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A Changing Visual Landscape: British Cinematography in the 1960s

Duncan Petrie

Abstract:
British cinema of the 1960s offers a productive terrain for the consideration of the significance and contribution of the cinematographer, a rather neglected and marginalised figure in British cinema studies. The work of British practitioners certainly achieved new levels of international recognition during this period, with the award of five Oscars for Best Cinematography between 1960 and 1969, equalling the total from the previous twenty years. A survey of the films made in Britain during the decade also reveals a gradual transformation in visual style: from a predominance of black and white to the ubiquity of colour; from hard-edged, high-contrast lighting to a softer, more diffused use of illumination; from carefully composed images and minimal camera movement to a much freer, more mobile and spontaneous visual register; from the aesthetics of classicism to a much more self-conscious use of form appropriate to a decade associated with a new emphasis on spectacle and sensation. This article will examine major achievements in 1960s British cinematography, focusing on the factors noted above and giving particular consideration to the contribution of a small number of key practitioners including Walter Lassally, David Watkin, Nicolas Roeg and Freddie Young, who individually and collectively helped to affirm the 1960s as a particularly creative period in British cinema.

Keywords: cinematographers; cinematography; colour; David Watkin; Freddie Young; Nicolas Roeg; realism; soft light; Walter Lassally; widescreen.

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Introduction

The 1960s was a transformative period for British cinema: a decade which saw substantial levels of American financial support for production, increased budgets, higher production values and an unprecedented level of international visibility and success. One of the most striking features of British films during this period is the transformation in visual style: from a predominance of black and white to the ubiquity of colour; from hard-edged, high-contrast lighting to a softer, more diffused use of illumination; from carefully composed images and minimal camera movement to a much freer, more mobile and spontaneous visual register; from the aesthetics of classicism to a much more self-conscious use of form appropriate to a decade associated with a new emphasis on spectacle and sensation. This shift was driven by a number of factors including developments in technology and film-making practice, a continuing process within the industry towards independent production, and the influence of a wider cultural fermentation which stimulated new developments in other creative spheres including television, advertising, fashion, fine art and pop music.

British cinema of the 1960s therefore offers a productive terrain for the consideration of the significance of cinematography and the contribution of the cinematographer – a rather neglected and marginalised figure in British cinema studies (Petrie 1996; Street 2012)[1] – to the creative process. Their work certainly achieved new levels of international recognition during this period, with the award of five Oscars for Best Cinematography between 1960 and 1969, equalling the total from the previous twenty years (Petrie 1996: 1–2). The winners included Freddie Francis for *Sons and Lovers* (1960) and Walter Lassally for *Zorba the Greek* (1964), both in the black-and-white category, alongside colour awards to Freddie Young for *Lawrence of Arabia* (1962) and *Doctor Zhivago* (1965) and Ted Moore for *A Man for All Seasons* (1966).[2] In addition, nominations were also received by Geoffrey Unsworth for *Becket* (1964), Ken Higgins for *Georgy Girl* (1966), Oswald Morris for *Oliver!* (1968) and Arthur Ibbetson for *Anne of a Thousand Days* (1969). However, Oscars are only one indicator of success, reflecting the tastes and prejudices of voting members of the American Academy of Motion Picture Arts and Sciences, and it is notable that the successful films tended to be period subjects rendered in a largely unobtrusive, pictorial and ultimately traditional visual style. Yet British cinematography in the 1960s was also strongly reflective of more modern trends as attested by Walter Lassally's work on *A Taste of Honey* (1961), Douglas Slocombe's on *The Servant* (1963), Gilbert

Taylor's on *Repulsion* (1965); David Watkin's on *Help!* (1965), Oswald Morris's on *The Hill* (1965), Otto Heller's on *The Ipcress File* (1965), Gerry Fisher's on *Accident* (1967), Geoffrey Unsworth's on *2001: A Space Odyssey* (1968) and Nicolas Roeg's on *Performance* (1970), among others.

Changing industrial and institutional contexts also impacted in significant ways on the operations and working practices of British cinematographers during the 1960s. American finance may have increased production values and boosted creative ambition, but it also contributed to the end of the formulaic B movie (which effectively transmuted into TV series and serials shot on film) and hastened the demise of black and white. And while the continuing shift towards independent, freelance working offered greater creative freedom and choice of assignments in an increasingly international production sphere, it also increased uncertainty and instability in terms of employment. But, on the whole, industrial change proved to be a positive stimulus. The studio system had been characterised by rather rigid working practices, and career progression in the camera department was a lengthy process with individuals beginning as a clapper/loader and gradually progressing to focus puller, then operator and finally director of photography (DoP). Consequently, most had reached their late thirties before becoming fully fledged cinematographers. The break-up of the studio system loosened this up and created new forms of training and opportunities for faster development and promotion. Moreover, it facilitated the movement of personnel between different spheres of production including documentary, television and advertising, further fuelling a process of cross-pollination and creative change in relation to production methods and aesthetic modes.

A diverse community

More than 150 individuals are credited as cinematographers on the nearly 1,000 British feature films released between 1960 and 1969. This broad and diverse group encompassed three distinct generations of practitioner. Some were experienced veterans with careers stretching back to the pioneering days of silent cinema, among them Geoffrey Faithfull, Basil Emmott, Desmond Dickinson, Freddie Young and the Czech émigré Otto Heller. Then there was the cohort largely trained in the studios of the 1930s and 1940s who effectively put British cinematography on the map after the Second World War (ibid.: 32–6), including Wilkie Cooper, Erwin Hillier, Robert Krasker, Douglas Slocombe, Jack Hildyard, Geoffrey Unsworth, Christopher

Challis, Gilbert Taylor, Oswald Morris, Ted Moore and Freddie Francis.[3] Finally, there was a younger generation whose diverse backgrounds embraced traditional studio training alongside formations in the fields of documentary, television and advertising, such as Walter Lassally, Arthur Ibbetson, Nicolas Roeg, Ken Higgins, David Watkin, Billy Williams, Gerry Fisher and Alex Thomson. The second half of the decade also saw some of the first film school graduates earning their first DoP credits, notably Peter Suschitzky, who studied at the French Institut des hautes études cinématographiques (IDHEC), and Ian Wilson, who attended the London Film School.

