**The Dark Knight Rises, and takes Imax with him**

Christopher Nolan is singlehandedly transforming the prospects of the biggest picture show of all



Truly immersive? ... an Imax screening of The Dark Knight Rises. Photograph: Julio Cortez/AP

It may be that the awful events at the Century 16 multiplex in Aurora, Colorado, will forever cast a shadow over cinema-going. Yet [The Dark Knight Rises](http://www.guardian.co.uk/film/movie/141046/dark-knight-rises) could also point the way to a brighter future for an increasingly troubled industry. It could help reshape the way we watch movies.

1. The Dark Knight Rises
2. **Production year:** 2012
3. **Country:** Rest of the world
4. **Cert (UK):** 12A
5. **Runtime:** 164 mins
6. **Directors:** Christopher Nolan
7. **Cast:** Aidan Gillen, Anne Hathaway, Christian Bale, Daniel Sunjata, Gary Oldman, Joseph Gordon-Levitt, Juno Temple, Liam Neeson, Marion Cotillard, Matthew Modine, Morgan Freeman, Sir Michael Caine, Tom Hardy
8. [More on this film](http://www.guardian.co.uk/film/movie/141046/dark-knight-rises)

The film includes [72 minutes of footage](http://www.comicbookmovie.com/fansites/JoshWildingNewsAndReviews/news/?a=63702) shot on the [Imax system](http://thefilmframe.com/2012/02/23/what-is-imax/), the most ever for a studio narrative feature. For director [Christopher Nolan](http://www.guardian.co.uk/film/christopher-nolan), that meant working with cumbersome, jitter-sensitive and [noisy cameras](http://entertainment.howstuffworks.com/imax3.htm) capable of only three-minute takes and requiring 20 minutes to reload. Still, he's in no doubt that the extra effort was worth it. He believes he has secured in return "[the best quality image that has ever been invented](http://www.nytimes.com/2012/07/15/movies/how-the-dark-knight-rises-makes-use-of-imax.html)".

In an Imax ("image maximum") camera or projector, [70mm film runs sideways](http://www.technewsdaily.com/235-how-imax-works.html), taking up 15 sprocket holes per frame instead of 35mm's four. The resulting picture is 10 times larger with 10 times the resolution. Ideally, it's displayed at up to twice the usual brightness, on a curved screen that can be as tall as an eight-storey building. Together with 360-degree surround sound and stadium seating, it's supposed to provide the "[most immersive motion picture entertainment](http://www.imax.com/corporate/)" available.

Nonetheless, the format proved slow to catch on. Both the system and content distribution are controlled by [one Canadian company](http://www.imax.com). Its first effort, [Tiger Child](http://www.imaxtrailers.com/2011/10/tiger-child/), was a 17-minute animated folk-tale that premiered in 1970. Live-action narrative was a problem, not only because of the production costs, but because camera noise meant dialogue had to be post-synced. Thus, science and nature documentaries became the system's staple fare. The market for these was limited, so few Imax-dedicated theatres came to be built.

By the turn of the millennium, however, the company had grown eager to crack fiction. [It invented a digital remastering procedure](http://gizmodo.com/5250780/how-regular-movies-become-imax-films) that enabled existing films to be enlarged frame by frame. In 2002, an upgrade of Apollo 13 flopped, but the following year [a remastering of The Matrix Revolutions](http://www.cinemareview.com/production.asp?prodid=2258) was released simultaneously with the conventional version, [and did good business](http://www.prnewswire.com/news-releases/matrix-fans-continue-to-reload-in-imax-71403077.html). Upgrades of Superman Returns, Star Trek, Avatar, Alice in Wonderland, The Amazing Spider-Man, Men in Black 3 and Prometheus have followed, but tarting up 35mm material was hardly fulfilling the format's potential. Only original shooting in the Imax system could do that. It fell to one man to grasp this nettle.

During his childhood in Chicago, [the young Nolan became fascinated by Imax](http://online.wsj.com/article/SB10001424052702304299304577347940832511540.html) while watching documentaries such as [To Fly!](http://www.imdb.com/title/tt0075333/), a history of aviation, at the city's Museum of Science. He grew up determined to make the format itself fly, and in 2008, [The Dark Knight](http://www.guardian.co.uk/film/movie/122806/dark.knight/review) became the first major Hollywood feature to include substantial segments shot directly on to Imax stock. The results were [impressive](http://www.guardian.co.uk/film/2010/oct/14/imax-cinema-3d), but Nolan wasn't satisfied. He told Warner Bros he wanted twice as much Imax content in the franchise's final instalment.

