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The Spanish Film Industry: New Technologies, New Opportunities

Lauren Kogen

Abstract: Spain, like other countries of Western Europe, has struggled against Hollywood to maintain its national film industry. Most of the films that are produced lose money, and producers are increasingly reliant on state subsidies. This article outlines the potential benefits of digital technologies to Spanish cinema and recommends changes in government film policy to take advantage of these benefits.
State subsidies, in Spain as well as elsewhere in Europe, have created a weak national film market. Most Spaniards view national cinema as low-grade, and consistently opt for foreign fare. This article argues that the government should decrease production subsidies in favour of an investment in digital theatre projectors, thus permitting all productions to take advantage of the cost-saving aspects of digital filmmaking. In the course of researching this article, interviews were conducted with among others Bigas Luna (director of *Jamon, Jamon*, 1992 and *La Teta y la Luna*, 1994); Tomás Pladevall (President of the Spanish Association of Cinematographers); José-María Aragonés (Artistic Director of Filmtel, the post-production arm of Filmax production company); Ricardo Gil (Marketing and PR Director of UCI/Cinesa theatres in Spain and Portugal); and J.M. Caparrós Lera (Director of the Center for Cinematic Research in Barcelona). All were interviewed about the audience appeal, artistic merit and technical advantages or disadvantages of the digital medium.

Introduction

For decades, filmmakers around the world have fought tirelessly against the inexorable force of the American film industry. Countries that attempt to establish an audience for their own national cinema are constantly battling the Hollywood juggernaut, and trying to reshape their own industry to promote domestic product both at home and abroad. In many West European countries, the effort has been only partially successful. American films continue to dominate the box office, and a recent increase in the home video and television markets have lowered theatre attendance across the board.

New digital film technologies, such as digital cameras and projectors, have been some of the latest additions to the ever more complicated world of production. They have provided new options for players on every level of the filmmaking process, but have also posed new challenges and inspired highly politicised debates. Both supporters and detractors of digital film question whether these technologies have any real potential for improving the playing field for national filmmakers. In Europe, many professionals within the industry do not fully understand the possibilities offered by these new options, and few have risked experimentation.

'Celluloid is dead. Long live film' was the prophetic declaration of Francis Ford Coppola at the 2002 San Sebastian Film Festival in Northern Spain, where he was honoured with a Lifetime Achievement award.[1] But although many directors, such as Coppola and George Lucas, have espoused the digital revolution, the changes have not fully materialised in Europe, and are virtually nonexistent within Spain. Although digital post-production (editing, image manipulation, and special effects) has existed in Spain for some time, the sectors of production, distribution, and exhibition are lagging behind much of the rest of the world in testing these new technologies.

Digital systems make savings possible at every step of the production process, and in some cases provide new sources of income. In a country like Spain that is flooded with low budget features and suffers from poor distribution, these concerns become very important. This article examines the potential benefits of digital technologies for Spain's struggling film industry.

The legacy of Franco

The attempt to create an indigenous commercial film industry in Spain is not new. The Spanish government reached a peak of active involvement in film during the fascist regime of General Francisco Franco (1936–1975), and the systems put in place by his government have left an enduring mark on the audiovisual sector. Ironically, Franco put more of a focus on the development of the film industry than any previous government, and yet at the same time enforced laws that would severely hamper its potential for commercial and critical success. Instead of viewing cinema as an artistic or fiscal matter, Franco saw only its potential as a propaganda machine. He even went so far as to write his own novel and have it turned into a self-aggrandising war film. Although there were certainly worthwhile films produced during the period, the effort to revitalise the industry ultimately failed because creativity was painfully stifled.

Numerous attempts by directors to create controversial or thought-provoking films were thwarted by arbitrary story modifications and draconian censorship laws. Variously named film classification and censorship boards dictated how directors presented Spain in their films, while government-controlled monopolies such as 'No-Do' (News and Documentaries)[2] carefully monitored what the public saw and understood of the outside world. Gifted filmmakers, such as Luis Buñuel, were forced to leave Spain in order to work freely. And of course, even if their films became successful abroad, they were not permitted to be seen by Spanish audiences.

The strict monitoring of national and international releases backfired, however, by reducing the popularity of Spanish films. Two particular laws imposed by the regime weakened the national film industry by strengthening the status and appeal of foreign films. The first, passed in 1941, called for the compulsory dubbing of foreign language films into Spanish. Its purpose was to avoid the adulteration of the Spanish language by foreign vernacular, and to promote the national language within Spain itself (regional languages, such as Catalan and Basque, were also dubbed). Although the law was repealed in 1947, dubbing has now become the standard for foreign films, making them even more accessible to the Spanish film audience and relegating any subtitled films to the art-house circuit. The accepted practice in the USA of subtitling all foreign language releases has similarly limited their popularity to a small niche market.

The second law involved the system by which foreign films were imported. In order to distribute foreign films, producers had to obtain permits. In order to receive such permits, they had to first release a Spanish film. Although a seemingly logical method of protecting their indigenous industry, the allocation of permits was cleverly tied to a 'classification' system, whereby Spanish films which served to promote the regime received higher classifications. The higher the 'classification' given to a Spanish film, the more permits to import foreign films the producer was allocated. Since audiences preferred American films, this system frequently resulted in indigenous films becoming no more than 'conventional vehicles for fascist mythology'.[3] Although a number of directors, such as Juan Antonio Bardem, Luis García Berlanga and many of the 'Nuevo Cine Español' directors, managed to avoid this pitfall with some of their films, it required not only a passion to create films that broke with that tendency, but also the ability to make it past the censorship boards.

After Franco's death in 1975 and the full repeal of censorship laws in 1977, the desire to examine the realities of Spanish social and political life flourished again. This time, however, films could be made about formerly taboo topics, such as homosexuality, drugs, and divorce. Although this was initially an exhilarating time for directors, the Spanish film industry was quickly debilitated by the rapid increase in television ownership in the 1970s, and subsequently by the global recession of the early 1980s. Moreover, foreign films which had been banned during the Franco years were suddenly available, and Spanish audiences were only too keen to see them.