The increasing use of 35mm film as a medium for television drama, particularly in popular ITV series like *The Avengers* (1961–9) and *The Saint* (1962–9), created new opportunities for emerging cinematographers who were prepared to alternate between large- and small-screen production. They included Paul Beeson (who also shot Walt Disney's British features from *Kidnapped* (1960) to *The Moonspinners* (1964)), Alan Hume and Michael Reed, who earned his first major credits on the TV series *The Adventures of Robin Hood* (ITV 1955–60), produced by Lew Grade's ITC. But television also provided a refuge for veterans like Lionel Baines, Walter J. Harvey, Gerald Gibbs and Ernest Steward, who finished their careers working exclusively on TV productions.

Formative experience inevitably influenced cinematographers' conception of their craft and their preference for particular aesthetic and technical approaches, and the generational differences occasionally created tension. When Oswald Morris disagreed with Tony Richardson's plans to shoot *Tom Jones* (1963) in a modern, new wave style, the director turned to Walter Lassally, who enthusiastically adapted the techniques he had pioneered with Richardson on the new wave dramas *A Taste of Honey* and *The Loneliness of the Long Distance Runner* (1962). Similarly, when Nicolas Roeg's predilection for speed and spontaneity brought him into conflict with the more considered, controlled and slower working methods of director David Lean on *Doctor Zhivago*, he was replaced by the more sympathetic (and considerably older) Freddie Young.

But such examples of incompatibility are relatively rare, as the quality most prized in cinematographers is their versatility and ability to create the appropriate visual style for the genre, theme or mood demanded by the script and/or director. Such adaptability proved particularly important in a decade associated with novelty, experimentation and independence, and we can find examples of diversity in the CVs of many individual practitioners. For example,

former Ealing studios cinematographer Douglas Slocombe's output across the decade encompasses the colourful widescreen exuberance of *The Young Ones* (1961), the black-and-white claustrophobia of *The L-Shaped Room* (1962) and *The Servant*, the CinemaScope spectacle of action adventure films such as *Guns at Batasi* (1964), *A High Wind in Jamaica* (1965) and *The Blue Max* (1966), the studio-based horror-spoof *Dance of the Vampires* (1967), the gritty crime thriller *Robbery* (1967), the bleak medieval vistas of *The Lion in Winter* (1968) and the cosmopolitan sheen and picturesque Italian locations of *The Italian Job* (1969).

The rise of auteurism also placed an increasing emphasis on the cinematographer's ability to realise the personal vision of the director. But this was another area marked by differing understandings and perspectives, as is clear in a 1965 *Sight and Sound* article on cinematography, tellingly entitled 'The Secret Profession' (Hudson 1965). Interestingly, Douglas Slocombe regards the director's function as being primarily to work with the actors to tell the story, leaving the responsibility for the visual realisation to the cinematographer, camera operator, production designer and others. On the other hand, Walter Lassally takes a very different view:

> I believe that these things – the composition, the splitting of the scene into set-ups, the camera movement, etc. – are all part of the director's function, and he is exercising this only incompletely if he doesn't decide them, at least in broad outline. The choice of these things is as much part of the style as anything else. (Ibid.: 113)

What is undoubtedly the case is that the relationship between director and cinematographer was a crucial one. Moreover, certain directors during the decade regularly enabled their cinematographers to excel – notably David Lean, Tony Richardson, Joseph Losey and Richard Lester. But as we have seen, this also required a meeting of minds, a compatibility of temperament and a clear understanding of roles. It is therefore interesting to note that both Oswald Morris and Gilbert Taylor found the experience of working with the iconoclastic American expatriate – and undeniable auteur – Stanley Kubrick on *Lolita* (1961) and *Dr Strangelove* (1963), respectively, frustrating and one they didn't wish to repeat, largely due to the director's insistence on exercising total control over every aspect of the production.[4]

While certain cinematographers found their services in constant demand during the 1960s, the individuals who amassed the largest number of credits during the decade tended to be engaged on long-term contracts for companies specialising in low-budget productions. The most prolific individual during the decade is Jimmy Wilson, who

photographed 42 films at Merton Park studios between 1960 and 1966 – including several of the successful series of thrillers adapted from the writings of Edgar Wallace (Mann 2009). The fact that these were modest black-and-white B films made on schedules of two or three weeks accounts for Wilson's ability to turn around an average of six features a year. Yet, despite this productivity, he remains a largely forgotten figure. The next highest tally is the 31 credits amassed by Arthur Grant, the vast majority of these being low-budget horror films, social dramas and action adventures made for Hammer Films at Bray studios. Grant had a reputation for speed and economy, which made him a valuable asset to a company whose keen commercial instincts allowed it to continue to thrive within the genre market, and the significance of his work on various Hammer horrors and on the contemporary dramas *Hell Is a City* (1960), *Jigsaw* (1962), *80,000 Suspects* (1963) and *The Beauty Jungle* (1964) is acknowledged by Robert Murphy (1992: 7). Former Gainsborough Studios cinematographer Stephen Dade shot 29 features during the 1960s, which, apart from the Empire drama *Zulu* (1964), made on location in South Africa, were mainly undistinguished low-budget productions. This number was matched by Ernest Steward, a Rank employee whose varied output at Pinewood included regular assignments for the director/producer team of Ralph Thomas and Betty Box including *No Love for Johnnie* (1961), *Doctor in Distress* (1963), *Hot Enough for June* (1964) and *The High Bright Sun* (1965), and several of the *Carry On* series, which transferred in 1967 from Anglo-Amalgamated to Rank, such as *Carry On … Up the Khyber* (1968) and *Carry On Camping* (1969). Steward's predecessor on the series had been Alan Hume, whose regular work for producer Peter Rogers, which also includes non-*Carry On* films such as *The Iron Maiden* (1962), *This Is My Street* (1964) and *Three Hats for Lisa* (1966), comprises the bulk of his 28 credits for the decade. In comparison, the more high-profile cinematographers who worked regularly on larger budget productions financed by the Hollywood studios tended to average between one and two features a year.

The realist impulse

The post-war period had seen the proliferation and refinement of crisp, high-contrast, black-and-white cinematography in Britain. While this was deployed for both realist and more expressionistic subjects featuring high-key and low-key styles, it remained essentially a highly controlled and sculpted 'studio look'. This can be discerned in such diverse films as *Great Expectations* (1946), *They Made Me a Fugitive*

(1947), *The Small Back Room* (1948), *The Third Man* (1949) and *The Man in the White Suit* (1951), photographed respectively by Guy Green, Otto Heller, Christopher Challis, Robert Krasker and Douglas Slocombe. And similar aesthetic principles can also be discerned in the increasing number of Technicolor films being made in Britain during this period.

