

# HEART STRINGS

By Michael Goldman

Custom lensing, low light, and a personal link to the period drama *Chevalier*.

**F**or cinematographer Jess Hall BSC ASC, shooting director Stephen Williams' historical drama, *Chevalier*, was one of the most compelling opportunities of his professional career.

Hall insists the movie represents "some of my best work" and, in many ways "pushes the boundaries of low-light digital cinematography." But more important than all that, "the movie is extremely personal to me as it recounts the story of a significant African-European artist."

Hall explains that when his agent first sent him the script, he felt as though "they had actually finally found something that connected to my life and interests on a very personal level."

*Chevalier* recounts a significant period in the life of the French-Caribbean violinist, composer and swordsman, Joseph Bologne, Chevalier de Saint-Georges, who was an important member in the court of French queen, Marie Antoinette, at a time in history when the rage of revolution was just starting to percolate on the streets of Paris.

His achievements were many – modern scholars rank him as one of the era's preeminent composers and, at one time, he was considered the top swordsman in Europe. Those accomplishments, and Chevalier's unique position of dwelling in a so-called bourgeois class that he clearly was not a part of, were even more incredible, considering the fact that Bologne was the illegitimate son of a French plantation owner on the Caribbean island of Guadeloupe and one of his slaves.

Hall was particularly drawn to this story – of a black man rising to the highest levels of French society

at the most turbulent time in its history – as he is the son of a Jamaican father, whom he describes as "a radical intellectual," and a British mother who is a historian specializing in the Caribbean and the British Empire. As such, Hall was exposed at an early age to complex ideas around art, culture and social equality. Filming the movie, therefore, meant more to him than simply fulfilling another job.

"The themes in the film connected personally to the legacy of my own family and my own life experience," Hall relates. "I knew I could bring a special insight to this project. *Chevalier* existed essentially between two cultures. I know what it is like to inhabit a double consciousness, to be of Caribbean and European heritage, and to explore that space through artistic practice and expression."

"For a cinematographer, I think it is quite unusual to have a project that feels so personal. Often, when you begin a commercial project, you have to try and find a

way in. On this project, I already had a very clear way."

The path Hall then had to travel included early decisions on how to create a lighting aesthetic for the period piece in ways that would best help tell the story, and evoke some of the many references he came up with during his extensive research phase.

"I grew up experiencing two very different kinds of light," Hall says. "There was the hard equatorial light of Jamaica, where I spent my summers with my extended family, and then, there was the soft, silver-gray light of Northern Europe. My artistic sensibility represents a fusion, and in moments, a tension between these two opposing forces."

Hall's imagery in the film was based on a crucial research trip to Paris with production designer Karen Murphy, and intense study of the artistic works of 18<sup>th</sup> century painters such as Thomas Gainsborough, Francois Boucher and Joshua Reynolds.

He also referenced several period films, including



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*Dangerous Liaisons* (1988, DP Philippe Rousselot AFC ASC) and *The Age Of Innocence* (1993, Michael Ballhaus ASC), as well as *Birdman or (The Unexpected Virtue Of Ignorance)* (2014, DP Emmanuel Lubezki AMC ASC) for its fluid camera movement. Hall adds that Kubrick's *Barry Lyndon* (1975, DP John Alcott BSC) was the most important reference.

Hall concluded that the story could be shot digitally, but wanted to explore the use of extreme low light to create authentic environments and an immersive experience. This approach made extensive use of candlelight, sometimes supplemented with low-key Tungsten illumination. Additionally, strategic iridescence was incorporated into lighting the of the vastly differing skin tones of the actors featured in the film.

The movie was shot entirely in Prague, between September and November 2021, in collaboration with Czech gaffer, David Kritz, who helped Hall evoke qualities of some of the unique lighting he saw in those oil paintings and in some of those historic films.

"I had always greatly admired Kubrick and John Alcott's work on *Barry Lyndon*. I wanted to use inspiration from that to craft a digital exploration of low-light period cinematography, using the best tools available to us today," he says.

"The film *Barry Lyndon* has an exceptional quality of light. I projected it with some friends during my research process, and one thing that struck me was that it was shot in incredibly low light. Yet, what I remembered was not the darkness, but the light, particularly the light on faces. I imagined a luminescence to our actors' skin, especially lead actor Kelvin Harrison, Jr. who plays *Chevalier*.

"The goal was a kind of naturalism, but I also had a desire to light Kelvin's skin in a way that I felt is not often done. Darker skin tones have not always been represented with integrity. I had a specific approach – I wanted *Chevalier* to glow. I was seeking a luminosity on Kelvin's relatively dark skin, despite the fact that many scenes were frequently staged in dark environments. So I devised a multi-faceted strategy that would circumvent muddy images or over-compressed shadows.

*Chevalier* is a shining light in this story, a hero and a revolutionary, and I wanted to evoke that. To get that kind of iridescence involved working a lot with reflective light on his skin, using the angles of reflection with larger sources and with candlelight. That was often a tricky

exercise, especially when he was sharing the frame with a Caucasian character Marie-Josephine, played by Samara Weaving, which meant the lighting had to accommodate two very different skin tones in one frame."