By 1978, 80 per cent of Spanish film professionals were unemployed[4] and theatre attendance soon declined, with the number of cinema screens falling from approximately 5,000 to 3,500 between 1972 and 1982.[5] Spain's entry into the European Community in 1986, coupled with a steeper rise in the number of television-owning households in the late 1980s augured an even worse state of affairs for traditional cinema.

By 1990 only 1,802 screens remained open, and Spain had to compete with the European films that now flowed ever more freely across its borders. In 1989, despite efforts to promote the industry, producers released a paltry 47 films.[6]

Current state of the industry

Due to a growing economy and an increase in film subsidies, production has since risen. According to the Spanish Ministry of Education and Culture (MEC), the number of films released in Spain has increased steadily every year since 1998, reaching a 20-year record in 2002 with the production of 137 films.

Unfortunately, approximately 10 per cent of these were never screened,[7] and 70 per cent lost money.[8] This is partially due to the popularity of American films, which took 67.2 per cent of the box office market share in 2003, while Spanish films received only 15.8 per cent.[9] Of the five major film-producing countries of Europe that year,[10] only the UK's national market share was lower than Spain's.[11]

Those in the industry lay the blame for these figures variously on the Spanish government, the production companies, and the influence of Hollywood, but the search for a scapegoat has only exacerbated and prolonged the problem. In an attempt to improve the state of the industry, the ICAA (Institute of Cinematography and Visual Arts) was created in 1984 to address some of these issues. Among their stated goals are an increase in the production of Spanish films, a greater national market share, and the creation of incentives for the take-up of digital technologies.[12] However, while the first goal has been accomplished, the ICAA is not making sufficient efforts to advance the latter two. The agency's principal activity lies in distributing grants to filmmakers. In 2002, the state government gave a total of Euro40.8 million to the audiovisual sector, with about Euro30 million being allocated to the production of 71 films. On average these films received 23 per cent of their budget from the state.[13] In addition to the production subsidies, another law, inspired by similar measures in France and Italy, gives each producer 15 per cent of the box office return on his or her film for the first year after its release.[14] But while this grant is given to every producer, the production grants are awarded based on each film's 'cultural merit', which – according to the MEC – means how the film presents Spain to the outside world. Such films should offer 'an expression of [Spain's] personality and its history, forming a part of the country's identity'.[15] This vaguely worded requirement, written into law, may sound eerily reminiscent of the days of Franco, but is standard policy for the rest of Western Europe as well. Cultural promotion is seen throughout the region as the best way to keep European cinema alive in the face of the Hollywood juggernaut.

Despite the benevolent intentions of the board, however, these grants have created a reliance by filmmakers on the largesse of the government, a disincentive to find independent financing, and a limited range of genres. Likewise throughout Europe, state governments dictate which films deserve to be funded, and thus influence production. Director, media consultant, and industry critic Martin Dale states:

'Culture is the "holy of holies" of the European power system, and ever since the days of Louis XIV, subsidies have been used by the state to encourage certain national authors and discourage others.'[16] This has unfortunately not had the hoped for outcome. Many Spaniards view homegrown cinema as low-grade, and consistently opt for foreign, usually American, fare. The consequent attempt to balance cultural promotion and financial viability has produced one of the industry's most impassioned struggles. If Spain is to escape the stranglehold resulting from the perceived inferiority of its films and the government constraints on production, it must find a way to increase both the critical and box-office success of its films. Digital technologies offer the opportunity to modernise the industry, bringing with it financial savings and easier distribution, which in turn offer the possibility of not only increasing revenues, but also widening the reach of Spanish cinema.

The difference between digital and celluloid film

> I'll work for Kodak just as much as for Sony or Panasonic, but when I see the work I've done reach the screen, the work I'm most proud of, that I prefer, is on 35mm film. (Tomás Pladevall, Cinematographer)[17]

> The general public doesn't understand the digital debate. What they want are good stories, good images, and that's it. (Bigas Luna, director)[18]

While it is not imperative that every moviegoer or policy maker understands the endless intricacies of all the technologies currently available, many of those involved in the debate prematurely dismiss digital film as inferior without a real understanding of the capabilities and limitations of the medium. Given that celluloid film has existed for over a century without radical changes in the technology (aside perhaps from the coming of synch sound), it's unsurprising that some cineastes have become attached to the medium. The high image resolution of 35mm film and its rich range of colours are frequently cited in its support. Furthermore, most of those opposed to digital film not only denounce its inferior picture quality, but also argue that the inherent 'look' of 35mm is fundamental to the film medium. Whether this view is overly nostalgic or not, there are certainly inescapable visual differences between the two systems.

The wide range of cameras available complicates the digital-versus-celluloid debate. Many people have seen films shot on low-quality digital video and assume that all digital cameras will produce similar image quality, but there is an enormous gap between the lowest and highest-end cameras. In order to look at the potential of digital film, it makes most sense to compare 35mm celluloid with the best digital equipment available. Currently, these are the high definition (HD) cameras capable of recording at 1080/ 24p, which means that (1) the image has approximately 1,920 x 1,080 resolution, with 1,080 horizontal lines (scan lines) each containing 1,920 pixels per line, (2) the camera records the image at 24 frames per second (fps), just like a 35mm film camera, and (3) each image is scanned progressively(p) – that is , it scans the entire image at once, as opposed to recording it as an interlaced image in two halves, as is the case with television or standard video. Some cameras are also capable of recording at different speeds or resolutions, depending on the needs of the production.

Of course there is a wide array of cameras available with varying capabilities, and there are many other technical features that affect the quality of the camera and its image. Because the industry is in its infancy, many of the specifications for these cameras are not standardised, and there is constant debate as to which features are most vital to image quality and which operating systems are superior. For the time being, however, the above are the generally accepted guidelines for commercially available, high-performing HD cameras. Currently, these cameras are the only capturing systems capable of achieving an image similar to film. Unfortunately, just like traditional film cameras, they can be quite expensive, with the highest quality cameras running upward of US$100,000 apiece. However, many other lower-end formats exist, creating possibilities for films of every budget. The most affordable of these are consumer, MiniDV (Digital Video) cameras. They do not have such a high resolution and therefore do not project well on large screens, but can be purchased for less than US$500. Compared to the 1,080 lines of horizontal resolution of the highest quality camera, the MiniDV contains approximately 500 horizontal lines. In between the two extremes lie several different types of DV and HD pro-sumer cameras. One that has been popular is Panasonic's AJ-SPX800 DVCPro, with 750 lines of horizontal resolution and currently priced at around US$20,000.