But technological developments facilitated a dynamic new engagement with the real during the 1960s, mirroring similar developments in Europe and America. Since the Second World War, film cameras had become smaller, lighter and more portable, although their use was initially largely confined to the sphere of documentary production. However, by the late 1950s the French Éclair Cameflex and German Arriflex 35 had started to be used on feature films, particularly in Western Europe. These cameras featured interchangeable magazines and a direct reflex viewfinder that avoided the problem of parallax which affected larger studio models such as the Mitchell BL, and allowed the operator to see the image being recorded on film. This facilitated the greater speed and flexibility of hand-held location shooting, and, with it, the potential for naturalism, spontaneity, improvisation and intimacy. This was further facilitated by the introduction in 1963 of the zoom lens by the French engineer Pierre Angénieux, which had a range of 10:1. Barry Salt identifies its use on British films such as *Billy Liar* (1963), photographed by Denys Coop, and *Darling* (1965), shot by Ken Higgins (1992: 258). Also significant were improvements in the speed or light sensitivity of film stocks, beginning with the introduction in 1954 of Eastman Kodak's black-and-white TRI X stock which had a rating of 200 ASA for daylight exposure, a key breakthrough. A decade later, the company launched 4X, which more than doubled the speed to 400 ASA. But this was preceded by the English manufacturer Ilford's HPS stock, which first became available in 1960. These stocks allowed cinematographers much greater latitude when using natural light sources on location.

The drive for greater realism gave rise to the breakthrough films of the new wave that marked the beginning of the new decade. Adapted from the novels and plays of the 'angry young men' highlighting the lives, loves and struggles of their young working-class protagonists, these productions were also firmly located in northern cities, providing a new topography and environment that demanded a fresh creative approach. The initial group of new wave films were shot by established cinematographers, usually at the insistence of the financiers, thus Oswald Morris photographed *Look Back in Anger* (1959) and *The Entertainer* (1960), while Freddie Francis was responsible for *Room at the Top* (1959) and *Saturday Night and Sunday Morning* (1960). The choice

of Morris and Francis can be linked to their previous work (as director of photography and operator respectively) on the 1954 production, *Knave of Hearts*, directed by René Clement. This pioneering film includes scenes shot on the streets of London, including one sequence filmed outside Charing Cross station during the rush hour with a hidden camera, in which the actors were insinuated into the actual environment. In another sequence, Francis followed the principals onto a bus, shooting with a hand-held Arriflex camera. But while locations feature strongly in these films – notably the bustling market and ominous presence of the railway line in *Look Back in Anger*, and the factory and Nottingham streets in *Saturday Night and Sunday Morning* – there is still a fundamental reliance on more conventional high-contrast lighting and solid camerawork, particularly in the interiors. Walter Lassally describes them as 'basically studio films' (White 1974: 62).

Lassally had photographed many of the Free Cinema documentaries of the 1950s, including *Momma Don't Allow* (1956), *Every Day Except Christmas* (1957) and *We Are the Lambeth Boys* (1959), and spending his formative years in low-budget independent film-making predisposed him to resourceful innovation. So when Tony Richardson was finally able to hire Lassally on *A Taste of Honey*, the two worked closely together to create what remains the most stylistically significant film of the entire new wave. Unlike its predecessors, *A Taste of Honey* was made as an all-location production, filmed entirely on the Arriflex. Following the lead of Raoul Coutard's ground-breaking work on Jean-Luc Godard's *À bout de souffle* (1959), Lassally used Ilford's new high-speed stock, allowing him to shoot with natural lighting sources, including one celebrated sequence in a cave illuminated only by candle light:

> I found that by making use of this extra film speed and by accepting the grainy look as part of the atmosphere, I could shoot in quite small rooms, using just a few small lights, often reflecting off the ceiling, and still giving the director the chance to use most of the space for deploying his actors. (Lassally 1987: 86)

Whereas traditional studio cinematography had placed a high premium on seamless visual continuity, Lassally deployed three different Ilford stocks for different types of location and lighting conditions:

> The first, very shabby flat that the heroine, played by Rita Tushingham, lives in with her mother (Dora Bryan) was shot on grainy HPS stock, but when she gets a flat of her own, which she takes some pride in fixing

> up nicely, this location was shot on a finer-grain film, Ilford HP3. All the exteriors were shot on the slower Ilford FP3, as the higher speed of the other films gave one no advantage outdoors. There was considerable opposition from the laboratory to my approach, but it proved entirely successful. (Ibid.: 64–5)

Richardson and Lassally subsequently made *The Loneliness of the Long Distance Runner* in a similar freewheeling and poetic *vérité* style on location. But this time, more self-conscious techniques were borrowed from the French *nouvelle vague* including fast motion, the occasional zoom and a freeze-frame ending. Lassally's facility for unadorned naturalism was subsequently rewarded with an Oscar for the UK/Greek co-production, *Zorba the Greek*, shot on the island of Crete. Working outside the rules governing the crewing of British productions, Lassally was able to exercise his preference for operating as well as lighting.

The other cinematographer associated with the new wave cycle is Denys Coop, who had been the camera operator on *Look Back in Anger* before graduating to director of photography on *A Kind of Loving* (1961), *Billy Liar* (1963) and *This Sporting Life* (1963). The third of these productions, the debut feature by Lindsay Anderson, was influenced by the look of Polish films – notably the work of cinematographers Jerzy Lipman (*Kanal*, 1957; *Knife in the Water*, 1962) and Jerzy Wócik (*Eroica*, 1958; *Ashes and Diamonds*, 1958) – and shot on a slow, fine-grain stock (possibly Kodak Plus X, which had a 50 ASA rating). The use of mobile, close-action work and the occasional burst of slow motion during the rugby sequences is also striking, evoking both the physical and the psychic torment of Richard Harris's belligerent protagonist Arthur Machin.