Following Nolan's lead, other directors, including JJ Abrams, Brad Bird and Michael Bay, have shot sequences in Imax. The success of [the Avatar reissue](http://www.imax.com/movies/m/avatar-special-edition-an-imax-3d-experience/) gave the format a boost, and [in 2010 the company's share price rose by 150%](http://articles.businessinsider.com/2010-02-02/entertainment/29981026_1_imax-avatar-stock-price). However, after less profitable remasterings it then fell back.

Meanwhile, a rollout of converted auditoriums with less than elephantine screens in ordinary multiplexes, projecting [a digital version](http://news.bbc.co.uk/newsbeat/hi/technology/newsid_7766000/7766558.stm) of Imax rather than 70mm celluloid, provoked a backlash from some filmgoers. After paying an often hefty ticket premium for a less than optimal experience, [they felt they'd been short-changed](http://azizisbored.tumblr.com/post/106587114/reblog-the-fuck-out-of-this-warning-amc-theaters-are). [A "Stop the LIEMAX" petition was organised](http://www.denofgeek.com/movies/14361/the-incredible-shrinking-imax-screen). Against this uncertain background, the fate of the format has seemed to hang on the impact of the Imax version of [The Dark Knight Rises](http://www.guardian.co.uk/film/movie/141046/dark-knight-rises). So what's it like?

Watching the film on Britain's biggest Imax screen (20 metres x 26 metres), at [the BFI's Waterloo theatre](http://www.bfi.org.uk/about-bfi/business-services/venue-hire/bfi-imax), I didn't find it particularly immersive. Whereas [3D](http://www.guardian.co.uk/technology/3d) tries to draw you into the action, Imax leaves you [watching a screen](http://www.lfexaminer.com/20090522b.htm), however big that screen may be. Other formats have done more to inject filmgoers into the drama. In the 50s, [Cinerama](http://www.widescreenmuseum.com/widescreen/wingcr1.htm) deployed three wide-angle cameras and projected its images on to three separate screens, thereby creating a near-semicircle around the audience. [That's what I call immersion](http://www.nytimes.com/2012/07/08/technology/movie-screens-small-to-big-to-small-again-digital-domain.html?_r=1).

Yet Waterloo did offer something else: spectacle, on a scale I'd never previously experienced. The 007-style aerial prologue of The Dark Knight Rises is doubtless impressive enough on a standard screen. So, I presume, are the cratering of the football pitch, the detonation of the bridges and the many ravishing portraits of Gotham's skyscape. Nonetheless, on 70mm Imax, on a full-size Imax screen with Imax sound, these things feel qualitatively different and simply stunning.

Spectacle has become an ever more crucial element in what cinemas offer, even though some regret this. The industry is under siege from hardware such as large-screen TVs, smartphones and tablets, software such as Blu-ray and downloads, and piracy. Visual shock and awe have become its most effective defensive weapon. There were hopes that [3D](http://www.guardian.co.uk/technology/3d) would lock in and enhance their potency, but that format's early promise [seems to be fading](http://www.guardian.co.uk/film/2012/mar/06/3d-films-lose-appeal). [There's 4D, too](http://www.guardian.co.uk/film/2012/mar/09/4d-vibrating-seats-launched-uk-cinemas), but that has [evoked derision](http://www.guardian.co.uk/film/2011/jul/12/4d-cinema-opens-punch-seoul) more than anything else.

Compared with such arguably gimmicky contrivances, Imax simply offers the movies bigger and better. For indie human dramas, that may be no big deal, but for the youth-targeted blockbusters on which cinemas now depend, it really ought to make a difference. And if a film's going to cost [more than $200m](http://www.latimes.com/entertainment/envelope/cotown/la-et-ct-dark-knight-rises-tracking-avengers-20120716%2C0%2C4678609.story) to make, you might as well go the extra budgetary mile. In return, Imax promises to recreate the sense of occasion that movie-going used to have, but has now largely lost.

For Imax to make a real contribution, we'll need to see not just more studios following Warners' lead, but new purpose-built cinemas as well. So far, Britain has only [19 Imax screens](http://www.lfexaminer.com/ImaxMapUS.htm), and some would consider only five of these to be the real thing. Still, they're currently buzzing. [Waterloo took £1m in advance bookings for The Dark Knight Rises](http://www.telegraph.co.uk/culture/film/film-news/9409940/The-Dark-Knight-Rises-breaks-pre-sales-records-at-BFI-IMAX.html) even though the best seats cost £19.50 each.If you can afford it, and can find a seat, you should give Nolan's full-blown vision a try. You may help build a more robust future for cinema. And with the aid of Imax sound, you should even be able to work out most of what Bane is trying to say.

• This article was amended on 24 July 2012. The original stated that Britain currently has 11 Imax screens