17-22.

Film Quarterly. 332 This also encouraged selectivity in the allocation of attention and praise. For Jacques Rivette, writing in a Cahiers du cinéma dossier on CinemaScope, the entire history of mise-en-scene was inseparable from 'the obsession, running secretly through the work of the greatest directors, with the spreading out of that mise-en-scène on the screen, the desire for a perfect perpendicular relative to the spectator's look'. 333 Auteurism went hand-in-hand with CinemaScope's alluring horizontality, condensing the development of film style into a series of progressive directorial choices toward ever greater realism. But it would be misleading to suggest that contributors to Cahiers du cinema, though evidently sharing some fundamental principles, had the same outlook on widescreen aesthetic. For example, in his essay, Rivette is more sympathetic to The Robe as a sign of better things to come than André Bazin, who bemoaned its blurred images. Turning his attention to VistaVision as a possible alternative to 'the foggy Robe', Bazin stated:

In addition to the great clarity of the image, which becomes absolutely sensational when the projection is equally horizontal, VistaVision's real interest lies in its 1:185 screen ratio, a ratio that definitely seems the most fortuitous and pleasing of all that have been tried out until now, since it is spectacular enough to satisfy the eye, yet still rational enough to satisfy the mind.³³⁴

In Bazin's praise of VistaVison, the spectacle of its image resolution and width is acknowledged but contained by, and contrasted with, the appeal to the intellect. The notion that

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³³² For an overview of auteurism in *Cahiers du cinéma* (1951-), *Movie* (1962-) and Andrew Sarris' catalytic contributions to *Film Culture* (1955-) and *Film Quarterly* (1958-), see *Theories of Authorship*, ed. by John Caughie (London: Routledge, 1981), pp. 35-67.

³³³ Jacques Rivette, 'The age of metteurs en scène', in *Cahiers du cinéma : The 1950s : Neo-realism*, *Hollywood, New Wave*, ed. by Jim Hillier (London: Routledge & Kegan Paul, 1985), pp.275-79 (p. 278). ³³⁴ André Bazin, 'The 3D Revolution Did Not Take Place', in *André Bazin's New Media*, ed. and trans. by Andrew, pp. 258-66 (p. 261).

widescreen spectacle offers more in the way of passing pleasure than conscious immersion in the film world chimes with Barr's realism, his preference for subtlety in widescreen cinema.

In Sight and Sound, we find a more dismissive and localised discussion of aesthetics, widescreen realism and CinemaScope's horizontality than that of Barr, Rivette or Bazin. A series of widescreen-related articles divulge the journal's suspicion of Hollywood cinema and preference for stylistic restraint which had informed 1940s debates around 'quality' British cinema, as examined by John Ellis.335 Instead of the grand movement from montage to widescreen cinema's fluidity, Sight and Sound arguments about widescreen cinema were bifurcated by Hollywood spectacle and British tradition. 'Hollywood' was the first word in Richard Kohler's article, which criticises the 'vast publicity mechanism' of widescreen cinema and is perturbed by widescreen exhibition regardless of the format used.³³⁶ Kohler finds that audiences are 'too close, too physically preoccupied' and 'distracted by an over-obtrusive surface' which engulfs the onlooker, dubbing this 'the new movement of physical realism on huge screens'. 337 Penelope Houston and Gavin Lambert offer varying degrees of chastisement in their reports on Hollywood widescreen aesthetics, the latter forecasting 'a wave of pedestrian and vulgar spectacle'. 338 Basil Wright showed appreciation of the flat horizontal staging in *The* Robe, which technique awaits 'a director of genius', though CinemaScope 'lacks height to a degree which makes nonsense of all ideas of pictorial composition other than the frieze': 'width is exaggerated to a degree in which height becomes a necessity of which we are deprived'. 339

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³³⁵ John Ellis, 'The Quality Film Adventure: British Critics and the Cinema, 1942-1948', in *Dissolving Views: Key Writings on British Cinema*, ed. Andrew Higson (London: Cassell, 1996), 66-93 (p. 70). This pro-British cinema discourse revolved around a cluster of films directed by Anthony Asquith, Carol Reed, Launder and Gilliat, the Boulting brothers, Thorold Dickinson, David Lean and Laurence Olivier.

³³⁶ Richard Kohler, 'The Big Screens', Sight and Sound, pp. 120-124 (p. 120).

³³⁷ Ibid, p. 121.

³³⁸ Gavin Lambert, 'Report on New Dimensions', *Sight and Sound*, 22.4 (April 1953), 157-61 (p. 159); Penelope Houston, 'CinemaScope Productions', *Sight and Sound*, 23.4 (April 1954), 198.

³³⁹ Basil Wright, *The Robe* review, *Sight and Sound*, 23.3 (January 1954), 143-44 (p. 143).

In revisiting post-war commentary on widescreen aesthetics, we can observe different historical interpretations of realism and spectacle guided by aesthetic criteria and journal ethos. The two terms 'realism' and 'spectacle' can be held in opposition and yet seem inseparable in widescreen marketing. The contradiction is also ingrained in VistaVision's 'High Fidelity' slogan, a hyperbole which indicates both the format's realistic appeal and something much more, beyond 'mere' fidelity to the real world. Similarly, VistaVision films oscillate between narrative representation and technological demonstration. Appreciating these different aspects requires a more accommodating view of film aesthetics than the various rejections of obtrusiveness, physicality and commerce described above. Furthermore, the materiality of the format does not just come through in its horizontality, which continues to be a strong theme in CinemaScope film analysis. Staging and shot composition in VistaVision films directed by Frank Tashlin, Alfred Hitchcock, Michael Powell and Emeric Pressburger can be placed in productive dialogue with aesthetic discourses around verticality, depth/scale, and texture, including in lesser known aspects of Barr's essay.

Placing widescreen aesthetics within historical reach of directing careers, studio affiliations, unstandardized production technologies and other production factors recalibrates widescreen auteurism. Later academic research which has built on the rich post-war debates around widescreen cinema have also paid more attention to the role of genre conventions or technological constraints, which inflect the director's staging of actors and framing techniques. The film director's authorial 'vision' is contextualised and questioned by factoring other influences into assessments. For film directors with significant control over some or all aspects of the writing and shooting process, how did widescreen composition and staging intersect with recurrent themes and signature techniques in VistaVision films? Did their techniques develop over time, on location or when adopting other studios' formats? To what extent should production contexts factor into our style analysis?

In order to address the above questions, this chapter follows a three-part structure to focus on four film directors and their aesthetic negotiation of VistaVision, which in turn leads to reflection on orthodox approaches to widescreen. Frank Tashlin's consumer comedies form the basis of my style comparison of widescreen comedies, variously made with different studios, stars and formats. His films use big set-ups for calamity gags which revolve around consumerist themes of the post-war era such as television ownership, cosmetics and even widescreen genres. The collaging of different textures in the set design and editing of Tashlin's films encourages an overarching analysis of his output in relation to texture. Alfred Hitchcock used VistaVision for comedic and suspenseful ends. The staging of actors in seemingly idyllic environments leads me to consider how depth of field and the use of scale provide or preclude visual information. Finally, I argue that Michael Powell and Emeric Pressburger's group and vertical staging in VistaVision war films, made on location after they re-joined Rank, demonstrates a decisive difference in technique and aesthetic from their colourful CinemaScope film. The varied widescreen cinema of Powell and Pressburger also sustains their career-long themes of transnational journeys and cultural exchange.

Frank Tashlin: Consumer Comedies and Calamity Gags

Former comic strip writer and Looney Tunes animator Frank Tashlin attracts attention as a CinemaScope and VistaVision director, having made an equal number of films in both formats during the 1950s. Previous research on Tashlin's CinemaScope films has highlighted his reflexive manipulation of the frame for visual slapstick. For example, during the introductory sequence of *The Girl Can't Help It* (1956), Tashlin has Tom Ewell proudly announce that the film has been made in colour and CinemaScope. Ewell's awkward glance to an 'off-camera' production team produces the desired result: colour floods the hitherto black-and-white image, and, with a little judder, the Academy frame falls away to reveal a wide stage. Harper Cossar,

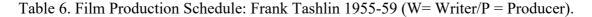
adding to Mark Rapport's assertion that 'the size of the screen itself [is] the visual gag or a component of the humour', argues that in his cinematographic and diegetic framings 'Tashlin uses the elongated mise-en-scène of the 'scope frame as a punch line to mock television and the Academy ratio'.³⁴⁰ In his stylistic analysis of *The Girl Can't Help It*, Cossar highlights social themes that find expression in Tashlin's VistaVision output. Whether satirising the American addiction to television or blowing up his erotic motifs of lips and legs to grotesque proportions, Tashlin's VistaVision films resonate with the post-war consumer comedy cycle outlined by Kathrina Giltre while playing on the extremes of Populuxe fantasy and fakery.³⁴¹

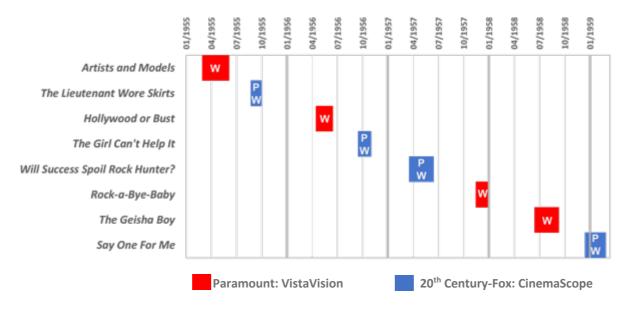
Scholars have not commented on Tashlin's VistaVision films, despite their representing an entire half of his widescreen output during the 1950s. Tashlin's CinemaScope films leave a strong impression of his directing technique and tropes, but the use of this format was dictated by studio strategy rather than pure personal preference. This is an important point to make as it captures how the package-unit era encouraged the movement of labour between studios, each of which had their own product differentiation strategies.

In the four-year production schedule below (Table 6), Tashlin directed widescreen films for both Paramount and Fox on a near bi-annual basis. Outside of filming, Tashlin typically had between three and five months to write his forthcoming features and TV shows. Tashlin produced all of his CinemaScope films, whereas at Paramount, the first two VistaVision films were Dean Martin and Jerry Lewis vehicles produced by Hal Wallis. Crucially, Lewis split from his comedy act with Martin in 1956, later graduating to producer of Tashlin's *Rock-a-bye Baby* and *The Geisha Boy*, in which Lewis is granted set-piece solo performances as the leading star.

³⁴⁰ Mark Rappaport, 'Tashlin, *Bachelor Flat* and CinemaScope', in *Frank Tashlin*, ed. by Roger Garcia (London: British Film Institute,1994), pp. 71-80 (p. 71); Cossar, *Letterboxed*, p. 149.

³⁴¹ Kathrina Glitre, 'Conspicuous consumption: The spectacle of widescreen comedy in the Populuxe era', in *Widescreen Worldwide*, ed. by Belton, Hall, and Neale, pp. 133-43.





The technological themes and product differentiation dynamics at work in Tashlin's career begs the question, did Tashlin's techniques vary in VistaVision and CinemaScope? As in Chapter 3, the general parameters of shot length and scale provide a useful initial assessment and overview of Tashlin's widescreen film career. As can be seen from the average shot lengths column in Table 7, Tashlin's CinemaScope films are cut consistently slower than his VistaVision films. The shot length results are in keeping with Cossar's findings, as is Tashlin's preference for relying on the medium shot for dialogue in CinemaScope (notably, after the 'early' 1953-55 period of CinemaScope, when dialogue in full shots was quite usual). An apparent familiarity with big close-ups towards the end of the decade is reflected most strongly in his CinemaScope films, matching Marlon Brando. By contrast, Tashlin's VistaVision films are shot farther back, with more full, long and very long shots than in his CinemaScope comedies, though not so many as to break with the shot scales of early VistaVision films.

³⁴² Cossar, *Letterboxed*, pp. 154, 156.

Table 7. Frank Tashlin: CinemaScope and (after partition) VistaVision Films, 1955-59.

Film	Date	A	В	C	M	M	M	F	L	V	Oth.
		S	C	U	C	S	L	S	S	L	
		L	U		U		S			S	
The Lieutenant Wore Skirts	1956	12.5	0	5	53	226	91	49	48	1	28
The Girl Can't Help It	1956	9.7	0	9	52	163	158	70	39	11	37
Will Success Spoil Rock Hunter?	1957	10.9	2	23	95	163	46	70	37	8	56
Say One For Me	1959	12.9	8	13	74	203	76	76	36	2	13
Artists and Models	1955	9.2	0	23	92	158	72	82	40	7	26
Hollywood or Bust	1956	6.7	0	3	64	104	77	75	68	26	85
Rock-a-bye Baby	1958	8.2	0	11	76	184	75	76	49	10	19
The Geisha Boy	1958	7	1	14	60	148	65	88	61	11	52

One reason for differences between VistaVision and CinemaScope shooting methods was Tashlin's work with Lewis. Only in his VistaVision films did Tashlin work with this contracted Paramount artist, who was given ample space to express himself in the trademark high and deep mise-en-scène. Tashlin's VistaVision collaborations with Lewis can be divided into his domestic comedies, *Artists and Models* (1955) and *Rock-a-bye Baby* (1958), which comment on everyday consumerism, and the travel comedies, *Hollywood or Bust* (1956) and *The Geisha Boy* (1958). As suggested by the distribution of long shots in Table 7, the latter two films provided a broader canvas on which to reference tropes of Hollywood widescreen cinema.

Across all of his widescreen films, Tashlin asks viewers to keep pace with a mercurial mise-en-scène and his VistaVision comedies are no exception. One technique which Tashlin uses to generate laughs involves a fluctuating of scales that I will label the 'pull back', which interlaces physical comedy with very long shots. I will examine the prevalence of this technique

across Tashlin's VistaVision output, before returning to some key shots which evidence Tashlin's textural style elements in close-ups and editing.

In the opening sequence of Frank Tashlin's *Artists and Models*, the VistaVision camera reverses from an extreme close-up of a hand applying red paint to a non-descript surface to a full shot of the painter brushing a pair of red lips (Dean Martin). A subsequent very long shot captures Martin and the entire carnivalesque billboard for cigarettes (figures 37 and 38). Meanwhile, Jerry Lewis reads comic books behind the sign. The changing of scales affords Tashlin a savvy visual gag, taking in both the seductive texture and scale of urban advertising before stripping away its allure. In subsequent long shots, Lewis can be heard wheezing behind the sign: a small puff of smoke issues from the mouth of the woman depicted on the billboard, as a passer-by asks, 'is she having problems with her lungs?' Next, Dean attaches an air cannon, causing misplaced comic books to fly out of the mouth while Lewis attempts to catch them and accidentally kicks paint cans onto the marketeers below. The sequence is typical of this director's themes and style, which amplifies Lewis' comedic performance by taking a broader view of the calamitous consequences.

In *Rock-a-bye Baby* (1958), Tashlin's 'pull back' technique amplifies the peril and destructiveness of Lewis' antics. The sequence in question begins with conversational voice-over narration much like that which opens *The Lieutenant Wore Skirts* (1956) and *Will Success Spoil Rock Hunter*? (1957), describing the town of Midvale in which Clayton Poole (Lewis) lives and works. 'The last I heard from my kid sister Sandy, Clayton was working for Mr Wright, who owns the Midvale television Store': onscreen, there is Clayton's repair van bearing the fated slogans, 'if it goes WRONG bring it to WRIGHT' and 'MIDVALE'S BEST'. The camera pans and tilts to show the van's owner tinkering with a rooftop aerial. The stature of the property immediately makes us aware of the class distinction between Clayton, who 'lives in a remodelled carriage house', and his customer Mrs Van Cleeve, Tashlin's figure for

the most particular and moneyed of American consumers. The character contrast is made sharper as we cut between a closer framing of Clayton, who is at that point revealed to be the famously haphazard Jerry Lewis, and shots of Mrs Van Cleeve, who fusses over her pets and the poor reception of the television signal in the living room below.



Figure 37. Artists and Models.



Figure 38. Artists and Models.

We watch Clayton adjusting the aerial at the frame edge as his admirer Sandy walks into the lower portion of the shot and vies for his attention (figure 39). 'I get dizzy if I look down', Clayton shouts to her with back turned, from a vertiginous long shot taken at a sheer

upwards angle which makes full use of the 1.85:1 aspect ratio (figure 40). Now primed for pratfalls, and very much aware of the consequences, the audience watches as Sandy distracts Clayton with news of a glamorous Hollywood actress (of course) and he teeters, hangs from the aerial and begins to revolve. The ensuing action cuts between long shots of a stunt double and full shots of Tashlin's star, thereby satisfying our appetite for Lewis' iconic brand of physical comedy. A subsequent wrestling match with a 'sentient' firehose follows a similar pattern. The final long shot in the TV repair sequence is a Tashlinesque scene of cartoonish destruction that was to be repeated with the biblical flood which issues from the spa in *The Geisha Boy* (1958). Clayton falls down the chimney and the perfect white house, seen from the exterior, exhales an improbable quantity of black smog.



Figure 39. Rock-a-bye Baby.



Figure 40. *Rock-a-bye Baby.*

By swapping small-town and urban settings for the great outdoors, Tashlin's 'travel films' provided an opportunity to play with tropes of big budget widescreen cinema. Again, Tashlin deploys the combination of full and long shots seen in his more domesticated comedies to 'contextualise' Lewis' performances. In *Hollywood or Bust* (1956), co-starring Dean Martin and Pat Crowley, Tashlin reorients widescreen genres in a portion of the film devoted to travelogue-style tourism. Lewis' character Malcolm fantasises about meeting Anita Ekberg, who we are told is due to star in a Paramount VistaVision picture. However, on their way to Hollywood, the group are side-tracked by another film star, the American West. As the car

pulls up alongside the Grand Canyon, the camera follows the curvature of the road in a panoramic shot of the scenery that lies beyond. The same landmark had been captured in the famous patriotic finale to *This is Cinerama* (1952), and displayed on a three-screen system which, along with VistaVision, is mentioned in the titular song of *Hollywood or Bust*.³⁴³ The three tourists are consumed by the landscape as they walk into a long shot and sing 'The Wild and Wooly West', with Tashlin pulling back to compose with equal parts scenery above and below.

Although it is an ensemble performance, Tashlin consistently gives Lewis the greatest room to express himself in *Hollywood Bust*. For example, in long shots of the stageshow and Hollywood Bowl, the diminutive figure of Lewis can more easily be heard than seen projecting himself through comic roars and snores. Lewis' sonic performance is so loud as to defy realism, hollowing out rather than filling in the space around him. Much like Tashlin's overlaying of a Japanese mountain with the Paramount logo in *The Geisha Boy*, the naturalistic sense of place which Tashlin establishes in *Hollywood or Bust* is flattened by his stronger sense of humour; noticing that their song has echoed in the Canyon, Malcolm (Lewis) remarks 'that's pretty', as we cut to a surreal landscape shot in which the Canyon intones, 'thank you'. The widescreen travelogue is appropriated for parody rather than generic immersion. A similar downsizing of widescreen spectacle occurs in *The Geisha Boy*. Sessue Hayakawa, who is General Saito in David Lean's *The Bridge on the River Kwai*, released in CinemaScope the previous year, constructs a bridge over a garden pond to entertain his on. A hazy clip from Lean's film is inserted as Lewis struggles to reconcile its likeness to the scene before him (figures 41 and 42).

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³⁴³ According to Belton's sources, 'Even veteran airmen reacted to Cinerama's illusion of reality [...] Gen. James Doolittle clutched his chair when stunt pilot Paul Mantz flew through the Grand Canyon': Belton, *Widescreen Cinema*, p. 93.



Figure 41. The Geisha Boy.



Figure 42. The Geisha Boy (Bridge on the River Kwai).

To summarise the argument thus far, the frame and depth of VistaVision provided Tashlin with alternative compositional and staging options to deliver his at times surreal brand of comedy. While the dialogue sequences do not have the dance-like grace of Tashlin's medium shots in CinemaScope, Jerry Lewis' full body performances encourage Tashlin to pull back from a scene in his more distantly shot VistaVision films. The result is best demonstrated by spectacular long shots which evidence bravura changes in scale, camera angle and careful

figure placement within the tall and wide frame. However, these qualities also apply in simple set ups. In Artists and Models, Tashlin shoots deep into the narrow confines of a New York apartment block, another comment on property, and has an exacerbated Lewis drag himself up, down and through the building in full shot to reach the telephone. Tashlin's VistaVision films leave us with a stronger sense of height and depth than his CinemaScope films, though his animation, sound effects and film clips have a rough texture which 'flatten' VistaVision shots.

In Tashlin's hands, the wide screen holds a cracked mirror up to post-war consumer culture. His films often rely on the audience's shared knowledge of marketing tactics in order to make them laugh at the disjuncture between products as advertised and their practical value. Tashlin makes fun of franchises, trashes the trash. Whether depicted on greyscale television, in Academy proportions, or widescreen, the goods either underwhelm or disturb the senses. As products of Hollywood, CinemaScope and VistaVision are also exposed to Tashlin's barbed humour. Harper Cossar suggests that Tashlin has an 'absurdist quality' when at his most reflexive, perhaps because his double entendre of diegetic and fourth-wall gags leaves us with nowhere else to look for affirmative meaning.³⁴⁴ Both the subject and means of representation are caricatured: as in his cartoons, so too in live-action. What is certain, Tashlin was fascinated by the manner in which consumer content was being packaged and formatted in the 1950s.

More than simply 'mocking' television and film screens, as Cossar says, Tashlin builds a collage of various materials and contrasting textures: fuzzy televisions, high gloss billboards (figure 37), grainy film clips (figure 42), and smooth animation. The television is just one facet of Tashlin's multi-media world, in the sense Lucy Fife Donaldson describes in *Texture in Film*: 'surfaces indicate the nature of a material world, literally in terms of touch and also in their communication of substance, the analogy with real space'. 345 Donaldson's word, 'analogy',

³⁴⁴ Cossar, *Letterboxed*, p. 146. ³⁴⁵ Donaldson, p. 82.

underlines how representing real space is a process of fabrication; the fictional world is constructed from the raw materials available on a set or location and which, by their textural consistency, help us to situate a story. However, the texture of Tashlin's films is multi-format, lacking consistency across its mirror images: the miniature Bridge on the River Kwai and the British CinemaScope film version, in *The Geisha Boy*, and the red lips of the billboard and those of the 'bat lady', Lewis' paramore in *Artists and Models*, whom Bessie (Shirley MacLaine) imitates by puckering her lips. If these two examples are indicative of the scale of Tashlin's gags, which can include both cinephile monuments to transnational film culture and New York tower blocks, they show an equal tendency to blur private and celebrity worlds, personal space and advertising space.

Tashlin's disturbing techniques are quite different to, for example, the collage of Richard Avedon's fashion photographs in *Funny Face* (Stanley Donen, 1957). Tashlin's characters get caught in the mix of materials, giving the sense of having accidentally walked into an advert that looks familiar and yet feels different. In *The Geisha Boy*, Lewis must do a double-take and stare at the Bridge immediately before him, in 'real-world' high definition VistaVision, which then contrasts with the muddier CinemaScope image of *Bridge on the River Kwai*.

Barr was the first to theorise the role of texture for widescreen compositions. This would in turn communicate CinemaScope's heightened spatial realism. To illustrate, Barr envisions a widescreen film adaptation of a scene from *Tess of the d'Urbervilles*, where Tess discloses past abuses to her husband in an uncomfortable setting:

I can't imagine a better method than to keep both of them in the frame the whole time, with the "material objects" around and between them, and to have her explanation, and then his silence, and reactions, in a single take, without any overt emphasis from the camera. Ideally, in CinemaScope, which makes the surroundings more palpable, and enables you to get close to one or both of the characters without shutting out the rest of the scene.346

Interpreting Thomas Hardy's contrast between Tess' traumatic utterance and the homely objects which appear to close in around her (a fire grate, a hot water bottle, and so on), Barr imagines the palpability of domestic clutter accumulating across the widescreen. The length and breadth of widescreen shots allow the viewer to interrelate character and setting without overt emphasis. The spectator, as if having opened a richly furnished wardrobe, begins to explore the contents – the 'stuff' of diegetic space – and forgets the frame/screen edge.

In other words, it is not simply that widescreen cinema offers immersion by pushing the frame beyond our peripheral vision; texture allures the viewer and keeps them looking within the bounds of the frame. A variation on Barr's 'gradation of emphasis', textural variegation involves tracing incidental details of character and setting as they materialise onscreen, within the more general activity of widescreen spectatorship which Barr outlines: 'one just has to sit in front of the films and see how space and décor and relationships are organized, and the eye led from one point to another within the image; how connections are made, and characters introduced, not being "added on" to the rest of the context but developing out of it'. 347 His stress on a character who develops out of the environment is a

³⁴⁶ Barr, 'CinemaScope', p. 16. ³⁴⁷ Ibid, 'CinemaScope', p. 19.

reference to both their spatial integration with the immediate, material surroundings and broader resonance with the diegetic world of the film.

Barr is less inclined to discuss the textures of cinematographic versus pro-filmic space which Tashlin extracts and recombines. The materiality of widescreen, its potential to emerge as spectacular attraction in its own right, is suppressed by alternate aesthetic criteria revolving around an unobtrusive and integrated realism. Donaldson writes that the 'contemplation of texture in film offers a way to unpick the feelings evoked by the constituents of a film's form, by the qualities of the materials it uses'. Returning to the opening of *Artists and Models*, in VistaVision, we find different evocations of feeling as its textures unravel. The shot begins with giant red lips, flecked with light and wet paint from the passing brush, and boasting VistaVision's high resolution and colour. There is no context, as in Barr's example, just the close-up of the painted surface which variegates cinematographic space. As the camera reverses, the lure of the lips is made sense of and reframed by the huge billboard for cigarettes. Materialistic delight turns into materialism, and ebbs as we cut to a softer matte shot of Martin (seen in large perspective against the skyscraper and false wall).

Tashlin's staging and composition techniques are rendered in detail thanks to VistaVision's wide-frame negative. VistaVision's clear delineation of textures alternately showcase and problematise the format's practicality. The texture of shots prompts questions about the production context and aesthetics, which compete with diegetic immersion for immediate attention. The rendition of texture is also bound up with scale: the distance from/to objects, or the focal sharpness/softness of long shots and close-ups. My following section dissects this issue of scale further, by examining its interconnection with the theme of perception in Alfred Hitchcock's location thrillers.

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³⁴⁸ Donaldson, p. 6.

Alfred Hitchcock: Widescreen Suspense and Aesthetics of Scale

Alfred Hitchcock directed five VistaVision films on location during the post-war phase of his Hollywood career, consisting of *To Catch a Thief* (1955), *The Trouble with Harry* (1955), *The Man Who Knew Too Much* (1956), *Vertigo* (1958) and *North by Northwest* (1959). Like Tashlin, Hitchcock demonstrates flexibility in switching between shot scales. However, Hitchcock also psychologises his long shots, planting the camera in the position of an observer or using composition as an extension of the main character's thoughts and fears. Whereas Tashlin delights in changing and often subverting our feel of space, Hitchcock alters perspectives. The experience of watching Hitchcock's long shots can leave us with an impression of impending danger, because the precise composition has drawn our attention to a salient detail, and yet either its positioning or timespan has made us aware that our impression is limited and precarious. The viewer is left in suspenseful anticipation, having been shown very much and yet not enough to make a clear judgement. These ideas inform my analysis of Hitchcock's VistaVision themes and key shots.

Although Hitchcock's post-war career features some of his most well-known films, these have not been compared on the basis of VistaVision technology, neglecting a key element of the production context. Where there has been engagement with Hitchcock's film directing career in VistaVision, this has been limited to isolated films. VistaVision is typically linked to Hitchcock's landscapes, and in the critical contributions I engage with below, we receive contradictory arguments: VistaVision was either technologically burdensome or neatly assimilated into production on location. Examining multiple titles will show patterns of technique and style more clearly. Hitchcock's much discussed set-pieces of the late 1950s, such as the crop duster in *North by Northwest* and the first 'death' of Madeleine in *Vertigo*, deserve to be contextualised by a study of his earlier VistaVision compositions. Another issue relates to the mismatch between Hitchcock's direct style and traditional views of widescreen

aesthetics, the latter celebrating longer takes with a clear view of unfolding narrative events. Hitchcock's style does not prevent this type of approach, as I will show, but it is not the most rewarding if it forecloses analysis. Distant shot scales, rapid cutting and décor prime and disorient the viewer in suspenseful sequences. As with Tashlin, I will trace these signature techniques across several examples before revisiting key shots to consider Hitchcock's widescreen aesthetics in more detail.