Prior to the production of *Zorba the Greek*, Walter Lassally had made yet another major contribution to the development of British cinematography with his work on *Tom Jones*, a film which also marked the transition between the poetic austerity of the new wave and the emergence of the more colourful, exuberant and cosmopolitan cinema of 'swinging London'. As noted above, Lassally approached this production in a similar freewheeling and self-conscious style. The *vérité* approach is in evidence throughout, with perhaps the highlight being the extended hunt sequence, beginning with the preparations, shot wild in a documentary style with three hand-held cameras, before moving into the chase, which combines low-angle travelling shots, including material filmed by Lassally from the back of a mini pick-up truck, with helicopter material providing an aerial overview of the horses and hounds. *Tom Jones* was also made in colour, which was

considerably slower in comparison to black-and-white stocks – using Eastmancolor 5251, introduced in 1962 and rated at just 50 ASA. This was to remain the standard until the appearance of Eastmancolor 5254 in 1968 doubled the speed to 100 ASA. While this did not rule out flexible location shooting, more lighting was required to achieve a suitable exposure, particularly in the interiors. Ever the innovator, Lassally manipulated the colour to lower the contrast and create a softer and more pastel look by shooting everything through a net placed over the lens. This entailed a major risk, however, as the cinematographer acknowledges:

> The piece we obtained was very small, just big enough to fill two small frames, which we used on short- and long-focus lenses respectively. It was a considerable risk as the net was not replaceable, and the entire look of the film more-or-less depended on it, and United Artists, who backed the film, would have had a fit if they had known. (Ibid.: 68)

The muted effect ensured that the colour did not detract from the overall aesthetic of naturalism, a significant shift from the prevailing use of colour for non-realist genres such as musicals and action adventures and its association with exoticism and spectacle. For the day-for-night sequences, Lassally used filters that gave a monochromatic rather than the usual blue effect. All of this served to give *Tom Jones* a very different look from other colour productions of the time, including those that were also regarded as being in tune with the cultural zeitgeist. For example, on the James Bond films, beginning with *Dr No* (1962), Ted Moore continued to favour the traditional and rather garish use of high-contrast, hard-edged lighting combined with unobtrusive camera movement, leaving the leading players, exotic locations and Ken Adam's sets to provide the necessary aura of cosmopolitan glamour and modernity.

The more playful and self-reflexive impulse that distinguishes the look and tone of *Tom Jones* from the previous new wave dramas is also central to the visual construction of *A Hard Day's Night* (1964). Here, director Richard Lester looked to the experience of Gilbert Taylor, who had been shooting features since the late 1940s, including films with the Boulting Brothers such as *Seven Days to Noon* (1950) and *High Treason* (1951), and J. Lee Thompson from *The Yellow Balloon* (1953) to *Ice Cold in Alex* (1958). But Taylor was open to new ideas and enthusiastically embraced the improvisational approach that Lester wanted, following the Beatles at work and play and capturing the action documentary style with five operators shooting on hand-held Arriflex cameras fitted with 10:1 zoom lenses. The film also

incorporates a series of set-piece 'performances' of some of the band's songs which incorporate a variety of techniques popularised by the *nouvelle vague* including variable speeds, jump cuts and even helicopter shots. In this sense *A Hard Day's Night* not only pushes the realist impulse to its limits, it also anticipates the later postmodern visual language of the music video.

Lighting: from hard to soft

Another key strand in the pursuit of realism was a shift away from predominantly hard and direct light sources to the use of more diffused lighting. This transformed the texture of both the black and white and colour away from the classic, glossy, high-contrast image towards a softer and ultimately more naturalistic look. A significant pioneer here was again Gilbert Taylor, who had experimented with bounced light as early as 1948 as a response to inexplicably hard and high-contrast rushes obtained during the first two weeks of production on *The Guinea Pig*. But this turned out to be the result of a flawed batch of stock and the industry continued to favour a hard and direct style of lighting. Taylor later developed a more muted look for a series of 'social problem' dramas directed by J. Lee Thompson such as *Yield to the Night*, *Woman in a Dressing Gown* (1957) and *No Trees in the Streets* (1958). Taylor's affinity for naturalism led to an invitation from Stanley Kubrick to shoot *Dr Strangelove*, on which the cinematographer made extensive use of fluorescent lighting, most strikingly in the War Room set. But the effect went too far for Taylor, who felt 'the lighting was incredibly boring, it was just flat.'[5]

While a veteran may have pointed the way, the key innovations in soft lighting in British cinematography were to come from elsewhere. David Watkin had joined British Transport Films in 1949 before moving into the newly burgeoning sphere of television commercials in 1960. It was during this period that he developed an inclination for a particular style of illumination:

> Partly as boredom relief, I thought an interesting way to light interiors was to use reflected light. I decided on one scene in a documentary with a housewife in Welwyn Garden City to aim a brute through the window and light the scene with reflected light, which looks better and is more natural if you know what you are doing. People poured shit on that for about five years and then started copying it![6]

After working with Richard Lester on a Shredded Wheat commercial, Watkin was invited to shoot the director's next feature, *The Knack* …

And How to Get It (1965). While this early example of the cinema of 'swinging London' sported a predominantly naturalistic monochrome look, this was tinged with an edge of surrealism, notably during the 'white-out' sequence featuring a line of young women on the staircase leading to the bedroom of Tolen (Ray Brooks), the young man with the 'Knack'. But despite the attempts to eschew excessive sculpting with light and shade, black and white continued to demand the use of contrast, and it took a shift into colour on Watkin and Lester's next collaboration, *Help!*, to facilitate the creation of a more overtly softer and diffused lighting style. Another Beatles showcase, the film included various zany set pieces – this time filmed in exotic foreign locations, ranging from the ski slopes of the Austrian Alps to the tropical beaches of the Bahamas, which added their own range of natural colours.

Watkin's artistic preferences dovetailed with technical ingenuity and his solution to a tight shooting schedule and limited space on Peter Brook's production of *Marat/Sade* (1966) was to create a single lighting set-up comprising a translucent wall through which 26 10kW lamps were diffused. The soft illumination proved not only conducive to fast and efficient production, but the distortion of the outline of figures when backlit added to the unsettling intensity of the drama's setting in a lunatic asylum. For *The Charge of the Light Brigade* (1968), Watkin found other ways of experimenting with a diffused naturalism. The slowness of colour film stock meant that backgrounds and windows are allowed to burn out in order to ensure the correct exposure for the foreground action, which created a dreamy quality in romantic scenes featuring the dashing Captain Nolan (David Hemmings) and his fiancée (Vanessa Redgrave). When the action switched from England to the Crimea, Watkin utilised a greater depth of field which further enhanced the harsh realities of this notorious military catastrophe. But what also gave the film its distinctive look was the use of old Ross Express lenses, which Watkin had encountered when he started his career in documentary production:

> They had been around since the early 1930s . . . and had a very beautiful and gentle quality to them. Also, they carried no coating or blooming, so that there would occur light refraction within the elements of the lens itself. When you put a net, a diffuser, or a fog filter in front of a lens it is an overall dead thing you are seeing through – whereas, inside the Ross lenses were constantly alive, giving rise sometimes to the most wonderful accidents. And accidents (of the right sort) are always the best things in photography. (Chase 1984)

Thus Watkin effectively eschewed the properties of current technology in favour of a retro or antiquated effect, thus making the cinematography of *The Charge of the Light Brigade* a fascinating blend of modernity and nostalgia.