In many instances, HD video can be virtually indistinguishable from celluloid, but certain circumstances make the differences more apparent. In HD small details may be blurred or show aliasing, fast motions are often stilted, there is a much greater depth of field (which can make the image look flat), and there is a lower contrast ratio than in 35mm film, reducing the range of deep blacks and bright whites. Additionally, digital film creates an extremely crisp, clean picture, and can make the image look more artificial. This can be jarring to an audience accustomed to celluloid, since the softer picture, as well as the pops, scratches, and fading which are common to celluloid – and are part of what creates the classic film 'look' – are absent. Digital proselytes, however, see this as a virtue. José María Aragonés, the Artistic Director of Filmtel in Barcelona, one of the most technologically advanced post-production houses in Spain, believes that it is purely a matter of growing accustomed to the new image. He compares the advent of digital film to that of digital audio, but believes that the current changeover will go even more smoothly: 'Everyone wanted records because they thought they were analog and therefore better. But now everyone's adapted to CD's.'[19]

So far, high-quality digitally released films have done very well. There has been no evidence that the general public finds the image inferior, and it's possible to argue that they even prefer it. Jerry Pokorski, the Executive Vice President for Pacific Cinemas in the USA, says that his theatres' grosses can be up to 40 per cent higher when a film is screened digitally.[20] Although audiences' preferences may change over time, it's important to recognise that audiences are certainly not rejecting cinema-quality digital releases, and to acknowledge that they cannot be straightforwardly dismissed as 'inferior'.

Production

Very few live-action films are both shot *and* screened with top-quality HD equipment. Most films that are screened digitally are filmed on celluloid and then transferred to a digital format. Likewise, films that are produced digitally still have to be converted to celluloid in order to be screened at the vast majority of theatres which are not equipped with digital projectors. However, while these types of productions take advantage of some of the benefits offered by digital technologies, an entirely digital chain – from shooting, through post-production to distribution and exhibition – in which celluloid is never used, reaps the greatest rewards. Two of the most well-known examples of live-action cinema-quality digital productions are George Lucas' *Star Wars: Episode II – Attack of the Clones* (2002) and Robert Rodriguez's *Once Upon a Time in Mexico* (2003). Of course, in *Star Wars*, with a budget of US$120 million,[21] Lucas' choice of medium was not based on economic criteria. *Once Upon a Time,* on the other hand, had a smaller budget (U$29 million), and the digital option was more practical.[22] But despite their differing motivations, both directors have acknowledged the benefits of digital film, and asserted that they plan to use it again.[23]

In production, the most obvious and publicised savings offered by the digital revolution are in respect of cameras. Low-end cameras are inexpensive enough that almost anyone can put one on their credit card. But shooting digitally offers savings on consumables as well as equipment. The most important of these is the cost of celluloid film stock, which can be very high. In 2002, the cost of the celluloid film stock, together with laboratory processing fees averaged 8.5 per cent of a Spanish film budget, which is typically around Euro2.3 million.[24] Secondly, not only are digital tapes significantly cheaper, but they also increase the director's flexibility. While a film reel may record about ten minutes of film, a digital tape can run from 30 minutes to three hours, depending on the camera and the speed setting. This gives the director the ability to record multiple takes while still rolling, thus creating a freer interaction with the actors and a smoother shoot. In documentaries or films that require improvisation, this added flexibility is invaluable, as it allows the director to capture moments s/he might otherwise have missed. In Spain, where documentaries account for a large proportion of feature-length films, this benefit becomes even more pertinent.[25]

An additional advantage of digital cameras is the ease of use. Many have 'automatic' settings that adjust for light and colour and thus reduce the necessary skills required of the crew as compared to those required when working with 35mm. This is obviously of enormous benefit for directors working on extremely low-budget productions. However, because filming can be done with relatively little experience – an impossibility with 35mm film cameras – the likelihood of using non-professionals increases, and therefore so does the possibility of an 'inferior' image. Clearly, a knowledgeable cinematographer or lighting director will be able to capture a better image than a novice, even when using the 'automatic' setting on a high-end camera.

Another potential benefit of digital cameras is that they can facilitate the creation of scenes that might otherwise be impossible or prohibitively expensive, as was the case with Danny Boyle's *28 Days Later* (2003) . For Boyle's film, local police agreed to stop the traffic on a busy London street for one minute. Using six DV cameras, arranged in different locations, Boyle was able to achieve a total of six minutes of footage. By editing the footage together, he was able to create the illusion of a deserted London street. Trying to create the same effect by using six 35mm cameras would not only have been hugely expensive, but also very cumbersome – and Boyle attributes the cooperation of the police in part to the fact that the cameras were extremely easy to set up and allowed the crew to work very quickly.[26]

In Spain, few films have been shot digitally. The most prominent example of a high-end digital production is Julio Medem's *Sex and Lucía* (*Lucía y el Sexo*, 2001). Medem used Sony's CineAlta 24p camera, which was given to him by Sony to promote the new technology. Tomás Pladevall, a seasoned director of photography and the President of the Spanish Association of Directors of Photography (AEC), cites this film as a good example of the productive use of digital technology, in that Medem, working with experienced director of photography Kiko de la Rica, was able to compensate for the problems associated with the medium by using those limitations to his artistic advantage: 'All the elements work together. What would be a defect, he turns into an effect. Because of the low contrast ratio of video, [de la Rica] overexposes and uses extremely bright exteriors.'[27] Because these visual choices were appropriate to the film's plot, Medem was able to use the inherent flaws of digital filming to his advantage, and incorporate the visual effects into his surreal, dream-like storyline. Because he was aware of the differences that come with filming digitally and was able to work with them, his final product was visually comparable to a film shot on celluloid.