With To Catch Thief, Hitchcock incorporated suspense into idyllic vistas, frequently introducing elements that trouble the touristic frame. John Robie (Cary Grant) becomes the chief suspect in a case involving jewel theft along the French coast. Despite having long abandoned his former career as a thief, Robie's criminal record stands against him, and he must quit his retirement to catch the real thief. The traveloguesque blends with Hitchcockian suspense as the wanted man attempts to blend in like a tourist and even conducts detective work on the pretence that he is sightseeing. For example, having been chased along the coast, a low-angle allows for imposing views of the mountains behind Robie. The wide frame is also alive with action. Robie's arriving bus brings our attention to the middle distance, screencentre, at which point a policeman in the foreground wanders across our eye line. The distraction of the bus is slight, but it means that we are more inclined to sense the policeman's presence almost peripherally, as does Robie. Caught unawares, Robie proceeds to cover his face almost to feign precaution as he passes by. Some of the later sequences are comedic, as when two background figures materialise behind Robie when visiting a flower market. The next few seconds also reveal the limits of Hitchcock's stylistic affinity with widescreen aesthetics, or at least, the conventional spatial contiguity that has been associated with widescreen cinema; shortly after the ominous figures appear in the background, the sequence cuts into closer shots to glean the reactions of hunters and prey, breaking up the scene.

Even Hitchcock's very long shots are interspersed with closer portraits of curiosity and

fear. Very aware that he is being pursued, and with the intention of learning more about the criminal for whom he has been mistaken, Robie next escapes to a holiday villa with Frances (Grace Kelly). As the couple arrive at the property and wander the grounds, Riviera in full view, Robie spots a figure near the house. Hitchcock then plays a game of channelling and obstructing our view, shifting between reaction shots of Robie and eye-line cuts to the mansion. Our curiosity is aroused by Robie's reactions but the figure resists description, being seen from a distance and, dressed in white, blending in with the garden's statues. The symmetry between the figure and the ornamentation ensnares the eye as we trace the progress of the man, who turns out to be Bertani, across two very long shots (figures 43 and 44), two long shots and a medium close-up. In response to this scene, Robert R. Shandley has written that:

The shot is at enough distance that it is easy to imagine that the identity of the man may not have been clear to the spectator upon one viewing of the film. VistaVision simply cannot achieve the depth of field required to provide the spectator the information required to build up and sustain Hitchcockian tension.³⁴⁹

VistaVision is misread as hampering. It is precisely the difficulty of seeing Bertani that contributes to tension, which effect is created by shot scale, patterns in décor and pacing of the shot. The pacing directly and artfully contradicts conventional wisdom regarding widescreen shot lengths, presenting a 'gradation of emphasis' across the composition but little time to navigate the detailed expanse.³⁵⁰ Flickers of recognition contribute to the signature pacing of *To Catch a Thief*.

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³⁴⁹ Robert R. Shandley, *Runaway Romances: Hollywood's Postwar Tour of Europe* (Philadelphia; Temple University Press 2009), p. 98.

³⁵⁰ Barr, 'CinemaScope', p. 18.



Figure 43. To Catch a Thief.



Figure 44. To Catch a Thief.

Themes of perception and the disruption of eye-line recur in *Vertigo*. Hitchcock repeatedly uses the extreme depth which became firmly associated with VistaVision during the 1950s in order to express the helplessness experienced by a displaced person who faces problems which are quite literally represented as being much larger than themselves. Ana Salzberg seems to share this sentiment when she writes that, 'emphasising depth of field and verticality, in this way exceeding the strict horizontal axis of the CinemaScope widescreen

format, VistaVision reveals the imposing material dimensionality of *Vertigo*'s sites in direct correlation to their psychological valence'. Salzberg here references the vertical compositions which frame the landmarks of Golden Gate Bridge, Red Woods State Park and Mission Dolores in which Scottie (James Stewart) desperately tries to ground himself and Madeleine (Kim Novak), for whom these places represent haunted sites. The landscapes and buildings take on vast, dream-like proportions as Scottie pursues Madeline's delusions, which are in fact illusions designed to embroil him.

Minute figures are found in very long shots from Hitchcock's VistaVision remake of *The Man Who Knew Too Much*. Josephine (Doris Day) and Ben (James Stewart) have tracked their kidnapped son, Hank, to a criminal hideout in London. The same villains have arranged for a political assassination to be undertaken during an Albert Hall performance, at the precise moment of a cymbal crash. The passing of time becomes tangible in the film's final act, as our sympathies are split between Hank and the insurmountable second problem of the assassination. At the church where Hank is being held, Josephine is awaiting Ben's delayed arrival (figure 45). In this very long shot, which captures the entire length of the church, Josephine can be spotted in one corner of the frame, compulsively folding her white gloves out of anticipation; concurrently, and unknown to her, the assassin (foreground) walks from the rear entrance of the church to a car, before swiftly departing for the Albert Hall. Hitchcock dwells on the unforgiving distance between Josephine and the assassin, who is so close and yet so far. As in a nightmare, the dreamer exerts themselves but remains in situ.

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³⁵¹ Ana Salzberg, 'VistaVision and the Cinematic Landscape of Vertigo', in *The San Francisco of Alfred Hitchcock's Vertigo: Place, Pilgrimage and Commemoration*, ed. by Douglas A. Cunningham (Plymouth: Scarecrow Press, 2011), pp. 63-80 (p. 64).



Figure 45. The Man Who Knew Too Much.

What I have said of Josephine's predicament in *The Man Who Knew Too Much* could also apply to the long shot of Roger Thornhill (Cary Grant) being marooned on a non-descript roadside in *North by Northwest*, or Scottie's bewilderment following Madeline's first fall from the tower in *Vertigo*. As Scottie leaves the Mission, a highly perched shot positions the whole tower centre-frame, while the nuns attend to the 'body' of Madeline on the roof to the left. The minute figure of Scottie is confined to the right-hand corner as he stumbles, seems to look back toward the still body, the state of which he cannot see, and then staggers out of sight. The scale of Scottie's obsession is mapped onto the coordinates of the VistaVision frame, in which the body and vertical tower loom over him. As with the assassin's escape in *The Man Who Knew Too Much*, the scale works to prolong the actual runtime of the shot. From this great height, and in practical terms, it takes longer for Scottie to exit the frame (figure 46). Aesthetically, he appears to retreat in nightmarish slow motion.



Figure 46. Vertigo.

Deep shots and large-scale representations recur in Hitchcock's VistaVision set pieces and resonate with widescreen cinema's aesthetic appeal. Depth and scale are closely interrelated, as Mary Ann Doane writes:

Perspective as a system calculates distance as a relation to scale. The large is close; the small, distant. The infinitely distant would be the infinitely small – the geometric point, without extension, in short, the vanishing point.³⁵²

It follows that widescreen cinema would represent the infinitely small as proof of its capaciousness, the ability to film that which is almost inscrutably faraway. Doane notes that 'the guarantee that widescreen gives to an almost limitless sense of horizontality leads [Otto] Preminger to mark continually the intense depth of the image, incessantly reiterating the vanishing point'. 353 By any conventional definition of widescreen aesthetics, Hitchcock's

³⁵² Doane, p. 75. ³⁵³ Ibid., p. 75.

approach to VistaVision is stylistically and thematically divergent. He provides a deep shot and burdens us with fast cutting and complicated décor which preclude a clear view. Inverting this theme, he also uses the large and deep frame to grant the spectator a grand overview of what the character cannot see (figures 45 and 46).

The discovery that Robie and Frances are not alone in the garden in To Catch a Thief alters the meaning of the establishing shot which immediately precedes his appearance. As we may come to realise, this shot corresponds to the position from which Bertani begins his approach. In this and other long shots, Hitchcock's placement of actors within a vista creates a 'doll's house' effect whereby unaware characters appear to be under manipulation, or in some cases, it is as if the misfortunes which often befall Hitchcock's innocent characters are being viewed in their fullest cosmic proportions. Hitchcock did not have a monopoly on the 'cosmic' long shot. Not unlike Hitchcock's Roger Thornhill, Cayatte's white-collar protagonist is seen wandering the desert in Oeil Pour Oeil [Eye for An Eye], cut off from urban comforts. By drawing the camera far back while keeping his actor in focus and interweaving reaction shots with barren landscapes, Cayatte incorporated the visual clarity of VistaVision into what André Bazin described as the 'intellectual clarity' of this director's unforgiving social rhetoric.³⁵⁴ From a parallel vantage point and with a similar fateful tone, defamed New York mayor, Jimmy Walker (Bob Hope), makes the long and desolate walk across a baseball stadium to announce his retirement in *Beau James* (Melville Shavelson, 1957). Staging within these shots points to an earthly kind of futility, as characters are unaware of the scale of events unfolding within the frame. In both the examples from Vertigo and The Man Who Knew Too Much, we also notice that looking up the height of the frame is equal in importance to the horizontal axis noted by Doane. The verticality of VistaVision will be examined further in my next section.

³⁵⁴ Bazin, 'The Cybernetics of André Cayatte', in *Bazin at Work*, ed. by Cardullo, pp. 93-102 (p. 95).

Powell and Pressburger: Group Staging and Axial Compositions

Reflecting on *The Cruel Sea* (1953) and *The Dam Busters* (1955), Christine Geraghty writes that 'British war films lack the sense of rapport between man and landscape, the physical ease of action characteristic of the western [because] the spectacle features machines rather than men in the landscape'. ³⁵⁵ In *The Battle of the River Plate*, Powell and Pressburger take this one step further by having battleships serve as technological 'landscapes' in their own right. Raymond Durgnat echoes this point about technological scale in comparing the Graf Spee, a German warship which supplies the film's most elaborate setting and only real villain, to a 'vast, complex killing-city [...] invested with Satanic nobility'. ³⁵⁶ Powell and Pressburger's presentation of the ship was first plotted to widescreen co-ordinates in their shooting script:

[First long shot aboard the Graf Spee]: Gun's crew in foreground. Gunner speaking on telephone. We see Dove and the Master-at-Arms in the distance. Beyond - and seeming so far away that you might almost imagine them part of another ship - the Control Tower, Bridge and Radar mast.³⁵⁷

In the shot described by Pressburger, the British Captain Dove (Bernard Lee) is being led on a tour of the enemy ship by German naval officers. The draughtsman-like cinematography of Chris Challis captures the distant turrets and control tower, which colonise the upper half of the composition, in a long shot replete with pristine surfaces. Dove is engulfed by the metallic surroundings in the distance, where his small figure can be spotted wobbling cautiously onto the deck. The camera then cuts into a medium shot of Dove, with head tilted

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³⁵⁵ Christine Geraghty, *British Cinema in the Fifties: Gender, Genre and The 'New Look'* (London: Routledge, 2000), p. 179.

³⁵⁶ Raymond Durgnat, *A Mirror for England: British Movies from Austerity to Affluence*, 2nd edn (Basingstoke: Palgrave Macmillan, 2011), p. 251.

³⁵⁷ London, British Film Institute Special Collections (BFI), Emeric Pressburger Collection, EPR 1/53/2, *The Battle of the River Plate* Final Script, August 1955, p. 9.

back, staring up at raised gun turrets. A series of point of view shots subsequently capture the ship's edifices from sheer angles, as if its mess of fortifications were cliffs towering above or outcroppings from which to peer. The scene was similarly described by Powell in a letter to Pressburger dated 17 September 1955, now contained in the BFI Special Collections: 'The altmark scenes should please you. They are just as you imagined, covered from many angles, and very spectacular.' Charles Barr and Andrew Moor have written about the psychological quality of foreign spaces which Powell and Pressburger's outsider characters traverse, 'and from the mise-en-scène alone, we sense that Dove is overawed.

Our first introduction to the Graf Spee bears thematic and stylistic trademarks of the Powell and Pressburger film. First, cluttered widescreen compositions are something which the filmmakers began to explore in their CinemaScope film, *Oh... Rosalinda!!* (1955), in which actors are positioned in and around Hein Heckroth's bizarre production design (figures 47 and 48). Composition in the VistaVision films is also meticulous, only the camera is now firmly planted on location rather than Heckroth's sets, offering incidental details for more densely packed shots. Dove's tour of the Graf Spee exemplifies the director's resourceful staging techniques using the single setting of a ship, which, when not being filmed for its inherent surface appeal, provides latticed areas within which to slot the actors (figure 49).

³⁵⁸ BFI, Emeric Pressburger Collection, EPR/1/35/4, Powell to Pressburger, 17 September 1955.

³⁵⁹ Charles Barr, 'In a Strange Land: The Collaboration of Michael Powell and Emeric Pressburger', La Lettre de la Maison française d'Oxford, 11 (1999), 95-104; Andrew Moor, Powell and Pressburger: A Cinema of Magic Spaces (London: I. B. Tauris, 2005), p 137.



Figure 47. Oh... Rosalinda!!



Figure 48. Oh... Rosalinda!!



Figure 49. The Battle of the River Plate.



Figure 50. Ill Met by Moonlight.

In *Ill Met by Moonlight,* Powell and Pressburger again use near vertical camera angles and depth to emphasise the scale of their outdoor setting while also manipulating it for compositional ends. The opening narration introduces us to resistance fighters in Nazioccupied Crete, who 'like hungry wolves, look down on their quarry below'. Encamped with the Cretans, the camera frequently pans down from the mountains to scan the wilderness at sheer angles. Nearing the film's climax, we watch over the shoulder of one fighter as Nazi soldiers invade the shore, their scale reassuringly diminutive in comparison with their number (figure 50). Each element of the composition is naturalistic, but Powell and Pressburger have subtly divided the shot into the thirds of land, bay and mountain, all of which the onlookers are attempting to hold dominion over.

In Tashlin's comedies and Hitchcock's thrillers, individual performances are through composition isolated for attention. In the VistaVision war films of Powell and Pressburger, the signature themes of camaraderie and cultural difference are strongly expressed in group staging. Once again, Powell and Pressburger's technique has changed from their earlier CinemaScope musical, *Oh... Rosalinda!!*, and to some extent Michael Powell's CinemaScope short, *The Sorcerer's Apprentice* (1955). In the two earlier widescreen films, actors are repeatedly staged along the lateral axis in dialogue sequences, dances and for visual gags. The staging observes rules of balance, pushing each actor into the left, centre and right-hand thirds of the screen. Since the approach is often taken with one to three actors, gulfs of empty space draw attention to the extreme horizontality of the mise-en-scène (figures 51 and 52). The mannered CinemaScope aesthetic complements Powell and Pressburger's operetta aesthetic, otherwise such staging techniques could be viewed as a contrived response to CinemaScope's constraints.



Figure 51. Oh... Rosalinda!!



Figure 53. Ill Met by Moonlight.

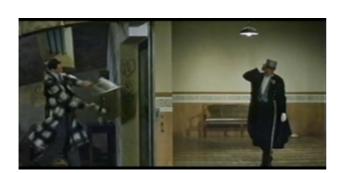


Figure 52. Oh... Rosalinda!!



Figure 54. The Battle of the River Plate.

In their VistaVision films, the narrower 1.85:1 aspect ratio of VistaVision contracts the playing space just enough to yield naturalistic and lively scenes when compared with the CinemaScope films. Actors are no longer staged in 'clothesline' formations but are pressed together and staggered in depth to fit within the frame. Moor picks up on the scope of Powell's group staging when he contrasts *The Battle of the River Plate* with *The Life and Death of Colonel Blimp* (1943): 'Camera distances signal the difference between the two films: the upclose, engaged characterization of *Blimp* has become a solid long-shot tableau'. It is important to acknowledge that the group staging was not just big, but offered arrangements of sometimes staggering complexity in depth and width. Powell and Pressburger attempt a more varied choreography within the tighter frame, from the briefest of dialogue sequences to the baroque grouping of highly populated shots, such as those of the British sailors being held captive in the bowels of the Graf Spee.

Upholding Powell and Pressburger's career-long interest in cultural values and differences, there is often a tribal dynamic to their group shots. In *Ill Met By Moonlight*, we witness Patrick (Dirk Bogarde) divulge his plot to infiltrate a German base to a Cretan fighter (figure 53). Two Nazi soldiers, seen between the co-conspirators, sip coffee in the background. A Greek waiter staged at the frame periphery both 'completes' the composition and reminds us of the civilian lives described in the opening narration and who, being peripheral, are subject to the wargames of both Nazi and Allied troops. In an earlier version of the cafe scene, Bogarde was to also interact evasively with a Nazi soldier, though in the final version the menacing presence of Axis forces is left visually implicit.

In the main battle of the *River Plate*, Powell and Pressburger deploy group shots of the captains commanding the officers on the bridge of each ship, as outlined in the script: 'We know the ships and we know their Commanders who each has his own character and

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³⁶⁰ Moor, p. 165.

idiosyncracies, affecting the men around them and governing their decisions'.³⁶¹ During the film's spectacular finale, multiple group responses to the scuttling of the Graf Spee are edited together in quick succession. We are then able to contrast the poignant way in which Commodore Harwood (Anthony Quayle) retreats behind his naval officers out of mourning, as they listen to the radio commentary, with the brazen voyeurism of onlookers at the bay-side, and thirdly, the metaphysical musings of political figures who are filmed, theatre-box style, atop a balcony with binoculars in hand (figure 54).

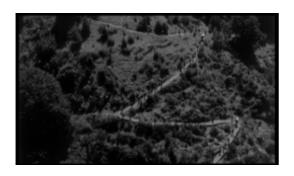


Figure 55. Ill Met by Moonlight.



Figure 56. The Battle of the River Plate.

In their latticed compositions and group staging, Powell and Pressburger's VistaVision films are similar to Tashlin's in that they evidence an evolution of method that is less distinct across the VistaVision films of Hitchcock. Powell and Pressburger's staging strategies can still take on a mannered appearance recalling the CinemaScope films, such as the zig-zag patterns seen in *River Plate* and *Ill Met By Moonlight* (figures 55 and 56), but the spatial co-ordinates remain deep where the CinemaScope films appear flat. It is difficult to imagine these films formatted the opposite way around, and in retrospect, the change in genre from musical comedy to historical war film provided the perfect transition for Powell and Pressburger to test the

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³⁶¹ BFI, Emeric Pressburger Collection, EPR 1/53/2, *The Battle of the River Plate*, Final Script, August 1955, P. 37.

technological and stylistic constraints of the two rival systems of CinemaScope and VistaVision.

One notable difference from the shift from CinemaScope to VistaVision is the dual appeal of verticality and warfare in the latter. Warship masts and mountains tower high in the VistaVision frame, dwarfing the soldiers. In 1930, just prior to the standardisation of the 1.37:1 aspect ratio for sound films, Eisenstein made a similar bid for a cinema of verticality. He stated that a variable frame could flaunt the horizontality of widescreen aspect ratios, briefly used in Hollywood cinema during the late 1920s, but without the loss of verticality found in the old aspect ratio. The dynamic square proposal was based on wide-ranging theories which sought to interrelate shot composition, likely subjects for future films, theatre architecture, film commerce, evolutionary biology and the history of the industrial revolution. But one clear motif of Eisenstein's paper is his association between modernity, masculinity and vertical subjects, which could include 'the Paramount building in New York, [the heavyweight boxer] Primo Carnera, or the profound and abysmal canyons of Wall Street in all their expressiveness - shots available to the cheapest magazine - yet debarred for thirty years from the screen.'362

It is important to highlight that Eisenstein's conception of the relation between frame and profilmic space is essentially isomorphic, for example, focusing on the kinship between inherently tall subjects and the vertical shot axis. Spatial immersion, or what Eisenstein called 'vertical and horizontal affective impulses', comes not only from framing but the staging of actors in relation to their surroundings, camera angle, off-screen space, and sound design.³⁶³ A number of the films studied thus far, notably *Strategic Air Command*, offer such variables. Powell and Pressburger's cinema is noteworthy for drawing relations between invaded and

³⁶² Eisenstein, p. 53. ³⁶³ Ibid, p. 53.

invader (figure 50) or captive and host (figure 49) in vertical space, with a steep camera angle and depth that looks into and down the frame. Although vertical in a spatial sense, it is typical of the directors' themes that these complex relations between characters are never simply hierarchical.

Conclusion

This chapter has shown how widescreen aesthetics feature in the VistaVision films of four film directors, while also interrogating aesthetic concepts of widescreen space though their films. This has provided some additional routes beyond the orthodox focus on CinemaScope's realism, wide and deep staging. All of the studied directors worked within industrial constraints and commercial expectations, whether incorporating new technologies, contracted stars or spectacular locations into their mise-en-scène. Concepts of verticality, width, texture and depth are refracted by these production contexts and signature styles.

Tashlin's career was subject to the commercial cross-currents of inter-studio rivalry, requiring him to adapt his comedy directing to different widescreen technologies and contracted stars on a routine basis. His comedies demand we consider the broader production context and thereby transcend the normative focus on CinemaScope, something which both sequence and statistical analysis assists in doing. VistaVision provided Tashlin with alternative compositional and staging options to deliver his physically chaotic brand of comedy. While the dialogue sequences do not command the dance-like choreography of Tashlin's medium shots in CinemaScope, Lewis' star performances may have encouraged Tashlin to rescale during his versatile VistaVision films. The result is best demonstrated by spectacular long shots which evidence bravura changes in scale, camera angle and careful figure placement within the tall and wide VistaVision frame, though these qualities also apply in simpler set ups such as interior dialogue. Tashlin's VistaVision films leave us with a stronger sense of height and depth than

his CinemaScope films, which can appear very wide but also flat in their lateral staging. At other times, Tashlin's collage and collision of textured surfaces in VistaVision films draw attention to the cinematographic space in spectacular fashion, whereas Barr's arguments on widescreen and texture engage with the diegetic space and not the materiality of the image itself. Tashlin's films revel in the textural appeal of consumer culture and different technologies.

Alfred Hitchcock's VistaVision films were compared to detect underreported signature techniques of staging and composition. His use of widescreen space included building suspense through visual distraction, background action on location, long shots which show characters in futile situations, or evade our own perception because of the pacing, staging or distant scale. Hitchcock's rapid cutting and analytical editing do not fit the traditional widescreen aesthetic mould emblemised by Barr's gradation of emphasis concept. It follows that incorporating Hitchcock involved pinpointing where his style might satisfy other ends or even offer a kind of meta-discourse on widescreen cinema's all-seeing connotations, by showing how large environments can distort space or meddle with perception. Hitchcock's themes and long shot techniques allow me to place him in productive dialogue with Mary Anne Doane's writings on distortions of scale and widescreen cinema.

Powell and Pressburger's group staging and axial compositions usefully captured differences in application of the CinemaScope and VistaVision formats. This was enabled by their changing of genre from the film operetta to the war film, shot on location. I showed how *The Battle of the River Plate* and *Ill Met By Moonlight* rekindled Powell and Pressburger's thematic interest in cultural difference and exchange. Where CinemaScope allowed for spectacular staging along the horizontal axis, these relations were abstract whereas in the war films they are also socio-political. The war films also create verticality through their staging in 1.85:1 and camera angles to embolden technologies and relations between characters.

Eisenstein's writings on the dynamic frame drew attention to a long-held association between modernity and the vertical in film aesthetics discourse. The formalism of Eisenstein's argument is however more applicable to Powell and Pressburger's *Oh... Rosalinda!!*, in CinemaScope.

In the next chapter, I will consider how the VistaVision film epic drew together large format experts in Britain, the USA and further afield, including cinematographers and set designers not considered so far. The trade discussion of craft labour on VistaVision film productions will be investigated, to assess craft ideals and whether individuals who worked with large format film were recognised as becoming proficient at this in their respective areas of expertise. I also consider the fusion of film styles within the context of international and collaborative production practices.

5. Widescreen Epics Outside Hollywood: Collaboration and Craft

I saw the first scenes of *War and Peace* shot as Audrey Hepburn ran down the marble stairs of the entrance hall to the Rostov mansion on the immense stage of the Government Experimentale studio.³⁶⁴

Nobody in the studio had expected anything on this scale [...] outside of Hollywood.³⁶⁵

In Chapter 4, it was argued that many VistaVision films diverge from techniques of composition and staging commonly associated with widescreen film directors. Whereas early CinemaScope films were noted for their shallow depth of field, lens aberrations and extreme horizontality, VistaVision filmmakers variously utilized depth, foreground details and verticality. My analysis showed how visual attributes of VistaVision first promoted by Paramount in the 1953-55 period were refracted by signature styles. Directing styles were also forged within the prevailing conditions of mainstream film production in Britain and the USA, which commercially favoured an emphasis on film stars and locations, tailoring these components to the wide frame. The present chapter builds on the previous analysis of film directing by showing how a broader range of craftspeople contributed to VistaVision film epics in contrasting contexts. Two case studies, *War and Peace* and *The Battle of the River Plate*, are selected to compare the techniques of VistaVision film producers, directors, cinematographers and designers based on location or in the studios of Rome and London.

³⁶⁴ Russell Holman, 'Diary of Two Years', *Motion Picture Daily*, 23 August 1956, p. 6.

The term 'epic' cinema has been used loosely and liberally in the marketing of Hollywood films, where it can be 'as indicative of size and expense as it was of particular kinds of historical setting, of protagonists who are caught up in large-scale events as it was of those who sway the course of history or the fate of nations' according to Sheldon Hall and Steve Neale.³⁶⁶ The relative descriptors of size, expense, setting, star protagonists and national history resonate throughout this chapter. I want to examine precisely how these elements were liable to be appropriated and hybridised in response to the production values of post-war Hollywood, rather than, for example, sustaining a transhistorical, indigenous 'tradition' of Italian or American cinema dating back to silent epics like Cabiria (Giovanni Pastrone, 1914) and Intolerance (D. W. Griffith, 1916). My opening quotations illustrate transnational influences on the VistaVision film epic. After visiting the set of War and Peace in Rome, Paramount executive Russell Holman applauded the performance of transatlantic star, Audrey Hepburn, on a Napoleonic-era Russian set crafted by Italian designers. By comparison, film director Michael Powell marvelled that their model of a German battleship, intercut with photography of Montevideo harbour, would compete with Hollywood for scale. The inclusion of 'expense' also implies discussing the role of producers in more detail than I have undertaken so far. Postwar producers like Dino De Laurentiis shaped the creative infrastructure of the film epic by securing the finance, crew, and widescreen technology.

As in previous chapters, Chapter 5 factors in the catalytic and constraining influence of industry, discourse and technique, with the latter term indicating the meeting of technology and artistic craft. By 'craft', we can refer to the various specialisms involved in film production and their professional discourses, or more intimately, the quality of craftsmanship and its material trace in the final product: a craft signature or trademark. In either case, film craft is inseparable from the question of how much influence individuals have during the production process.

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³⁶⁶ Hall and Neale, p. 5.

To make a basic distinction, in very small-scale productions, writes Pam Cook, 'the film-maker, like a craft worker, is in control of all aspects of the process of production and distribution/ exhibition [...] historically, therefore, artisanal production stands in opposition [...] to the structure of labour within the industry (in terms of its hierarchy and organisation)'. 367 Cook compares the avant-garde filmmaker in receipt of patronage to an artisanal ceramicist or carpenter (the 'craft worker') for whom there is a 'close and intimate' relation to the work, but which would not be shared equally by the many hands employed by a major film studio. 368 In large scale production, it is only through an intimate knowledge of the production history that we can extricate the individual contributions of producers, directors, cinematographers and set designers from the collaborative process of epic filmmaking. Previous sections of this thesis have dealt with various levels of production activity. The current chapter focuses on the individual feature to bring out fine-grained details, using production papers in the BFI Special Collections, Film Finances Archive, Margaret Herrick Library, and memoirs in order to reconstruct the production chronology.

Unlike artisanal modes of production, individual contributions are less general and more specialised in the VistaVision film epic, being constrained by job title and industrial conceptions of craft. By 'the craft of VistaVision films', then, I include the organisation of specific roles, their relatively closed circuits of knowledge, trade secrets and techniques, as when Katie Bird describes Steadicam labour as a 'conceptually and physically distinct form of cinematographic craft', or Helen Hanson writes that classical Hollywood's 'sound technicians had a repertoire of sound techniques at their command'. ³⁶⁹ I also embrace the craft discourses which informed professional standards, for example, Patrick Keating's reference to the 'the

³⁶⁷ Pam Cook, 'The point of self-expression in avant-garde film', in *Theories of Authorship*, ed. by John Caughie (London: Routledge, 1981), pp. 271-81 (pp. 272-73).
³⁶⁸ Ibid., p. 274.