The need to work extensively with real candlelight was also crucial to Hall's lighting strategy. Some night interior candle-lit scenes were augmented predominantly with very low-level supplemental light, such as helium balloons and soft Tungsten sources. But, the cinematographer emphasises that, "candles are quite hard to work with as a solo source, because they are actually quite hard light, and you can get multiple shadows. Therefore, we often supplemented the candlelight with something that was almost fill light, whilst the candles served as the key light."

Day interiors featuring natural light were also often

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supplemented. For example, a key scene in which *Chevalier* wins an important fencing match, causing the queen to make him a Chevalier in the first place. To create natural light streaming-in through the windows, Hall used a 100ft x 40ft. cantilevered bounce outside a south-facing bank of windows using indirect ARRI M90 and ARRI 18K HMIs. "The light was changing all day, so that helped me block the sunlight and create soft, consistent daylight, even after sunset," he explains.

Meanwhile, after extensive testing, Hall chose the Sony Venice camera to shoot the movie, especially attracted to its low-light capabilities using the 2,500ISO option. A bigger question, however, for Hall was how to lens the picture. In collaboration with Panavision VP of optical engineering, Dan Sasaki, Hall was able to have Panavision construct unique, customised, high-speed lenses to maximise his ability to shoot the night interiors in candlelight.

"We worked on a prototype lens that was large-

format and could cover the sensor of the Sony Venice in the 1.85:1 aspect ratio I wanted," Hall reveals. He says the lenses that resulted from that work – a package ranging from 28mm to 100mm, plus a 90mm micro – "are some of the fastest large-format lenses available. The 50mm lens features what Dan referred to, in our initial meeting, as 'The Holy Grail' – a 0.9 aperture!"

"Some of the night interiors in the movie were filmed at sub-1ft. candle range," he continues. "Focussing at this T-stop with a moving camera was only made possible by unique alterations to the lenses, recent developments in camera technology, and the tools required to maintain focus. Essentially, these high-speed lenses did not behave like modern, mathematically sharp high-contrast lenses. The fall-off was softer, therefore creating a larger area of perceived sharpness. The transition from sharp to soft was gentler, because there was never anything pin-sharp on the lens.

"Dan also worked on the lenses' close-focus capability, because we often placed the camera close to *Chevalier* to experience the world from his perspective. These lenses have a kind of ethereal feel to them. The depth-of-field is not perceived as extremely shallow like you would expect from a T0.9 to T1.4 lens. That was something we managed to achieve, which also made it possible to move the camera in the way we desired and to maintain focus. Without modified lensing, the fluidity and flexibility of camera movement we employed might not have been possible."

Hall adds that the 90mm micro was also crucial for certain shots where music sheets, with notes penned by *Chevalier*, were closely highlighted as he was imagining his compositions.

"As he imagines the note, the note comes into focus," he says. "That is why Dan built us the 90mm micro, which was more than 1:1. He managed to build it in a small form factor and with a very specific character to the fall-off in focus."

The other crucial creative decision Hall made was to make extensive use of a moving camera. Steadicam was the primary tool of preference for this, but a Technocrane and a dolly with an ARRI remote head were also utilised for certain sequences. Hall says his purpose with this choice was to achieve "fluidity and elegance of movement to compliment the unique compositions of *Chevalier*."





For this work, Hall relied heavily on his single camera operator, Geoffrey Haley SOC, who had experience as a concert cellist and understood how to elegantly follow a musician and work with musical sequences.

Hall says he, director Stephen Williams, and Haley

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worked together to create “a camera choreography that was largely in harmony with the music. Using the pre-score, we started working on camera-pacing early. We were able to time camera movement on the Steadicam precisely. Geoff, being a former concert cellist himself, could synchronise with ease as he has extensive musical training.

“In one sequence, where we see Chevalier and Marie-Josephine falling in love, we choreographed the camera movement to within the accuracy of a single note. We knew exactly where the transitions were going to occur and, with the collaboration of our fantastic music department, we were even able to make slight edits to the score. The timings of the camera moves for each section of that score were extremely tight. The syncopation of camera movement to the music was executed by Geoff with significant precision.”

More generally, Hall says that the mission Williams gave him regarding camera movement was to make sure viewers got “an incredibly immersive experience,” meaning he wanted to film the world largely from Chevalier’s point-of-view.

“The idea was essentially to inhabit the subjective,” he explains. “Stephen wanted a consistent approach to the camera syntax. A lot of the world was revealed with quite a simple classic structure, by following Chevalier through environments, seeing him look, and seeing what he sees.”

Czech technician Viktor Lonek served as DIT on the project, managing a single show-LUT that was designed by Company 3 digital intermediate colourist Yvan Lucas

in collaboration with Hall. During post, Lucas relied on the ASC CDL correction system for various adjustments to candlelit scenes compared to daylight scenes. Hall says the DI process largely involved a series of “fine adjustments” performed by Lucas, whom he calls “a master colourist.”

Hall and Lucas both suggest that, among other things, *Chevalier* addresses an interesting question—how the aesthetic quality of a period film like *Barry Lyndon* can be translated into a digital context.

“We adjusted specific colours, saturation, and reduced contrast,” Lucas remarks. “Colour grading was largely done using printer lights to maintain consistency of scenes, like a print-light, relying on the tools we have in the Baselight [colour correction system]. But the dailies were already so beautiful that I didn’t need many power windows. I really hope the audience will appreciate as much as I have the nuance in Jess’ lighting.”

