

A 3D lenticular portrait of Karl Lagerfeld for AnOther Magazine and Chanel by Rob Munday, 2015



In 2015, I was commissioned by Jefferson Hack and Dazed Media's AnOther Magazine to shoot and create a three-dimensional lenticular light sculpture portrait of Karl Lagerfeld for its 15th anniversary limited-edition cover. In accepting and conducting the commission, I became one of a select group of photographers, which includes Nick Knight, Craig McDean, Collier Schorr, and Willy Vanderperre, to have been commissioned to shoot a cover for one of the most iconic fashion magazines in the world. Not only did I direct and shoot the portrait, but I also hand-made the 200 lenticular portraits that were later adhered to the magazine's cover.

This cover is thought to be the world's first 3D lenticular fashion magazine cover.

I also supplied large-format lenticular portraits to Chanel and to Karl Lagerfeld for his personal art collection.

Before the commission, I had famously shot and created a three-dimensional holographic and lenticular portrait of Queen Elizabeth II, and it was this that attracted the interest of Jefferson Hack, best known for founding the iconic fashion magazine company Dazed & Confused with photographer Rankin, and for having fathered a child with the supermodel Kate Moss!

The portrait shoot was conducted on 8th December 2015 at Karl Lagerfeld's private photography studio within his bookshop known as La Librairie 7L, situated at 7, rue de Lille, Paris, just next to Le Musée du Louvre.



La Librairie 7L, located at 7, rue de Lille, Paris.

Together with my then agent Willy Camden, who also took responsibility for lighting together with my second lighting assistant Sam Jackson, I drove my proprietary 3D camera system, the VIP system (Video Images with Parallax), originally designed and built by me to shoot my portrait of Queen Elizabeth II in 2003/2004, to Paris in a hired transit van the day before the shoot.

The portrait shoot

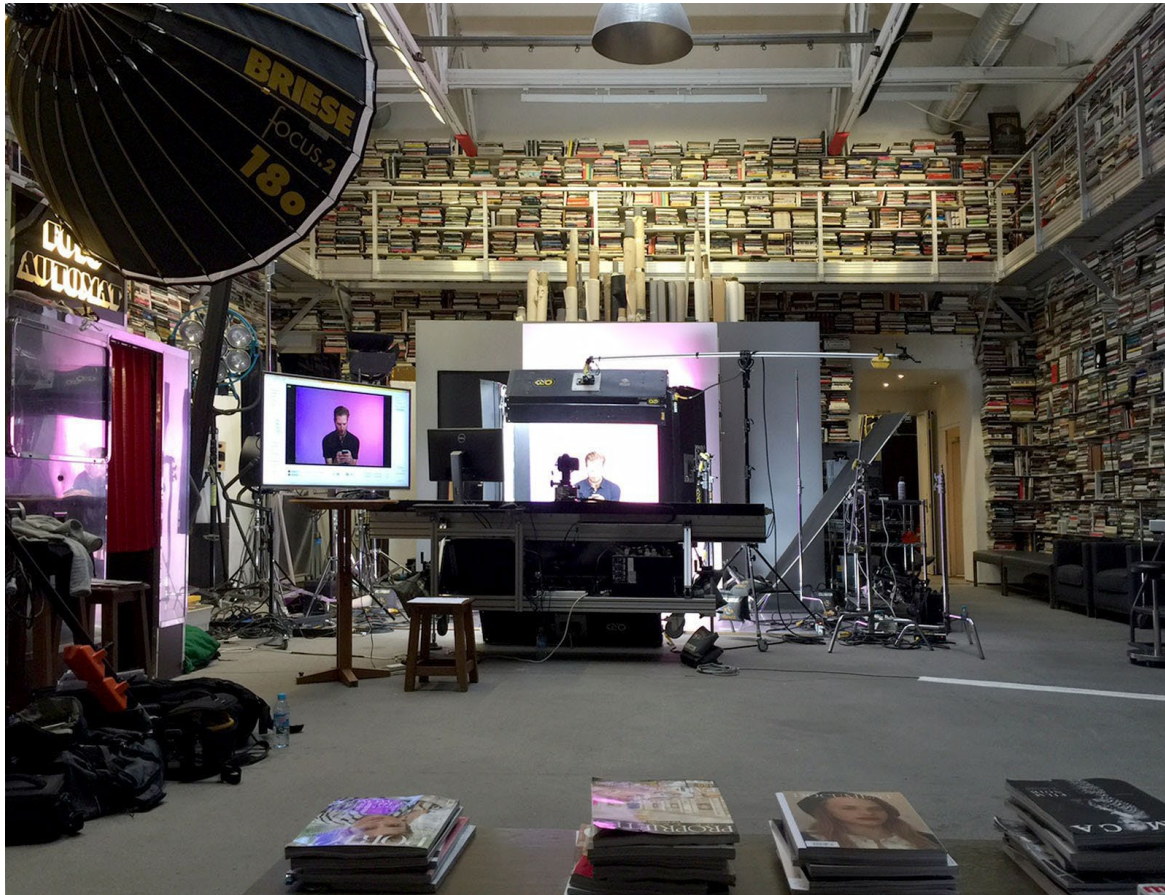
The next morning, my assistants and I arrived at La Librairie 7L, to set up for the shoot and I worked hard to erect the studio and test the camera system and the lighting before Karl's arrival after lunch.