³⁶⁹ Katie Bird, "Dancing, Flying Camera Jockeys": Invisible Labor, Craft Discourse, and Embodied Steadicam and Panaglide Technique', *The Velvet Light Trap*, 80 (Fall 2017), 48-65 (p. 55); Hanson, *Hollywood Soundscapes*, p. 110.

craft of cinematography: a set of norms and ideals determining what the job should be when practiced with artistry and skill'.³⁷⁰ Although this chapter does not focus on the below-the-line labour which Bird, Caldwell and Hanson describe, I have noted where directors, cinematographers and set designers intersected with adjoining areas of expertise such as continuity supervision, script editing and special effects.³⁷¹ VistaVision filmmakers left their individual imprints, but they also worked within a collaborative production culture where craftsmanship merited comment from trade societies, journals and awards bodies.

Epics in the Widescreen Era

Widescreen epics can divide taste. Large-scale drama draws praise for its immersive combination of technologies, action and production design that saturate what Geoff King describes as 'expansive vistas [which] spread out across the width of the big screen', but they have also been regarded as overstuffed and indulgent films which disrupt narrative or parade their production values before the audience in turgid fashion.³⁷² These polarised feelings toward the scale and duration of the epic are captured in the *Monthly Film Bulletin* review of *War and Peace*, the first half of which 'lasted over a hundred minutes' and had a 'lifeless, reverent tone', whereas 'the photography of Jack Cardiff and Aldo Tonti and Vidor's groupings' in battle sequences exemplified a more 'disciplined spectacle'.³⁷³ On the other hand, Barr praised the subtlety of large format film epics such as *Exodus* (Otto Preminger, 1960), deeming as unnecessary the aesthetic division between 'trivial and spectacular' widescreen cinema and the categories of "serious" or "intimate" drama'.³⁷⁴ Similarly, Hall and Neale

³⁷⁰ Patrick Keating, 'Shooting for Selznick: Craft and Collaboration in Hollywood Cinematography', in *The Classical Hollywood Reader*, ed. by Steve Neale (London: Routledge: 2012), pp. 280-95 (p. 281).

³⁷¹ Bird, p. 50; Caldwell, *Production Culture*, p. 116; Hanson, *Hollywood Soundscapes*, pp 5-6.

³⁷² Geoff King, Spectacular Narratives: Hollywood in the Age of the Blockbuster (London: I.B. Tauris, 2000), pp. 1, 192.

³⁷³ P.J.D., War and Peace review, Monthly Film Bulletin, 24 (January 1956), 4-5 (p. 5).

³⁷⁴ Barr, 'CinemaScope', p. 5; 'A Letter From Charles Barr', *The Velvet Light Trap*, 21 (Summer 1985), p. 7.

argue that epics such as *Ben-Hur* (William Wyler, 1959) present delicately staged sequences, the meaning of which can be amplified by vast surroundings: 'the facility of even the widest screens for both spectacle *and* subtlety (sometimes simultaneously) can also be observed in blockbusters made by now-unfashionable craftsmen'.³⁷⁵ King's research also shows how spectacular set pieces can reinforce the dramatic themes of a narrative in deep and intricate ways, even as 'we might wish to stop and stare' at their sumptuously crafted surfaces rather than continue on with the story.³⁷⁶ Adding an alternative viewpoint, Vivian Sobchack notes that it is precisely the 'surge and splendour' of Hollywood's historical epics, with their 'wantonly expansive, hyperbolic, even hysterical acts of cinema', that historians should examine.³⁷⁷

In my analysis of *War and Peace* and *The Battle of the River Plate*, I want to avoid ready-made definitions of what a film epic 'should' look like. Sequences which flout popular or academic expectations and hybridise styles are very illuminating here. For example, studying the VistaVision film epic allows us to observe how this type of film telegraphs its manual craft and reliance on multiple film-producing nations, instead of focusing on the Hollywood epics explored in previous scholarship. Directors, cinematographers and designers were able to display their input through material aspects of profilmic and cinematographic space in VistaVision film epics, or by integrating their handiwork with locations to meet ideals of authenticity. *War and Peace* demonstrates a hybrid style thanks to its dynamic combination of Italian-American resources and personnel, whereas *The Battle of the River Plate* offers a comparative example which signals its epic status despite British studio constraints on lighting and designing ocean settings. Additionally, both VistaVision film epics are as evocative of this

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³⁷⁵ Hall and Neale, p. 156.

³⁷⁶ King, p. 4.

³⁷⁷ Vivian Sobchack, "'Surge and Splendor": A Phenomenology of the Hollywood Historical Epic', *Representations*, 29 (Winter 1990), 24-49 (p. 24).

format's trademark verticality, texture and shot scale range as they are widescreen cinema's horizontality, the latter of which is emphasised by King, Hall and Neale.

While this chapter focuses on the individual feature to demonstrate some of the stylistic opportunities and challenges of VistaVision filmmaking, I am also aware that films regarded as 'epic' offer exceptional case studies which are not representative of broader tends. After examining and comparing these two case studies, I therefore diversify this thesis' selection of films by introducing British examples of what I term 'countercurrents' in VistaVision film production and style, all of which appropriated the format in subversive response to large-scale widescreen cinema.

War and Peace: Spectacular Vistas, Stars and Hybrid Styles

War and Peace can be positioned within Hollywood's tradition of big-budget spectaculars, revived in the post-war years by films such as David and Bathsheba (Henry King, 1951), Quo Vadis (Mervyn LeRoy, 1951) and the epics of Cecil DeMille. The budget of War and Peace totalled \$5.5 million, 40% of which was financed by Paramount as an advance payment for worldwide distribution.³⁷⁸ Paramount's expenditure on War and Peace therefore falls comfortably between two post-war epics which DeMille made for the studio: the pre-VistaVision Samson and Delilah (1949), which cost \$3 million, and The Ten Commandments (1956), which cost \$13 million.³⁷⁹ War and Peace also adheres to the 1950s trend of Hollywood studios reducing their output to focus on extravagant productions in co-operation with foreign facilities and filmmakers seeking international exposure. This was an American-Italian coproduction between Paramount and the Carlo Ponti-Dino De Laurentiis partnership, directed

³⁷⁸ Dick, p. 131.³⁷⁹ Fiscal details from Finler, p. 190.

by Hollywood veteran King Vidor. The Cinecittà studios in Rome, which housed most of the interiors used in *War and Peace*, facilitated the production of both *Quo Vadis* and *Ben-Hur*.

The considerable international resources behind *War and Peace* are put on spectacular display through colour cinematography in VistaVision, lavish production design, sweeping locations, choreographed battles and an ensemble star cast. The film's individual elements were carefully assembled during pre-production to gain global market appeal. The production history underlines how the brand name of VistaVision and recognised aesthetic markers were perceived to help *War and Peace* gain its 'epic' credentials and thereby ensure commercial success in this niche. One can also be too restrictive with the 'epic' label, as if this were a perfectly transparent category in which to place *War and Peace*. The international production team ensured that unique, colossal set pieces sat alongside gritty, claustrophobic and expressionist scenes, demonstrating hybrid styles and divergent possibilities in VistaVision. Prior to making *War and Peace*, producer Dino De Laurentiis believed that its international success would depend upon the dynamic combination of VistaVision cinematography, prodigal scale and star performances. Alongside Samuel Bronston and Sam Spiegel, De Laurentiis belongs to a handful of entrepreneurial independents producing widescreen epics in Europe for overseas distribution via Hollywood in the 1950s and 60s.

De Laurentiis has claimed that *Ulysses* (Mario Camerini, 1954), his Homeric epic starring Kirk Douglas, consolidated his 'good relationship with Paramount' and eased his frequent transitions between small-scale dramas and more extravagant productions during the post-war period. Thus he was able to produce *Riso Amaro [Bitter Rice]* (Giuseppe De Santis, 1949) and *La Strada* (Federico Fellini, 1954), the former also distributed by Paramount, but also larger-scale works such as *Attila* (Pietro Francisci, 1954), *War and Peace*, and *Barabbas*

(Richard Fleischer, 1961). Such was De Laurentiis' interest in the market for spectacular films that, following *War and Peace*, he sold his company shares to Carlo Ponti and established his Cinematografica studio near Rome. De Laurentiis sought to follow Hollywood by introducing expensive blockbusters to the production schedule, whereas Ponti preferred to focus on high volume production of melodramas and crime thrillers. For example, Ponti and Marcello Girosi would later produce two films for Paramount in VistaVision, *The Black Orchid* and *That Kind of Woman* (Sidney Lumet, 1959), both shot in black-and-white and featuring Italian actress Sophia Loren.

In order to target international audiences and deter producers who were competing to adapt the same source material, De Laurentiis constructed a lavish package for *War and Peace* and established the creative parameters within which its production team would work. Tolstoy's novel was of considerable commercial interest to widescreen filmmakers and De Laurentiis was competing with major producers David O. Selznick and Mike Todd for the spoils. As is typical of widescreen epics, trade coverage of the film's creation precipitated the scale of the feature itself. The title registration bureau of the Motion Picture Association of America could not arbitrate due to the producers involved, with De Laurentiis and Todd using their 'outsider' non-member status to claim immunity from story rights concerns raised by Selznick.³⁸² Completion of production would instead depend on which producer could outmanoeuvre the others through logistical efficiency and teaser promotion; securing the desired film stars, widescreen technology and distribution deals during the pre-production phase would be instrumental to their success. In building momentum for their respective projects, producers played a key role in mobilising widescreen film production.

³⁸⁰ Tullio Kezich and Alessandra Levantesi, *Dino: The Life and the Films of Dino De Laurentiis*, trans. by James Marcus (New York: Miramax, 2004), p. 101; *Movie Moguls Speak: Interviews with Top Film Producers*, ed. by Steven Priggé (London: McFarland, 2004), pp. 60-73 (p. 62).

³⁸¹ 'War and Peace Team Splitting', Variety, 23 November 1955, p. 12; 'Program Vs. Epics: Report Ponti-De Laurentiis Have Split Up', Motion Picture Daily, 17 November 1955, p. 3; Dick, p. 131.

^{382 &#}x27;Three Films on "War and Peace"?', The Independent Film Journal, 35 (February 1955), p. 17.

Producing the Epic: Dino De Laurentiis

Fred Zinnemann was contacted by each of the three producers to direct *War and Peace* and his papers, now held by the Margaret Herrick Library, underscore the politics of producing. Zinnemann was first offered the directing role by De Laurentiis on 5 March 1954, leading him, on 10 July, to decline an equivalent offer from Selznick. Zinnemann was due to enter negotiations with the Italian team pending receipt of a screenplay draft, the final version of which would focus on the characters of Pierre and Natasha under the penmanship of Irwin Shaw, with modifications by King Vidor and several others.³⁸³ However, Todd reached out to Zinnemann for the Tolstoy epic when the latter was still directing their debut Todd-AO feature, *Oklahoma!* (1955), announcing his appointment at a press conference in January 1955.³⁸⁴ Todd managed to lure his preferred director away from De Laurentiis by offering a 15% share in any profits made by his Todd-AO version of *War and Peace*, plus 2.5% of stock in his production company.³⁸⁵

Zinnemann's papers illuminate how leading producers exploited business loyalties and widescreen technologies to secure their projects. Similar to the protocol of announcing newly acquired film stars, it was conventional for film journalists to report on the chosen widescreen format as and when this became public knowledge. Selznick remained ambivalent about how his epic would be formatted throughout pre-production, despite Stanley Warner offering him the right to use Cinerama.³⁸⁶ Unlike Selznick, Todd and De Laurentiis had clear business obligations to their agreed distributors. On 15 April 1955, by which date it had become evident that De Laurentiis would complete production before Todd if both projects were to go ahead,

³⁸³ MHL, Fred Zinnemann Papers, box 120, folder 1463, Fred Zinnemann to David O. Selznick, 10 July 1954. ³⁸⁴ MHL, Fred Zinnemann Papers, box 120, folder 1463, Mike Todd to Zinnemann, 9 October 1954; 'Signs

Zinnemann and Sherwood for "*War and Peace*", *Motion Picture Daily*, 1 February 1955, p. 3. ³⁸⁵ MHL, Fred Zinnemann Papers, box 120, folder 1463, points of contract dictated over phone by Ann Rosenthal, 3 January 1955.

³⁸⁶ 'Stanley Urges Selznick Shoot Tolstoy Novel as Cinerama Story-Film', *Variety*, 23 June 1954, pp. 4, 21; 'Stanley Warner Negotiates With Selznick on Cinerama Deal', *Film Bulletin*, 12 July 1954, p. 20.

the latter's screenwriter Robert Sherwood privately warned that 'all those interested financially in the Todd-AO process should be greatly concerned about the loss of *War and Peace*, particularly to a rival process' (i.e., VistaVision). Each widescreen format also introduced serious practical considerations for film production, distribution and exhibition, requiring the producer to think ahead. While it might be imagined that a prestigious roadshow format such as Todd-AO would be appealing to an independent producer like De Laurentiis, its restrictions ran counter to the desire of some European stakeholders to saturate international distribution. John Belton notes that only four first-run theatres in the USA could initially show *Oklahoma!* in its native large film format, with 60 theatres installed by the end of 1957, rising to 606 in 1961.

The archival evidence suggests that De Laurentiis played up the constraints of Todd-AO during pre-production in order to protect (ultimately unneeded) Yugoslavian support for his film. In a letter which Zinnemann received from Sherwood on 18 March 1955 regarding their race against De Laurentiis to secure Yugoslavian soldiers and locations for Todd's *War and Peace* project, it was claimed that the 'DeLaurentis faction' had already 'sent a script to the officials and [made] attempts to scare them out of the Todd production through misinformation.' On the subject of Todd-AO, 'the De Laurentis propaganda was glaringly evident', including the smear that there were few 'theatres in the US and none in the rest of the world that can show Todd-AO - and that, since Todd holds the exclusive rights to the process, it would be impossible to produce enough pictures to justify many more theatres to be converted'. ³⁹⁰ Immediately preceded by VistaVision, the Todd-AO format belongs to the same family of 1950s technologies that upscaled image resolution by exceeding the dimensional standard of 35mm/4-perf. film during production. Todd's films were exhibited in the oversized

³⁸⁷ MHL, Fred Zinnemann Papers, box 120, folder 1463, Robert Sherwood to Zinnemann, 15 April 1955.

³⁸⁸ Belton, Widescreen Cinema, pp. 158, 279.

³⁸⁹ MHL, Fred Zinnemann Papers, box 120, folder 1463, Robert Sherwood to Zinnemann, 18 March 1955. ³⁹⁰ Ibid.

70mm format *and* via general release, though this involved shooting films in Todd-AO and CinemaScope simultaneously, which complicated and lengthened the production process.³⁹¹ From the early 1960s, it was not uncommon for European epics shot on 35mm film to be 'blown up' to 70mm. For example, Bronston's *El Cid* (Anthony Mann, 1961) and *King of Kings* (Nicholas Ray, 1961) were both shot on Technirama, which took an anamorphic lens and used the same 35mm/8 perf. frame proportions as VistaVision. However, these were shown on 70mm film via the prestigious 'supercircuit' of cinemas equipped for this purpose.³⁹² De Laurentiis, surveying the technologies available to him in the early 1950s, had a less elaborate format in mind for wide distribution.

De Laurentiis was aiming to secure wide distribution through an American studio and, in a letter sent to Hollywood talent agent Bert Allenberg in March 1954, it was anticipated that his *War and Peace* would therefore be made in CinemaScope - the most popular widescreen format for general release at that time.³⁹³ In December 1954, Columbia entered distribution negotiations with De Laurentiis, during which CinemaScope would have remained an option. By the end of January 1955, De Laurentiis reached an alternative business agreement with Paramount, which, as described in Chapter 2, had recently launched VistaVision and proceeded to promote its adoption overseas. Unlike Todd-AO, VistaVision's high resolution images could be printed onto standard 35mm film for the widest possible distribution through Paramount in the USA, South America and selected European territories. By adopting the house format of his biggest distributor, De Laurentiis attained visual scale and technological flexibility. Other distributors allowed to handle the film included Associated British, in return for which Audrey

³⁹¹ Sheldon Hall, 'Alternative Versions in the Early Years of CinemaScope', in *Widescreen Worldwide*, ed. by Belton, Hall, and Neale, pp. 115-16.

³⁹² Belton, Widescreen Cinema, p. 175.

³⁹³ MHL, Fred Zinnemann Papers, box 120, folder 1463, Dino De Laurentiis to Bert Allenberg, 16 March 1954.

Hepburn was loaned to the feature, after De Laurentiis met with her and Mel Ferrer in March, and Lux Film in Italy.³⁹⁴

In addition to his choice of distributor and technology, De Laurentiis' rapid recruitment of cast and crew helped him to oust rival claimants for War and Peace. The Italian producer stated that the 'casting of Audrey Hepburn [as Natasha] was inspired and was key to the international success of the film', something also mentioned in Zinnemann's letters regarding his rival project with Todd: 'a production of War and Peace starring Audrey Hepburn and released presumably before we even start shooting cannot be lightly dismissed as competition'. ³⁹⁵ (Replying to Sherwood in April 1955, Zinnemann was unequivocal: 'there is hardly any possible way in which we could save the project', though suspension of the production would not be announced until October because of Todd's relentless optimism, which Sherwood characterised as a 'maniacal clutching at straws'. 396) Hepburn starred alongside, Henry Fonda (Pierre), Ferrer (Andrei), Vittorio Gassman (Anatole Kuragina), and Anita Ekberg (Hélène). Sourcing crewmembers, including Vidor, Jack Cardiff, Mario Chiari and second-unit cinematographer Aldo Tonti, who had served as director of photography on fifteen previous De Laurentiis pictures, also fell within the producer's purview. Vidor confessed that 'I had wondered many times during the making of the film whether it would be possible for an American director to capture the spirit of such a Russian epic, especially when surrounded by Italians who impose yet a third mentality upon the production - not to mention the English and Swedes also involved'. 397 The result was a production team of diverse professional training, combined and crystalised by the film.

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³⁹⁴ 'De Laurentiis' Dream of Years is Fulfilled', *Motion Picture Daily*, 23 August 1956, p. 6; Ian Woodward, *Audrey Hepburn: Fair Lady of the Screen* (London: W. H. Allen, 1984), p. 177.

³⁹⁵ *Movie Moguls Speak*, ed. by Priggé, p. 62; MHL, Fred Zinnemann Papers, box 120, folder 1463, Robert Sherwood to Zinnemann, 6 April 1955.

³⁹⁶ MHL, Fred Zinnemann Papers, box 120, folder 1463, Fred Zinnemann to Robert Sherwood, 9 April 1955, and Robert Sherwood to Fred Zinnemann, 6 July 1955; 'No 'War' between 'Peace' Produc'ns Now Looming', *Variety*, 7 October 1955, p. 14.

³⁹⁷ John Francis Lane, 'Tolstoy's "War" - as Vidor Makes It', *Films and Filming*, 2 (March 1956), 8-9, 13 (p. 9).

Crafting the Borodino Sequence in Rural Italy

War and Peace began production at the Cinecittà and Ponti-De Laurentiis Studios in Rome in July 1955. To outstrip other companies interested in adapting Tolstoy's epic, De Laurentiis' team was rushed into production, as film historian Tony Thomas recounts:

The difficult task was made even more difficult for Vidor by having to start production before a final script was ready and before the complicated financial backing from several countries had been settled. Vidor was not able to keep daily track of his filming by the usual procedure of watching the 'rushes' [...] because the VistaVision stock had to be processed in either England or America. Despite the pressure Vidor was able to complete the principal photography in four months, an astonishing fact in view of the multiple locations and the scope of the battle sequences.³⁹⁸

One sequence which showcased the film's spectacular elements was the Battle of Borodino, during which the invader Napoleon would be shown overcoming the Russian army to clear his path to Moscow. While it would have been conventional for a second unit to begin shooting battle scenes at the start or end of production, when the main cast was not on the payroll, Borodino would instead be filmed mid-production to accommodate the Italian military's schedule. Vidor chose to shoot the scene while his second unit, directed by Mario Soldati, worked in the Rome studio with most of the main cast. In late October, Vidor spent two days rehearsing and filming Fonda as Pierre alongside professional soldiers and extras who were to appear in the battle scenes. As there was one week's delay when delivering the film rushes from London Technicolor, and limited resources forbade extended reshoots, the Borodino

³⁹⁸ Tony Thomas, *The Great Adventure Films* (Secaucus, NJ: The Citadel Press, 1976), p. 208.

sequence was practically filmed 'blind' and thus required precise staging on Vidor's part.³⁹⁹ The dynamic between staging, cinematography and production design during key sequences demonstrates collaboration at the fine-grained level of VistaVision production.

Vidor oversaw the studio and outdoor set pieces with an organisational rigour that made him very reliable on a high-stakes VistaVision epic. According to Cardiff, 'Vidor was very earnest and laboured with his direction', conducting detailed meetings every morning about the coming day's shooting. 400 Vidor's efficiency is indicative of his long career in the studio system. Indeed, he was one of very few individuals to have directed large format films during Hollywood's short-lived widescreen experiments of the late 1920s, synchronous with the transition to recorded sound. At this time, Vidor used MGM's 'Reallife' format on the Western, *Billy the Kid* (1930), of which the director wrote in his memoirs, in '70mm, the Grand Canyon looked very much as it does when personally viewing it while the 35mm process could not reproduce its magnificent scale in three dimensional values. '401 Vidor's voluminous images of the Grand Canyon are recalled in his VistaVision version of the Battle of Borodino, but this time Vidor was working overseas in a valley near Rome. The spectacle of the sequence is embodied by Fonda's dazzled reactions as the impressionable Pierre.

The stylistic latitude of the battle sequence was facilitated by deep-focus VistaVision cinematography, the topography of the location, elevated shooting position and fluid planar staging. For inspiration, artistic impressions of combat described in Tolstoy's epic were first sketched by Franz Bachelin, the film's Hollywood-based associate art director. The Italian art department directed by Mario Chiari then created a plaster prototype of the valley to feature in the Borodino sequence, including a foreground hill to represent, in Vidor's words, the 'ideal

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³⁹⁹ King Vidor, King Vidor on Filmmaking (London: W. H. Allen, 1973), pp. 84-85.

⁴⁰⁰ Jack Cardiff, *Conversations with Jack Cardiff: Art, Light and Direction in Cinema*, ed. by Justin Bowyer (London: Batsford, 2003), p. 130

⁴⁰¹ Vidor, p. 178.

⁴⁰² Derek Hill, 'Jack Cardiff's VistaVision Venture', *American Cinematographer* 37 (December 1956), 732-34, 746 (p. 734).

camera-placement spot for all long shots of the spectacle and for Pierre (Henry Fonda) to observe the entire battle'. Shooting positions were diagrammed and staked out on location, though according to Vidor, another valley had to be found at short notice to better suit the Italian cavalry. Vidor's account also appreciatively references his discussions with the principal cinematographer, Jack Cardiff, about locating and shooting a rural vista.

When filming the battle action, a continuity supervisor counted in Italian over the radio to prime the soldiers and special effects technicians, who performed controlled explosions on cue; all action cues were staggered so that each segment of the battle would be in motion as Pierre approached and Cardiff's camera operator disclosed the expansive scene. 404 First, the sound of gunfire prompts Pierre to hasten to a hilltop clearing which provides a vista of the battlefield. A series of close-ups show Pierre peering into the distance at the conflict, which is also directly presented in various long shots. For example, soldiers march in the immediate foreground, only metres from Pierre, as cavalry men charge in the middle-distance and army troops advance in rows on the opposite side of the valley (Figure 57). Next Pierre walks along the hilltop while continuing to gaze into the sprawling valley, as the camera tracks his movement in a steady panorama. Pierre pauses a second time, as Napoleon's cavalrymen, framed by two trees in the middle distance, charge in the opposite direction to that previously taken by the Russian troops. Pierre proceeds, stopping for a third and final time before a view of moving army units, again in planar arrangement from foreground to distant background. When silently absorbed in the gunfire and lateral advance of the troops, Pierre drops a flower that Vidor insisted this character should carry (Figure 58). The troops remain in view as the flower falls from the upper frame to the ground, in a low shot which Cardiff captured through a telephoto lens. The cinematography activates the tri-directional axes of verticality,

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⁴⁰³ Vidor, p. 84.

⁴⁰⁴ Ibid., p. 94.

horizontality and depth, contrasting the momentum of the background action with the fragility of the flower in the immediate foreground.

At the granular level, Vidor's vistas can be differentiated from spectacular scenes such as the parting of the Red Sea in DeMille's VistaVision epic, *The Ten Commandments*. Firstly, Vidor films from one point of view as opposed to that of DeMille's biblical crowd. In War and *Peace*, the battle exceeds the horizontal bounds of the VistaVision frame and Pierre's scope of vision. One figure is physically and psychologically situated within a broader panorama of events, which are shown from the shocked perspective of the invaded. Vidor's combination of the personal and historical can sensitise us to the emotional resonance of the scene, which incrementally grows in size and significance, whereas DeMille's densely layered mise-enscéne is difficult to absorb all at once. 405 On a practical note, Julie Turnock adds that it is precisely this overwhelming quality of the miracle in *The Ten Commandments* that distracts (intentionally or not) from artificial details of the composited mise-en-scéne shown up by the resolution of large format film. 406 Secondly, Vidor's intercutting of shots, panning and staging in War and Peace outpace DeMille's static master shot and counter the frieze-like tendency of VistaVision long shots, the latter of which can slow movement at extreme distances. In this regard, the swelling momentum of Vidor's sequence shares resemblances with a set piece in his early war epic, The Big Parade (1925), where soldiers are called up as we cut between parting lovers, and for which Hall and Neale also stress 'the importance of rhythmic cadences to its editing, staging, and impact'. 407

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⁴⁰⁵ DeMille does however use singles to foreground Moses' (Chartlon Heston) astonished interactions with God in *The Ten Commandments*, as Erica Sheen observes: 'Moses face is thus both our mark of the presence outside the frame of the face of God and our covenant of the conversion that widescreen cinema offered its spectators': Erica Sheen, "The Light of God's Law": Violence and Metaphysics in the '50s Widescreen Biblical Epic', *Biblical Interpretation*, 6.3/4 (1998): 292-312 (p. 311).

⁴⁰⁶ Julie Turnock, 'Special/Visual Effects', in *Editing and Special/Visual Effects*, ed. by Charlie Keil and Kristen Whissel (London: I.B. Tauris, 2016), pp. 91-102 (p. 97).

⁴⁰⁷ Hall and Neale, p. 59.



Figure 57. War and Peace: Pierre absorbs the deep and wide panorama, framed by a treeline.



Figure 58. War and Peace: height, width and depth are activated as Pierre drops the flower.

In summary, *War and Peace* combines very long shots with deep-focus staging techniques which were firmly associated with the VistaVision format. The deployment of VistaVision in the Borodino sequence was influenced by Vidor's subjective shooting style, following the character's eyeline and intercutting reaction shots to emphasise Pierre's peril. The variety of shot scales, facilitated by Cardiff, eschews the battle's otherwise massive choreography, thereby complementing De Laurentiis' dual interest in large scale spectacle and

star-aggrandizing close-ups. Capturing Vidor's vistas also required negotiating local production factors such as the Italian military and valley location, models of which were constructed beforehand by the art department in Rome.

Contracting Space: Hybrid Styles in Cinematography and Set Design

War and Peace demonstrates the resplendent outdoor and interior vistas typical of the midcentury epic, shot on location or under a high key with naturalistic light and colour. In addition to the Borodino sequence, we might include the reflective surfaces of the grand ballroom or the sweeping staircase in the fover of the Rostov household. In one sequence, for example, Natasha rushes down the Rostovs' staircase, followed by an eyeline cut from her to the distant figure of Andrei, who is bathed in a pool of naturalistic light emanating from the anteroom window overlooking the garden. Natasha and the audience are guided visually toward Andrei thanks to a pair of carefully positioned drapes and two Roman columns, which double as depth cues and ornamentation. Natasha relishes the moment, almost wishing to freeze time as she reflects on her youth. In the same breath, she projects into the future, as Hepburn's subsequent close-up and voice-over monologue reveal: 'is it possible that I, Natasha, am to be the wife of this strange, dear clever man, whom even my father looks up to [...] that now I am grown up?'. The set and lighting variously capture Natasha's concoction of nostalgia and expectation: roman columns and drapes lend a classical timeless feel, while the hopeful monologue is reinforced by the open-ended vista, which extends from the aperture of the hallway to Andrei, the verdant garden and skyline beyond (Figure 59). At the end of the film, the sequence is repeated, only now Andrei has died in action, and the Rostov mansion has almost been destroyed in the war along with her plans for their future together.



Figure 59. War and Peace: ornamental décor and naturalistic light fills the Rostov mansion.

Both the sequence described above and Vidor's inclusion of several reaction shots of Fonda during the Borodino set piece echo the double-meaning of 'vista', which can refer to an imposing view from a high position and something more cerebral, such as the revelation experienced by the character of Pierre regarding the impending violence. Both sequences showcase film spectacle while introducing formative moments in the character's story.