Other cinematographers also contributed to the soft light revolution. The mid-1960s saw a brief flurry of muted black and white with Ken Higgins's work on *Darling* (1965) and *Georgie Girl* and Larry Pizer's on *Morgan . . . A Suitable Case for Treatment* (1966). Meanwhile a plethora of colour films further exemplified the trend, including Gerry Fisher's cinematography on *Accident*, Peter Suschitzky's on *Charlie Bubbles* (1967) and *Privilege* (1967), Brian Probyn's on *Poor Cow* (1967), Miroslav Ondricek's on *If . . .* (1968), Pizer's on *Isadora* (1968), Chris Menges's on *Kes* (1969) and Billy Williams's on *Women in Love* (1969). Williams, who had worked alongside Watkin and Pizer at British Transport Films during the 1950s and became a vocal advocate of soft lighting, describes his approach to cinematography as being guided by the desire 'to achieve a heightened reality',[7] a reminder that even the most naturalistic images rely on the creative intervention of skilled practitioners. The popularity of this style of illumination led the Coltran lighting company to manufacture a unit called a 'soft' or 'north' light, comprising quartz-iodine lamp tubes within a metal box, which produced a non-directional glow. While, as Barry Salt notes, these tended to be used for fill lighting – which corrected the contrast created by a strong key light – some cinematographers used them as principal light sources, notably Freddie Young on *Ryan's Daughter* (1970) (1992: 254).

Young had previously demonstrated his continuing desire to keep up with current trends on the production of *The Deadly Affair* (1967), based on a John le Carré spy novel. Here he developed a technique for manipulating colour for a subject that hitherto would have been considered more suitable for black and white – the previous Le Carré adaptation, *The Spy Who Came in From the Cold* (1966), had been shot in monochrome by Oswald Morris. This involved pre-exposing the Eastman colour negative to create a more muted, subdued range of tones. Young carried out a series of tests and found that a pre-exposure of 30 per cent gave the best effect, and the British Technicolor lab subsequently pre-exposed negative in batches of 30,000 feet for the production (Young 1966). Young noted that the process entailed a number of advantages: there was no loss in definition, the film speed was increased from 50 to 75 ASA and very little filler light was required. The process – which came to be known as 'flashing' – is more popularly associated with the Hungarian cinematographer Vilmos Zsigmond,

who first used it on the Robert Altman western *McCabe and Mrs Miller* (1971).

Self-consciousness and the interrogation of form

As the examples discussed above indicate, alongside the shift towards greater naturalism, British cinematography of the 1960s is marked by an increasing self-consciousness and formal experimentation. While some of the most enthusiastic exponents of this were of an independently minded younger generation, more experienced practitioners were equally prepared to explore new opportunities. A pivotal film in this regard is *The Servant*, directed by Joseph Losey from a script by Harold Pinter, which is distinguished by Douglas Slocombe's use of crisp deep focus and extensive dolly shots to create a fluid, long-take style which forcefully conveys the unfolding power struggle between master (James Fox) and servant (Dirk Bogarde) within the confines of a Chelsea town house. While filmed largely in the studio at Elstree, the interiors are noticeably cramped in order to convey a more realistic sense of space. The story has three distinct phases, reflected in both the changing decor of the house and Slocombe's photography:

> In actual fact, I ran the styles into one another as the film went on… I shot the opening scenes in an overall grey tone that showed the bare bones of the building and its intrinsic coldness. Then we wanted to make things look exciting with new furniture, new belongings, so I shot it with a certain glossy contrast. Then, as the servant takes over, we wanted some things to show meaningfully for their own sake, wanted to find sinister meanings in objects that before seemed merely pretty and inoffensive, I used the lighting to rub out a number of things that had to be forgotten, and bring forward new elements that had to be given sinister implications. (Hudson 1965: 117)

In this way, external physical elements are constructed so as simultaneously to convey and explore internal psychic states and conflicts, linking back to the rich tradition of expressionism that distinguished British cinematography in the late 1940s (Petrie 2000).

Expressionism was also central to the style developed by Gilbert Taylor for Roman Polanski's *Repulsion*, a disturbing tale charting an isolated young woman's descent into insanity. Taylor reverted to a hard-edged, high-contrast look with liberal use of extreme and forced angles and a gradual lowering of the overall lighting level to convey the protagonist's steadily deteriorating state. The film makes frequent use of camera movement, from the hand-held and slightly intrusive close

shots of Catherine Deneuve wandering the streets of South Kensington to the more overtly restless and increasingly tense long takes that relentlessly follow her as she paces around the apartment. Taylor also utilised various lenses, from a 50mm to a wide angle 18mm which produced distortion in the interior close-ups. The overall effect was further enhanced by the production design, with the walls moving out and the ceiling closing in, which necessitated the use of bounced light and small, discrete sources. The result was a consummate study in psychic disintegration and abject terror.

Another fortuitous paring between youth and experience, this time director Sidney J. Furie and cinematographer Otto Heller, distinguished *The Ipcress File*, the first of three adaptations of Len Deighton's Cold War spy thrillers featuring the insubordinate and reluctant agent Harry Palmer. Heller had a strong track record in expressionism in both black and white and colour, as demonstrated by films such as *They Made Me A Fugitive*, *Queen of Spades* (1949), *The Ladykillers* (1955) and *Peeping Tom* (1960), where his grubby Eastmancolor palate evocatively captured the muted tones of drab London streets, the cheap tackiness of the British film studio and the darker sleaziness of the Soho porn industry. Heller lent a similarly shabby and squalid look to both the interiors and exteriors of *The Ipcress File*, a decision that suited, and communicated, the film's conception as a kind of anti-Bond. But the most striking aspect of this film's visual schema is the inventive approach to composition, with a liberal use of low angles and the most audacious use of 45 degree Dutch tilts since *The Third Man*, which, combined with the widescreen frame, creates an unsettling *mise-en-scène* that deliberately disrupts the audience's vision and thus their full comprehension of what is going on. For example, in one sequence when Palmer is fighting off assailants, the camera is confined within a telephone box. This serves to suggest a world of instability and fragility over which Palmer (unlike Bond) is never able fully to assert his mastery or control.