Rob Munday sets up his VIP camera system in Karl Lagerfeld's personal photography studio.

As with most high-end commercial and advertising shoots, the style of the portrait had already been determined by Chanel's creative director in New York, leaving less room for spontaneous creativity by me.

A pink and mauve background had already been chosen before the shoot, and so Willy Camden and Sam Jackson busied themselves with obtaining just the right colour and gradation using lighting gels whilst I commissioned and tested my camera system.



Assistant Sam Jackson poses for test shots.

As the morning progressed, test shots were emailed to the creative director in New York in real time. Word came back that the lighting, set up by my agent and assistant Willy Camden, was not suitable for the portrait, and so Willy proceeded to adapt it to the director's liking. When everybody was happy with the colour and lighting, and the camera system was, to a very large extent, functional, it was time for lunch.

Karl had arranged for his personal chef to attend the shoot and to provide a fabulous lunch for the plethora of people that had arrived to watch the shoot, numbering over fifty, however, with adrenaline to keep me going, I took the opportunity to check every aspect of my camera system alone in the now calm of the vacated studio. At least three times, however, I felt a tap on my shoulder and turned to be asked politely when I was also coming to lunch. On the third occasion, I was told that unless I also came to lunch, nobody else could start eating! It was a tradition that nobody else could eat until the photographer himself had started eating, a custom that I had been unaware of! I, therefore, obliged and went to lunch.

Soon after lunch, Karl arrived clutching multiple jackets and items of jewellery and asked me to choose what he should wear for the portrait. I selected a metallic patterned jacket, which would provide interesting reflections in the final image, and a diamond-encrusted platinum tie pin that featured a photograph of Karl's beloved pet cat Choupette. Karl loved the idea of being immortalised with a picture of his favourite pet. I also chose the tie pin as he realised that the photograph of Choupette would ultimately lie on the image plane of

the 3D lenticular image, and thus be in sharpest focus.