On the other hand, the interior and exterior vistas I have examined do not demonstrate the look of *War and Peace* comprehensively nor the options available to VistaVision filmmakers, who could also use the format to capture gritty details in high resolution for expressionist or realist ends. In the first two-thirds of the film, Vidor portrays the privileged lives and aspirations of Natasha and Pierre, who are at a considerable distance from the affairs of war, only to later immerse his characters in the conflict and its aftermath. In one fell motion, the film's ornate production design and summer landscapes are stylistically torn and muddied. With this change in tone and narrative comes a subtle alteration in shot scale. We are no longer amazed just by the capaciousness of the VistaVision image, but also surfaces rendered along the foreground plane: the wet mud cloying at the French army's feet, the dark ash coating wood

and brick as Pierre proceeds through the burning capital, and the snow resting on his bedraggled clothes when marching south as a prisoner of war.

During the production of War and Peace, Vidor generalised that 'here [in Italy] you can be artistic or documentary and if you don't make money, well, that's too bad', whereas 'in Hollywood you can't afford to take the risk'. 408 It would be easy to caricature Vidor as a riskaverse director trained in the studio system, or as someone who was unreceptive to transnational influence, at the cost of underplaying the input of his collaborators. The interiors of ruined Moscow and Andrei's sickroom bear the definite signatures of Chiari and his assistant director Giannia Polidori, whom Vidor ranked above Hollywood art directors. 409 Small and stripped-back sets would have been familiar terrain for the Italian art department, with its professional background in intimate melodramas and what would become known as iconic neo-realist productions, Bellissima (Luchino Visconti, 1951, p.d. Gianni Polidori) and I vitteloni (Federico Fellini, 1953, p.d. Mario Chiari). According to Michael L. Stephens, Chiari's experience as art director on War and Peace 'tempered his realist style and added more abstract qualities to his work', paving the way for 'sumptuous historical epics' such as Barabbas (1961) and Ludwig (Visconti, 1973) during his late career, and signalling the multiple impulses in Chiari's design for War and Peace. 410 His training in realist art direction was temporarily redirected and fused with the demands of historical scale in War and Peace, which involved matching studio exteriors with location footage, at other times constricting sets in ways that use the widescreen as evocative negative space.

Another guiding influence on the hybrid look of *War and Peace* was the textured cinematography of Cardiff, whose outdoor lighting in *Scott of the Antarctic* (Charles Frend,

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⁴⁰⁸ Lane, p. 13.

⁴⁰⁹ Ibid, p. 9; Joel Greenberg, 'War, Wheat and Steel: An Interview with King Vidor', *Sight and Sound*, 37 (Fall 1968), 192-97 (p. 197).

⁴¹⁰ Michael L. Stephens, *Art Directors in Cinema: A Worldwide Biographical Dictionary* (London: McFarland, 1998), pp. 55-56.

1948) served as a point of reference for the winter scenes in the latter third of War and Peace according to the cinematographer. 411 The VistaVision cinematography of Cardiff and Tonti, and the art department of Mario Chiari, helped to create what Cardiff described as a 'rough' feel for the gloomy final third of the film, which provides a pleasing counterpoint to the scenes described thus far: 'it was a realistic subject and it demanded a straightforward treatment, raw treatment. I could light faces with flickering firelight; the whole approach was deliberately broad, almost rough.'412 Cardiff's control of light contributes to the film's contraction of space in bedraggled interiors and snowstorms, diverging from the massive backdrops of Borodino and palatial interiors rendered in luxurious detail.

War and Peace attains a hybrid style through the use of craft minutiae, which usher the film from the glamorous terrain of historical drama to overt expressionist techniques, inducing a sense of claustrophobia. For example, when encamped with the exiled citizens, there is a Shane-esque ground-level shot showing Natasha, partly obscured by a cartwheel in the foreground, as she approaches Andrei's darkened sickroom. There is a shift from the amber glow of the burning city outside to the gothic candlelight of the sickroom, which casts a strange glimmer across Andrei's pallid face. His delirious groaning soundtracks an embodied point of view shot, which tilts up from the bedside candle to Natasha. Several expressionist touches are contained within this brief take, including the curving camera-path, the decision to obscure Natasha's face within her reaper-like cowl, and framing with the coffin-like ceiling at a canted angle (Figure 60). The aesthetic departs from the soft lighting and distanced pans deployed during the preceding 'woman among the wounded' sequence which is more typical of the war epic, and the earlier summer scenes of War and Peace.

⁴¹¹ Hill, 'VistaVision Venture', p. 733. ⁴¹² Ibid., p. 734.



Figure 60. War and Peace: expressionist framing and lighting on a confined set.

The style of Cardiff's post-war close-ups can be contrasted with the glamourous soft-focus and diffused lighting styles of Hollywood's golden era, evidencing a stylistic continuity in his VistaVision films that is matched by his American counterparts. For example, when Natasha is forced to evacuate Moscow, Cardiff'shrouds the outline of Hepburn's face in close-up and intermittently obscures the image as objects pass by and she is consumed by sorrow. Gestural point of view is also used for the first time in the film's latter third, including the gun barrel shot when Pierre contemplates assassinating Napoleon from a ruined tower in Moscow (Figure 61). Cardiff's enflaming of Fonda's close-up recalls Robert Krasker's moody lighting of Laurence Olivier in the latter's *Henry V* (1944), hunched over a campfire on the eve of battle. These stylistic traces are typical of what Petrie has termed 'neo-expressionist cinematography' in post-war British films, and which is most strongly present in the lighting of Cardiff and the 'émigré cinematographers Krasker and Otto Heller. 413

⁴¹³ Duncan Petrie, 'Neo-expressionism and British Cinematography: The Work of Robert Krasker and Jack Cardiff', in *Post War Cinema and Modernity*, ed. by John Orr and Olga Taxidou (Edinburgh: Edinburgh University Press, 2000), pp. 223-33.



Figure 61. War and Peace: Cardiff 'enflames' Fonda on the set of war-torn Moscow.

In close-ups, VistaVision gave cinematographers the stylistic latitude to refresh earlier techniques, which is not something historians attribute to anamorphic and multi-camera widescreen formats. It is important to remember that some of the most highly decorated VistaVision cinematographers in Hollywood also lit gritty films in the 1940s, such as *Kings Row* (1942, d.p. James Wong Howe), *So Proudly We Hail!* (1943, d.p. Charles Lang), *The Naked City* (1948, d.p. William Daniels), and *Scott of the Antarctic*. These film run the gamut of deep focus, newsreel-esque, and bleak expressionist techniques powering what Patrick Keating calls the 'the hardening and sharpening of the Hollywood style' in the 1940s, much of it encouraged by shooting on location with faster Eastman stocks, compact lighting rigs and other portable accessories. It is tempting to present the early to mid-1950s as an abrupt transformation in the history of cinematography technique, supposing that the spectacular sheen of lavish productions in colour and widescreen overwhelmed the hard styles of the previous decade. However, by the end of the 1950s, some wide-frame and large format

⁴¹⁴ Duncan Petrie, *The British Cinematographer* (London: British Film Institute, 1996), pp. 49-51; Bordwell, *Poetics of Cinema*, pp. 288, 292-94.

⁴¹⁵ Keating, Hollywood Lighting, p. 243.

filmmakers retraced their steps back from the customary lighting schemes and sets that had come to be used in film epics, as some brief examples will demonstrate.

In the VistaVision Western, Last Train From Gun Hill (John Sturges, 1959), Lang's shadowy close-ups of Kirk Douglas and Anthony Quinn made sure to 'avoid the picturepostcard look so common in outdoor epics and kept the faces looking more natural', stated American Cinematographer. 416 Lang complained that 'too much light on faces - that is, an overabundance of fill or booster light - makes a player look phoney [...] whereas it is the purpose of the cameraman to enhance the character and point up his personality'. 417 Across several scenes in which Kirk Douglas' character, Matt Morgan, intimidates Belden's rapist son (Earl Holliman), Lang lengthens the shadows in the room to record the passage into night. Morgan slips in and out of the shadows as he paces and narrates, for two unbroken minutes, the drawn out experience of being sentenced and hung to death: 'first you stand trial, that takes a fair amount of time and you do a lot sweating [...] after that you sit in a cell and wait, maybe for months, thinking how that rope will feel around your neck'. Cross-lighting sends a phantasmagoric ripple of expressions across Douglas' sharp features, caught from a harsh angle, and complements the syncopated rhythm of his storytelling. Following a similar principle, James Wong Howe brutally sculpts Anna Magnani's grief-stricken face in the VistaVision film, *The Rose Tattoo* (1955), winning him an Academy Award. As in the 1940s, Howe's black-and-white stock minimized lighting requirements, bringing Magnani's tousled hair and taut lines into sharp focus. The texture and shifting scales of Chiari's sets in War and Peace synchronized with Cardiff's attempt to avoid the "painted backdrop" or flat look of other epic films, by adopting a lighting aesthetic that was also being implemented by certain other widescreen cinematographers working in a range of genres.

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⁴¹⁶ Herb A. Lightman, 'Photographing "Last Train from Gun Hill", American Cinematographer, 40 (September 1959), 544-45, 560-62 (p. 560).

⁴¹⁷ Ibid.

After producing *War and Peace*, De Laurentiis went on to successfully oversee the Italian-American biblical epic *Barabas* in the Technirama format with the cooperation of Columbia Pictures. British director Michael Powell visited Rome in the early 1960s, shortly after the film's domestic release, to consult De Laurentiis about his upcoming Australian production, *They're a Weird Mob* (1966). From an outsider's perspective, Powell regarded that the 'Italian movie industry was riding high, and it was possible to discuss a coproduction deal between a London-based producer and a Rome-based Italian - possible, but not probable.' Powell's signal to the improbable remains a realistic acknowledgment of the unpredictable process of courting international co-production partners: unlike De Laurentiis' *War and Peace* and *Barabas*, Powell's VistaVision film epic had been made within the institutional and budgetary constraints of Rank's Pinewood Studios after the sudden withdrawal of financial support (and CinemaScope) by Fox's Spyros Skouras.

The Battle of the River Plate: The Challenge of the Naval War Epic

The Battle of the River Plate is a VistaVision film written and directed by Michael Powell and Emeric Pressburger for the Rank Organisation in Britain. It can be described as a naval war film, though is repeatedly referred to as an 'epic' in Powell's memoirs due to its visual, narrative and technical scope and was accorded similar stature by prominent individuals involved in the production. Powell and Pressburger's particular interpretation of the historic naval battle did not match the length or cost of War and Peace. The budget of £280,000 was a fraction of that agreed for the American-Italian production, which was budgeted at the

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⁴¹⁸ Powell, p. 438. In fact, twenty-eight British-Italian films were made in the decade immediately following the war, including *La mano dello straniero* [*The Stranger's Hand*] (Mario Soldati, 1954) and *Summertime* (David Lean, 1955): Steve Chibnall, 'Rome, Open for British Production: The Lost World of "Britalian" Films 1946-1954', *Historical Journal of Film Radio and Television*, 33.2 (2013), 234-69; Pauline Small, 'Anglo-Italian co-productions in the 1950s and 1960s: film finances, the Prince and Venice', *Historical Journal of Film, Radio and Television*, 37.2 (2017), 220-41.

equivalent of just under £2 million. For the filmmakers and their financiers, the 'epic' tag came rather from the production values associated with historical subject matter, VistaVision technology, actual war ships, colour cinematography, and scenes of destruction using large models. The film revels in the authentic minutiae of its historical story and production elements while also mobilising them to present spectacular events, exemplifying the trend of 'dramatising and over-stating specific historical incidents, personages and precedents' identified by Jonathan Rayner in *The Naval War Film*. 420

Comparing British post-war production with the resources available to Hollywood-backed epics like *War and Peace* enables me to distinguish between examples of epic widescreen cinema. The documentary detail and spectacular scale of *The Battle of the River Plate* are more remarkable when seen in the context of Rank's post-war management and studio facilities. The British scenario also highlights how film historians who have ascribed particular stylistic qualities to the VistaVision format have disregarded the material realities of film production in certain cases. VistaVision technology repeatedly frustrated attempts to maximise the mise-en-scène in British films, though deep-focus cinematography and detailed design remained a hard-won priority on *The Battle of the River Plate* thanks to the transnational flow of production discourse, commercial ambitions and craft expertise.

Logistics as Spectacle: Research, Schedule and Finance

The Battle of the River Plate was inspired by the scuttling of a German battleship in 1939, the Admiral Graf Spee, a ship that had contributed to escalating global tensions after it entered open combat with Allied naval forces in South America. Considerable care was taken in researching and writing the film to ensure that it had a firm basis in military history. Pressburger

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⁴²⁰ Jonathan Rayner, *The Naval War Film: Genre, History and National Cinema* (Manchester: Manchester University Press, 2007), p. 13.

began researching the topic while he and Powell were visiting Argentina for a press conference in early 1954, around the location of the original conflict. Before returning to London in late March, the team stopped in New York to secure financial support from Twentieth Century-Fox, a studio that was already engaged to distribute their CinemaScope musical, *Oh... Rosalinda!!*, in the USA. Powell spent the next few months interviewing principal officers who had served during the battle, before meeting the Admiralty and obtaining their co-operation in August 1954. The U.S. Navy's permission to film their battleship, *Salem*, which would stand in as the German Graf Spee, came in July 1955.⁴²¹ International maritime forces are listed alongside 'thousands' of contributors in the opening credits to legitimise the prestige and scale of the naval epic. Figure 62 demonstrates the 'attention to the relationship between the lettering dimensions and the proportions of the frame' which Deborah Allison identifies in Hollywood widescreen credits of the 1950s, while also eschewing the latter's lurid backdrops, colours and studied compositions by filling the 1.85:1 screen in a style consistent with the sombre story.⁴²²

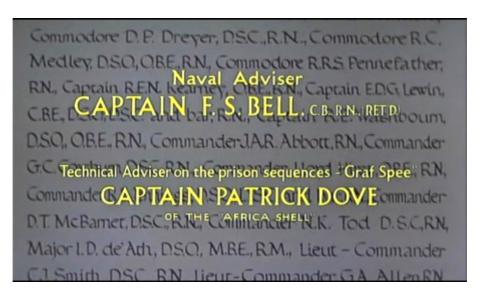


Figure 62. The Battle of the River Plate: 'respectable' title credits saturate the widescreen.

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⁴²¹ Powell, pp. 265-67, 296.

⁴²² Deborah Allison, 'Film Title Sequences and Widescreen Aesthetics', *Film International*, 13 (December 2015), 6-19 (p. 10).

Having received the Admiralty's scheduled ship movements, Powell and Pressburger presented their initial timescale to Fox. A shooting schedule was later refined by associate producer Sydney Streeter and production manager George Busby. 423 According to Powell's memoirs, based on the diaries he kept while filming, they proceeded as outlined in Figure 63. Reflecting on his shooting schedule, Powell wrote that 'only the Americans, or the Rank Organisation, had the money, the distribution, the studios, and the technical resources to play out this daring plan'. 424 Ultimately, Rank saw The Battle of the River Plate through to completion in part due to Fox's dissatisfaction over the omission of transatlantic star, Jack Hawkins, from the proposed cast. Pressburger negotiated with Rank in London while Powell met with the Admiralty in Cyprus in June 1955, at which point he was informed by them that location photography in the Mediterranean would have to be brought forward to that same month. On 14 June, Powell received much needed confirmation from Pressburger that Rank had approved the script. A camera unit including director of photography, Christopher Challis, was also en route to Cyprus with the VistaVision camera which Powell and Pressburger would now use instead of Fox's CinemaScope. 425 We can examine the finer details of the logistics and writing process with reference to trade reports and primary sources held by the Film Finances Archive and BFI Special Collections.

In Chapter 4, I referenced briefly the screenplay of *The Battle of the River Plate* in order to support my textual analysis of certain scenes and to show how directing choices were embedded in the production process. The screenplay can be studied both as a work of art and as a kind of blueprint outlining the work that would need to be undertaken by the wider production team. Alongside the shooting schedule and budget, a version of the screenplay was

⁴²³ Powell, p. 283

⁴²⁴ Ibid., p. 283.

⁴²⁵ Ibid., pp. 282-86.

submitted to the Rank Organisation and Film Finances so that an informed estimate could be made about the potential cost for the company, and the risks involved, before a guarantee of completion was drawn up for the film. Inspired by technical advisor Captain Dove's memoirs Pressburger began writing the script after meeting with Fox in New York in early 1954. Powell, Pressburger and former Archers secretary Joan Page reviewed the script shortly before Powell's departure for location shooting in Cyprus, so that a final draft was ready for submission to Film Finances by August 1955. Powell said of their finished version, 'from the opening scenes, the film moved relentlessly forward, Jules Verne-like, a combination of science, engineering, mystery and romance. The climax was the deliberate destruction of the great ship [Graf Spee] and the suicide of her captain, cut off, abandoned, surrounded by enemies [...] it was an epic, and they don't fall into your lap every day. 426

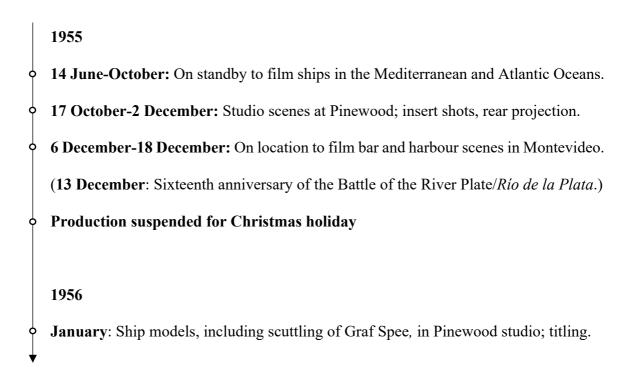


Figure 63. The Battle of the River Plate: Michael Powell's Production Timeline. 427

⁴²⁶ Ibid. p. 281.
⁴²⁷ Ibid. pp. 266-84, 301-21, 331-58.

The epic story would have a defining influence on the logistics of production and widescreen style. It also raised practical questions about the setting and naval action that concerned the film's cost-conscious financiers at Rank, providing ample commentary on the film's elaborate craft and exemplary status as a widescreen epic. Post-war Rank had been cutting back on its direct financing of production, though from 1950, it could rely on the newly founded Film Finances company for guarantees of completion when funding riskier films and, in Charles Drazin's words, 'expert assessment of the production challenges [that] was the key to creating the necessary confidence that a simple insurance policy could not provide'. John Croydon of Film Finances had previously approved a completion guarantee for Powell and Pressburgers' musical, *Oh... Rosalinda!!*, and gave his troubling initial assessment of their proposed naval epic on 19 August 1955:

I am sure - particularly after "Oh! Rosalinda" [sic] - that once Powell has set himself a target, he will make every endeavour to meet it. It is more in matters outside his personal control that my fears are based. Explosions [...] wreckage from these explosions; fire and water; collapsing cabins; an aircraft starting up on deck; guns being ranged and fired and so on - and for all of which, the Producers depend upon the efficiency of other Studio departments, and the effectiveness of that work. AND IT IS IN VISTAVISION!⁴²⁹

In a subsequent report, Croydon placed *The Battle of the River Plate* in 'the same category as Hollywood productions like *Quo Vadis* - not expecting the cost to rise to

⁴²⁸ Charles Drazin, 'Film Finances: The First Years', *Historical Journal of Film, Radio and Television*, 34.1 (2014), 2-22 (p. 4)

⁴²⁹ FFA, box 156b (*The Battle of the River Plate*), John Croydon to Robert Garrett, 19 August 1955.

astronomical sums, but certainly up to 400,000 to 500,000'. 430 Croydon's wilder estimates regarding the spectacular cost of *The Battle of the River Plate* would prove unfounded due to the stringent accountancy of John Davis at Rank, who called Powell and Pressburger to his London office on 4 July to agree on a firm upper-limit of £280,000. 431 Rank's Head of Production, Earl St. John, was also present during studio rehearsals at Pinewood, urging on filming in order to maintain their tight schedule; according to Powell, production designer Arthur Lawson 'reported continuous sniping by the Pinewood staff over the Archers' schedule and budget, and particularly over the art department's estimates'. 432

Film Finances foresaw a number of exacerbating technological factors for the studio work to be undertaken on *The Battle of the River Plate* at Pinewood. Based on a completion guarantee previously issued to *Richard III*, which was also shot in VistaVision, Croydon warned that 'the additional lighting called for by this process does tend to slow up special effects work' and suggested that the three days reserved for filming rear projection would be insufficient; for the same reason, Croydon was concerned by the screenplay's meticulous description of how 'light gradually changes in various sequences from dawn, through the day, to evening and on to night'. The use of a cyclorama, though not without its own lighting issues, limited the amount of rear projection required and allowed the filmmakers to pace subtly the story by simulating sunrise, daylight and dusk as the screenplay required.

The screenplay gives a clear sense of time and place by combining authentic records of the weather and naval action with pensive passages of literary description which aspire to transport audiences to a momentous event in history. By giving the story a human scale and romantic imagination, the film attained its authentic appeal. The ocean setting would inform both the dramatic rhythm of the narrative and decisions of craft in the studio, down to the way

⁴³⁰ FFA, box 156b (*The Battle of the River Plate*), John Croydon to Robert Garrett, 7 September 1955.

⁴³¹ Powell, pp. 296, 312.

⁴³² Ibid., pp. 301-02

⁴³³ FFA, box 156b (*The Battle of the River Plate*), John Croydon to Robert Garrett, 7 September 1955.

naturalistic light should behave, the rocking motion of the mechanised bridge set, and the weathered appearance of exteriors; on location, colour footage taken at twilight imbued an otherworldly atmosphere. According to the screenplay, colour, shadow and a sublime sense of scale would flood the screen from the opening shot, during which 'a great surge of sea heaves across the widescreen', followed by 'a hurtling black mass: the Graf Spee steaming against the sun'; at the more intimate scale, the personal experiences of the film's naval advisor would inform the main battle sequence which I shall examine, and for which the object was to 'present classic Naval action as it appeared to those who took part in it' and 'to take part in the action, instead of observing it'. 434 Shooting an epic naval battle sequence in VistaVision challenged set designer Arthur Lawson and cinematographer Chris Challis to modify their techniques within British production constraints.

Challenge 1: Designing 'Authentic' Sets

As referenced in the previous section, the epic war film presents special problems of tone, narrative and style which are not strongly present in other film genres studied thus far. King writes that certain Hollywood war epics might be defined as "spectacles of authenticity", as 'spectacular films based on real conflicts' face certain 'demands [which] have to be met if Hollywood products are to be treated as "respectable" representations of war'. 435 The Battle of the River Plate indicates its respectability and historical research through the opening credits, which boast of the film's technical advisors and prestigious military collaborators. Respectability also manifests itself at the level of diegetic space and style, which in the 1950s included the appropriation of large format and widescreen representation. In 1961, William Perlberg, producer of four Paramount VistaVision films, argued that the 'clarity of pictures and

⁴³⁴ BFI, Emeric Pressburger Collection, EPR 1/53/2, The Battle of the River Plate Final Script, August 1955, pp. 1, 37.
435 King, p. 118.

size of screen are increasingly taxing the abilities of our art directors to provide believable exterior settings'.⁴³⁶ The design of ship exteriors in the Pinewood studio provides a comparative example of Britain's desire to create 'authentic' war epics.

The aesthetic and technological constraints of *The Battle of the River Plate* realigned Powell and Pressburger's collaborative relationship with their regular art directors. Production designer Hein Heckroth had a guiding hand in the fantastical CinemaScope films, *The Sorcerer's Apprentice* and *Oh... Rosalinda!!*, in which the screen's horizontality was matched by the breadth of Heckroth's chromatic range and architectural grids. Heckroth's aesthetic preferences contrasted with the requirements of *The Battle of the River Plate*, which relied on locations and realist sets. When Heckroth left in the mid-1950s, Powell ascribed this to their move toward making outdoor war films, for which the criteria of authenticity and integration with location shots mattered more than original concept design:

It had naturally been assumed by everybody, including Emeric and myself, that Hein and Arthur would continue as co-designers. But it soon became clear that there was very little original design in the film. It was more like a documentary than a feature. Even the important one third of the film that took place ashore, in a Montevideo that was more like a never-never-land, was conventional in design and gave no opportunity to a painter like Hein. [...] we watched our great collaboration dissolve and vanish and Hein decided to return to Frankfurt.⁴³⁷

Heckroth stated that Manolo's bar in Montevideo harbour, his one contribution to *The Battle of the River Plate*, was designed to 'emphasise the slight seediness and feel of

⁴³⁷ Powell, p. 303.

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⁴³⁶ William Perlberg, 'Searching Europe for Authenticity', Films and Filming, 8 (February 1961), p. 9.

impermanence, in a café bar dependent on fluctuating business'. As publicity information file circulated within Rank states that Heckroth's set incorporated 'bamboo-slatted walls, and gaudily painted, uneven dance floor and musicians' stand', while adding that Rank's overseas publicists should be cautious that Uruguayan officials 'disagreed with our conception of Manolo's bar as showing the more backward side of their country'. The casting of Christopher Lee as the manic Manolo contributes to this politically dubious portrayal of Montevideo nightlife which feels uncomfortable to watch today. Heckroth's exotic bar was also intentionally constructed to counterpoint the severe colour scheme and orderly space of the warships occupied by characters from Britain, Germany and and New Zealand (Figure 64).



Figure 64. The Battle of the River Plate: Hein Heckroth's exotic Montevideo bar set.

Arthur Lawson, Heckroth's former assistant on Powell and Pressburger's art film trilogy (*The Red Shoes, The Tales of Hoffmann* and *Oh... Rosalinda!!*), would design the ships' cabins, exteriors and oversized models. Rank emphasised that Lawson's 'unique background as engineer and draughtsman' proved 'invaluable in designing the practical settings of ships'

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⁴³⁸ BFI, Michael Powell Collection, box 12, folder MP S-208, *The Battle of the River Plate* Information File compiled by Jean Osborne (Rank Publicity Division), p. 65.
⁴³⁹ Ibid.

cabins, bridges, gun turrets - in fact all the complicated paraphernalia of ships at war', creating a 'realistic, authentic film'. 440 Rank's narrativization of production (in the genre of 'trade secrets') also provides historical insight into Lawson's techniques, as textual analysis of the battle sequence will help to illustrate. Immediately before the momentous sea battle, the captains congregate to discuss the rules of engagement. The Commodore determines that, due to the Graf Spee's increased fire power, the best chance of success is to launch a surprise attack the following day or as soon as they spot the German ship. Next, we cut to an intertitle placed over a naval façade designed by Arthur Lawson, which reads 'The Morning of Wednesday December 13th. The shot is delicately coloured with amber and blue light to represent dawn. The following sequence intercuts location photography of the three Allied battleships with Lawson's artificial bridge, consistently showing streaks of blue, yellow and orange along the horizon-line in the background. As anticipation builds, various naval crew and lookouts discuss the clear visibility for spotting the Graf Spee, provided by the rising sun and promise of good weather as seen from the bridge. Captain Woodhouse, paraphrasing Shakespeare's Julius Caesar, adds that 'the Ides of December hath come', to which the Commodore, playing the soothsayer in return, states 'Aye Caesar, but not gone'. As navy jargon is supplanted by poetic musings at twilight, the oncoming war is given a fated feel.

Anticipating that VistaVision would capture his sets in such exacting detail that they would be exposed for the artificial surfaces they were, Lawson adorned his designs with granular features which explode the realist strain of art direction in 1950s British war films: 'because of the greater definition I found that sets had to be superlatively finished [...] For the sake of realism, we often had to throw realism overboard [...] Sometimes we had to exaggerate slightly to achieve the right visual effect on the screen'. 441 Elsewhere, the head of Pinewood's

⁴⁴⁰ Ibid., p. 65. ⁴⁴¹ Ibid., pp. 65-66.

camera department similarly warned that 'one must bear in mind the final magnification of the images and objects on the large screen' when shooting in VistaVision. 442 The façade from the morning of the battle is a perfect example of Lawson's craft signature of fabricating a realistic feel to match the location shots, helping to situate the story (Figure 65). The long shadow of early morning underscores the texture of the 'metalwork', which has been visibly scratched and raised at gradations to give an almost tangible impression of space that counterpoints the two-dimensional lettering of the timestamp. Incidental details evoke historicity, as the variegated surface has been finished with streaks of grey and brown paint for a weathered aesthetic that indicates the ship is being captured at one moment in its service history. The bridge set is similarly riddled with rivets and piping which break up the otherwise geometric space and, thanks to Challis' lighting, glisten with water or cast small shadows (Figure 66). Tom Hutchinson of Kinematograph Weekly claimed that 'Arthur Lawson's work deserves credit on this film. I was greatly impressed by the realistic ship's bridge', while John Gillett of Sight and Sound spotted the minutiae of Lawson's work among the 'beautiful seascapes (notably the opening shot), spacious VistaVision camerawork, a good deal of documentary attention to detail on board ship, and a reasonable simulation of the effects of shell fire'. 443

Intimate details of design acclimatise the audience to the ship as a lived-in space, before we witness its ruthless large-scale destruction in long shots. Whereas the ship's bridge and insert shots represented piecemeal segments, the main confrontation between Allied ships and the Graf Spee required Lawson to construct large areas featuring damaged parts of the ship that the actors would be able to clamber through. As a more aggressive use of pyrotechnics was required to portray the scuttling of the Graf Spee, Lawson made a destructible twenty-three-

⁴⁴² Bert Easy, 'Production in VistaVision', British Film Academy Journal (Spring 1955), 14-15 (p. 15).