A similarly self-conscious approach to style is also central to *The Hill*, Sidney Lumet's drama set in an army prison camp in North Africa during the Second World War. Here Oswald Morris used overexposure to convey the oppressive heat of the desert environment, allowing the sand and the windows of interiors to 'blow out' in the process. He also eschewed the use of fill light, creating deep shadows that obscured the eyes of some of the characters, breaking a cardinal rule of classical cinematography some seven years before Gordon Willis created a more celebrated but essentially similar effect in *The Godfather.* In one scene,

when a young prisoner who has been forced to march up and down the man-made hill in the prison camp collapses and dies, the subjective spinning camera that captures his final moments even reveals Morris's lights, mounted in the ceiling of the set. The approach to camera movement on the film represented a further break with professional orthodoxy:

> If we laid a track down on boards on the sand, we got to roughly level and then threw sand and lumps of rock all over it so that when we dollied across it the camera bounced all over the place. If the film had been photographed in a smooth, slick, sophisticated way it wouldn't have had half the strength. (Eyles 1971)

A cinematographer who became closely associated with innovative uses of colour in the 1960s was Nicolas Roeg, despite having a very conventional training at MGM's Elstree Studios during the 1950s, where he worked as an operator for Freddie Young, Jack Hildyard and Ted Moore. Roeg graduated to director of photography in the early 1960s, initially making his mark with black-and-white features such as *The Caretaker* (1963) and *The System* (1964) before becoming a leading exponent in colour. However, Roeg eschewed the muted naturalism favoured by many of his contemporaries in favour of a return to the more expressionist approach that had distinguished the earlier Technicolor achievements of the 1940s and 1950s. Thus for Clive Donner's contemporary social drama *Nothing But the Best* (1964), Roeg drew upon the look of glossy magazines including the new Sunday colour supplements for its lush tones and shallow focus, in order to convey a world in which morality has been eclipsed by shallow materialism and greed.[8] On Roger Corman's *The Masque of the Red Death* (1964) he created a lurid world of primary colours, notably in the masked ball sequence and in the long tracking shot of a young Jane Asher wandering through a series of different coloured rooms in Prince Prospero's castle. The film was made on a three-week schedule, with Roeg responding enthusiastically to Corman's speed and energy (Gow 1972).[9]

For the adaptation of Ray Bradbury's futuristic drama, *Fahrenheit 451* (1966), Roeg's creative imagination was fuelled by François Truffaut's vision of a colour scheme that rejected the vogue for a soft, muted palate in favour of the garish tones of Technicolor. As the cinematographer recalls, 'the old three-strip process was very lush looking, artificial and glossy, while cinema at the time was going through an idea of naturalism … So we had things like the shiny red fire engine, then perhaps the image of a drab street.'[10] The high

contrast photography emphasised both the brightness of colours and the solidity of the blacks, which were set against an otherwise colourless environment. In the interiors, Roeg used a translucent wall gently lit from behind, the illumination provided by the light spillage producing a suitably other-worldly effect for this dystopian vision of the future.

While Roeg's poetic rendering of the Dorset countryside and coast across four seasons in John Schlesinger's 1967 adaptation of Thomas Hardy's *Far from the Madding Crowd* appears to owe more to rather old fashioned pastoral pictorialism, this is punctured by the improvised scene in which Terence Stamp's Sergeant Troy displays his swordsmanship to Julie Christie's heroine, Bathsheba Everdene, rendered via an impressionistic melange of hand-held camera movements, zooms and lens flares – which places an emphasis on the spontaneous, the unplanned and the accidental. This impulse was further developed by Roeg on Richard Lester's *Petulia* (1968), a dark drama set in San Francisco about the relationship between a doctor (George C. Scott) and a flighty socialite (again played by Julie Christie) who is trapped in an abusive marriage. The narrative is aggressively non-linear, featuring a plethora of disorienting flashbacks, and this is complemented by the restlessness of Roeg's camera to create a *mise-en-scène* characterised by profound unease and instability.

This anticipated the more celebrated achievement of *Performance*, which Roeg also co-directed with Donald Cammell. In this tale of an East End gangster who seeks refuge in the Notting Hill home of a burnt-out rock star, cinematography is utilised to deconstruct the solidity and certainty of the world – reflecting the way in which James Fox's Chas has his identity gradually broken down by Mick Jagger's reclusive Turner and his female companions. While the fractured editing plays a key part in the aesthetic, once again Roeg's restless cinematography – a plethora of zooms, forced angles, off-kilter compositions, slow motion and some degraded 16mm images – renders space and time as essentially random, shifting and unstable, which in turn reflects the film's contemplation of identity and, arguably, the signification of meaning itself (MacCabe 1998). But this was balanced by more familiar elements in the visual schema such as the recourse to expressionistic colour, with ambers and greens underscoring both the sensuality and the queasy psychic dislocation experienced by Chas in Turner's house, while the occasional interruption of red is a reminder of the impending danger and violence of the gangster's usual domain.

The ubiquity of widescreen

Another major aspect of cinematography in British cinema of the 1960s was the continuation of the widescreen revolution that had been initiated in the previous decade. While the majority of productions were now composed for a 1.66:1 ratio, with the top and bottom of the 35mm frame masked, various special processes were also widely used. The most famous of these, CinemaScope, relied on anamorphic lenses to squeeze an image with an aspect ratio of 2.35:1 on 35mm film which was then un-squeezed in projection. This format was favoured by many Hollywood-backed productions, ranging from the glossy MGM comedy-romance *The Millionairess* (1960), photographed by Jack Hildyard, to war films like 20th Century Fox's *Sink the Bismark* (1960) and Columbia's *The Guns of Navarone* (1961), shot by Christopher Challis and Oswald Morris respectively. But CinemaScope was deployed widely during the early part of the decade: by Douglas Slocombe and John Wilcox on the colourful Cliff Richard musicals *The Young Ones* (1961) and *Summer Holiday* (1963); by Arthur Grant and Gerald Gibbs on the black-and-white social problem dramas *80,000 Suspects* (1963) and *The Leather Boys* (1964); and by Denys Coop on the new wave production, *Billy Liar* (1963).