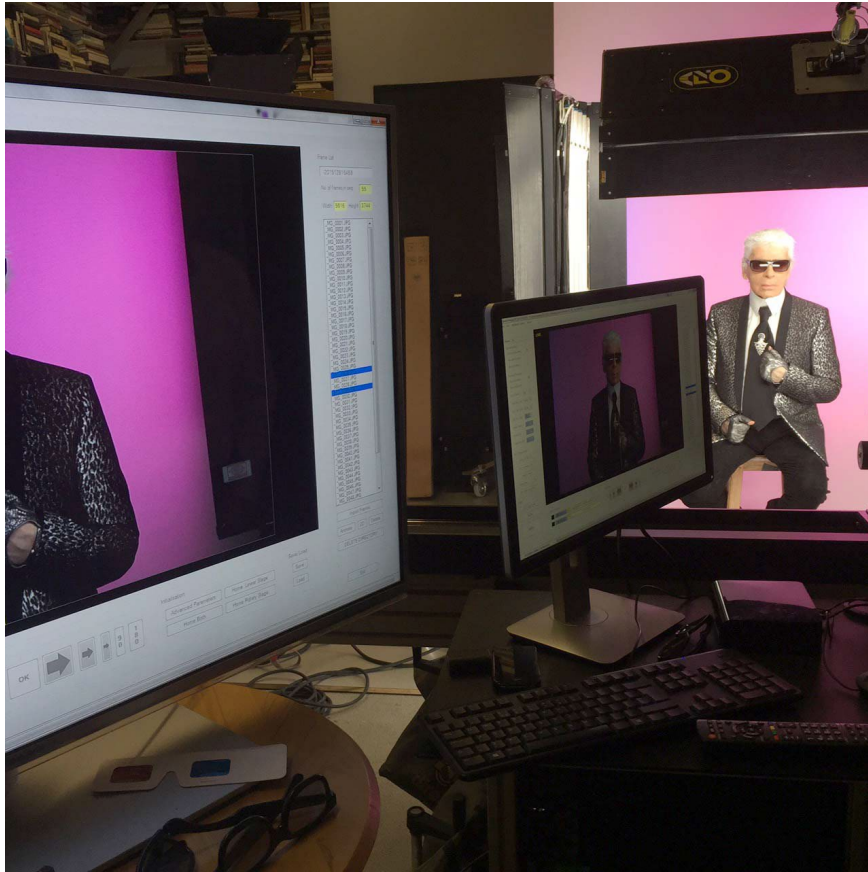
Karl Lagerfeld's diamond-encrusted platinum tie pin

It was at this point that I diplomatically asked Karl if he would like to direct his portrait. Before the shoot, I had been told that Karl wanted it to be a 'self-portrait'. Karl, of course, was also an accomplished photographer. Karl's immediate response, however, as I expected, was to decline, saying that he had no idea how to shoot three-dimensional portraits or use my camera, and stated that he would be very happy for it to be entirely my work. I, therefore, proceeded on the basis that full creative credits would go to me for the portrait.

The rather full studio included directors from Chanel, Karl's own entourage, Jefferson Hack, and a multitude of assistants and friends of Karl, all of whom stood at the back of the studio to watch me conduct the shoot. This was a far cry from every other portrait shoot that I had conducted before, where, at most, only 2-3 people were present.

After I had chosen the attire, Karl went to the back of the room to a small changing room and bathroom to dress and make himself up. Upon his return, I directed him to stand in front of the camera, suggesting that he hold the lapel of his jacket with his right hand to both show off his metallic gloves and to provide greater three-dimensional depth and interest in the final portrait. Ensuring that he did not cover the diamond brooch, the centre piece of the portrait, with his hand, I conducted a series of test shots, showing each test portrait to Karl in 3D, by way of his large 3D Television, after each shot. Karl, Jefferson Hack, and a host of others crowded around the TV and were amazed by the three-dimensional portraits.

After about an hour, I decided that it was time to take the final shots. At this moment, however, Karl made it clear that he needed to go back to the bathroom, I assumed for a toilet break. Karl then returned and, expecting nothing to have changed, I directed Karl to adopt the same position as before, sitting on a tall stool, but I was suddenly taken aback to see that a layer of white powder had appeared all over Karl's face, on the rim of his glasses, on the bridge of his nose and above his mouth. Not wishing to embarrass Karl in front of fifty people, and not knowing what substance it was, I took one of Karl's assistants to one side and whispered that he was mysteriously covered in a white powder. Thankfully, the assistant offered to wipe it off, and the final shoot commenced. The white powder turned out to be a product that Karl applied to his hair to make it extra white.



Rob Munday shoots a portrait of Karl Lagerfeld.

I successfully shot a further five final sequences, visualising each one in 3D, before calling it a wrap.

At the end of the shoot, I showed his large-format portraits of Queen Elizabeth II and Dr Edward Papenfus to Karl Lagerfeld, Jefferson Hack, the directors of Chanel, and others. All were suitably impressed.

Whilst packing up my camera system, Karl came over to me to privately thank me for the shoot and portrait, and asked if I liked the Queen! I replied, 'of course, she's a wonderful woman', at which point Karl told me a quite surprising story about a visit by the Royal family, including the Queen and her sister Princess Margaret, to his French chateau some years before. He told me that the Queen had been charming but that he didn't care much for Princess Margaret as, during dinner, she had made a rather disparaging comment about the gifts of diamond jewellery that Karl had generously left in each of their places at the table. Having made the remark, Princess Margaret then intentionally dropped her piece of diamond jewellery into her glass of champagne! I was quite taken aback that Karl would tell me, a relative stranger, such a personal story, but he was very friendly and personable with me.