⁴⁴³ Tom Hutchinson, 'Pre-Rehearsing Cuts Production Time', *Kinematograph Weekly*, 10 November 1955, p. 30; John Gillett, The Battle of the River Plate review, Sight & Sound, 26 (Winter 1956), p. 152.

foot ship model and placed this in a wave-machine tank; Pinewood did not have an existing tank, so the team constructed a container on the studio's large Stage 4.444



Figure 65. The Battle of the River Plate: a textured naval façade designed by Arthur Lawson.



Figure 66. The Battle of the River Plate: hunting the Graf Spee from the bridge of Ajax.

We might typically think of the model set as a somewhat contrived attempt to give the film epic a sense of size, or something to be chosen only in the most constrained circumstances of film production. Yet, model techniques are convincingly utilized by Vidor for the opera

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⁴⁴⁴ Powell, p. 345.

house sequence in *War and Peace* and it should also be appreciated that the scope of Powell and Pressburger's sequence was unusual for Rank during a period of frugal management at Pinewood. Powell claimed of the Graf Spee model that 'nobody in the studio had expected anything on this scale [...] outside Hollywood': a statement that could equally apply to Challis' overhead lighting rigs and Lawson's warship sets. As with the elision of location photography and fabricated exteriors, ship models in *The Battle of the River Plate* achieve their scale by expert sleight-of-hand. The model set celebrates the resources of Rank and the spectacle of historical authenticity through its meticulous craft and subsequent destruction (diverging with the pristine subjects of touristic films which Powell so wished to avoid). 446

Focusing in on micro-elements of Lawson's design crystallises broader trends in British set design during the 1950s, when realist styles began to reign, while at the same time questioning the reach of aesthetic orthodoxies given Powell and Pressburger's manipulation of colour, explosive set pieces, design choices and film format. Certainly, Lawson's set design invests in the illusion of authenticity, with brushstrokes and incidental additions situating us in a particular place and time. As Harper and Porter write, the 1950s British war film 'relied on military verisimilitude, location shooting, stock footage and a sense of unmotivated social space', though these generic definitions do not apply to all production teams and formats. 447 At a joint meeting of the British Kinematograph Society and the British Film Academy in March 1955, when Powell and Pressburger were just entering negotiations with Fox, it was reported that 'several speakers referred to the fact that VistaVision needed a good depth of focus' and agreed with Paramount policy that the use of library film materials - of locations, for example - should be discontinued because the grainy texture of stock footage would diverge

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⁴⁴⁵ Powell, p. 345.

⁴⁴⁶ Ibid., p. 351.

⁴⁴⁷ Harper and Porter, p. 197.

from the clarity of VistaVision when displayed on large cinema screens.⁴⁴⁸ As Lawson's artwork reveals, it is not necessarily true that the departure of concept design led to a lack of ingenuity. Complicating academic perceptions of restrained design in the sombre war genre, Lawson found that the art director must embellish their sets to integrate with spectacular narrative events and the exacting quality of VistaVision cinematography.

Challenge 2: Colour Lighting on the Large Set

For the closing set piece of *The Battle of the River Plate*, the vibrant colours of the Montevideo sunset, shot on location, were matched to the burning wreck of the model Graf Spee. Cinematographer Christopher Challis used a spread of powerful lights and orange filters. The decision to shoot along the horizon at sunset for the finale provides a cyclical link to the dawn of the battle, underlining the screenplay's tragic structure. The screenplay's description of the ship's destruction is at once spectacular and solemn, indicative of Powell and Pressbuger's dynamic combination of colour, space and movement:

The Suicide (Model) (286). On the vast calm expanse of the River Plate the Battleship lies motionless. Her launch is approaching the 'Tacoma'. Now the sun has nearly gone. At the very moment when the sun disappears beneath the waves, a tremendous explosion is heard and an inferno of fire shoots out of the "Graf Spee". Great columns of smoke rise into the air, while again and again new explosions occur.⁴⁴⁹

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⁴⁴⁸ Anthony Havelock-Allan, 'How New Techniques Influence Direction and Editing', *Kinematograph Weekly*, 14 April 1955, p. 39.

⁴⁴⁹ BFI, Emeric Pressburger Collection, EPR 1/53/2, *The Battle of the River Plate* Final Script, August 1955, p. 108.

Challis' instinct would have been to illuminate the model with flood lights, though it was found that VistaVision required the higher amperage carbon arc ('Brutes') for Lawson's largest sets: 'one Brute, however, is not big enough for VistaVision: it takes three to get the candle-power we need [...] with a spread of light sources, it is inevitable that your shadows tend to be less definite and, unless you are very careful, the final impression on the screen can give the impression of being out of focus.'450 Challis' article recommended that British studios like Pinewood needed more powerful equipment for shooting large sets in the VistaVision format: 'the definition is magnificent and I like the proportions but we need more Brutes or, for preference a lamp even bigger than the Brute'. 451 Fitting the arc lights with spun glass diffusers distributed the strong illumination evenly and prevented the background from being speckled with spots of light. However, images of the sinking Graf Spee model remain indistinct when compared to what Duncan Petrie describes as 'striking dawn images' taken on location, which was exacerbated by the size of the soundstage and attempt to convey twilight by lowering the level of illumination (Figure 67).⁴⁵²



Figure 67. The Battle of the River Plate: murky shots of the Graf Spee model/soundstage.

⁴⁵⁰ Chris Challis, 'Give Us Light', *Kinematograph Weekly*, 15 December 1955, p. 91.

⁴⁵² Petrie, *The British Cinematographer*, p. 82.

The scuttling sequence exposes a misconception about VistaVision colour cinematography and film style that is worth discussing in detail. As large negative format, VistaVision could produce higher resolution images than standard 35mm film and smaller gauges. At Paramount Pictures and in VistaVision film production generally, the format was most often applauded when coupled with the technique of deep focus cinematography which rendered clear images from foreground to background in sweeping action sequences. For example, Stanley Kramer's The Pride and the Passion (1957) attracted praise for its Spanish setting, where bright weather conditions favoured deep focus cinematography. Hollywood Reporter praised 'panoramic shots that are striking not only for their magnitude but also for the strength and ingenuity of their texture', whereas Motion Picture Herald observed that VistaVision 'catches every detail of foreground and background, from distant castle wall to close-up epaulette on a stricken soldier's shoulder'. 453 In The Searchers (1956), director John Ford's camera operator was placed in a ditch and instructed to shoot horses galloping overhead, instead of using the less dangerous technique of focusing the camera remotely, in order 'to maintain VistaVision's traditional sharpness and depth of field in this important shot'. 454 The fixation on sharpness and depth is something which director J. Lee Thompson claimed had become routine in some British productions:

There was a tendency in VistaVision's early days in this country to worry about matters which I consider of very little importance. One of these needless worries I maintain was the feeling that everything shot should be pin-sharp. As long as the objects in the background were sharply in focus, that was as important (or so it was felt) as the

⁴⁵³ James Powers, *The Pride and the Passion* review, *Hollywood Reporter*, 26 June 1957; William R Weaver, *The Pride and the Passion* review, *Motion Picture Herald*, 29 June 1957, p. 16.

^{454 &#}x27;Thrill Shot', American Cinematographer, 37 (November 1956), 665, 668 (p. 688).

foreground action that was telling the story [...] "Is the definition perfect?" was the cry when rushes were viewed.⁴⁵⁵

Historians of cinematography such as Lev and Petrie also cite what the latter describes as VistaVision's 'tremendous sharpness and depth of field', either as a general feature of the format or specific improvement over CinemaScope and Academy ratio films. 456 Counterweighing evidence shows that VistaVision technology constrained depth of field particularly on colour productions made in Britain's largest soundstages.

Using a combination of primary and trade sources, we can make clearer distinction between the choice of lenses, stock and production space when examining VistaVision film production. The spherical lenses used with VistaVision did not place absolute restrictions on depth of field as did the anamorphic lens used for CinemaScope. However, lenses of longer focal length were required when shooting with VistaVision's oversized negative, to rectify the shift in viewing angle caused by the larger frame. Lenses of longer focal length in turn demand more light. Whereas low-illumination levels had become increasingly common immediately after the war (circa 200-400 foot candles), by 1955 the average light level on major studio sets had significantly increased (850-1000 ft. c.) due to the desirability of large format film negatives, clearer images and bigger sets, according to the SMPTE. 457 Paramount introduced more lenses for VistaVision cameras over time, ranging from 21mm to 152mm, though this did not alter the fact that VistaVision cinematographers were forced to use longer focal lengths than would be used to achieve the same angle of view in the standard 35mm/4perf. format. Contrary to current scholarly understanding, the tendency towards deep focus techniques was

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⁴⁵⁵ Thompson, p. 89.

⁴⁵⁶ Lev, pp. 120-21; Petrie, *The British Cinematographer*, pp. 81-82.

⁴⁵⁷ Petro Vlahos, 'Motion-Picture Studio Lighting and Process Photography Committee Report', *Journal of the SMPTE*, 64 (August 1955), p. 447.

encouraged by the transnational flow of a production discourse which encouraged the maximisation of cinematographic space despite technological constraints.

The Kinematograph Weekly trade paper became a temporary forum for several filmmakers who expressed their concern that it was sometimes difficult to take advantage of VistaVision as Hollywood studios appeared to do because of British lighting facilities. 'Granted that VistaVision has improved definition', stated Ken Annakin, director of Value for Money, 'but because we have to work with longer focal length lenses the system takes the normal characteristics of those lenses, and we have to go a higher key in lighting to hold any depth of focus'. 458 Cinematographer Ernie Steward, who lit four VistaVision comedies including ocean locations for *Doctor at Sea* (Ralph Thomas, 1955), claimed that 'there is an enormous clarity in VistaVision; CinemaScope seems fluffy by comparison', but admitted that he first had to overcome depth of focus problems to fully utilize VistaVision. 459 When Challis came to serve as cinematographer on The Spanish Gardener (1956), director Philip Leacock justified their decision to stage and light within a tighter spatial plane with the argument that it is 'a popular misconception that VistaVision gives tremendous depth of focus [...] especially when one is also dealing with colour'. 460 Leacock stated that he had been inspired by William Wyler's selective use of depth in VistaVision for The Desperate Hours (1955).⁴⁶¹ André Bazin has likewise observed that Wyler and his cinematographer Gregg Toland tended to 'foreshorten the image, that is to say, to spread it out on the surface of the screen'. 462 Of course, Bazin was more concerned with comparing Wyler's deep shots with those of Jean Renoir and Orson Welles, than his influence on mid-50s British cinema.

⁴⁵⁸ Annakin, 'Shooting for VistaVision', p. 38.

⁴⁵⁹ Tom Hutchinson, 'It's a Woman's World at Pinewood', Kinematograph Weekly, p. 28.

⁴⁶⁰ Peter Evans, 'It's the Shallow Way for Phil Leacock', *Kinematograph Weekly*, 7 June 1956, p. 29.

⁴⁶¹ Ibid

⁴⁶² Bazin, 'Wiliam Wyler', p. 10

When lighting *The Battle of the River Plate*, Lawson's small ship's cabin interiors and sunlit locations proved far less problematic than the large ship sets, even providing opportunities to show off VistaVision's image resolution. Challis' next picture after *The Battle of the River Plate* and *The Spanish Gardener*, Powell and Pressburger's *Ill Met by Moonlight* (1957), would also help to alleviate depth concerns by shooting in black-and-white VistaVision on location. The introduction of Eastman Kodak 5250 colour film stock in 1959 made it evident to VistaVision cinematographers that they could gain vibrant images without the lighting constraints of VistaVision on large sound stages. Comparing the Hollywood and British epic underlines just how varied these constraints were.

British Countercurrents

One objective of this thesis has been to study a large quantity of VistaVision films and so expand the range of textual examples beyond that usually featured in histories of widescreen cinema. There are also films which appropriate VistaVision in unexpected ways, as an artistic alternative or contrarian response to the most visually expansive and luxuriant examples of widescreen filmmaking. As epic spectacle was more commonly present in Hollywood-backed productions including *War and Peace*, *The Ten Commandments* and *The Pride and the Passion* in VistaVision, it is unsurprising that visually unorthodox VistaVision films can be traced to diverse sectors of the British film industry.

In some cases, VistaVision offered British filmmakers such as Laurence Olivier with an alternative route to general release when deterred by local examples of widescreen spectacle. The arrival of CinemaScope prompted a cycle of costume adventure films including *The Black Sword of Falworth* (Rudolph Maté, 1954) and *Prince Valiant* (Henry Hathaway, 1954). As referenced in Chapter 1, *Knights of the Round Table* featured historical British locations and was made by a Hollywood subsidiary. Such films incorporate the wide screen as a mode of

myth-making, staging battles and duels along a horizontal line that visually befits their shallow foundation in medieval history. *Richard III*, which Olivier directed and starred in as the titular Yorkist King, diverges visually from Hollywood productions of regal romance.

Richard III was produced by Alexander Korda's London Films and was originally intended to be made in CinemaScope, as Korda's Storm Over the Nile had been in order to gain distribution in the USA by Twentieth Century-Fox. Olivier sought to persuade Korda away from CinemaScope, fearing that his intimate soliloquies would be diluted by the format's 'beguiling' width, as he wrote to New York financier Robert Dowling:

I have never honestly liked Cinemascope very much, and apart from my rather cowardly fears that it might be too great a tax on my directorial resourcefulness, I can't from an artistic point of view, feel that it is helpful to a Shakespearean subject. A subject which depends so much upon its appeal to the ear of the audience would, I believe, defeat itself badly by beguiling the eye. [...] For such a very simple, and indeed simply told story as *The Robe*, CinemaScope is, of course, a tremendously helpful advantage and one wonders, without being too unkind, whether the 'CinemaScope subjects', as we might call them (*Knights of the Round Table* etc.), could very well make a claim upon the attention without this advantage.⁴⁶³

Olivier attended Paramount's London demonstration of VistaVision at the Plaza cinema in June 1954, which provided him with a viable alternative to CinemaScope. The director's focus on performance and intimate direct address (his 'appeal to the ear') seemed a perfect fit for the narrower aspect ratio and visual clarity of VistaVision. In his memoirs, Olivier praised the

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⁴⁶³ London, British Library, Laurence Olivier Archive, Add MS 80489, Laurence Olivier to Robert Dowling, 11 June 1954.

cinematographer Otto Heller for using 'a magnificent VistaVision camera which gave us distinct and solid figures in wide shots, precise and true features and vivid eyes in its big close-ups', the latter effect evidenced in Figure 68.⁴⁶⁴ Many of these shadowy portrait shots share a resemblance to Cardiff's neo-expressionist style in *War and Peace*. Olivier's decision to foreground dramatic performances in *Richard III* is also reflected in the uncluttered sets, created with his usual collaborators Roger Furse and Carmen Dillon, which contrast the material saturation and horizontal mise-en-scène which C.S. Tashiro identifies in Hollywood's widescreen historical epics.⁴⁶⁵ These clear spaces lay the groundwork for elaborate group shots, in which colour-coded costumes draw the eye to the various factions of court. In the concluding battle sequence, Olivier uses VistaVision for outdoor spectacle, but again, the camera repeatedly returns to the tyrant King and his set-piece death scene.



Figure 68. Richard III: Otto Heller's expressionistic lighting emboldens Olivier's features.

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⁴⁶⁴ Laurence Olivier, On Acting (London: Weidenfeld and Nicolson, 1986), p. 208.

⁴⁶⁵ C.S. Tahisro, *Pretty Pictures: Production Design and the History Film* (Austin: University of Texas Press, 1988), pp. 51-54.

In contrast to Olivier's prestige production of Richard III, there were several British filmmakers who had no choice in the shape or size of format. Simon and Laura (Muriel Box, 1955) portrays the BBC's economical attempt to broadcast a reality drama about a quarrelsome celebrity couple whose lives are moulded onscreen by the producer's conservative view of the television audience and what constitutes a happy marriage. Similar to the Tashlin films examined in Chapter 4, Box's characters, mise-en-scéne and technical breakdowns make light of the entertainment industry's overt attempts to sell anything which it deems novel or exciting. The positioning of the TV frame and fuzzy image within the VistaVision shot draws attention to the latter's resolution and scope. But even widescreen cinema does not escape critique. At one witty juncture, Simon's TV-obsessed talent agent states, 'films! by the time they've made up their minds what size and shape they're going to be, they'll be through - 3D, 4D, curved screen, Cinerama - who cares if the story is no good'. Unlike Tashlin, Box does not scale her film to spectacular proportions only to turn widescreen spectacle on its head. Nor does she centre her gags around long shots, as occasionally observed in the Rank comedies discussed in Chapter 3. Instead, Box's characters are crammed into a cardboard studio version of Simon and Laura's spacious home, in order to take comedic aim at the constrained institution and medium of British television.

Even the Rank comedies were made on a relatively stable economic foundation when compared to *The Door in the Wall* (Glenn H. Alvey Jr., 1956). Adapted from an H. G. Wells story, this experimentally produced, post-war *divertissement* portrays the childhood of a prominent statesman who discovers a secret garden behind a magical door. The door appears again at auspicious moments in his adult life, though he does not allow himself to enter until the film's fatal conclusion. The defining feature of the short was its use of the 'Dynamic Frame' process, in which the aspect ratio fluctuates throughout 'according to the dramatic needs of the

story', as the opening credits state. Derek Hill, writing for *American Cinematographer*, described how the large area negative enabled the system:

The Dynamic Frame system allows the cameraman to choose any rectilinear composition and to vary it in time by graded steps during the scene to any other preselected size and proportion within the limits of the negative frame. As image definition must be of the highest quality throughout, Alvey used the system in combination with VistaVision.⁴⁶⁶

Even if the need to isolate and magnify people and objects justifies the use of double-frame VistaVision, *The Door in the Wall* rescales its aspect ratio from narrow pillar-box to widescreen to emphasise setting and character with all the predictability of a prototype demonstration. For example, when the child enters the garden through the narrow door frame, cinematographic space stretches outward to take in the lush expanse, and when scolded by the father, the frame narrows to a vertical strip which fixates on his looming height.

Alvey's film is noteworthy for being funded by the British Film Institute's Experimental Film Fund (later becoming the BFI Production Board), which had been chaired by independent producer Michael Balcon from 1952. The Fund was an offshoot of a modest government grant awarded to the BFI's Telecinema project as part of Festival of Britain celebrations, returning us to the stereoscopic shorts described in Chapter 1. Christophe Dupin has likened the Fund to a 'mini-laboratory where film-makers, ideas and techniques could be tested', though notes its severe limitations in terms of financial clout, technical expertise and heavy concentration in London as a production base and choice of setting. 467 As a test of the

⁴⁶⁶ Derek Hill, 'Dynamic Frame', American Cinematographer, 38 (April 1957), 236-37 (p. 237).

⁴⁶⁷ Christophe Dupin, 'The BFI and film production: half a century of innovative independent filmmaking', in *The British Film Institute, the Government and Film Culture, 1933-2000*, ed. by Geoffrey Nowell-Smith and Christophe Dupin (Manchester: Manchester University Press, 2012), pp. 197-218 (p. 200).

Dynamic Frame technique, *The Door in the Wall* takes a remarkably Eisensteinian stance toward widescreen space that is unlike any VistaVision feature. Hill also argues that matting shots seemed to be motivated by the perceived 'wasted space of CinemaScope interiors', rather than the stylistic opportunities of widescreen composition. As we have seen, VistaVision film epics often used décor as cues or framing devices to guide the audience's eye (Figures 57, 60, and 64). These latter examples establish multiple planes and retain depth within the shot, whereas the hard matte in *The Door in the Wall* flattens film space.

Conclusion

Analysing the production history of VistaVision features on a case study basis can fine-tune our appreciation of widescreen cinema's diverse appeal. The film epic is a useful test subject due to its foregrounding of technology and craftsmanship, particularly in spectacular sequences. The Battle of Borodino in *War and Peace* and the explosive finale of *The Battle of the River Plate* deploy VistaVision to offer panoramic views of international events which are also a sign of the studios' physical resources and financial support. Simultaneously, each set piece resonates with characters' feelings and narrative themes, providing opportunities to foreground stars or underline violence in astonished reaction shots. As argued in this chapter's introduction, one strength of films recognised as 'epic' is their dynamism: characters, dialogue, and details of décor are situated within historic change and sweeping vistas, variously showing how small actions can reverberate, or external forces can overpower and annihilate. Historians should not underestimate the choice of format when assessing how filmmakers scaled their approach, at least in visual terms, to these subtle actions, environmental minutia, screen-filling settings and special effects.

⁴⁶⁸ Hill, 'Dynamic Frame', p. 236; 'The Dynamic Frame', British Kinematography, 29 (October 1956), 123-24.

VistaVision's width, verticality, depth and texture enhanced the scope of the epic and challenged film craft. However, aside from autonomous independents such as Olivier and experimenters like Alvey, the selection of format was heavily subject to business concerns. The individual contributions of the producer Dino De Laurentiis or the Film Finances' advisor John Croydon were influential, showing close attention to certain aspects of production and exhibition which fell within their professional remit. Film producers, financiers and distributors offer their own interpretations of the film epic. De Laurentiis was interested in overseas markets and film glamour, while Rank and Film Finances reflected on British cinema's capacity for authenticity and technological innovation. The 'epic' label entails a certain amount of technical or fiscal risk which is then displayed, like a badge of honour, via title credits, the production stories of behind-the-scenes interviews, studio publicity and film reviews. Comparing *War and Peace* with *The Battle of the River Plate* demonstrates that risk was experienced differently according to budget, shooting schedule and the extent and nature of international collaboration in British and American productions.

War and Peace and The Battle of the River Plate display the input of directors, cinematographers and set designers in both extravagant and subtle ways. Vidor collaborated with British cinematographer Cardiff to craft deep-focus shots for elaborately staged set pieces on outdoor locations and darkly lit close-ups, while also allowing his largely Italian art department, led by Chiari, the flexibility to contract space in intimate interiors. Chiari's background in Italian neo-realist domestic melodrama merges with Cardiff's expressionist tendencies, providing transnational stylistic currents which course through the film's latter third. The Battle of the River Plate constitutes a comparative example of cinematography and set design in the context of an international British production. The craft ideal of authenticity encouraged art director Lawson to ornament segments of the set for high resolution presentation, while also alternating to larger scale designs for epic scenes of destruction. The

combination of Mediterranean and oceanic location photography informed Lawson's aesthetic and gave Challis an opportunity to exploit VistaVision's capaciousness in sunlit cinematography. However, Challis struggled to maintain the format's reputed clarity when illuminating large sets in colour. Transitions between day and night were crucial to the script, tone and setting, shedding new light on the challenges of VistaVision film production. Variations in the texture of cinematographic space across locations and sets betray this production's more limited means. While it would be easy to frame VistaVision as the more refined production format when compared to 'ersatz' widescreen and early CinemaScope, double-frame film also led to underexamined challenges. In large studios, it had limited depth of field because of the focal characteristics of lenses used with the upsized film negative.

My two case studies of *War and Peace* and *The Battle of the River Plate* separately demonstrate the techniques which VistaVision encouraged while simultaneously showing that filmmakers had to negotiate technological constraints as part of their craft. In this way, VistaVision exemplifies and anticipates certain constraints inherent to large format film production. My concluding chapter will 'zoom out' to identify the key themes that have emerged from my multi-level approach and will examine VistaVision's legacy for technological innovation.

Conclusion: Format Histories and Historiography

I remember seeing King Vidor's War and Peace at the Capitol Theatre in VistaVision, High Society, The Court Jester - all first run. Even a movie which is mediocre, like Away All Boats, was quite extraordinary [...] The closest thing to this impact today is IMAX.⁴⁶⁹

Martin Scorsese's unrestrained appetite for VistaVision epics, musicals, comedies and war films has been shared by this thesis. Contrary to the impression given by traditional approaches to widescreen cinema of the 1950s and 60s, this was not a monotonous period dominated by turgid Hollywood epics, on the one hand, or the occasional redemptive masterclass in CinemaScope composition, on the other. Even so-called 'mediocre' popular films have been shown to exhibit a stylistic variety that was facilitated by collaboration and an openness to international exchange. Seeing these issues through the critical lens of the 'new film history', production studies and comparative methods contests the methodological convenience of earlier auteurist approaches by allowing transnational influences, different roles and formats to come to the fore. To conclude, I will highlight two key tensions which have emerged through my multi-level history of VistaVision and help to answer my main research questions, before posing issues for future research to address. As Scorsese's allusion to IMAX indicates, VistaVision had a significant legacy which also deserves elucidation.

Firstly, VistaVision introduced some unique production techniques which underscores the two-way street between creative agency and technological constraints. After 1954, film characters, objects and locales could be captured in high resolution, recording intricate details on a negative frame that exceeded the established standard of 35mm/4-perf. film. If, as Peter

von Bagh asserts, the VistaVision camera could be figuratively compared to a 'surgical instrument' in its exactitude, the blade was double-edged. 470 To integrate fabricated and actual elements within the sharp and tall VistaVision image, Paramount filmmakers modified production and this had a ripple effect on multiple areas of expertise and other studios. Realist, expressionist and experimental styles co-existed within the range of choices presented by the technology and organisational policy. For example, cinematographers utilized depth in large indoors sets and in close-ups, while set designers compensated by creating textured and hyperreal surfaces to echo locations. Much creative labour was expended on enhancing the overall look of VistaVision films, including their spatial height, width, scale and texture.

Furthermore, VistaVision films in the aspect ratio of 1.85:1 discourage widescreen scholarship from fixating on the horizontal plane. Expanding on Eisenstein's conception of an isomorphic relation between vertical aspect ratios and towering subjects, VistaVision film directors framed actors and objects in combination with angled cameras, distant shot scales and 'tri-directional' staging along the height, width and depth axes.⁴⁷¹ The inputs and expectations of managerial, technical and trade voices informed the collaborative construction of film space. Depending on the local production context, filmmakers self-consciously responded to past or imported techniques which were associated with the Academy aspect ratio or meretricious Hollywood spectacle.

In future research, scholarly understanding of the different roles and techniques involved in widescreen filmmaking could be sharpened. Using key sequences to chart the interrelations between profilmic, cinematographic, diegetic and location space presents one route. Scholars should also experiment with different layers of comparative criteria. Comparing widescreen formats, individual styles, locations and the spatial iconographies of film genres,

⁴⁷⁰ Von Bagh, p. 320 ⁴⁷¹ Eisenstein, pp. 48-65.

in different combinations, has proven productive. Of course, one could pair a study of widescreen space with statistical criteria other than the conventional shot length and scale data types used in this thesis. The frequency of camera tracking, pans, tilts and crane movements could be correlated with camera weight, location shooting and other variables. Scholars would also need to consider how large datasets can be presented accessibly and persuasively, with a view to clarifying rather than mystifying their methodologies. In this regard, film statisticians might learn from the current popularity of infographic news journalism, for example, in *The New York Times* or the British quarterly, *Delayed Gratification*.

A second major tension existed between transnational influence and its local moderation by available facilities, expertise and production cultures. VistaVision technology offers an interface for the negotiations between creative roles and studios based in different national contexts. In Chapters 3 and 5, I referred to upscaling films and countercurrents, respectively, to highlight gradations of transnational influence within a single VistaVision film. My approach provided a holistic alternative to the dichotomous position of contrasting films purely on the grounds of national difference. The structural approaches offered by media industry research also helped me to plot transnational exchange at different levels of production activity, responding to Lotz and Newcombe's call for comparative and historical case studies.⁴⁷² Caldwell's concept of trade stories drew my attention to the British and American film industry's self-promotion along local, national and global lines. Widescreen dimensions and shooting locations were frequently and hyperbolically equated with commercial expansion.⁴⁷³ Narratives of expansion helped to compensate for contraction in other areas of studio activity, primarily reduced rates of film production and the divestiture or closure of cinemas noted in Chapter 1.