CinemaScope had been initially developed by 20th Century Fox and, consequently, productions funded by the studio were obliged to use the system. Other notable British examples include Freddie Francis's Oscar-winning black-and-white cinematography on *Sons and Lovers*. Rather than opting for spectacle, Francis used the Scope frame to accentuate the confinement of the Morel family's cramped cottage in a Nottinghamshire mining community. The width of the frame is combined with deep focus in order to render characters in close-up and medium shot, and to use spatial dimensions in the exploration of personal relationships. This was made possible by the speed of Kodak Tri-X, combined with a prism which allowed the camera to get close to the subject without the distortion previously caused by the anamorphic lens. Francis was less happy when compelled to use CinemaScope on his next production for Fox, the atmospheric ghost story *The Innocents* (1961). To compensate, he used graduated filters which, as he noted, meant that 'you were never quite sure what you could see at the sides due to the gradual diffusion at the edge. This greatly enhanced the claustrophobic feeling of the picture' (Francis 1980). The filters also helped to concentrate the action in particular parts of the frame rather than foregrounding widescreen spectacle. In this way Francis's creativity works against the inherent properties of the particular technology.

CinemaScope was gradually eclipsed by a superior anamorphic system, Panavision, which was devised by Robert Gottschalk in the mid-1950s. This was first used in Britain in 1963 by Kenneth Talbot on the independent Mickey Spillane pulp thriller, *The Girl Hunters*, and on two MGM productions: the black-and-white horror film, *The Haunting*, photographed by Davis Boulton, and the high-society romance, *The VIPs*, shot in colour by Jack Hildyard. The first James Bond film to be photographed in Panavision was *Thunderball* (1965), by the series' regular cinematographer, Ted Moore, who had filmed the previous three productions using a masked widescreen frame. The status of Panavision in Britain was given a major boost in 1965 when the equipment hire company Samuelsons became Gottschalk's representative in Europe, paving the way for the company to become publicly listed the following year.[11]

Another significant widescreen system introduced in 1960 was Techniscope. Developed by Technicolor in Rome, this used a modified movement of the film in the gate to expose a two perforation rather than the usual four perforation frame, creating a letter box shape but reducing the amount of negative exposed by 50 per cent, thus making major savings on stock and processing. Despite the reduced negative space, the quality of the image remained high due to the short focal length spherical lenses used on the camera (Foster 1964). An improved version of Techniscope was demonstrated in London in 1963 to promote its economic and technical advantages, and the system was subsequently used on a number of low- and medium-budget films. These include horror and fantasy films such as *Curse of the Mummy's Tomb* (1964), shot by Otto Heller; *Dr Terror's House of Horrors* (1964) by Alan Hume; *Dracula Prince of Darkness* (1965) by Michael Reed; and *Dr Who and the Daleks* (1965) and its sequel, *Daleks – Invasion Earth: 2150 AD* (1966), both photographed by John Wilcox. Techniscope was also deployed on the pop musicals *Wonderful Life* (1964) and *Pop Gear* (1965) by Ken Higgins and Geoffrey Unsworth respectively, while Otto Heller's work on the spy dramas *The Ipcress File* and *Funeral in Berlin* (1966) provides arguably the most visually striking examples of this short-lived phenomenon.

The widescreen boom also saw the development of large-frame formats producing high-resolution images. The first of these was the 70mm system Todd AO, introduced in 1955 and featuring a special camera with a large bug-eye lens which recorded an angle of view of 128 degrees and an aspect ratio of 2:1. Panavision responded with Camera 65, subsequently renamed Ultra Panavision 70. Both systems required specialist exhibition, limiting the number of British films

made in these 'roadshow' formats to just one example each: *Those Magnificent Men in Their Flying Machines* (1965), shot on Todd AO by Christopher Challis, and *Khartoum* (1966), photographed by Ted Scaife on Ultra Panavision 70. More successful was Super Panavision 70, a non-anamorphic system which avoided the exhibition limitations of Ultra Panavision, with the first British production to use it being the Oscar-winning *Lawrence of Arabia*, with Freddie Young creating what remains a milestone in epic pictorialism. Super Panavision was also used by Young on *Lord Jim* (1965), by Geoffrey Unsworth on *2001: A Space Odyssey* and by Christopher Challis on *Chitty, Chitty, Bang, Bang* (1968). Super Technirama 70, a process developed by Technicolor using a 35mm anamorphic image that could be enlarged onto 70mm film, was pioneered by Freddie Young on the US production *Solomon and Sheba* (1959), before being used by Ted Moore on *The Trails of Oscar Wilde* (1960), Christopher Challis on *The Long Ships* (1963) and Stephen Dade on *Zulu* (1964). Moore and Challis had also worked with the original short-lived Technirama system, which used a modified three-strip camera with the film being exposed horizontally, as in the VistaVision process, on the South African 'Western' *The Hellions* (1961) and the Stanley Donen comedy *The Grass Is Greener* (1960) respectively. Wide film production proved to be a limited phenomenon when a process whereby 35mm negative could be blown up to 70mm for exhibition purposes was perfected. Thus when David Lean and Freddie Young came to make *Doctor Zhivago*, they eschewed the large format used on their previous collaboration.

With *Lawrence of Arabia* and *Doctor Zhivago*, Young created some of the most memorable widescreen images of the period. The former production remains a consummate exercise in scale, with the logistics of shooting in remote desert areas in Jordan and Morocco with 70mm Panavision equipment presenting a major challenge (Young 1999: 93–5). Young made effective use of various tracking devices, including a Wickham dolly in conjunction with a crane mounted at a height of ten feet to film the riders on their camels. A larger Chapman crane with a maximum height of 25 feet was also used, mounted on a vehicle with six-wheel drive. In addition, Young required large arc lamps – or 'brutes' – to get a correct exposure in the actors' faces in the harsh desert light. But as he notes: 'The Brute is like a candle compared to the sun, so you had to be quite close to the actors – often as little as eight feet away.'[12] Young also made use of an 800mm lens to capture the celebrated mirage effect when Omar Sharif's character first appears, riding out of the desert towards the camera. Despite these logistical challenges, *Lawrence of Arabia* is a highly composed

film, the camera framing the desert landscapes in a variety of lighting conditions from the blazing midday sun to the cool deep blues of dusk. The memorable images of Peter O'Toole as T. E. Lawrence – alone or at the head of the Arab army in battle – set against the magnificent desert backdrops define the cinematographic ideal of the epic.