Smoking Room (Roger Gual, Julio D. Wallovits, 2002), shot on MiniDV, achieves the opposite effect of Medem's film. It is clear that it's shot digitally – so much so that the visual quality of the image helps make it appear to be a documentary. Like *Sex and Lucía*, however, the directors are aware of the visual effects of video and intentionally use them to support the storyline. The plot, concerning a Spanish subsidiary of an American company, follows the plight of one worker to save the company's smoking room from the malicious, anti-nicotine American directors. The indignation of the workers unfolds and is analysed through interviews and conversations filmed in close-up. This creates a very intimate picture, while at the same time accommodating the problem of digital film's exaggerated depth of field. Gual and Wallovits further use shakey camerawork, combined with the poorer quality of the film image to reinforce the impression that the narrative is a work of non-fiction. By mimicking the codes, conventions and 'look' of an interview-based film documentary, the directors promote the audience's acceptance of the new digital format by making an association with – making it resemble – one they are already familiar.

La Fiesta (Manuel Sanabria, Carlos Villaverde, 2003) demonstrates the possibility for financial success of micro-budget productions. Shot on MiniDV for Euro5,500, this film falls into the *Blair Witch* category of low-budget filmmaking, albeit on a smaller scale. Through word of mouth and an interactive website, this small film was able to bring in over Euro1 million at the box office, an accomplishment achieved by less than 20 Spanish films that year. The film's success probably had less to do with the 'quality' of the film than with the directors' choice of genre. Unsurprisingly, teen comedies of this ilk, involving themes of love and sex, tend to do very well. However, despite its potential box-office draw, its unsophisticated storyline kept the film from receiving state funding, while its directors' lack of experience made private investment unlikely. Having access to an inexpensive camera allowed the team to make a film which could not have been made by conventional means and launched the careers of its creators.

At this point, digital film is used in Spain only in very specific instances. No films other than *Sex and Lucía* have been shot wholly on high-end cameras, and few have used other HD cameras. Because there are so few digital theatres in Spain, no films are made with the intention of screening digitally. For first-time directors, such as those of *Smoking Room* and *La Fiesta*, small budgets make low-end digital production an attractive option, but nevertheless many shoot films digitally in the hope that they will get picked up by a production or distribution company for transfer to 35mm film. The infrastructure is simply not yet in place to make high-end digital filmmaking worthwhile. As Pladevall asserts: 'The only productions in Spain that merit using high-end HD are those directly sponsored by [the camera company]. We don't have any George Lucas productions here.'[28]

Post production

Although digital production is still in its nascent stage, post-production work such as editing, special effects, and image manipulation has been computerised for some time. Non-linear editing systems were introduced in the early 1990s and now dominate the field. Typically, a film shot on celluloid is digitised and edited on a computer. Once the director gives final approval to the cut, the celluloid original is retrieved, cut, and spliced together to match the sequence in the computer file. Therefore, in standard non-linear editing, it is not necessary for the digital files to be of high quality, because they will not ultimately be used. However, if there are parts of the film that need special effects or image manipulation, these segments will be digitised at a very high resolution, manipulated as required, and then transferred back to celluloid to replace the original frames.

A more recent trend, however, is to create what is referred to as a 'digital intermediate'. In this process, the entire film is scanned to digital files at a very high resolution. This way, the entire image can be modified, optimising light and colour throughout, instead of picking and choosing which sections to adjust. This digital intermediate then becomes the master, instead of the celluloid film reels. Because the cost of scanning 35mm film to a high-quality digital file is expensive, this is typically only done for films requiring a significant amount of special effects work or where the intention is to screen digitally. If a film is shot digitally, it is of course much easier to transfer to digital files and therefore to take advantage of the image manipulation tools offered by today's computer programs.

From the discussion above, it is evident that the savings in an all-digital production chain are two-fold. Firstly, money is saved in the conversion to a digital file; and secondly, once post-production work is completed, the film does not have to be transferred back to celluloid – the digital 'intermediate' becomes the final product.

Distribution and exhibition

The distribution phase of a film release is where the savings offered by digital technologies really kick in. *Screen Digest*, a media research firm, estimates the potential savings offered by digital film distribution for American studios to be approximately US$1.36 billion per year.[29] But although the prospective savings are immense, they cannot be realised until exhibition becomes digital as well. Until then, even a film with a digital master will have to be transferred to 35mm film to be viewed at conventional theatres. However, once digital exhibition becomes more widespread, distributors will be able to reap the benefits of the new system. In a country like Spain, where there are only five major distribution companies,[30] and one in every five films lacks professional distribution, this becomes particularly noteworthy.[31] Because most producers do not have established reputations or relationships with movie theatres, many films without committed distributors fail before anyone has even seen them. Digital film lowers the cost of distribution, which not only helps the distributors, but allows more filmmakers to utilise their services.

In the case of digital projection, digitally produced films or films with digital masters would no longer have to be converted to celluloid film reels. Instead, the distributor would send the digital film file to the theatre via satellite transmissions, fibre optic or broadband networks, DVD-ROMS, hard drives or digital tapes. This saves the cost of the film copies, which typically run to about US$1,500 each, and that of shipping the heavy films reel cans. Furthermore, for the films that are lucky enough to gain international distribution, different language tracks or subtitles can potentially be stored on the same master.[32]

Digital exhibition, other than allowing for digital distribution, offers the most interesting opportunities of all the steps in the digital chain. Just as there are different digital cameras, there are also various types of digital projectors, and exhibitors can buy a projector commensurate with their budget. Digital screenings have therefore been divided into two broad categories: D-Cinema (Digital Cinema) and E-Cinema (Electronic Cinema). D-Cinema refers to the use of the highest-end or 'cinema-quality' projectors, to screen most first-run film releases. Currently, all commercially available D-Cinema projectors are based on the Digital Light Processing (DLP) technology developed by Texas Instruments, and cost up to US$150,000 each. Other systems in development, such as the D-ILA technology from JVC or Sony's new

SXRD chip technology, will hopefully increase competition and lower costs.