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⁴⁷² Lotz and Newcomb, p. 72.

⁴⁷³ Caldwell, *Production Culture*, pp. 37-68.

Other production contexts could have been chosen or weighed differently according to research needs. For example, there is a counterintuitive case for basing a transnational history of widescreen cinema wholly in Britain, where a melting pot of global production companies and imported formats provided opportunities for domestic expertise. The cycle of CinemaScope costume adventures and Rank's VistaVision films of the 1950s can be viewed as an opportunity to test Britain's growing storehouse of technologies, facilities and labour that would be exploited by large film widescreen epics during the 1960s, such as *Lawrence of Arabia* (David Lean, 1962) and *Those Magnificent Men in Their Flying Machines* (Ken Annakin, 1965). Returning to the Rank-Fox fiasco over CinemaScope described in Chapter 2, historians might also consider how widescreen films were distributed and received in British cinemas. The global appropriation of widescreen formats developed outside the USA, such as Technirama production and double-frame film exhibition in Europe, presents one starting point for this research.

VistaVision was the first widescreen system of the 1950s to expand the film negative to such a degree that it came to define the format's design and visual appeal. This foreshadowed later industrial and aesthetic trends. Paramount itself envisioned VistaVision's legacy in a direct and self-aggrandizing way. A mock-up article, titled 'Industry Follows VistaVision', was prepared by the studio in May 1955, when large format film production was gaining traction with Todd-AO and CinemaScope 55; the article's subline reads, 'a large negative image is the feature that others must follow', and reproduces progress reports on Twentieth Century-Fox's CinemaScope 55 and MGM's Camera 65 from the American trade press as evidence.⁴⁷⁴ It is important to remember that the formats which came after VistaVision also emerged from unique organizational contexts, as John Belton and Kira Kitsopanidou observe

⁴⁷⁴ MHL, Loren L. Ryder Papers, Scrapbook 4 1954-55, 'Industry Follows VistaVision' draft article, May 1955.

of Fox's large film format.⁴⁷⁵ As this thesis has argued, micro-variables in technology and policy are part of the reason why film formats supply such rich and varied production histories.

VistaVision's legacy can be teased out with more delicacy than Paramount's conception of technological change. The industry's obsession with big and clear images manifested itself in diverse ways. Herb A. Lightman attributed the 'high-fidelity definition' of MGM Camera 65 to 65mm/5 perf. film and Panavision's anamorphic lenses. William C. Shaw promoted IMAX's 'high-fidelity image quality' in connection with oversized 65mm/15 perf. film and 'rolling loop' projector which threaded film horizontally (like VistaVision) and was first demonstrated at Expo' 70 in Osaka, Japan. The technical discourse overlaps neatly with Paramount's 'Motion Picture High-Fidelity' tagline while also underlining divergences in engineering design. It should also be remembered that the introduction of large fine-grained stocks by Eastmancolor and Panavision's improved lens designs contributed to the obsolesce of VistaVision as a main production format after 1961, though its high-resolution image was exploited in other areas.

The legacy of VistaVision can be partly traced through continuities in creative expertise and production techniques. Technicala was converted from VistaVision camera models by Technicolor in its London laboratory and was introduced in 1956 - it had the same double-frame film size with a wider 2.35:1 image and anamorphic 'Delrama' attachment. During a meeting of the British Kinematograph Society it was predicted that use of the 'double-frame negative would become more general' following Technirama.⁴⁷⁸ It was most widely used in Europe until 1967, also making its way to Japan, where Daiei's Super-70 Technirama

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⁴⁷⁵ Belton, 'Fox and 50mm', pp. 9-24; Kitsopanidou, pp. 32-56.

⁴⁷⁶ Herb A. Lightman, 'Why MGM Chose "Camera 65", *American Cinematographer*, 41 (March 1960): 162-63, 92 (p. 163).

⁴⁷⁷ William C. Shaw, 'New Large-Screen and Multi-Image System', *Journal of the SMPTE*, 79 (September 1970), 782-87 (p. 783).

⁴⁷⁸ 'Production from Edison to Technirama', *Kinematograph Weekly*, 21 March 1957, p. 7; George Gunn, 'Technirama', *British Kinematography*, 34 (1959), 94-98; R. Howard Cricks, 'Delrama - The Technirama Camera Anamorph', *Kinematograph Weekly*, 30 May 1957, p. 10.

Veteran VistaVision cameras, 70mm film and anamorphic lenses, and in Hollywood. 479
Veteran VistaVision cinematographer William Daniels lit the first American Technirama film,
Universal-International's Western, *Night Passage* (James Neilson, 1957). He described how
the 'sharpness, clarity and definition of Technirama offers opportunities both for director and
cinematographer', for example, 'we used combination closeup-longshots frequently'. 480 *American Cinematographer* commended how, 'although Stewart is in medium close-up, all the
interesting details in background also were included in [the] scene with superior clarity'. This
commentary vividly recalls the reception of Daniels' deep-focus cinematography on *Strategic Air Command*, in which Stewart too starred. 481 There are also correspondences in the set design
practices of VistaVision and larger film formats. The first Todd-AO film, *Oklahoma!*, was
praised for the 'meticulous care' taken with 'painting of sets to give the appearance of great
age', without which, 'the illusion would be too apparent' on oversized film, just as Arthur
Lawson found when painting ship exteriors in high resolution on *The Battle of the River Plate*. 482

VistaVision inspired short-lived auxiliary devices such as handheld cameras, special effects technologies and, as described in Chapter 2, double-frame film projectors. Handheld VistaVision freed camera operators of using heavy large format film cameras on location. Its exploitation was limited to a few Hollywood films including *The Mountain, The Ten Commandments* and *The Pride and the Passion*; for *Richard III*, no access to handheld VistaVision necessitated shooting with an Arriflex 35mm camera, leading to fluctuations in

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⁴⁷⁹ "Shyaka" - Japan's First Epic Production in 70mm', *American Cinematographer*, 11 (January 1962), 42-44; Jasper Sharp, '*Buddha*: Selling an Asian Spectacle', *Journal of Japanese and Korean Cinema*, 4 (January 2012), 29-52 (pp. 43-45).

Arthur Rowan, "Night Passage" - First in New Technirama Large-screen System', American Cinematographer, 38 (March 1957), 148-149, 182 (p. 182).

⁴⁸¹ Ibid., 182. For a historical account of Technirama film production, see Sheldon Hall, *Zulu, With Some Guts Behind It: The Making of the Epic Movie* (Sheffield: Tomahawk Press, 2005), pp. 216-19.

⁴⁸² Herb A. Lightman, 'Shooting "Oklahoma!" in Todd-AO', American Cinematographer, 36 (April 1955), 210-11, 243-44 (p. 243)

image resolution during its multi-format battle sequence, as Duncan Petrie observes.⁴⁸³ When shooting on 65mm film for the Todd-AO musical *Can-Can* (Walter Lang, 1960), Daniels found that the challenges of camera weight, focal length and lighting restrictions encountered with VistaVision increased exponentially.⁴⁸⁴ VistaVision cinematographer Lee Garmes reported similar issues after lighting the first Super Panavision 65 film, *The Big Fisherman* (Frank Borzage, 1959), and handheld cameras in this format were used from 1960.⁴⁸⁵

Elaborate triple-head projectors were adapted to take rear projection shots with VistaVision-specification film at Paramount and Rank's Pinewood Studio. 486 During the making of matte shots for *North by Northwest*, intra-studio correspondence between Paramount and MGM reveals that it took a debilitating five days to move, assemble and test the triple-headed unit and train crew while all finished plates also had to be projected at Paramount, leading Frank Caffey to remark, 'I would much prefer they didn't take it at all'. 487 The value of using double-frame film in special effects was not widely recognized until Industrial Light & Magic adopted VistaVision cameras in order to maintain clarity in photorealist composite photography for *Star Wars* (George Lucas, 1977). 488 VistaVision was most recently used for special effects model work in *Interstellar* (Christopher Nolan, 2014) because, as Scorsese alludes to in my earlier quotation, VistaVision's image resolution is visually comparable to the IMAX format used by Nolan's team.

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⁴⁸³ Arthur Rowan, 'New Portable VistaVision Camera', *American Cinematographer*, 36 (December 1955), 713, 728; Petrie, *The British Cinematographer*, p. 104.

⁴⁸⁴ Herb A. Lightman, 'Filming "Can-Can" in Todd-AO and Color', *American Cinematographer*, 11 (May 1960), 300-1, 312, 314, 316.

⁴⁸⁵ Frederick Foster, 'Photography Sharp, Clear, and Incisive', *American Cinematographer*, 11 (August 1960), 480-81, 504-6; Salt, *Film Style and Technology*, p. 261.

⁴⁸⁶ Raymond Fielding, *Techniques of Special Effects of Cinematography*, 4th edn (New York: Focal Press, 1985), p. 256.

⁴⁸⁷ MHL, Paramount Pictures Production Records, box 146, folder 1, Frank Caffey to Ray Klune, 15 September, 1958; C Shepphird to William Smith, 29 September 1958.

⁴⁸⁸ Cristen Yasko, 'Deep Deep Outer Space: The Revitalization of VistaVision', *Focus*, 16 (1996), 14-25; Julie A. Turnock, *Plastic Reality: Special Effects, Technology and the Emergence of 1970s Blockbuster Aesthetics* (New York: Columbia University Press, 2015), pp. 136-38.

VistaVision's stunted diffusion helps to explain why extravagant systems such as the Biograph, Cinerama, Todd AO, and IMAX have traditionally favored vertically-integrated companies, or at least organizations with strong links to the specialist production and exhibition facilities needed to rationalize use of such technologies. Brands like IMAX and Cinerama were associated with high-cost, low-volume filmmaking and operated within a niche remit of genres and venues such as purpose-built cinemas and science parks. However, VistaVision has been associated with rarefied entertainments that we might associate with IMAX, including double-frame projection and Museum orientation.

Foreshadowing the IMAX corporation's venture into museum film exhibition by more than a decade, VistaVision was used to shoot a short orientation film which is still played at the Colonial Williamsburg Museum, with surround sound by Todd AO. *Williamsburg: The Story of a Patriot* (George Seaton, 1956) was filmed by Paramount and funded by the not-for-profit Colonial Williamsburg Foundation established by John D. Rockefeller. The Foundation's audio-visual director stressed to the SMPTE that the film's aim was to 'orient the visitor in terms of *historical background* and *mood*' before they walked the restored grounds of Virginia's former colonial capital, material details of which feature heavily in the finished film.⁴⁸⁹

In its setting and style, *Williamsburg* encapsulates the 'tension between the museum as a site of civic uplift and rational learning versus one of popular amusement and spectacle' which Alison Griffiths has identified with IMAX museum installations. ⁴⁹⁰ The film informs of the town's national significance by reenacting the political lives of burgesses around the outbreak of the American Revolutionary War. An attempt is made to engage a broad and potentially global audience of tourists. For example, the film opens with a spectacular shot of

⁴⁸⁹ Arthur L. Smith, 'The Colonial Williamsburg Theaters for a Wide-Screen Participation Film', *Journal of the SMPTE*, 70 (September 1961): 677-79 (p. 678).

⁴⁹⁰ Alison Griffiths, *Shivers Down Your Spine: Cinema, Museums, and the Immersive View* (New York: Columbia University Press, 2008), p. 5.

a boy running through an idyllic vista (Figure 69) and is bookended by a similarly staged shot of a march to war. Events are seen via a fictional character, retained from the initial treatment by James Agee, who also narrates the film. Stylistic choices create thresholds of space and meaning for the audience to immerse themselves in didactic history as they would a conventional narrative film.



Figure 69. Williamsburg: The Story of a Patriot: opening vista onto the national past.

The architect of Williamsburg's duplex cinema, Ben Schlanger, advocated using large film on a general release basis. In 1965, Schlanger likened the industry's response to 70mm film technology to that of a 'sleeping giant' which was 'encumbered with inefficient and already amortized machinery'. ⁴⁹¹ Large film still constitutes the rare novelty which Schlanger described in the 1960s. Expensive films about the west, war, space, superheroes and chamber dramas directed by Quentin Tarantino, Christopher Nolan and Paul Thomas Anderson incorporate modern 65mm cameras and post-war systems such as VistaVision, Ultra Panavision 70 and IMAX for production and/or exhibition, occasionally distracting us from

⁴⁹¹ Ben Schlanger, 'Criteria for Motion-Picture Viewing and For a New 70mm System: Its Process and Viewing Arrangements', *Journal of the SMPTE*, 75 (March 1966), 161-67 (p. 164).

the mainstream of digital cinema. Allison Whitney writes that IMAX films such as *The Dark Knight*, which used VistaVision to ensure coverage of a truck crash sequence, communicate an 'emphatic endorsement of film-as-film'. *492 *The Dark Knight* commercially reinforces the synergy between Nolan's output 'and a particular brand of cinephilia, one that is highly invested in technological specificity'. *493 In critical and promotional discourse, the craft signatures of Nolan's collaborators risk being overwritten by a technophilic auteurism that might just attend to film technology more than it does film style.

Digital cinema has stimulated cultural interest in analogue film and its particular formats. As per Whitney's comments, format-specifity is characteristic of the contemporary cinephile discourse around analogue technologies. This can manifest itself in all sorts of practical, commercial or taste-demarcating ways in debates about aspect ratios and film gauges. It can also have the inverse process of inducing nostalgia, which is more concerned with celebrating than historicizing past movie culture.

Widescreen formats of the 1950s are given varying degrees of visibility in three recent films which fabulize Hollywood. In *Hail, Caeser!* (Ethan and Joel Coen, 2016), cowboy actor Hobie Doyle (Alden Ehrenreich) stars in a mid-budget Western and the VistaVision logo is discreetly included in the film's opening credits at the glamorous premiere (though the film is set in 1951, before VistaVision). In *Once Upon a Time in Hollywood* (Quentin Tarantino, 2019), a neon Cinerama sign is seen illuminating as if by magic during the transition to night-time; on the other hand, the deserted drive-in where Cliff Booth (Brad Pitt) resides hints bitterly at the decline of populuxe movie culture in 1969. In *La La Land* (Damien Chazelle, 2016), the

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⁴⁹² Allison Whitney, 'Cinephilia Writ Large: IMAX in Christopher Nolan's *The Dark Knight* and *The Dark Knight Rises*', in *The Cinema of Christopher Nolan: Imagining the Impossible*, ed. by Jacqueline Furby and Stuart Joy (New York: Columbia University Press, 2015), pp. 31-43 (p. 31).

⁴⁹³ Ibid. p. 31.

⁴⁹⁴ James Kendrick, 'Aspect Ratios and Joe Six-Packs: Home Theater Enthusiasts Battle to Legitimize the DVD Experience', *The Velvet Light Trap*, 56 (Fall 2005), 58-70; Harper Cossar, 'The Shape of New Media: Screen Space, Aspect Ratios and Digitextuality', *Journal of Film and Video*, 61.4 (2009), 3-16.

opening sequence clearly displays the vintage CinemaScope logo, readying the audience for the film's 2.55:1 aspect ratio and Technicolor musical aesthetics. Whether used as ornamental detail or spectacular statement, it is interesting to note that these formats are strongly associated with 1950s American consumerism as opposed to the international experience of widescreen cinema.

The present-day use of 1950s technologies is more intricate than *La La Land*'s appropriation of the CinemaScope logo would imply. Filmmakers and restoration experts rely on modified technologies and international crews to accommodate dated equipment. These difficulties are made evident in the original publicity for Robert A. Harris and James C. Katz's 1996 restoration and 70mm transferal of *Vertigo*, which stressed the use of Hitchcock's production notes to help Harris and Katz add Foley effects to the DTS digital soundtrack. For the special effects sequences depicting 1940s Hollywood in *Who Framed Roger Rabbit* (Robert Zemeckis, 1988), cinematographer Dean Cundey used the 'Vista-Flex' - a quieter, lighter VistaVision camera with electronic accessories which he designed with Industrial Light and Magic. Cundey shot the film's matte sequences against a blue screen in London's Elstree Studio. Cundey, his camera operator and Vista-Flex assistant 'worked essentially in American style and adapted that to the English crew system', which involved relying on English-trained electricians for setting up light-control devices (scrims, flags and nets) that are usually arranged by the grip in the USA. The VistaVision film negative for these sequences was processed at Denham Laboratory, London.

VistaVision is currently used as the main camera in special effects sequences such as those mentioned above, or short films where running lengths of only a few minutes afford this level of experimentation. Over the past decade, VistaVision has been used to make three short

⁴⁹⁵ Universal Pictures, 'Restoration of *Vertigo*' https://www.in70mm.com/news/2015/vertigo/index.htm [accessed 1 September, 2019].

⁴⁹⁶ George Turner, 'Who Framed Roger Rabbit?', American Cinematographer, 69 (July 1988), 44-51 (p.46).

films in Britain and the USA, all in the traditional aspect ratio of 1.85:1 and digitally projected in IMAX theatres. As some brief examples will illustrate, VistaVision shorts made with updated equipment have also drawn on diverse styles of the 1950s analysed in this thesis.

Within the British strand, *Chasing Cotards* (Edward L. Dark, 2010) portrays Hart's (Andrew Scott) transcendent encounter with his wife, Elizabeth (Olivia Grant), two weeks after her funeral. The film's title is inspired by Cotards syndrome, the delusion that one is dead or dying. Ghostly themes, aesthetic of scale, and psychological elements are strongly reminiscent of Hitchock's *Vertigo*, in which staging and special effects disturb Scottie's viewpoint of Madeleine. The short opens with a wide interior shot in which Hart, still clothed in his funeral attire, is almost lost among the clutter of his neglected mansion (designed by Alice Bird). Dusty light, animated wallpaper and reverse action convey Hart's liminal state as he communes with the dead. He eventually leaves the house and looks up to the sky with arms wide open, as the camera rises over his head. The film's sole exterior shot focuses more on cerebral themes than its qualities as lush landscape.

By contrast, *Ellston Bay*, filmed on location in South West England, and an American short, *The Negative* (Máté Boegi and Ben Brahem Ziryab, 2016), aim for what the directors of both shorts describe as a 'naturalistic' style in their predominately outdoor settings. ⁴⁹⁷ *The Negative* pivots on the adventures of a large format stills photographer, using this storyline to showcase crisp orange-blue shots of Monument Valley which evoke *The Searchers* (Figure 70). Boegi and Ziryab intentionally emulated Ford's style through the sparing use of close-ups and semi-static compositions. However, the length and variety of camera movements in all of these VistaVision shorts reveals the compact size and weight of modified camera models.

David Harvilla and Jack Winemiller, 'VistaVision Strikes Back' (2017)

⁴⁹⁷ Nicholas Eriksson, 'The Making of *Ellston Bay*' (2017)

https://www.in70mm.com/news/2017/bay/index.htm [accessed 1 September 2019];

https://www.in70mm.com/news/2017/negative/index.htm [accessed 1 September 2019].



Figure 70. The Negative: reviving The Searchers and large format landscapes in VistaVision.

As contemporary films indicate through their diegesis or craft, upsizing the celluloid frame is a long-standing, even revered practice within film production. If historians wish to understand the creative agencies involved in large format film production and its transnational appeal, they need to look further back than the worldwide tradeshows of IMAX in the 1970s. For example, film scholars could yet resituate US-centric studies of the transatlantic Biograph format in the 1890s,⁴⁹⁸ to consider its corporate establishment in Britain. Or, we may find ways to factor transnational commerce and styles into accounts of Hollywood's widescreen revolution in the 1920s.⁴⁹⁹ VistaVision was the first format in the 1950s to widen the film frame to meet the aesthetic and commercial goals of Britain, the USA, and their international coproduction partners. Large format technologies such as IMAX continue to shapeshift as its stakeholders contend with whatever the orthodox recording material or mode of exhibition may

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⁴⁹⁸ Charles Musser, *The Emergence of Cinema: The American Screen to 1907* (Berkeley: University of California Press, 1994), pp. 150-57; Tom Gunning, 'Movies, Stories, and Attractions', in *American Cinema, 1890-1909: Themes and Variations*, ed. by André Gaudreault (New Brunswick, NJ: Rutgers University Press, 2009), pp. 114-15.

⁴⁹⁹ Current accounts include: Belton, *Widescreen Cinema*, pp. 34-68; Cossar, pp. 61-94; Ariel Rogers, *On the Screen: Displaying the Moving Image*, 1926-1942 (New York: Columbia University Press, 2019), pp. 58-87.

be. Researchers are tasked with charting the commercial trajectories of film formats and their differentiation from alternative options. As a relatively minor format, VistaVision's legacy also demonstrates the value of directing research beyond the industrial mainstream of innovation, to the lesser known tributaries which sculpt the surrounding production landscape and diverge in style. Divergent examples can contain general assumptions and realign research methodologies.

In conclusion, studying the VistaVision format nourishes our current knowledge of widescreen cinema's historical and stylistic complexity. It has also encouraged critical reflection on diverse research methods, comparative analysis and film aesthetics. Film formats demand a supple historiography as various types and scales of production activity are nestled within their histories. Multiple levels of analysis can isolate international, organisational, and more localised influences on film production and style. Meanwhile, concepts from transnational cinema and production studies, such as appropriation, exchange, accommodation, hierarchy, hybridisation and collaboration, allow historians to give a precise account of the confluence of influences. Combining methodologies will only invigorate histories of widescreen cinema and instigate intellectual exchange with other fields. As film studies diversifies in response to digital technologies and global media practices, it becomes increasingly valuable to study examples which offer historical parallels for these changes, and to pool our research expertise.

Appendix: Shot Scale and Length Data

CinemaScope films are marked with asterisk (*). All other films are in VistaVision. The earliest known release/premiere date is given.

Film	Date	A S L	B C U	C U	M C U	M S	M L S	F S	L S	V L S	Oth.
Artists and Models	1956	9.2	0	32	127	219	99	114	56	9	36
Beneath the 12- Mile Reef*	1953	9.9	0	19	41	138	126	123	72	32	46
The Black Tent	1956	11.9	0	38	66	66	71	116	87	17	9
Doctor at Large	1957	11.9	0	23	113	190	70	36	39	8	5
Doctor at Sea	1955	11.7	2	157	89	92	55	47	17	4	8
The Far Horizons	1955	8.3	0	15	68	150	139	185	149	54	17
The Geisha Boy	1958	7	2	23	95	235	103	140	97	17	83
The Girl Can't Help It*	1956	9.7	0	10	60	188	137	80	45	13	42
Gunfight at the O.K. Corral	1957	10.3	0	13	79	148	130	199	112	15	7
Hollywood or Bust	1956	6.7	0	5	104	169	125	122	111	42	138
How to Marry a Millionaire*	1953	21.3	0	7	45	53	23	60	18	10	32
The Iron Petticoat	1956	11.8	0	5	42	189	84	81	40	5	22
King of the Khyber Rifles*	1953	13.8	0	8	22	113	48	114	96	11	11
Knights of the Round Table*	1954	6.5	0	24	203	175	141	191	133	5	30
Last Train from Gun Hill	1959	7.4	0	33	114	173	153	135	117	11	16
The Lieutenant Wore Skirts*	1956	12.5	0	5	49	209	84	45	44	1	26
One-Eyed Jacks	1961	7.8	10	174	293	215	99	100	119	25	31
The Robe*	1953	15.8	0	13	43	120	96	140	66	9	12
Richard III	1955	22	0	17	54	84	33	87	94	27	23
Rock-a-bye Baby	1958	8.2	0	15	108	261	106	108	69	14	27

Film	Date	A	В	C	M	M	M	F	L	V	Oth.
		S	C	U	C	S	L	S	S	L	
		L	U		U		S			S	
Run For Cover	1955	5.9	0	7	119	259	188	128	155	39	15
Say One For Me*	1959	12.9	8	13	75	206	77	77	36	2	13
The Seven Little Foys	1955	13.4	0	12	34	79	80	104	64	4	24
Strategic Air Command	1955	10.9	0	20	142	159	80	53	45	17	107
The Ten Commandments	1956	11.1	0	14	56	212	160	352	239	80	45
Value For Money	1955	8.8	8	92	96	118	69	86	48	13	31
White Christmas	1954	15.1	0	2	40	131	71	135	85	4	18
Will Success Spoil []*	1957	10.9	2	22	92	157	44	68	36	8	54

Filmography: VistaVision Features and Shorts 1954-61

Features are listed first. Black-and-white films are marked by an asterisk (*). The main distributor is named if it differs from the production organisation(s). International coproductions have more than one country listed after the company details.