While *Doctor Zhivago* reprises some of these qualities in a romance set against the upheaval of the Russian Revolution and subsequent civil war, it is also arguably a more inventive production. The main story is told in flashbacks in which the ideas of illusion and revelation are key. This inspired Young to construct a series of memorable images featuring mirrors, windows and other similarly transparent and translucent surfaces: for example, Yuri Zhivago's (Omar Sharif) first vision of Lara (Julie Christie); the condensation on a window that gradually clears to reveal Pasha (Tom Courtney) reading Lara's letter; Pasha's fallen glasses on the battlefield; and the cut from the frosted window to the field of daffodils. Unlike *Lawrence of Arabia*, this production entailed a great variety of types of location and seasons of the year. While the recurring obstruction of the image suggests a modern impulse, the careful lighting of Julie Christie harks back to a previous age of glamour in which someone of Young's generation would have been well versed. But like *Lawrence* before it, *Doctor Zhivago* showcases the cinematographer's ability to combine scale and intimacy in the same coherent visual schema.

A different kind of large-scale creative challenge is represented by Stanley Kubrick's *2001: A Space Odyssey*. While a great deal of the credit for the visual impact of this production should go to Douglas Trumbull and his special effects team, Geoffrey Unsworth and John Alcott were responsible for creating the definitive crisp, sterile look for the interiors of the spaceship *Discovery*, where the bulk of the action takes place. In addition to lighting for mood, the photography had to work with more than 200 special effects shots while retaining as much of the sharpness of a first-generation image as possible. Within the giant centrifuge set which served as the main compartment of the *Discovery*, and which could be rotated 360 degrees to produce the illusion of weightlessness, Unsworth used hidden strip lights in the walls of the set. It was difficult getting enough light into the centrifuge, forcing the cinematographer to shoot with his lens wide open (Lightman 1968). While Kubrick once again exercised his customary total control over the project, Unsworth and Alcott – who would go on to photograph the director's next three features[13] – clearly brought to the film a visual distinction that enhanced the director's vision.

Concluding remarks

What this discussion of cinematography in British cinema of the 1960s makes abundantly clear is the richness and diversity of the achievements in this period. The distinction of much of this work demolishes the Bengali director Satyajit Ray's 1963 assertion that 'I do not think the British are temperamentally equipped to make the best use of the movie camera' (quoted in Barr 1986: 1). While the overarching narrative was clearly one of innovation and experimentation, this coexisted alongside the continuation of traditional styles and techniques propagated by a wide range of practitioners from septuagenarian Otto Heller to the twenty-something Peter Suschitzky. The spirit of new possibility opened up by the likes of Walter Lassally, David Watkin and Nicolas Roeg (arguably the triumvirate who most embody the cutting-edge of 1960s British cinematography) set the standard that was embraced by a new generation who photographed their first feature films in the second half of the decade, among them Gerry Fisher, Alex Thomson, Tony Richmond (the latter two both former close associates of Roeg) and Peter Suschitzky who collectively defined the restless, colourful and increasingly psychedelic style of the late 1960s.

The decade also provided ample evidence of the complex relationship between technological development and creative innovation. There may be some truth in Walter Lassally's observations that 'cameramen are a very conservative lot, they like to stick with the film stock and the lighting units they know, and usually when the speed goes up, they just stop the lens down another stop and go on using the same large lighting units as before' (1987: 68). But this clearly didn't apply to him or to David Watkin, as their respective innovations on *A Taste of Honey*, *Tom Jones*, *Marat/Sade* and *The Charge of the Light Brigade* demonstrate. But neither did it restrict considerably older practitioners like Freddie Young, as shown by his work on *The Deadly Affair*. In the final analysis, the 1960s placed a new emphasis on novelty and experimentation – a response not only to wider cultural transformations associated with the decade but also to the uncertainties of a film industry desperately searching for ways to halt the steady decline in audiences – and British cinematographers responded with characteristic technical ingenuity and artistic flair.

Appendix: Number of Feature Films Released During the 1960s by Individual Cinematographers

Name		*Name*		*Name*	
Jimmy Wilson	42	Christopher Challis	18	Norman Warwick	9
Arthur Grant	31	Desmond Dickinson	18	Jack Asher	9
Stephen Dade	29	Douglas Slocombe	18	John Coquillion	8
Ernest Steward	29	Ted Scaife	17	Stanley A. Long	8
Alan Hume	28	Basil Emmott	15	Davis Boulting	7
Geoffrey Faithful	25	Geoffrey Unsworth	15	Martin Curtis	7
Otto Heller	23	Wilkie Cooper	14	S. D. Onions	7
Kenneth Hodges	23	Arthur Lavis	14	Larry Pizer	7
Paul Beeson	22	Gerald Gibbs	13	Peter Suschitzky	7
Harry Waxman	22	Nicolas Roeg	13	David Watkin	7
Arthur Ibbetson	21	Denys Coop	12	Billy Williams	7
Bert Mason	20	Freddie Young	12	Manny Wynn	7
Ted Moore	20	Jack Hildyard	11	Freddie Francis	6
Michael Reed	20	Ken Higgins	11	David Holmes	6
Gilbert Taylor	20	Erwin Hillier	10	Robert Krasker	6
Walter J. Harvey	19	Walter Lassally	10	Stan Pavey	6
Oswald Morris	19	Peter Newbrook	10	Kenneth Talbot	6
John Wilcox	19	Gerry Fisher	9	Wolfgang Suschitzky	5
Reginald Wyer	19	Gerry Turpin	9		

Notes

1. There are also various memoirs of variable quality written by cinematographers Walter Lassally, Jack Cardiff, Freddie Young, Christopher Challis, David Watkin and Oswald Morris. This article draws upon interviews originally conducted for the author's monograph, *The British Cinematographer* (1996), with a number of individuals who have since died.
2. The Academy moved to a single award for cinematography in 1967.
3. Other key figures of this generation, notably Jack Cardiff and Guy Green, had graduated to directing in the 1950s.
4. Oswald Morris, interview with author, 8 November 1991; Gilbert Taylor, interview with author, 9 March 1993.
5. Gilbert Taylor, interview with author, 9 March 1993.
6. David Watkin, interview with author, 16 November 1992. Billy Williams discusses the impact of his advertising work on his interest in soft lighting at < http://www.webofstories.com/play/billy.williams/22 > .
7. Billy Williams, interview with author, 24 October 1991.
8. *Kine Weekly*, 'In production', 6 June 1963.
9. Low-budget horror also provided a platform for John Coquillon, whose striking images of East Anglian landscapes in Michael Reeves's *Witchfinder General* (1968) paved the way for a close association with Sam Peckinpah.

10. Nicolas Roeg, interview with author, 12 May 1992.
11. Sydney Samuelson, interview with author, November 1992.
12. Freddie Young, BECTU Oral History Project.
13. These were *A Clockwork Orange* (1972), *Barry Lyndon* (1975) – for which Alcott won the Oscar – and *The Shining* (1980).

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