E-Cinema refers to the new and expanding market for alternative types of screenings. These use lower-end projectors, often with resolutions equivalent to that of High Definition Television (HDTV). Examples of screenings for these types of projectors are music concerts, sports matches, stage performances, television series, business rental, and certain types of films. Because of the inferior quality, however, they are not meant for typical first run releases.

So far in Spain very few E-cinema screenings have taken place, but of those that have, some have been quite successful. In one event co-sponsored by Telefonica (the country's major telephony company), Thomson (an electronics manufacturer), Cinesa/UCI theatres, and the Liceu Opera House in Barcelona, the opera *La Traviatta* was screened live at Barcelona's Cinesa Diagonal Theatre. The image was delivered through fibre-optic lines installed solely for the occasion, running from the Liceu to the theatre. The event was popular enough for Ricardo Gil, the Marketing Director of the Cinesa/UCI theatres (who are owned by Paramount/Universal) to say they will continue such events when the technology becomes more readily available. At the time, there were no digital TV cameras in Spain and a unit had to be rented from Belgium in order to stage the event, at a cost too high to be borne solely by one theatre and for local broadcasting only. However, he believes that the audience exists for these types of screenings and is willing to pay the Euro25–30 that would be required to make such a one-time event profitable. Gil feels the alternative venue attracts a different kind of audience: 'It was strange to see some of the younger people in the audience wearing jeans and eating popcorn. It's a much more casual environment'.[33] And while the relaxed atmosphere draws a non-typical opera-goer, it appeals at the same time to more avid fans, who can see the singers up close without having front-row seats.

Advertising is another avenue of income. By being able to screen digital pre-show adverts across an electronically connected chain of theatres exhibitors can gain a wider reach of potential advertisers. Regal Cinema, an American theatre chain owner, has been a pioneer in this field. Its 'Cinemedia' digital network was the first large-scale, nationwide digital projection system in the country, and they are already reaping the benefits of the experiment. The chain has had moderate success with alternative screenings, but has found the greatest profits to come from advertising, with revenue increasing in this area by 236 per cent between 2002 and 2003.[34] Cliff Marks, the president of Marketing and Sales, asserts that 'Advertisers and marketers from all realms and all walks of life have been very open to partner with us. ... There's a whole host of new companies that are finding cinemas as a great alternative for sight, sound and motion advertising.'[35] By being able to package together 20 minutes of pre-show adverts and distribute them via satellite to a wide number of theatres, reliability is increased and distribution costs are decreased, as are the labour costs of splicing together celluloid reels for each theatre. Additionally, theatres equipped with lower-end projectors can be rented out for business presentations, satellite conferences, or educational screenings, thus allowing the theatre to take advantage of the conventional nine-to-five working day, when admissions are generally low.

But for Spain, as well as other countries outside the USA, the most exciting possibility offered by E-cinema is the screening of local, digital films. A theatre with an E-cinema projector is capable of screening films shot digitally on low to mid-range cameras. In fact, a movie shot on these types of cameras does not gain anything by being converted to celluloid or blown up to a cinema-size screen, since as José María Aragonés explains, the image resolution cannot be improved: 'If a film is shot in Digital Betacam, edited digitally, and is projected in video resolution on a smaller screen, the quality is optimal. If it's converted to film, nothing is improved.'[36] E-cinema projectors could greatly increase the possibility of smaller producers getting their films into theatres, and thus improve their chances of wider distribution.

The largest factor hindering the take-up of digital exhibition, however, is the cost. D-Cinema projectors cost approximately US$150,000, as compared to the US$30,000 a theatre might otherwise expect to pay for a conventional celluloid film projectors. Moreover, not only do the new digital projectors not last as long, but the fact that the technology is still new and improving all the time, more or less guarantees that better and probably cheaper projectors will soon be available. And because producers and distributors reap the bulk of the monetary benefits of an all-digital chain – especially via the eradication of the physical distribution costs of film reels – exhibitors are loath to shoulder the financial responsibility of investing in new digital projectors alone. While many theatres could afford lower-end projectors and experiment with alternative content and advertising before investing in a top-end projector, the relatively low levels of earned income generated by Spanish exhibitors and the as yet unestablished acceptance of digital projection mean that the chances of any more than a select few taking this risk is currently slim.

And indeed, there are currently very few digitally equipped movie theatres in Spain. In 2000, two cinema-quality projectors were installed: one in the Kinepolis theatre in Madrid and one in the Cinesa Diagonal in Barcelona. The projector at the Cinesa was a prototype from Sony, and largely financed by Disney to promote their own digital films. However, because there was no universal standard for digital film files, and few Hollywood releases dubbed into Spanish were available, the projectors soon fell into disuse.[37] But Cinesa is now installing D-Cinema projectors in three of its Spanish theatres, which will be capable of handling several different file formats, and the company is attempting to work more with alternative content. In one proposed plan, called Orpheus, they will join together with Cinecitta, the Liceu, and other European organisations to screen operas such as those at the Liceu across theatres in Europe.

Going global

Over and above the potential to increase revenues in the domestic sector, revitalising the Spanish film industry could allow it to better exploit the international markets. Spain is in a unique position with regard to the world film circuit, since it has two enormous markets beyond its borders. The EU-15 and the Spanish-speaking countries of Latin America total close to 730 million potential ticket buyers.[38] Sharing a common socio-political culture with Western Europe and a common language with the majority of Latin America, it is if anything surprising that the Spanish film industry has not had greater success with international distribution.

The European Union is Spain's core market. In 1999 the EU market share within its borders was slightly more than 25 per cent.[39] With approximately 70 per cent of admissions going to American films, this leaves little room for films from other parts of Europe or the rest of the world. Several organisations have been created in the hope of furthering cooperation within the EU market. Eurimages was set up by the European government in 1989 to help with the production and financing of co-productions between at least three countries, and the MEDIA programme, which entered its third phase in 2001, assists with the development, distribution, and promotion of EU films, finances professional training, and supports certain pilot projects to incorporate new digital technologies into the market. The most promising of these projects is the D-Cinema Europa Network, which aims to equip 20 theatres throughout Europe with HD projectors by the end of 2004, raising that number to 60 by the end of 2005. Unfortunately, much of the financing for productions follows the same 'cultural' guidelines as those of the individual member-states, which potentially limits the success of this venture by imposing the government's cultural agenda on the market.