After packing up and placing all of my equipment back into the transit van, and a second night at the Hôtel Vinci opposite La Librairie 7L, we set sail for home. It was whilst on the ferry travelling across the English Channel that I thought to check the images I had shot of Karl in Photoshop on my laptop. I was horrified to see that Karl's forehead was still covered in the white powder that he had applied to his hair during the shoot. In the heat of the moment, surrounded by fifty onlookers and with the pressure of getting the shot done, I simply hadn't seen it. I was suddenly filled with dread that the powder might not be easy to remove at the retouching stage, especially given its proximity to Karl's hair, and this caused me several sleepless nights after my return to London.

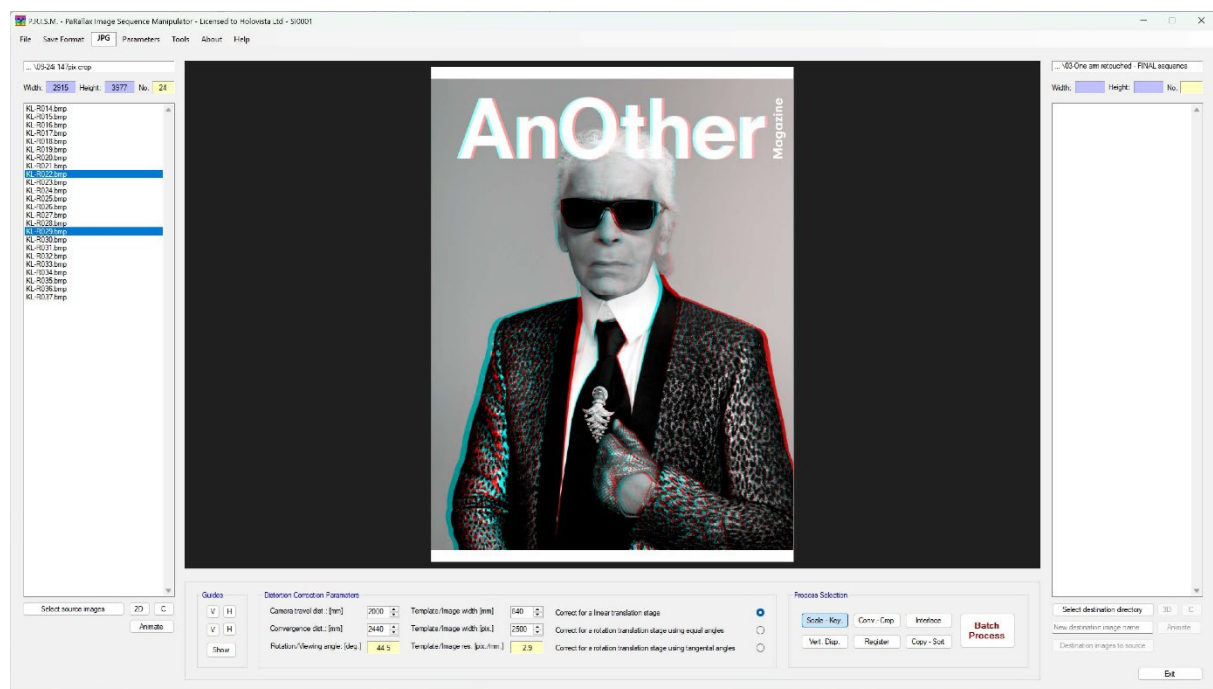


Rob Munday with Karl Lagerfeld after the shoot.

The portrait creation

Upon returning to London, my first job was to choose one of the six sequences that I had recorded in Paris and to retouch all fifty images. Metro Imaging, a London-based company, was chosen to conduct the majority of the retouching. Instructions from Karl Lagerfeld's office came thick and fast. Of crucial importance was to remove the remaining white 'hair' powder on Karl's forehead. Fortunately for me, Metro Imaging did a fantastic job of removing this. The reflections of any lights were removed from Karl's sunglasses, and wrinkles and blemishes were removed from his face. Then came the most difficult challenge of all. Karl Lagerfeld's office insisted that Karl's jaw line was reshaped and also that his right arm was made narrower. Now, this is not so difficult to achieve with a single image, but to do this in all fifty stereoscopic images in a way that did not compromise the 3D/stereoscopic integrity of the portrait was a herculean task, and likely one that has never been attempted or achieved before.