Feature Film	Date	Production Organisation(s); Distributor (if different); Country	Director
3 Ring Circus	1954	Paramount/Hal Wallis; USA	Joseph Pevney
An Alligator Named Daisy	1955	Rank; UK	J. Lee Thompson
An Eye for an Eye [Oeil pour oeil]	1957	Galatea Film/Holly Film/Union Générale Cinématographique; France	André Cayatte
Another Time, Another Place*	1958	Lanturn/Kaydor; Paramount; UK/USA	Lewis Allen
Anything Goes	1956	Paramount; USA	Robert Lewis
Artists and Models	1955	Paramount; USA	Frank Tashlin
Away All Boats	1956	Universal; USA	Joseph Pevney
Beau James	1957	Paramount/Hope & Scribe; USA	Melville Shavelson
The Big Money	1956	Rank; UK	John Paddy Carstairs
The Birds and the Bees	1956	Paramount/Gomalco; USA	Norman Taurog
The Black Orchid*	1959	Paramount; USA	Martin Ritt
The Black Tent	1956	Rank; UK	Brian Desmond Hurst
The Buccaneer	1958	Paramount; USA	Anthony Quinn
The Buster Keaton Story*	1957	Perlberg-Seaton; Paramount; USA	Sidney Sheldon
But Not for Me*	1959	Perlberg-Seaton/Paramount; Paramount; USA	Walter Lang
The Court Jester	1956	Dena Enterprises; Paramount; USA	Norman Panama
Dangerous Exile	1957	Rank; UK	Brian Desmond Hurst
The Delicate Delinquent*	1957	York; Paramount; USA	Don McGuire
Desire Under the Elms*	1958	Don Hartman/Paramount; Paramount; USA	Delbert Mann

Feature Film	Date	Production Organisation(s); Distributor (if different); Country	Director
The Desperate Hours*	1955	Paramount; USA	William Wyler
The Devil's Hairpin	1957	Theodora/Paramount; Paramount; USA	Cornel Wilde
Doctor at Large	1957	Rank; UK	Ralph Thomas
Doctor at Sea	1955	Rank; UK	Ralph Thomas
The Far Horizons	1955	Paramount/Pine-Thomas; Paramount; USA	Rudolph Maté
Fear Strikes Out*	1957	Paramount; USA	Robert Mulligan
The Five Pennies	1959	Dena Pictures/Paramount; Paramount; USA	Melville Shavelson
Flowers of Hell [Jigoku bana]	1957	Daiei Kyoto; Japan	Ito Daisuke
Funny Face	1957	Paramount; USA	Stanley Donen
The Geisha Boy	1958	York/Paramount; Paramount; USA	Frank Tashlin
The Girl Rush	1955	Paramount/Independent Artists; Paramount; USA	Robert Pirosh
Gunfight at the O.K. Corral	1957	Paramount/Hal Wallis; Paramount; USA	John Sturges
Hear Me Good*	1957	Paramount/Mackeran; Paramount; USA	Don McGuire
Hell Drivers*	1957	Rank/Aqua; Rank; UK	Cy Endfield
Hell's Island	1955	Paramount/Pine-Thomas; Paramount; USA	Phil Karlson
High Society	1956	Metro-Goldwyn-Meyer/Bing Crosby; Loew's Inc.; USA	Charles Walters
Hollywood Or Bust	1956	Paramount/Hal Wallis; Paramount; USA	Frank Tashlin
Hot Spell*	1958	Hall Wallis/Paramount; Paramount; USA	Daniel Mann
House of Secrets	1956	Rank; UK	Guy Green
Houseboat	1958	Scribe/Paramount; Paramount; USA	Melville Shavelson
Ill Met by Moonlight*	1957	Vega; Rank; UK	Michael Powell and Emeric Pressburger
The Iron Petticoat	1956	Remus/Setafilm; Independent Film Distributors; UK	Ralph Thomas

Feature Film	Date	Production Organisation(s); Distributor (if different); Country	Director
It Started in Naples	1960	Capri /Paramount; Paramount; USA	Melville Shavelson
The Jayhawkers!	1959	Paramount; USA	Melvin Frank
The Joker is Wild*	1957	AMBL (Vidor-Lewis-Sinatra); Paramount; USA	Charles Vidor
King Creole*	1958	Hall Wallis/Paramount; Paramount; USA	Michael Curtiz
Last Train from Gun Hill	1959	Hall Wallis/Bryna/Paramount; Paramount; USA	John Sturges
The Leather Saint*	1956	Paramount; USA	Alvin Ganzer
Li'L Abner	1959	Triad/Paramount; Paramount; USA	Melvin Frank
The Lonely Man*	1957	Paramount; USA	Henry Levin
Loving You	1957	Paramount/Hal Wallis; Paramount; USA	Hal Kanter
Lucy Gallant	1955	Paramount/Pine-Thomas; Paramount; USA	Robert Parrish
The Man Who Knew Too Much	1956	Paramount/Filwite; Paramount; USA	Alfred Hitchcock
Maracaibo	1958	Theodora /Paramount; Paramount; USA	Cornel Wilde
The Matchmaker*	1958	Don Hartman/Paramount; Paramount; USA	Joseph Anthony
The Mountain	1956	Paramount; USA	Edward Dmytryk
North by Northwest	1959	MGM; Loew's Inc.; USA	Alfred Hitchcock
Omar Khayyam	1957	Paramount; USA	William Dieterle
One-Eyed Jacks	1961	Pennebaker; Paramount; USA	Marlon Brando
Pardners	1956	Paramount/York; Paramount; USA	Norman Taurog
The Pride and the Passion	1957	Stanley Kramer Pictures; United Artists; USA	Stanley Kramer
The Proud and Profane*	1956	Paramount/Perlberg-Seaton; Paramount; USA	George Seaton
The Rainmaker	1956	Paramount/Hal Wallis; Paramount; USA	Joseph Anthony
Richard III	1955	London/Big Ben; Independent Film Distributors; UK	Laurence Olivier
Rock-a-bye Baby	1958	York Pictures/Paramount; Paramount; USA	Frank Tashlin

Feature Film	Date	Production Organisation(s); Distributor (if different); Country	Director
The Rose Tattoo*	1955	Paramount/Hal Wallis; Paramount; USA	Daniel Mann
Run For Cover	1955	Paramount/Pine-Thomas; Paramount; USA	Nicholas Ray
The Sad Sack*	1957	Paramount/Hal Wallis; Paramount; USA	George Marshall
The Scarlet Hour*	1956	Paramount; USA	Michael Curtiz
The Search for Bridey Murphy*	1956	Paramount; USA	Noel Langley
The Searchers	1956	C.V. Whitney Pictures; Warner Bros.; USA	John Ford
The Seven Little Foys	1955	Paramount/Hope & Scribe; Paramount; USA	Melville Shavelson
Short Cut to Hell*	1957	Paramount; USA	James Cagney
Simon and Laura	1955	Rank; UK	Muriel Box
Spanish Affair	1957	Nomad/CEA Studios Madrid/Benito Perojo; Paramount; USA/Spain	Don Siegel
The Spanish Gardener	1956	Rank; UK	Philip Leacock
St. Louis Blues*	1958	Paramount; USA	Allen Reisner
Strategic Air Command	1955	Paramount; USA	Anthony Mann
Teacher's Pet*	1958	Perlberg-Seaton/Paramount; Paramount; USA	George Seaton
The Ten Commandments	1956	Paramount; USA	Cecil B. DeMille
That Certain Feeling	1956	P & F/Hope; Paramount; USA	Norman Panama and Melvin Frank
That Kind of Woman*	1959	Paramount; USA	Sidney Lumet
The Battle of the River Plate	1956	Arcturus; Rank; UK	Michael Powell and Emeric Pressburger
Three Violent People	1957	Paramount; USA	Rudolph Maté
Thunder in the Sun	1959	Seven Arts /Carrolton; Paramount; USA	Russell Rouse
The Tin Star*	1957	Perlberg-Seaton; Paramount; USA	Anthony Mann
To Catch a Thief	1955	Paramount; USA	Alfred Hitchcock
The Trap	1959	Parkwood Enterprises/Heath; Paramount; USA	Norman Panama

Feature Film	Date	Production Organisation(s); Distributor (if different); Country	Director
The Trouble With Harry	1955	Paramount/Alfred Hitchcock; Paramount; USA	Alfred Hitchcock
The Vagabond King	1956	Paramount; USA	Michael Curtiz
Value for Money	1955	Rank; UK	Ken Annakin
Vertigo	1958	Alfred Hitchcock/Paramount; Paramount; USA	Alfred Hitchcock
War and Peace	1956	Paramount/Ponti-De Laurentiis; Paramount; USA/Italy	King Vidor
We're No Angels	1955	Paramount; USA	Michael Curtiz
White Christmas	1954	Paramount; USA	Michael Curtiz
Wild Is the Wind*	1957	Paramount/Hal Wallis; Paramount; USA	George Cukor
The Woman for Joe	1955	Rank; UK	George More O'Ferrall
You're Never Too Young	1955	Paramount/York; Paramount; USA	Norman Taurog

Short Film	Date	Production Organisation(s);	Director
		Distributor (if different); Country	
County Pride	1959	Drummer; Rank; UK	Ian Barnes
no.14: Cuckoo			
Land			
County Pride	1959	Drummer; Rank; UK	Ian Barnes
no.15: The Isle			
and the Pussycat			
County Pride	1959	Drummer; Rank; UK	Ian Barnes
no.16: <i>The</i>			
Channel Queen			
County Pride	1959	Drummer; Rank; UK	Ian Barnes
no.17: <i>In the</i>			
Beginning			
County Pride	1959	Drummer; Rank; UK	Ian Barnes
no.18: Wreckers'			
Coast			
County Pride	1959	Drummer; Rank; UK	Ian Barnes
no.19: <i>The</i>			
Smugglers			
The Door in the	1956	British Film Institute/Lowrie;	Glenn H. Alvey Jr.
Wall		Associated British-Pathé; UK	
Key to the Future	1956	General Motors (for annual company	Michael Kidd
		'Motorama' convention); USA	

Short Film	Date	Production Organisation(s); Distributor (if different); Country	Producer/Director
VistaVision Visits	1956	Paramount; USA	Carl Dudley/Richard
Austria			Goldstone
VistaVision Visits	1956	Paramount; USA	Carl Dudley
Gibraltar			
VistaVision Visits	1955	Paramount; USA	Carl Dudley
Hawaii			
VistaVision Visits	1955	Paramount; USA	James A. Fitzpatrick
Japan			
VistaVision Visits	1955	Paramount; USA	James A. Fitzpatrick
Mexico			
VistaVision Visits	1954	Paramount; USA	James A. Fitzpatrick
Norway			
VistaVision Visits	1956	Paramount; USA	Jack Eaton
Panama			
VistaVision Visits	1955	Paramount; USA	Carl Dudley
Spain			
VistaVision Visits	1955	Paramount; USA	Jack Eaton
Sun Trails			

Note: two Paramount features which may have been in VistaVision are *A Breath of Scandal* (Michael Curtiz, 1960) and *My Six Loves* (Gower Champion, 1963), but this is unconfirmed.

Bibliography

Archives and Special Collections

British Film Institute, Reuben Library, London UK

Emeric Pressburger Collection

Michael Powell Collection

British Library, London UK

Laurence Olivier Archive

Film Finances Archive, London UK

Another Time, Another Place

The Battle of the River Plate

The Iron Petticoat

Richard III

Margaret Herrick Library, American Academy of Motion Picture Arts and Sciences, Los

Angeles USA

Fred Zinnemann Papers

Loren L. Ryder Papers

Academy Oral History Collection

Paramount Pictures Production Records:

The Desperate Hours

Funny Face

Run For Cover

The Ten Commandments

To Catch a Thief

North by Northwest

The Pride and the Passion

White Christmas

Williamsburg: The Story of a Patriot

VistaVision Shorts – General

Paramount Pictures VistaVision Material

Technicolor Collection

University of California Los Angeles, Charles E. Young Research Library, USA Walter Beyer Papers

Journal and Newspaper Articles

- '20 Features Least Par Can Produce: Need That Many to Absorb Overhead', *Variety*, 13 October 1954, p. 62
- '20th Raps Par for "Brickbats" Vs. CinemaScope', Variety, 5 May 1954, p. 5.
- '25 Exhibitors Will Change to Para. Wide-Screen Ratio', *Motion Picture Daily*, 30 April 1953, p. 3
- 'Allied States Flays MPTOA, ATA as "tools" of Producers-Distribs', *Variety*, 17 September 1947, p. 6
- 'American Widescreen', The Velvet Light Trap, 21 (Summer 1985), 2-80
- 'Anamorphic VistaVision Prints to be Supplied', *Motion Picture Herald*, 13 November 1954, p. 28
- 'Appeal Shotgun Divorce: Industry Fears It May Spread', Variety, 20 July 1938, pp. 3, 22
- 'Bausch & Lomb Plans Lens Plant in Britain', Motion Picture Daily, 2 August 1956, p. 1
- 'Bausch & Lomb to Build Plant in the UK', Kinematograph Weekly, 9 August 1956, p. 6
- 'Big (Widescreen) Pix Key to Big Biz in Future, Declares Par's Hartman', *Variety*, 17 June 1953, p. 7
- The Black Tent review, Variety, Wednesday June 12, 1957, p. 6
- 'Cameras in Short Supply Veto VistaVision', *Kinematograph Weekly*, 16 September 1954, p. 39
- 'CinemaScope: Larger than life', Cinegrafie, 16 (2003), 217-312
- 'CinemaScope: No Agreement Yet', Kinematograph Weekly, 25 February, 1954, p. 3
- 'Cinemascope What It Is; How It Works', *American Cinematographer*, 34 (March 1953), 112-13, 31-34
- 'Continuous V'Vision Flow at Para; Lazy 8 Cameras Slowing Exhib', *Variety*, 1 September 1954, p. 10
- 'De Laurentiis' Dream of Years is Fulfilled', Motion Picture Daily, 23 August 1956, p. 6

- 'Filmed in the Four Corners of the World', *Kinematograph Weekly*, 3 May 1956, pp. 59-62
- 'First Presentation of "New Aspect" at New York's Radio City Music Hall', *Showmen's Trade Review*, 58 (1953), 24-25
- 'Goldwyn Hears from Sindlinger and Snaper Hears from Goldywn', *Variety*, 23 September 1953, p. 7
- 'Hall Tests Screens For "Shane" Booking', Motion Picture Daily, 7 April 1953, p. 2
- 'Homeoffice Teams Hit Field, As Par Sells "Scientifically", Variety, 9 June 1954, p. 10
- 'In the Picture: British Films', Sight and Sound, 25 (Spring 1956), 169-70
- 'In the Picture', Sight and Sound, 23 (July 1953), 2-4
- 'Indie Producers Blunted Romance with VistaVision', *Variety*, 21 April, 1954, p. 3 'Paramount Due for 15 VistaVision Cameras', *Variety*, 18 August 1954, p. 7
- 'John Q Public Likes V-V', Motion Picture Daily, 15 October 1954, p. 6
- 'Leigh Plans Demonstration of 2 Wide-Angle Systems', *Motion Picture Daily*, 28 May 1953, p. 4
- 'Levy to Cover Todd-AO, Cinerama, Camera 65', *Daily Cinema*, 18 March 1960, pp. 1, 10 'Reject Plea to Exempt Cinerama from U.K. Levy', *Motion Picture Daily*, 14 April 1960, p. 4
- 'Light Requirements for Wide-Screen Projection', *International Projectionist*, 29 (September 1954), p. 15
- "Massive Scale" of Rank Future Programme', Kinematograph Weekly, 10 January 1957, p. 7
- 'More Than Half Equipped to Show CinemaScope', *Kinematograph Weekly*, 5 April 1956, p. 29
- 'News Projections', The International Projectionist, 28 (April 1953), p. 27
- 'No 'War' between 'Peace' Produc'ns Now Looming', Variety, 7 October 1955, p. 14
- 'Now It's Glamorama and Superama, 2 Leigh Lenses in Widescreen Derby', *Variety*, 27 May 1953, pp. 7, 20
- 'Paramount Puts in TV at the Plaza', Kinematograph Weekly, 12 February 1953, pp. 1, 32
- 'Coronation Theatre TV is Acclaimed', *Motion Picture Daily*, 3 June 1953, p. 7
- 'Paramount's London Demonstration', Kinematograph Weekly, 3 June 1954, p. 38
- 'Par's "How To" Exhib Guide', *Variety*, 13 May 1953, p. 5. 'Exhibs Demand Widescreen Economy, Swing to Simpler Depth Systems', *Variety*, 15 April 1953, p. 7

- 'Present Aspect Ratio Permits 13.5% of Brit. Houses to Use C'Scope', *Variety*, 30 December 1953, p. 13
- 'Production from Edison to Technirama', Kinematograph Weekly, 21 March 1957, p. 7
- 'Program Vs. Epics: Report Ponti-De Laurentiis Have Split Up', *Motion Picture Daily*, 17 November 1955, p. 3
- 'Quickie 3-D Era Over, Big Pix Are Coming, Sez, Pine', Variety, 10 June 1953, p. 5
- 'Rank in Television Research', The Film Daily, 3 October 1945, p. 1
- 'Rank Looks to Television as New Field to Conquer', *Motion Picture Herald*, 14 July 1945, p. 15
- 'Rank to Open America's First Odeon', Kinematograph Weekly, 12 December 1957, p. 149
- 'Rank to Produce 100 p.c. VistaVision says John Davies', *Kinematograph Weekly*, 16 December 1954, p. 191.
- 'Rank Ups Budgets For U.S. Rivalry', Variety, 22 February 1956, p. 7
- 'Rank Variable Lens Launched in London', Variety, 15 September 1954, p. 12
- 'Showmen Are Doing 3D & Widescreen', Film Bulletin, 1 June 1953, p. 30
- "Shyaka" Japan's First Epic Production in 70mm', *American Cinematographer*, 11 (January 1962), 42-44
- 'Signs Zinnemann and Sherwood for "War and Peace", Motion Picture Daily, 1 February 1955, p. 3
- 'Silverstone: Why We Split With Rank', Kinematograph Weekly, 7 October, 1954, p. 7
- 'Skouras Again: Talks with Rank', Kinematograph Weekly, 20 May, 1954, p. 7
- 'Skouras Studied UK Lens Bottleneck', Motion Picture Daily, 24 August 1954, p. 1
- 'SMPE Survey to Report Europe's Television Status', *Motion Picture Herald*, 14 July 1945, p. 16
- 'Stanley Urges Selznick Shoot Tolstoy Novel as Cinerama Story-Film', *Variety*, 23 June 1954, pp. 4, 21
- 'Stanley Warner Negotiates With Selznick on Cinerama Deal', *Film Bulletin*, 12 July 1954, p. 20.
- 'Story, Not Gimmicks, To Be Featured in Paramount 3Ders', *Film Bulletin*, 23 March 1954, p. 12

- 'Striking Ad Approach to Selling "Shane" in N.Y. Debut', Boxoffice, 16 May 1953, p. 38
- 'Technicians' Coronation Triumph', Cine-Technician, 19 (July 1953), p. 89
- 'The 3-D and Wide-Screen Furor', Harrison's Reports, 18 April 1953, p. 64
- 'The Dynamic Frame', British Kinematography, 29 (October 1956), 123-24
- 'The Global VistaVision Timetable', Paramount International News, June 1954, p. 3
- 'Three Films on "War and Peace"?', The Independent Film Journal, 35 (February 1955), p. 17
- 'Thrill Shot', American Cinematographer, 37 (November 1956), 665, 668 (p. 688).
- 'UK "Wide Open" For British Independent Productions', *Motion Picture Daily*, 4 April 1955, pp. 1, 6
- 'VistaVision Around the World', Kinematograph Weekly, 19 April 1956, p. 16
- 'VistaVision Gifted to Industry, But Other Producers Ask "When", *Variety*, 31 March, 1954, p. 3
- 'VistaVision Has Become Might Big Business', Paramount World (February 1956), p. 33
- 'VistaVision in the Laboratory', *Kinematograph Weekly Studio Review*, 3 October 1957, pp. 14-15

Vista Vision Visits Mexico review, Monthly Film Bulletin, 22 (January 1955), p. 129

Vista Vision Visits Norway review, Monthly Film Bulletin, 21 (January 1954), p. 183

- 'VistaVision Sans Sweeping Slogans: Just Another "Star" in Paramount's Galaxy', *Variety*, 13 October 1954, p. 10
- 'VistaVision: The New "Eye-Deal" in Motion Pictures', *Kinematograph Weekly*, 4 November 1954, back page
- 'VistaVision', RPS Photographic Journal, 94 (August 1954), 215a
- 'War and Peace Team Splitting', Variety, 23 November 1955, p. 12
- 'Wide-Screen' Films Now Subject to U.K. Levy', *Motion Picture Daily*, 17 March 1960, pp. 1, 4
- 'Y. Frank Freeman Dies at 78', The New York Times, 7 February 1969, p. 37

VistaVision advertisement, Kinematograph Weekly, 9 June 1955, pp. 12-13

War and Peace review, Monthly Film Bulletin, 24 (January 1956), 4-5

White Christmas review, Variety, 1 September 1954, p. 6

Allison, Deborah, 'Film Title Sequences and Widescreen Aesthetics', *Film International*, 13 (December 2015), 6-19

Annakin, Ken, 'Shooting for VistaVision', Kinematograph Weekly, 14 April 1955, p. 38.

Bagh, Peter von, 'The Dream of VistaVision', in Cinegrafie, 17 (2004), 315-23

Balio, Tino, 'Charles Chaplin, Entrepreneur: A United Artist', *Journal of the University Film Association*, 31 (Winter 1979), 11-21

Barr, Charles, 'CinemaScope: Before and After', Film Quarterly, 16 (Summer 1963), 4-24

—, 'A Letter From Charles Barr', The Velvet Light Trap, 21 (Summer 1985), p. 7

—, "Projecting Britain and the British Character": Ealing Studios', *Screen*, 15 (Spring 1974), 87-121

—, "Projecting Britain and the British Character": Ealing Studios', *Screen*, 15 (Summer 1974), 129-63

—, 'In a Strange Land: The Collaboration of Michael Powell and Emeric Pressburger', La Lettre de la Maison française d'Oxford, 11 (1999), 95-104

—, 'Wider Still and Wider', *Motion* (Summer 1961), 30-33

Belton, John, 'The curved screen', Film History, 16.3 (2004), 277-85

—, ed., 'Widescreen', Film History, 15.1 (2003), 1-119

Bird, Katie, "Dancing, Flying Camera Jockeys": Invisible Labor, Craft Discourse, and Embodied Steadicam and Panaglide Technique', *The Velvet Light Trap*, 80 (Fall 2017), 48-65

Bishop, John R. and Loren L. Ryder, 'Paramount's "Lazy 8" Double-Frame Camera', *American Cinematographer*, 34 (December 1953), 588-89, 606-07

Bordwell, David, 'Widescreen Aesthetics and Mise en Scene Criticism', *Velvet Light Trap*, 21 (Summer 1985), 18-25

Bragg, Herbert E., and John Belton, 'The Development of CinemaScope', *Film History*, 2 (November-December 1953), 359-71

Burnup, Peter, 'Rank to Push Circuit in US', *Motion Picture Herald*, 18 December, 1954, p. 22

Buscombe, Edward, 'Notes on Columbia Pictures Corporation', *Screen*, 16 (Autumn 1975), 65-82

Caldwell, Philip G., 'Pacific Coast Section Meeting', *Journal of the SMPTE*, 60 (March 1953), p. 312

Challis, Chris, 'Give Us Light', Kinematograph Weekly, 15 December 1955, p. 91

Clarke, Charles G., 'Practical Filming Techniques for Three-Dimension and Wide-Screen Motion Pictures', *American Cinematographer*, 34 (March 1953), 107, 28-29, 38

Cooper, Anna R.., 'Colonizing Europe: Widescreen Aesthetics in the 1950s American Travel Film', *Transnational* Cinemas, 7.1 (2016), 21-33

Cossar, Harper, 'The Shape of New Media: Screen Space, Aspect Ratios and Digitextuality', *Journal of Film and Video*, 61.4 (2009), 3-16

Cricks, R. Howard. 'Delrama - The Technirama Camera Anamorph', *Kinematograph Weekly*, 30 May 1957, p. 10

Daily, Charles R., 'Progress Committee Report', *Journal of the SMPTE* 62 (May 1954), 333-63

Daniels, William, 'Photography at 40,000 Feet', *American Cinematographer*, 36 (September 1955), 523-33, 547

David Rhodes, John, 'White Christmas, or Modernism', *Modernism/modernity*, 13 (April 2006), 291-308

Davis, John, 'Efficiency and Economy in Films', *The Financial Times*, June 1954, pp. 81-82

Deutelbaum, Marshall, 'Basic principles of anamorphic composition', Film History, 15.1 (2003), 72-80

Doane, Mary Ann, 'Indexicality: Trace and Sign', differences, 18 (2007), 1-6

Drazin, Charles, 'Film Finances: The First Years', *Historical Journal of Film, Radio and Television*, 34.1 (2014), 2-22

Easy, Bert, 'Production in VistaVision', British Film Academy Journal (Spring 1955), 14-15

Edouart, Farciot, 'Paramount Triple-Head Transparency Process Projector', *Journal of the SMPE*, 33 (August 1939), 171-84

Ellis, John, 'Made in Ealing', Screen, 16 (Spring 1975), 78-127

Elsaesser, Thomas, 'The New Film History', Sight and Sound, 55 (Fall 1986), 246-51

Evans, Peter, 'It's the Shallow Way for Phil Leacock', *Kinematograph Weekly*, 7 June 1956, p. 29.

Foster, Frederick, 'Photography Sharp, Clear, and Incisive', *American Cinematographer*, 11 (August 1960), 480-81, 504-6

Gillet, John, *The Battle of the River Plate* review, *Sight & Sound*, 26 (Winter 1956), p. 152

Gomery, Douglas, 'Theatre Television: The Missing Link of Technological Change in the U.S Motion Picture Industry', *The Velvet Light Trap*, 21 (Summer 1985), 54-61

—, 'Writing the History of the American Film Industry: Warner Bros and Sound', *Screen*, 17 (Spring 1976), 40-53

Greenberg, Joel, 'War, Wheat and Steel: An Interview with King Vidor', *Sight and Sound*, 37 (Fall 1968), 192-97

Gunn, George, 'Technirama', British Kinematography, 34 (1959), 94-98

Gunning, Tom, 'Weaving a Narrative: Style and Economic Background in Griffith's Biograph Films', *Quarterly Review of Film Studies*, 6 (1981), 11-25

Hall, Sheldon, 'Dial M for Murder', Film History, 16.3, (2004), 243-55

Harman, Bernard, Strategic Air Command review, The Daily Film Renter, 15 June 1955, p. 2

Havelock-Allan, Anthony, 'How New Techniques Influence Direction and Editing', *Kinematograph Weekly*, 14 April 1955, p. 39

Higson, Andrew, 'Space, Place, Spectacle', Screen, 25 (July-October 1984), 2-21

Hill, Derek, 'Dynamic Frame', American Cinematographer, 38 (April 1957), 236-37

—, 'Jack Cardiff's VistaVision Venture', *American Cinematographer*, 37 (December 1956), 732-34, 746

Hodgson, Richard, 'Theater Television System', Journal of the SMPE, 52 (May 1949), 540-48

Holman, Russell, 'Diary of Two Years', Motion Picture Daily, 23 August 1956, p. 6

Houston, Penelope, 'CinemaScope Productions', Sight and Sound, 23.4 (April 1954), 198

—, 'Shane and George Stevens', Sight and Sound, 23 (October 1953), 71-76

Hutchinson, Tom, 'Pre-Rehearsing Cuts Production Time', *Kinematograph Weekly*, 10 November 1955, p. 30

—, 'It's a Woman's World at Pinewood', *Kinematograph Weekly*, p. 28.

Jacobson, Brian R., 'Fire and Failure: Studio Technology, Environmental Control, and the Politics of Progress', *Cinema Journal*, 57 (Winter 2018), 22-43

Jenkins, Norman, 'The Cash Customers at the Festival of Britain Telecinema', *Journal of the SMPE*, 58 (April 1952), 304-11

Jewell, Richard B., 'How Howard Hawks Brought "Baby" Up: An "Apologia" for the Studio System, *Journal of Popular Film and Television*, 11 (Winter 1984), 158-65

Johnston, Keith M., 'Now is the time (to put on your glasses): 3-D film exhibition in Britain, 1951-55', *Film History*, 23 (Spring 2011), 93-103

—, 'A Technician's Dream? The Critical Reception of 3-D Films in Britain', *Historical Journal of Film, Radio and Television*, 32 (June 2012), 245-65

K. R., Shane film review, Monthly Film Bulletin, 20 (January 1953), 132-33

Kael, Paul, 'Criticism and Kids' Games', Film Quarterly, 17 (Autumn 1963), 62-64

Kalmus, Herbert T., 'President's Message', *Technicolor News and Views*, 16 (September 1954), 2

Kendrick, James, 'Aspect Ratios and Joe Six-Packs: Home Theater Enthusiasts Battle to Legitimize the DVD Experience', *The Velvet Light Trap*, 56 (Fall 2005), 58-70

Kitsopanidou, Kira, 'The Widescreen Revolution and 20th Century-Fox's Eidophor in the 1950s', *Film History*, 15.1 (2003), 32-56

Kohler, Richard, 'The Big Screens', Sight and Sound, pp. 120-24

Krukones, James H., 'Peacefully Coexisting on a Widescreen: Kinopanorama vs. Cinerama, 1952-66', *Studies in Russian and Soviet Cinema*, 4 (December 2010), 283-305

Lane, John Francis, 'Tolstoy's "War" - as Vidor Makes It', Films and Filming, 2 (March 1956), 8-9, 13

Lightman, Herb A., 'Filming "Can-Can" in Todd-AO and Color', *American Cinematographer*, 11 (May 1960), 300-1, 312, 314, 316.

—, 'Photographing "Last Train from Gun Hill", American Cinematographer, 40 (September 1959), 544-45, 560-62

—, 'Shooting "Oklahoma!" in Todd-AO', American Cinematographer, 36 (April 1955), 210-11, 243-44

—, 'Why MGM Chose "Camera 65", American Cinematographer, 41 (March 1960): 162-63, 92

MacGowan, Kenneth, 'The Screen's "New Look": Wider and Deeper', *The Quarterly of Film Radio and Television* 11 (Winter 1956), 109-30

Manvell, Roger, 'The Battle of the Systems', Films and Filming, 1 (October 1954), 8

Marzola, Luci, 'A Society Apart: The Early Years of the Society of Motion Picture Engineers', Film History, 28 (Winter 2016), 1-28

Mercille, Julien, 'Critical Geopolitics and the 1950s Bomber Gap', *Geopolitics*, 13 (July 2008), 498-518

Mitchell, Robert A., 'Visibility Factors in Projection', *The International Projectionist* 28 (May 1953), 7-8, 30

Mizejewski, Linda, 'Minstrelsy and Wartime Buddies: Racial and Sexual Histories in *White Christmas*', *Journal of Popular Film and* Television, 36 (2008), 22-29

Morris, James, 'The VistaVision Horizontal Projector', *International Projectionist* 29, (October 1954), 16-17, 27

Paul, William, 'The Aesthetics of Emergence', Film History, 5 (January 1993), 321-55

Perkins, V. F., 'River of No Return', Movie, 2 (September 1962), p. 18

Perlberg, William, 'Searching Europe for Authenticity', *Films and Filming*, 8 (February 1961), p. 9.