In Latin America where, save Brazil, the Spanish language reigns, Spain finds its second major market group. Unfortunately, South and Central America's poor economies adversely affect the export potential for Spanish films to this region. Although Spanish is the second most common native language in the world, with approximately 330 million speakers, as a group they are sixth in terms of purchasing power.[40] As a result, people simply do not go to the cinema as often. In 1998, the most recent year for which statistics are available, the average EU-15 citizen attended the cinema 2.13 times per year, while in Latin America[41] the figure was less than 0.56 times per year. In addition, Latin American politics and economies are highly unpredictable. One country may begin to show growth while another falls deeper into debt, and many of the countries' economic systems are dependent on the well being of their neighbours. Argentina, one of the larger economies of South America, which has dominated Latin American headlines in the past few years with its financial crises, may be recovering slowly. If the continent's economy improves this will mean (among other things) more cinema attendance, and therefore more potential for Spanish imports. Ibermedia was created in 1988 to perform a similar function to Eurimages for Latin America and Spain. Since its founding, they have helped to finance the development, promotion, and distribution of over 500 projects in 13 countries.[42]

Spain is already among the major film-producing countries in Western

Europe, consistently coming in the top five in terms of worldwide admissions, and has the potential to create a stable, lucrative film industry. The talent certainly exists, and more directors and actors are receiving international acclaim. Pedro Almodovar, who outside of Spain has been synonymous with Spanish film in recent years, is being joined by new internationally successful directors such as Alejandro Amenábar. Actors like Penelope Cruz, Antonio Banderas, Javier Bardem and the up-and-coming Paz Vega and Elena Anaya have also found their talents well received overseas. Every year a select few Spanish producers make movies which manage to compete effectively with North American ones for audience. Comedies have proven the most fruitful, with films such as *Torrente (1998), El Otro Lado de la Cama* (2002), and *La Gran Aventura de Mortadelo & Filemon* (2003), gaining exceptional box-office success. However, these achievements are rare, and many of those who do succeed quickly leave the Spanish industry for more financially rewarding careers in Hollywood.

To augment their incipient success and to keep talent from migrating, the industry must find a way to increase the popularity of their films abroad but also, more importantly, at home. This means they must (1) produce a wider variety of films, and 2) create a domestic audience for them.

Recommendations

Because Spain's film industry, like most of Europe's, is partially controlled by the government, the responsibility for improving the market lies heavily on the state's shoulders. Although the censorship of Franco's regime has long been abandoned, the government now determines which films get made by choosing which ones to help finance based on its own cultural criteria. Since few producers can afford to make films without these funds, most of them have no alternative but to conform to the genres encouraged by the state. Unfortunately, the government's 'imprimatur' doesn't increase ticket sales, and these usually less commercial films, even if culturally rich, tend to do poorly at the box office.

To make matters worse, the ICAA's fund for film subsidies in the past few years has been, in the eyes of Spanish producers, dangerously inadequate, both in terms of the small number of films which receive funding, as well as the low level of funding awarded to each production. Subsidy apologists claim that the industry cannot survive without grant-aid, and that an increase is sorely needed in order to maintain current levels of production. In response to these demands, Carmen Calvo, the Minister of Culture, has recently announced a 'significant' increase in the budget for the fund for 2005.[43] However, the various pro-subsidy arguments elide the reality that Spanish culture and its public are little served if no one sees the films that are being made in their honour. Javier Castro, a film producer, goes further: 'It's fundamental that we change the perception of the industry from one of amateurs living in the luxury of subsidies, producing fluff that no one sees. The victimized attitude of professionals must change.'[44]

The government must therefore reconcile cultural promotion and profitability. Digital technologies have been proven to offer not only financial savings, but a greater freedom of expression as well. Digital technology therefore offers the potential to generate savings for all films without prejudice, a virtue lacking in the ICAA, and in turn give filmmakers greater freedom to create whatever works they choose. And therein lies the possibility of increasing the variety of both artistic and commercial productions.

However, the value of these technologies is moot until digital projection is available on a wide scale. Without a full digital network in place, many of the savings generated during production will be lost with the then necessary film transfer costs (about US$40,000), and the savings offered by digital distribution will not materialise. Unfortunately, because of the high cost to theatres of the digital conversion, exhibitors are unlikely to undertake the changeover on their own. In the USA, there has been talk of distribution companies co-financing the conversion to digital projectors, but such a move would be unlikely in Spain, as the potential savings are far lower.[45]

Therefore, it is possible to argue that government funding would in fact be put to much better use by investing in digital theatres and decreasing film subsidies. Once digital exhibition is in place, natural market economics and the inherent savings of digital production will force the industry to follow suit. This switch will allow the presently cosseted market to save money on every film genre, thus allowing market economics and audience preference to dictate what is produced, instead of the government. Film popularity and box office revenue must be considered along with cultural significance if Spanish films are to avoid becoming mere ciphers to an American-dominated market. As Xabier Elorriaga's character ominously states in Alejandro Amenábar's dark debut feature, *Thesis* (*Tésis*, 1996): 'We've reached a critical stage. Our cinema won't be saved unless it's understood as an industrial phenomenon. Out there the American industry is trampling you and there's only one way to compete: Give the public what it wants to see.'

To this end, one option that the government has is to begin installing a combination of D-cinema and E-cinema projectors. The Chinese government chose this route, announcing plans to roll out both types of projectors, 2,500 in total, over the next five years. The UK Film Council is allocating £13 million (US$21 million) for the installation of 250 cinema-quality projectors across the country. Regal's Cinemedia Digital Network has 4,700 low-end projectors installed in 394 theatres in the USA. Other governments around the world are discovering the potential profits offered by digital exhibition, and are beginning to invest as well.