Once the retouching had been completed, the next task was to remove all the distortions that are found naturally in such parallax image sequences, such as keystone distortion, foreshortening, and scaling distortions. I also registered each image to every other to ensure that the convergence point was Choupette the cat. Both operations were accomplished using custom software, called PRISM, that I had written myself.



Rob Munday's PRISM software showing a stereographic anaglyph version of the AnOther magazine cover.
View with red-cyan 3D glasses to see a stereoscopic image.

Finally, the image sequence could be used to hand-produce the 200 lenticular images needed for the front cover. These were made entirely by me, working alone in my studio, which, at this time, was based in Richmond Lodge at Twickenham Film Studios.

Once made, an adhesive backing was applied to the lenticular images, they were laser cut to the correct size for the magazine, and then adhered to the front cover.

The unveiling, magazine launch, and AnOther's 15th anniversary party

A 36 x 48 inch, large-format glass lenticular version of the portrait was unveiled, and the anniversary magazine, complete with my lenticular portrait, was launched on the 8th March 2016 during Paris Fashion Week at a special celebration party in Chanel's haute couture salon and Coco Chanel's historic apartment in the centre of Paris.

Those present included Karl Lagerfeld, Princess Caroline of Monaco - Princess of Hanover, Kendall Jenner, G-Dragon, Pharrell Williams, Bella Hadid, Gabriel-Kane Day-Lewis, Riccardo Tisci, Clare Waight Keller, Rick Owens, and Jefferson Hack.

I was honored to have my photograph taken on the famous Coco Chanel staircase.



Top: Chanel's haute couture salon showing the unveiled large-format lenticular of Rob Munday's portrait of Karl Lagerfeld.

Bottom left: Karl Lagerfeld with Princess Caroline of Monaco.

Bottom centre: G-Dragon and Kendall Jenner.

Bottom right: The singer-songwriter, Pharrell Williams, with Rob Munday.

A second 36 x 48-inch, large-format, backlit, glass lenticular copy of the portrait, this time a 3D mock-up of the magazine cover, was also displayed at the famous Collette's in Paris. Known to be Karl Lagerfeld's favourite shop, this is where the magazines first went on sale.



Left: My wife Brigitte poses next to my portrait of Karl Lagerfeld at the famous Collett bookstore.



Right: AnOther magazine's 15th-anniversary issue goes on sale at the famous Collette's.

Further copies

After the unveiling, the original copy was gifted to Karl Lagerfeld by Chanel. I was told that he had hung it in his office.

After some weeks, Karl Lagerfeld commissioned a second 36 x 48-inch, large-format, glass lenticular copy through Chanel in Paris. This time, I created a front-lit version for Karl's private art collection, which he hung in his home.



Technical process:

1. A 'parallax image sequence' each consisting of 50 digital images was shot of Karl Lagerfeld through an angle of 29 degrees using a high-resolution Canon 5D Mark II digital stills camera and a specialised motion control system called the VIP system, originally developed by Rob Munday to record his portrait of Queen Elizabeth II.
2. This sequence of images was then digitally manipulated using a computer and specialised software to remove all the distortions inherent in 'parallax image sequences'. Such image correction is necessary to provide a stereoscopically accurate 3D image which is easy to view, does not swing as the viewer moves, and looks proportionally correct in all three dimensions. This correction software, called PRISM, standing for Parallax Image Sequence Manipulator, was written by Rob Munday and was an innovation in the creation of this kind of 3D lenticular image.
3. The corrected image sequence was then 'interlaced' to produce one single image that amalgamates all 50 frames.
4. For the large-format copies, this single interlaced image was then digitally printed using a specially modified Océ LightJet printer onto Fujitrans Crystal Archive photographic paper or film at high resolution. The resultant photographic print is also called a digitally produced 'chromogenic' print.
5. The chromogenic prints were then hand-laminated, using an optically clear acrylic adhesive laminating film, to the back of 20 lpi, 4mm thick, acrylic resin/PET film/glass lenticular lenses in perfect register. The print and lens were registered to each other to an accuracy of 1/3000th inch (1/120th mm) over the entire area.
6. For the smaller format copies, for the magazine cover, the interlaced image was printed using an Epson Stylus Pro 4880 inkjet printer at 1440 dpi onto Epson Premium Glossy Photo Paper (250).
7. The Epson prints were then hand-laminated, using an optically clear acrylic adhesive laminating film, to the back of 60 lpi PETG lenticular lenses from Microlens Technology of North Carolina, USA, in perfect register.
8. The final lenticular prints were then laminated with an adhesive backing and adhered to the front covers of the magazines.