Powers, James, The Pride and the Passion review, Hollywood Reporter, 26 June 1957

Pratt, David, 'Widescreen box office performance to 1959', *The Velvet Light Trap*, 21 (Summer 1985), 65-66

Roggen, Sam, 'Gradation of Emphasis in the CinemaScope Westerns of Anthony Mann: A Style Analysis', *Projections*, 10 (Winter 2016), 25-48

Rowan, Arthur, 'New Portable VistaVision Camera', *American Cinematographer*, 36 (December 1955), 713, 728

—, "Night Passage" - First in New Technirama Large-screen System', American Cinematographer, 38 (March 1957), 148-149, 182

Ryder, Loren L., 'Engineering and Showbusiness', American Engineer (March 1955), 13-15

- —, 'Television: Now and Tomorrow', Motion Picture Herald, 24 July 1948, p. 26
- —, 'Theatre Television', American Cinematographer, 29 (January 1948), 12-14, 29

—, 'VistaVision Moves Forward', *American Cinematographer*, 35 (November 1954), 552-53, 573-76

Schlanger, Ben, 'Criteria for Motion-Picture Viewing and For a New 70mm System: Its Process and Viewing Arrangements', *Journal of the SMPTE*, 75 (March 1966), 161-67

Sharp, Jasper, 'Buddha: Selling an Asian Spectacle', Journal of Japanese and Korean Cinema, 4 (January 2012), 29-52

Shaw, William C., 'New Large-Screen and Multi-Image System', *Journal of the SMPTE*, 79 (September 1970), 782-87

Sheen, Erica, "The Light of God's Law": Violence and Metaphysics in the '50s Widescreen Biblical Epic', *Biblical Interpretation*, 6.3/4 (1998): 292-312

Small, Pauline, 'Anglo-Italian co-productions in the 1950s and 1960s: film finances, the Prince and Venice', *Historical Journal of Film, Radio and Television*, 37.2 (2017), 220-41

Smith, Arthur L., 'The Colonial Williamsburg Theaters for a Wide-Screen Participation Film', *Journal of the SMPTE*, 70 (September 1961): 677-79

Smith, Douglas, "Up to our eyes in it": theory and practice of widescreen in the French New Wave', *Studies in French Cinema*, 17 (2017), 113-28

Sobchack, Vivian, "Surge and Splendor": A Phenomenology of the Hollywood Historical Epic', *Representations*, 29 (Winter 1990), 24-49

Spottiswoode, Raymond, 'Progress in Three-Dimensional Films at the Festival of Britain', *Journal of the SMPTE*, 58 (April 1952), 291-303

Strategic Air Command colour poster, The Kinematograph Weekly, 5 May 1955, pp. 26-27

Street, Sarah, 'Alexander Korda, Prudential Assurance and British Film Finance in the 1930s', *Historical Journal of Film, Radio and Television*, 6 (1986), 161-79

Thompson, J. Lee, 'VistaVision in Production', *Kinematograph Weekly*, 15 December 1955, p. 89.

Turner, George, 'Who Framed Roger Rabbit?', American Cinematographer, 69 (July 1988), 44-51

Vlahos, Petro, 'Motion-Picture Studio Lighting and Process Photography Committee Report', *Journal of the SMPTE*, 64 (August 1955), p. 447.

Weaver, William R., *The Pride and the Passion* review, *Motion Picture Herald*, 29 June 1957, p. 16.

West, A. G. D., 'Development of Theater Television in England', *Journal of the SMPE*, 51 (August 1948), 127-68

White, Timothy R., 'Life After Divorce: The Corporate Strategy of Paramount Pictures Corporation in the 1950s', *Film History*, 2 (June-July 1988), 99-119

Wilccox, Roy and H. J. Schlafly, 'Demonstration of Large-Screen Television at Philadelphia', *Journal of the SMPE*, 52 (May 1949), 549-60

Wright, Basil, The Robe review, Sight and Sound, 23.3 (January 1954), 143-44

Yasko, Cristen, 'Deep Deep Outer Space: The Revitalization of VistaVision', Focus, 16 (1996), 14-25

Zone, Ray, 'A Window on Space: Dual-Band 3-D Cameras of the 1950s', Film History, 16 (Fall 2004), 216-28

Books and Chapters

Allen, Robert C. and Douglas Gomery, Film History: Theory and Practice (New York: McGraw-Hill, 1985)

Anderson, Joseph L. and Donald Richie, *The Japanese Film: Art and Industry* (Princeton, NJ: Princeton University Press, 1982)

Andrew, Dudley, ed. and trans., *André Bazin's New Media* (Oakland: University of California Press, 2004)

Aspinall, Sue and Robert Murphy, eds, *Gainsborough Melodrama* (London: British Film Institute, 1983)

Banks, Miranda, Bridget Conor, and Vicky Mayer, eds, *Production Studies, The Sequel!: Cultural Studies of Global Media Industries,* (New York: Routledge, 2015)

Bazin, André, 'The 3D Revolution Did Not Take Place', in *André Bazin's New Media*, ed. and trans. by Andrew, pp. 258-66

- —, 'The Cybernetics of André Cayatte', in *Bazin at Work: Major Essays and Reviews From the Forties and Fifties*, ed. by Bert Cardullo, trans. by Alain Piette and Bert Cardullo (London: Routledge, 1997), pp. 93-102
- —, 'The Evolution of the Western', in *What is cinema?*, 2 vols, ed. and trans. by Hugh Gray (London: University of California Press, 2005) II, pp. 149-157
- —, 'The Myth of Total Cinema', in in *What is cinema*?, 2 vols, ed. and trans. by Hugh Gray (London: University of California Press, 2005) I, pp. 17-22
- —, 'William Wyler, or the Jansenist of Directing', in *Bazin at Work: Major Essays and Reviews From the Forties and Fifties*, ed. by Bert Cardullo, trans. by Alain Piette and Bert Cardullo (London: Routledge, 1997), pp. 1-22

Belton, John, 'Fox and 50mm', in *Widescreen Worldwide*, ed. by John Belton, Sheldon Hall, and Steve Neale (New Barnet: John Libbey, 2010), pp. 9-24

—, Widescreen Cinema (Cambridge, MA: Harvard University Press, 1992)

Benelli, Dana, 'Hollywood and the Travelogue', in *Virtual Voyages: Cinema and Travel*, ed. by Jeffrey Ruoff (London: Duke University Press, 2006) pp. 177-194

Bergfelder, Tim, Sue Harris, and Sarah Street, Film Architecture and the Transnational Imagination: Set Design in 1930s European Cinema (Amsterdam: Amsterdam University Press, 2007)

Beyer, Walter, 'Wide Screen Systems', in *American Cinematographer Manual*, 1st edn, ed. by Joseph V. Mascelli (Los Angeles: ASC, 1960), pp. 44-54

Bordwell, David, Janet Staiger, and Kristin Thompson, *The Classical Hollywood Cinema: Film Style and Mode of Production to 1960* (New York: Columbia University Press, 1985)

Bordwell, David, *Poetics of Cinema* (New York: Routledge, 2008)

Borneman, Ernest, 'United States versus Hollywood: The Case Study of an Antitrust Suit', in *The American Film Industry*, ed. by Tino Balio, rev. edn (London: The University of Wisconsin Press, 1985), pp. 449-62

Bowyer, Justin, ed., Conversations with Jack Cardiff: Art, Light and Direction in Cinema (London: Batsford, 2003)

Briggs, Asa, *The History of Broadcasting in the United Kingdom*, 5 vols (Oxford: Oxford University Press, 1961-95), IV (1979)

Bruno, Giuliana, Surface: Matters of Aesthetics, Materiality and Media (Chicago: University of Chicago Press, 2014)

Budd, Michael, 'A Home in the Wilderness: Visual Imagery in John Ford's Westerns', in *The Western Reader*, ed. by Jim Kitses and Gregg Rickman (New York: Limelight Editions, 1998), pp. 133-48

Burch, Noël, *Theory of Film Practice* (Princeton: Princeton University Press, 1981)

Buscombe, Edward, One Hundred Westerns (London: British Film Institute, 2006)

Carr, Robert E. and R.M. Hayes, *Wide Screen Movies: A History and Filmography of Wide Gauge Filmmaking* (Jefferson, NC: McFarland, 1988)

Caughie, John, ed., *Theories of Authorship* (London: Routledge, 1981)

Chapman, James, Mark Glancy and Sue Harper, eds, *The New Film History: Sources, Methods, Approaches* (Basingstoke: Palgrave Macmillan, 2007)

Chibnall, Steve, 'Rome, Open for British Production: The Lost World of "Britalian" Films 1946-1954', *Historical Journal of Film Radio and Television*, 33.2 (2013), 234-69

Chibnall, Steve, 'The scope of their ambition: British independent film production and widescreen formats in the 1950s', in *Widescreen Worldwide*, ed. by John Belton, Sheldon Hall, and Steve Neale (New Barnet: John Libbey, 2010), pp. 149-62

Conant, Michael, *Antitrust in the Motion Picture Industry* (Berkeley: University of California Press, 1960)

Conekin, Becky, 'The Autobiography of a Nation': The 1951 Festival of Britain (Manchester: Manchester University Press, 2003)

Cook, Pam, 'The point of self-expression in avant-garde film', in *Theories of Authorship*, ed. by John Caughie (London: Routledge, 1981), pp. 271-81

Cossar, Harper, *Letterboxed: The Evolution of Widescreen Cinema* (Lexington: University of Kentucky Press, 2011)

Crafton, Donald, *The Talkies: American Cinema's Conversion to Sound, 1926-1931* (Berkeley: University of California Press, 1997)

Crisp, Colin, *The Classic French Cinema*, 1930-1960 (Bloomington: Indiana University Press, 1997)

Crosby, Eric, 'Widescreen composition and transnational influence: early anamorphic filmmaking in Japan', in *Widescreen Worldwide*, ed. by John Belton, Sheldon Hall, and Steve Neale (New Barnet: John Libbey, 2010), pp. 173-98

Dick, Bernard F., Engulfed: The Death of Paramount Pictures and the Birth of Corporate Hollywood (Lexington: The University Press of Kentucky, 2001)

Dickinson, Margaret and Sarah Street, Cinema and State: The Film Industry and the Government, 1927-84 (London: British Film Institute, 1985)

Dixon, Bryony, 'Archiving the 1950s', in *British Cinema of the 1950s: A Celebration*, ed. by Ian MacKillop and Neil Sinyard (Manchester: Manchester University Press, 2003), pp. 208-10

Doane, Mary Ann, 'Scale and the Negotiation of "Real" and "Unreal" Space in the Cinema', in *Realism and the Audiovisual Media*, ed. by Lúcia Nagib and Cecília Mello (Houndmills: Palgrave Macmillan, 2009), pp. 63-81

Donaldson, Lucy Fife, *Texture in Film* (Houndmills: Palgrave Macmillan, 2014)

Dupin, Christophe, 'The BFI and film production: half a century of innovative independent filmmaking', in *The British Film Institute, the Government and Film Culture, 1933-2000,* ed. by Geoffrey Nowell-Smith and Christophe Dupin (Manchester: Manchester University Press, 2012), pp. 197-218

Durgnat, Raymond, *A Mirror for England: British Movies from Austerity to Affluence*, 2nd edn (Basingstoke: Palgrave Macmillan, 2011)

Easen, Sarah, 'Film and the Festival of Britain', in *British Cinema of the 1950s: A Celebration*, ed. by Ian MacKillop and Neil Sinyard (Manchester: Manchester University Press, 2003), pp. 51-63

Eisenstein, Sergei, 'The Dynamic Square', in *Film Essays with a Lecture*, ed. by Jay Leyda (London: Dobson, 1968), pp. 48-65

Ellis, John, 'The Quality Film Adventure: British Critics and the Cinema, 1942-1948', in *Dissolving Views: Key Writings on British Cinema*, ed. by Andrew Higson (London: Cassell, 1996), 66-93

Enticknap, Leo, Moving Image Technology: From Zoetrope to Digital (London: Wallflower Press, 2005)

Eyles, Allen, *Odeon Cinemas 2: From J. Arthur Rank to the Multiplex* (London: Cinema Theatre Association, 2005)

Farmer, Richard, Cinemas and Cinemagoing in Wartime Britain, 1939-45: The Utility Dream Palace (Manchester: Manchester University Press, 2016)

Fielding, Raymond, *Techniques of Special Effects of Cinematography*, 4th edn (New York: Focal Press, 1985)

Finler, Joel, *The Hollywood Story*, 3rd edn (London: Wallflower Press, 2003)

Garwood, Ian, *The Sense of Film Narration* (Edinburgh: Edinburgh University Press, 2013)

Geraghty, Christine, British Cinema in the Fifties: Gender, Genre and the 'New Look' (London: Routledge, 2000)

Gibbs, John, *The Life of Mise-en-scène: Visual Style and British Film Criticism*, 1946–78 (Manchester: Manchester University Press, 2013)

Gibbs, John and Douglas Pye, 'Preminger and Peckinpah: seeing and shaping widescreen worlds', in *Widescreen Worldwide*, ed. by John Belton, Sheldon Hall, and Steve Neale (New Barnet: John Libbey, 2010), pp. 72-73

Gifford, Dennis, *The British Film Catalogue: Fiction Film 1895-1994*, 3rd edn (London: Fitzroy Dearborn, 2001)

Glancy, Mark, Hollywood and the Americanization of Britain: From the 1920s to the Present (London: I.B. Tauris, 2014)

Glitre, Kathrina, 'Conspicuous consumption: The spectacle of widescreen comedy in the Populuxe era', in *Widescreen Worldwide*, ed. by Belton, Hall, and Neale, pp. 133-43

Goldsmith, Ben and Tom O'Regan, *The Film Studio: Film Production in the Global Economy* (Lanham, MD: Rowman and Littlefield, 2005)

Gomery, Douglas, *Shared Pleasures: A History of Movie Presentation in the United States* (London: University of Wisconsin Press, 1992)

Gomery, Douglas, and Clara Pafort-Overduin, *Movie History: A Survey*, 2nd edn (New York: Routledge, 2011)

Gottlieb, Sidney, ed., *Alfred Hitchcock: Interviews* (Jackson: University Press of Mississippi, 2003)

Griffiths, Alison, *Shivers Down Your Spine: Cinema, Museums, and the Immersive View* (New York: Columbia University Press, 2008)

Guback, Thomas H., 'Hollywood's International Market', in *The American Film Industry*, ed. by Tino Balio, rev. edn (London: The University of Wisconsin Press, 1985), pp. 463-86

Gunning, Tom, 'The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde', in *Early Cinema: Space, Frame, Narrative*, ed. by Thomas Elsaesser (London: British Film Institute, 1990), pp. 56-62

—, D.W. Griffith and the Origins of American Narrative Film (Urbana: University of Illinois Press, 1994)

—, 'Movies, Stories, and Attractions', in *American Cinema, 1890-1909: Themes and Variations*, ed. by André Gaudreault (New Brunswick, NJ: Rutgers University Press, 2009), pp. 112-32

Haines, Richard W., *Technicolor Movies: The History of Dye Transfer Printing* (Jefferson, NC: McFarland, 1993)

Hall, Sheldon and Steve Neale, *Epics, Spectacles, and Blockbusters: A Hollywood History* (Detroit: Wayne State University Press, 2010)

Hall, Sheldon, 'Alternative versions in the early years of CinemaScope', in *Widescreen Worldwide*, ed. by John Belton, Sheldon Hall, and Steve Neale (New Barnet: John Libbey, 2010), pp. 115-16

—, Zulu, With Some Guts Behind It: The Making of the Epic Movie (Sheffield: Tomahawk Press, 2005)

Hanson, Helen, *Hollywood Soundscapes: Film Sound Style, Craft and Production in the Classical Era* (London: British Film Institute, 2017)

Hanson, Stuart, From Silent Screen to Multi-Screen: A History of Cinema Exhibition in Britain since 1896 (Manchester: Manchester University Press, 2007)

Harper, Sue and Vincent Porter, *British Cinema of the 1950s: The Decline of Deference* (Oxford: Oxford University Press, 2003)

Hayes, R. M., 3-D Movies: A History and Filmographic of Stereoscopic Cinema (Jefferson, NC: McFarland, 1998)

—, 'The Limiting Imagination of National Cinema', in *Cinema and Nation*, ed. by Mette Hjort and Scott MacKenzie (London: Routledge, 2000), pp. 63-74

Higson, Andrew, Waving the Flag: Constructing a National Cinema in Britain (Oxford: Oxford University Press, 1995)

Higson, Andrew, and Richard Maltby, eds, "Film Europe" and "Film America": Cinema, Commerce and Cultural Exchange 1920-1939 (Exeter: University of Exeter Press, 1999)

Hill, Erin, Never Done: A History of Women's Work in Media Production (London: Rutgers University Press, 2016)

Hilmes, Michele, Network Nations: A Transnational History of British and American Broadcasting (Abingdon: Routledge, 2012)

Jacobson, Brian R., Studios Before the System: Architecture, Technology and the Emergence of Cinematic Space (New York: Columbia University Press, 2015)

Jarvie, Ian, Hollywood's Overseas Campaign: The North Atlantic Movie Trade, 1920-1950 (Cambridge: Cambridge University Press, 1992)

Johnston, Keith M., Coming Soon: Film Trailers and the Selling of Hollywood Technology (Jefferson, NC: McFarland, 2009)

—, "'An unlimited field for experiment": Britain's stereoscopic landscapes', in *British Rural Landscapes on Film*, ed. by Paul Newland (Manchester: Manchester University Press, 2016), pp. 71-85

Keating, Patrick, The Dynamic Frame (New York: Columbia University Press, 2019)

—, Hollywood Lighting from the Silent Era to Film Noir (New York: Columbia University Press, 2010)

—, 'Shooting for Selznick: Craft and Collaboration in Hollywood Cinematography', in *The Classical Hollywood Reader*, ed. by Steve Neale (London: Routledge: 2012), pp. 280-95

Kezich, Tullio, and Alessandra Levantesi, *Dino: The Life and the Films of Dino De Laurentiis*, trans. by James Marcus (New York: Miramax, 2004)

King, Geoff, Spectacular Narratives: Hollywood in the Age of the Blockbuster (London: I.B. Tauris, 2000)

Kornhaber, Donna, 'The Producer in Animation: Creativity and Commerce from Bray Studios to Pixar', in *Beyond the Bottom Line: The Producer in Film and Television Studies*, ed. by Andrew Spicer, A. T. McKenna, and Christopher Meir (London: Bloomsbury, 2016), pp. 145-60

Lambert, Gavin, 'Report on New Dimensions', Sight and Sound, 22.4 (April 1953), 157-61

Landy, Marcia, *British Genres: Cinema and Society, 1930-1960* (Princeton: Princeton University Press, 1991)

Lev, Peter, Transforming the Screen: 1950-1959 (New York: Charles Scribner's Sons, 2003)

Lotz, Amanda D., 'Industry-Level Studies and the Contributions of Gitlin's *Prime Time*', in *Production Studies: Cultural Studies of Media Industries*, ed. by Vicki Mayer, Miranda J. Banks, and John T. Caldwell (New York: Routledge, 2009) pp. 25-38

Lotz, Amanda D. and Horace Newcomb, 'The production of entertainment media', in *A Handbook of Media and Communication Research: Qualitative and Quantative Methodologies*, 2nd edn, ed. by Klaus Bruhn Jensen (Abingdon: Routledge, 2012), pp. 71-86

Macnab, Geoffrey, J. Arthur Rank and the British Film Industry (Abingdon: Routledge, 1993)

Moor, Andrew, *Powell and Pressburger: A Cinema of Magic Spaces* (London: I. B. Tauris, 2005)

Murphy, Robert, British Cinema and the Second World War (Continuum: London, 2000)

—, Realism and Tinsel: Cinema and Society in Britain 1938-48 (London: Routledge, 1989)

Musser, Charles, *The Emergence of Cinema: The American Screen to 1907* (Berkeley: University of California Press, 1994)

Neale, Steve, 'The art of the palpable: composition and staging in the widescreen films of Anthony Mann', in *Widescreen Worldwide*, ed. by John Belton, Sheldon Hall, and Steve Neale (New Barnet: John Libbey, 2010), pp. 91-106

—, Genre and Hollywood (London: Routledge, 2000)

O'Brien, Charles, Cinema's Conversion to Sound: Technology and Film Style in France and the U.S. (Bloomington: Indiana University Press, 2005)

Olivier, Laurence, On Acting (London: Weidenfeld and Nicolson, 1986)

Palmer, R. Barton, *Shot on Location: Postwar American Cinema and the Exploration of Real Place* (Newbrunswick, NJ: Rutgers University Press, 2016)

Perkins, V. F., Film as Film: Understanding and Judging Movies (Hammondsworth: Penguin, 1972)

Petrie, Duncan, The British Cinematographer (London: British Film Institute, 1996)

—, 'Neo-expressionism and British Cinematography: The Work of Robert Krasker and Jack Cardiff', in *Post War Cinema and Modernity*, ed. by John Orr and Olga Taxidou (Edinburgh: Edinburgh University Press, 2000), pp. 223-33

Political and Economic Planning, *The British Film Industry* (London: PEP, 1952)

Powell, Michael, Million Dollar Movie (Random House: New York, 1992)

Priggé, Steven, ed., Movie Moguls Speak: Interviews with Top Film Producers (London: McFarland, 2004)

Rappaport, Mark, 'Tashlin, *Bachelor Flat* and CinemaScope', in *Frank Tashlin*, ed. by Roger Garcia (London: British Film Institute, 1994), pp. 71-88

Rayner, Jonathan, *The Naval War Film: Genre, History and National Cinema* (Manchester: Manchester University Press, 2007)

Rivette, Jacques, 'The age of metteurs en scène', in *Cahiers du cinéma : The 1950s : Neo-realism, Hollywood, New Wave*, ed. by Jim Hillier (London: Routledge & Kegan Paul, 1985), pp. 275-79

Rogers, Ariel, *Cinematic Appeals: The Experience of New Movie Technologies* (New York: Columbia University Press, 2013)

—, On the Screen: Displaying the Moving Image, 1926-1942 (New York: Columbia University Press, 2019)

Ross, Miriam, 3D Cinema: Optical Illusions and Tactile Experiences (Houndmills: Palgrave Macmillan, 2015)

Ryall, Tom, 'Genre and Hollywood', in *The Oxford Guide to Film Studies*, ed. by John Hill and Pamela Church Gibson (Oxford: Oxford University Press, 1998), pp. 327-38

Salt, Barry, Film Style and Technology: History and Analysis, 3rd edn (London: Starword, 2009)

Salzberg, Ana, 'VistaVision and the Cinematic Landscape of Vertigo', in *The San Francisco of Alfred Hitchcock's Vertigo: Place, Pilgrimage and Commemoration*, ed. by Douglas A. Cunningham (Plymouth: Scarecrow Press, 2011), pp. 63-80

Schatz, Thomas, *Boom and Bust: American Cinema in the 1940s* (Berkeley: University of California Press, 1997)

—, The Genius of the System: Hollywood Filmmaking in the Studio Era (London: Faber and Faber, 1988)

Scorsese, Martin, *Scorsese on Scorsese*, ed. by David Thompson and Ian Christie (London: Faber and Faber, 1996)

Shandley, Robert R., Runaway Romances: Hollywood's Postwar Tour of Europe (Philadelphia; Temple University Press 2009)

Shaw, Deborah, 'Transnational Cinema: Mapping a Field of Study', in *The Routledge Companion to World Cinema* (London: Routledge, 2018), pp. 290-98

Shupert, George T., 'An Answer to High TV Costs Film Network Expansion Plan', in *The Radio Annual and Television Yearbook*, ed. by Jack Alicoate (New York: Radio Daily Corp., 1950), p. 1146

Slide, Anthony, ed., *International Films, Radio and Television Journals* (Westport, CT: Greenwood Press, 1985)

Staiger, Janet, ed., *The Studio System* (New Brunswick, NJ: Rutgers University Press, 1995)

Steinhart, Daniel, 'A Flexible Mode of Production: Internationalizing Hollywood Filmmaking in Postwar Europe', in *Behind the Screen: Inside European Production Cultures*, ed. by Petr Szczepanik and Patrick Vonderau, (New York: Palgrave Macmillan, 2013), pp. 135-51

Stephens, Michael L., Art Directors in Cinema: A Worldwide Biographical Dictionary (London: McFarland, 1998)

Street, Sarah, British National Cinema (London: Routledge, 1997)

—, Colour Films in Britain: The Negotiation of Innovation 1900-55 (London: British Film Institute, 2012)

—, Transatlantic Crossings: British Feature Films in the USA (London: Continuum, 2002)

Swann, Paul, *The Hollywood Feature Film in Post-War Britain* (London: Croom, 1987)

Szczepanik, Petr and Patrick Vonderau, eds, *Behind the Screen: Inside European Production Cultures* (New York: Palgrave Macmillan, 2013)

Tahisro, C.S., *Pretty Pictures: Production Design and the History Film* (Austin: University of Texas Press, 1988)

Thomas, Deborah, *Reading Hollywood: Spaces and Meaning in American Film* (London: Wallflower Press, 2001)

Thomas, Tony, *The Great Adventure Films* (Secaucus, NJ: The Citadel Press, 1976)

Turnock, Julie A., *Plastic Reality: Special Effects, Technology and the Emergence of 1970s Blockbuster Aesthetics* (New York: Columbia University Press, 2015)

—, 'Special/Visual Effects', in *Editing and Special/Visual Effects*, ed. by Charlie Keil and Kristen Whissel (London: I.B. Tauris, 2016), pp. 91-102

Vidor, King, King Vidor on Filmmaking (London: W. H. Allen, 1973)

Vincent, Tom, 'Standing Tall and Wide: The Selling of VistaVision', in *Widescreen Worldwide*, ed. by John Belton, Sheldon Hall, and Steve Neale (New Barnet: John Libbey, 2010), pp. 25-40

Vitella, Federico, 'Before Techniscope: The penetration of foreign widescreen technology in Italy', in *Widescreen Worldwide*, ed. by John Belton, Sheldon Hall, and Steve Neale (New Barnet: John Libbey, 2010), pp. 163-72

Wheatley, Helen, Spectacular Television: Exploring Televisual Pleasure (London: I.B. Tauris, 2016)

White, Timothy R., 'Hollywood's Attempt at Appropriating Television: The Case of Paramount Pictures', in *Hollywood in the Age of Television*, ed. by Tino Balio (London: Unwin Hyman, 1990), pp. 145-63

Whitney, Allison, 'Cinephilia Writ Large: IMAX in Christopher Nolan's *The Dark Knight* and *The Dark Knight Rises*', in *The Cinema of Christopher Nolan: Imagining the Impossible*, ed. by Jacqueline Furby and Stuart Joy (New York: Columbia University Press, 2015), pp. 31-43

Williams, Raymond, 'British Film History: New Perspectives', in *British Cinema History*, ed. by James Curran and Vincent Porter (London: Weidenfeld and Nicolson, 1983), pp. 9-23

Woodward, Ian, Audrey Hepburn: Fair Lady of the Screen (London: W. H. Allen, 1984)

Zone, Ray, 3-D Revolution: The History of Modern Stereoscopic Cinema (Lexington: The University Press of Kentucky, 2012)

Unpublished PhD Theses

Hincha, Richard Emil, 'Twentieth-Century Fox's CinemaScope: An industrial organization analysis of its development, marketing and adoption' (PhD thesis, University of Wisconsin-Madison, 1989)

Sharp, Jasper, 'Widescreen Cinema: Commerce, Technology and Aesthetics' (PhD thesis, University of Sheffield, 2013)

White, Timothy R., 'Hollywood's Attempt to Appropriate Television: The Case of Paramount Pictures' (PhD thesis, University of Wisconsin-Madison, 1990)

Whitney, Alison Patricia, 'The Eye of Daedalus: A History and Theory of IMAX Cinema' (PhD thesis, University of Chicago, 2005)

Websites

<patents.google.com.> [accessed 30 July 2019]

Dorange, Alain and Gerhard Witte, 'VistaVision Presented in Horizontal Projections', https://www.in70mm.com/news/2015/vistavision/index.htm [accessed 3 September 2019]

Eriksson, Nicholas, 'The Making of *Ellston Bay*' (2017) https://www.in70mm.com/news/2017/bay/index.htm [accessed 1 September 2019]

Furmanek, Bob, '3-D Features and Shorts 1952-1962', http://www.3dfilmarchive.com/golden-age-3-d [accessed 1 September 2019]

—, 'Widescreen Documentation', http://www.3dfilmarchive.com/home/widescreen-documentation [accessed 2 August 2019]

Gunning, Tom, 'Your Number is Up! Questioning Numbers in Film History' (1 March 2014) https://www.youtube.com/watch?v=VvwC3FyRAo [accessed 1 September 2019]

Hart, Martin, 'Widescreen Museum',

http://www.widescreenmuseum.com/widescreen/vistavisionref.htm [accessed 28 August 2019]

Harvilla, David and Jack Winemiller, 'VistaVision Strikes Back' (2017) https://www.in70mm.com/news/2017/negative/index.htm [accessed 1 September 2019].

Howson, Simon, *Widescreen Worldwide* review, *Senses of Cinema*, 60 (October 2011), http://sensesofcinema.com/2011/book-reviews/widescreen-worldwide-edited-by-john-belton-sheldon-hall-and-steve-neale/ [accessed 21 June 2019]

Salt, Barry, 'Statistical Film Analysis (Basic Concepts and Practical Details)' http://www.cinemetrics.lv/salt.php [accessed 1 September 2019]

Sherlock, Daniel J., 'Wide Screen Movies Corrections version 2.0', (2004) http://www.film-tech.com/warehouse/tips/WSMC20.pdf [accessed 21 June 2019]

Universal Pictures, 'Restoration of *Vertigo*' https://www.in70mm.com/news/2015/vertigo/index.htm [accessed 1 September, 2019]