Film subsidies need not be eliminated, but should serve as a component of an economically viable industry, not as its lifeline. One suggestion, promoted by José María Caparrós Lera, a Spanish film historian and director of the Film-Historia Center for Cinematic Research in Barcelona, is to give subsidies only to first time directors, thus giving them an opportunity to succeed in the market, but demanding that personal talent and directorial success determine their future.[46] Additionally, the government should allow these subsidies to go to digital productions, a format they do not currently cover.[47]

Aside from digital projectors and subsidies, the government could also invest in the training of current cinematographers in the operation of digital cameras. Sergi Maudet, the HD manager at Ovide BS, a leading Spanish camera rental company, has seen a large increase in HD rental for television productions (25 per cent in 2003), but little in film. He attributes this partially to the more established use of HD for television, but also to the unfamiliarity of filmmakers with digital systems.[48] A positive step in this direction has been the creation of a series of digital film workshops by the eminent Spanish director Bigas Luna, an outspoken proponent of the digital medium. In an effort to open up the world of production to young filmmakers, he has recently led several small workshops, of about 20 students each, in order to teach them not only about digital cameras, but also about the art of storytelling in the digital age. The students are taught to use the cameras, and are given the opportunity to assist in filmmaking. 'One [of my trainees] has already signed a contract with a producer who finances the films of my most promising students. That's part of what I'm trying to do – help young filmmakers with their own projects.'[49] If more directors and camera operators become familiar with digital cameras, this will ease the transition to digital filmmaking. The government could assist in this area by offering subsidies for courses in digital camerawork, or for digital equipment purchases. Although the MEDIA and Eurimages programmes mentioned earlier can be faulted for the same intervention as the individual European states, their subsidising of training programmes and promotion of new technologies is a step in the right direction.

There is no doubt that the traditional film industry is transforming, and the probability that digital platforms will eventually become the worldwide norm for filmmaking is high. This will offer advantages to everyone from Hollywood studio executives to documentary filmmakers in the Amazon. However, when each country chooses to adopt these changes, and how much each will benefit from them, varies enormously. The countries that have the most to gain from the conversion are those with prolific film industries dominated by low and medium budget films. Encouraging digital filmmaking will save money for established filmmakers, and will open up the market to new ones.

To be sure, decreasing barriers to entry does not ensure that all new films will be groundbreaking, or even that they will make a profit. We have already witnessed this in the USA. Increasing the number of films available raises the number of poor ones just as much as it does the number of good ones – if not more so. But as we have also seen in the US market, competition from smaller producers *does* challenge the ubiquity of Hollywood. The public has shown that it is no longer satisfied (solely) by traditional studio films. But as we have seen in the Spanish market, neither is it satisfied solely by 'cultural' ones.

Increasing the variety of films available will, by the same account, increase the likelihood of truly successful films, and create a better image, both nationally and internationally, of Spanish cinema. By taking advantage of these new technologies now, Spain has the possibility of revitalising its film industry and becoming a powerful and competitive force on the international scene. Spanish and European film need not be pitied as non-competitive nor written off as non-commercial. European filmmakers have much more to offer than cultural heritage, but must be provided with the opportunity to do so.

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Notes

1. Pablo del Río, 'Amplitud de campo', *Academia: revista del cine español* (Winter 2004), p. 18.
2. 'No-Do' is short for *Noticiarios y Documentales* (News and Documentaries) and were the newsreels produced by the Franco regime. Theatre exhibitors were required by law to show them before film screenings, and no newsreels other than these were permitted to be shown at any time. The regime thus carefully controlled what national and international news was available to the public, as well as how it was presented to them.
3. Virginia Higginbotham, *Spanish Film Under Franco* (Austin: Univ. of Texas Press, 1988), p. 8.
4. José María Caparrós Lera, *Historia crítica del cine español: Desde 1897 hasta hoy* (Barcelona: Ariel, 1999), p. 172.
5. Jean-Claude Seguin, *Historia del cine español*, Trans. José Manuel Revuelta (Madrid: Acento Editorial, 1999), p. 67.
6. Ibid, p. 80.
7. Ministry of Education and Culture, Institute of Culture and the Visual Arts, Spain, *Boletin Informativo: Películas Españolas de largometraje*, at http://www.cultura.mecd.es/cine/cvdc/bol/pdf/04-resumen.pdf (accessed 8 April 2004).
8. Alvarez Monzoncillo, Jose María and Javier López Villanueva, 'Informe del año: El cine español de 2002', *Academia: Revista del cine español* (Winter 2003), p. 50.
9. Ministry of Education and Culture, Institute of Culture and the Visual Arts, Spain, *Cuota de mercado de películas de la Union Europea y los Estados Unidos*, at http://www.cultura.mecd.es/cine/jsp/plantilla.jsp?id=85&contenido=/cine/cvdc/mc/2003/cuota.jsp (accessed 27 April 2004).
10. Germany, France, the UK, Italy and Spain.
11. UK national Market share was 11.9 per cent, cited on *Lumiere: Database on admissions of films released in Europe*, European Audiovisual Observatory, at http://lumiere.obs.coe.int/web/sources/EN/analyse.html (accessed 22 March 2004).
12. Royal Decree 7/1997, Spain, de 10 de enero, of infrastructure and functions of the ICAA (BOE, 28/1/1997).
13. Ministry of Education and Culture, Institute of Culture and the Visual Arts, Spain, *Ayudas a la cinematografía concedidas en el año 2002*, http://www.cultura.mecd.es/cine/cvdc/bol/pdf/10-ayudas.pdf (accessed 27 April 2004).