Footnotes:

1. The shoot almost didn't happen, at least in the way that had been planned. On the night of our arrival in Paris, the day before the shoot, I had parked the hired transit van in an underground car park. Upon entering the car park, the concrete ceiling of the entrance tunnel seemed rather low, almost touching the roof of the van. Early next morning, the team and I arrived to find that it was impossible to drive the van out through the exit tunnel without hitting the concrete ceiling and becoming wedged in the tunnel. Fortunately for all concerned, a helpful car park attendant managed to hold up the long line of early morning traffic now entering the car park so that I could leave via the entrance tunnel through which I had initially arrived. It was a tense moment.
2. It was only after the magazine had been published that I discovered the incorrect credits on its back cover. Instead of acknowledging me as the sole photographer and creator of the portrait, the magazine attributed it as a Self-portrait by Karl Lagerfeld in association with me. Unfortunately, my then-agent, Willy Camden, who was responsible for managing the project, had taken his eye off the ball. In truth, Karl Lagerfeld had played no creative part whatsoever, neither in the shoot, the selection of the portrait, nor in the creation of the lenticular image. I informed the publishers, but the timing prevented the credit from being corrected. However, AnOther Magazine assured me that they would update the credits on their website and in all future promotional articles for the magazine. This was demonstrated by the article *Karl Lagerfeld immortalized in holographic AnOther cover*, shown below, and many others.



3. Karl Lagerfeld passed away on 19th February 2019, just three years after I immortalized him in three dimensions. It was one of the last official portraits of the fashion legend, Karl Lagerfeld.

DAZED

Karl Lagerfeld immortalised in holographic AnOther cover

The imitable fashion designer joins Björk, Grimes, Kate Moss and Kristen Stewart as a cover star of AnOther Magazine's 15th-anniversary issue

Fashion News

Yesterday

Text Ted Stansfield



8 shares



AnOther Magazine Volume 2 Issue 3, Karl Lagerfeld
Artwork by Rob Munday

Last month, *AnOther Magazine* unveiled [the covers of its 15th-anniversary issue](#) starring a quartet of cultural icons: [Björk](#), [Grimes](#), [Kate Moss](#) and [Kristen Stewart](#). Now, the magazine has added a fifth person to this line-up: [Karl Lagerfeld](#). The brainchild of co-founder Jefferson Hack, the 3D hologram of the fashion designer was created by award-winning holographer and artist Rob Munday and will cover 1000 copies of the magazine.

To create the hologram, Munday went to Lagerfeld's private photography studio in Paris equipped with his 3D camera system. From there he proceeded to take 50 high-resolution images of the [Chanel](#) creative director, from a variety of angles.

Speaking on the experience, Munday says, "Working with Karl was a joy, largely because he was so open to the whole idea of being immortalised in 3D. He was fascinated by the medium and the technology and exclaimed several times when seeing the results that it was 'the future'."

"At the end of the shoot I presented the final 3D portrait to Karl, displayed on a large format 3D TV," he goes on to say. "He was particularly happy to see that the picture of his beloved cat Choupette, inlaid into his stunning diamond encrusted tie pin..."

The cover has been unveiled on the same day as Chanel's AW16 ready-to-wear show – and with good reason; the issue comes complete a 30-page profile of the designer written by *AnOther's* editor-in-chief Susannah Frankel, and a shoot containing looks from the six Chanel runway collections of 2015, photographed by Colin Dodgson and styled by Katie Shillingford.