14. Law 15/2001, Spain, de 9 de julio, de fomento y promoción de la cinematografía y el sector audiovisual (BOE, 10/07/2001).
15. Ibid.
16. Martin Dale, *The Movie Game: The Film Business in Britain, Europe and America* (London: Cassell, 1997), p. 122.
17. Tomás Pladevall, Cinematographer and President of the Spanish Association of Directors of Photography (AEC), from an interview with the author, 19 December 2003.
18. Bigas Luna, director, from an interview with the author, 31 March 2004.
19. From an interview with the author, 19 January 2004.
20. Eric Taub, 'Digital Projection of Films is Coming. Now, Who Pays?' *New York Times*, 13 October 2003, p. C3.
21. Cited on the *Internet Movie Database*, 'Business Data for Star Wars Episode II: Attack of the Clones', at http://www.imdb.com/title/tt0121765/business (accessed 27 May 2004).
22. Ibid, 'Business Data for Once Upon a Time in Mexico', http://www.imdb.com/title/tt0285823/business (accessed 27 May 2004).
23. Ron Magid, 'Exploring a New Universe: George Lucas Discusses His Ongoing Effort to Shape the Future of Digital Cinema,' *American Cinematographer* (September 2002), at http://www.theasc.com/magazine/sep02/exploring/ (accessed 20 February 2004).
    Lisa Zlotnick, 'Interview: Robert Rodriguez of "Once Upon a Time in Mexico",' *Cinema Confidential News*, 15 September 2003, at http://www.cinecon.com/news.php?id=0309152 (accessed 10 March 2004).
24. Ministry of Education and Culture, Institute of Culture and the Visual Arts, Spain, *Costes de producción de largometrajes*, at http://www.cultura.mecd.es/cine/cvdc/bol/pdf/EVOLUCION_COSTES_PRODUCCION_LARGOMETRAJES.pdf (accessed 28 April 2004).
25. In 2002, documentaries accounted for 19.1 per cent of feature film releases. See Atocha Aguinaga, 'La crisis', *Academia: Revista del cine español* (Winter 2003), p. 53.
26. Miguel Juan Payán, '*28 Days Later*: Rodada en DV', *Shooting: Mundo Audiovisual*, no. 14 (undated), p. 42.
27. Pladevall, 19 December 2003.
28. Ibid.
29. Taub, C3.
30. The top five distribution companies in 2003 were The Walt Disney Company Iberia SL, United International Pictures SL, Warner Sogefilms AIE, Columbia Tri-Star Films de España SA, Hispano Foxfilm SAE. These five companies accounted for nearly 70 per cent of ticket sales that year. See Ministry of Education and Culture, Institute of Culture and the Visual Arts, Spain, *Distribuidoras con mayor recaudación*, at http://www.cultura.mecd.es/cine/jsp/plantilla.jsp?id=85&contenido=/cine/cvdc/mc/2003/distribuidoras.jsp (accessed 28 April 2004).
31. Monzoncillo and Villanueva, p. 50.
32. Currently, because the system is new, the specifications for digital projection are such that digital masters must be made for each language. However, it is hoped that this will soon change once digital standards are established.
33. Ricardo Gil, interview with the author, 7 May 2004.

34. Bob Tourtellotte, 'Digital U.S. Theaters Start to Pay Off for Regal,' *Reuters*, 21 March 2004 http://www.forbes.com/reuters/newswire/2004/03/21/rtr1306404.html (accessed 28 March 2004).

35. Andreas Fuchs, 'Cinemedia Version 2.0: Regal Refines the Pre-Show,' *Film Journal International*, 1 October 2004, at http://www.filmjournal.com/filmjournal/features/article_display.jsp?vnu_content_id=1000720837 (accessed 15 January 2005).

36. José María Aragonés, Artistic Director of Filmtel, the post-production arm of Filmax production company, interview with the author, 19 January 2004.

37. The Digital Cinema Initiative (DCI) is a group created by the seven major Hollywood Studios to create standards for DIGITAL film projectors. They are expected to complete the standards sometime this year.

38. In 2003 the total population of the EU-15 was 379.5 million, while Spanish speakers in Latin America totalled 350 million. See 'Oh, to be in Europe', *The Economist*, 26 June 2004, at www.economist.com (accessed 26 June 2004).

39. Figures are from *Lumiere: Database on admissions of films released in Europe*, European Audiovisual Observatory, at http://lumiere.obs.coe.int/web/sources/EN/analyse.html (accessed 22 March 2004).

40. See Colin Hoskins, Stuart McFadyen, and Adam Finn, *Global Television and Film: An Introduction to the Economics of the Business* (New York: Oxford University Press, 1997), p. 40. Buying power ranking is given as (1) English, (2) Japanese, (3) German, (4) French, (5) Italian and (6) Spanish. And the largest group of native speakers are Mandarin Chinese.

41. Countries included were Argentina, Bolivia, Chile, Columbia, Cuba, Mexico, Nicaragua, Peru, Venezuela. See UNESCO Institute for Statistics, *Films and Cinemas: Number, Seating Capacity, and Annual Attendance, 1995–1999*, 28 April 2004, at http://www.uis.unesco.org/TEMPLATE/html/Exceltables/culture/Film.xls (accessed 10 July 2004).

42. Argentina, Bolivia, Columbia, Chile, Cuba, Spain, Mexico, Nicaragua, Portugal, Puerto Rico, Uruguay and Venezuela.

43. *Academia* (June 2004), p. 7.

44. *Academia* (Winter 2003), p. 18.

45. In 2003, there were 459 new feature film releases in the USA (see Motion Picture Association, *US Entertainment Industry: 2003 MPA Market Statistics*, at http://www.mpaa.org/home.htm, Keyword 'US Economic Reviews', accessed 15 June 2004, p. 15), and the typical US feature has a 2,000 copy domestic release (see *Screen Digest*, quoted in Taub C3). Spain released 110 films, and the average number of copies per film was 71 (see Ministry of Education and Culture, Institute of Culture and the Visual Arts, Spain, *The Spanish film industry trends*, at http://www.cultura.mecd.es/cine/cvdc/ev/pdf/ICAA_INGLES.pdf MEC, 'Trends', p. 10). (accessed 25 June 2004).

46. José María Caparrós Lera, interview with the author, 7 May 2004.

47. Although the state government does not grant subsidies for digital films, several of the country's 17 autonomous communities do.

48. Sergi Ovide Maudet, 'Re: Preguntas,' email to author, 24 March 2004.

49. Luna, interview.