But of course, it's not the first time *AnOther* has pushed the boundaries of traditional print publishing. Last year, for its SS15 issue, the magazine debuted the world's first moving LED magazine cover, starring Rihanna.

An enlarged portrait of the cover will be exhibited at Colette in Paris for two weeks from the 8th March 2016. The issue is available exclusively at stores including Colette in Paris, Selfridges in London, and the Tate Modern, priced at £75.



AnOther Magazine Volume 2 Issue 3, Björk, Grimes, Kate Moss and Kristen Stewart
Photography Nick Knight, fashion Katy England; photography Craig McDean, fashion Alex White; photography Alasdair McLellan, fashion Alister Mackie; photography by Paolo Roversi, fashion Katie Shillingford



Magalleria

AnOther Anniversary Hologram cover issue

We have a small allocation of the exquisite 15th anniversary issue of AnOther Magazine with a hologram cover featuring a 3D Karl Lagerfeld. There are only 1000 of these anywhere. The price tag is £75.

Lagerfeld has been immortalised by holographer Rob Munday who was commissioned by Dazed Media to create the striking portrait image. Munday employed a proprietary 3D camera system, taking a sequence of fifty high-resolution photographs to achieve the extraordinary final image.

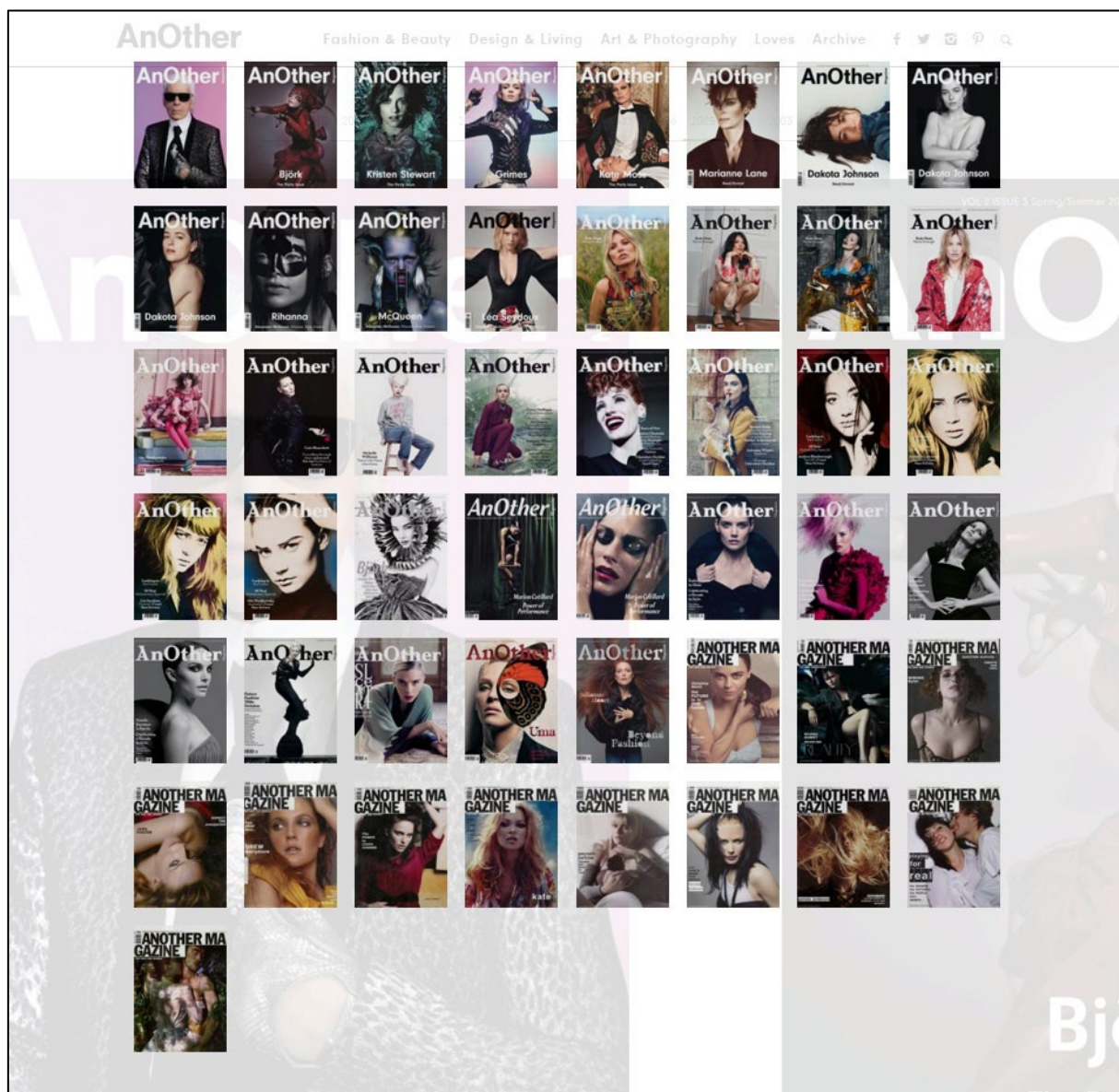
Believe us, it's quite something to behold.



Details

Culture/Fashion
Bi-annual
UK
£75

AnOther Magazine covers



The next two pages show the call sheet for the shoot:

Tuesday 8th of December 2015

call time :

**9:00 am : Thea Charlesworth (Another), Teresa Koenig (Chanel UK), photo crew,
set design, production**
1:00 pm : Sarah Lee
2:00 pm : Karl Lagerfeld & team
6:00 pm : End of shooting

location :

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Waiter	Frédéric Gouby	M.: +33 6 81 32 64 14 E.: fgouby@gmail.com
Car service	Taxi Philippe Rossignol	M.: +33 6 88 07 40 32
Prod. Manager	Ben Faraday	M.: +33 6 03 00 0630
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For : Thea Charlesworth

Hotel Bersolys Saint Germain

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T.: +33 1 42 60 19 05
For : Rob Munday, Willy Camden & Sam Jackson

Car transfers

Monday, 7th December

6:47 PM

a car picks up Thea Charlesworth at the Eurostar station to go to Hotel Bel Ami
7/11 rue Saint Benoit, 75006 Paris

Wednesday, 9th December

9:50 AM

a car picks up Thea Charlesworth at Hotel Bel Ami, 7/11 rue Saint Benoit,
75006 Paris to go to the Eurostar station (train departing at 11:13 am)

Miscellaneous

weather forecast

morning
afternoon

Cloudy, 6°C
Light rain, 12°C

sunrise : 8:31 AM
sunset : 4:55 PM



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Holographic versions

In 2016, I also created several dot-matrix miniature holographic stereogram versions using my Lightgate dot-matrix hologram master system at my French studio and home, Cuyaubere, 6565 Route de Pindats, 64290 Bosdarros, France.

I first created a photoresist master holographic stereogram using my Lightgate B digital dot-matrix hologram mastering system, a unique technology that I had invented in 1996. I also employed a new recording method called 3Digital, which I developed in 1998 and for which I received the International Hologram Manufacturers Association's 'Excellence in Holography - Best New Technique' award in the year 2000. A description of my Lightgate system and the 3Digital technique can be found in the book [*Practical Holography Fourth Edition by Graham Saxby, 2017 - Chapter 21 - Dot Matrix.*](#)

Using electroforming methods, the photoresist master holograms were copied to produce wrong-reading nickel-metal master holograms and then right-reading nickel-metal copies.

One version depicts a 24-karat gold-coated 4 x 4 array of holographic stereogram miniatures.





Also in 2016, at my request, a larger holographic stereogram miniature was created by Jeffrey Wyle, a professional holographer and friend of mine, who lives in Miami, USA.

To create this miniature, Jeffrey employed his more traditional LCD digital holographic stereogram mastering system, a system that I had helped him to build some years earlier. The system was an updated DI-HO system (Digital Input – Holographic Output) of the kind that I had invented and first built in 1991, the world's first computer-automated, LCD, digital holographic stereogram recording system.

This holographic portrait miniature was first shown at my solo show at the Little Black Gallery, London, 26 October 2017 - 07 December 2017.

Left: A photoresist test plate. Below: A framed metalised glass plate photoresist hologram.





*A 3D anaglyph version of Karl Lagerfeld for AnOther Magazine / Chanel by Rob Munday.
Use red/cyan stereoscopic glasses to view the image in 3D.*