eph 17 - the other nefertiti

Title: The Other Nefertiti

Closing music: Nefertiti - Fouki (fade to spiel @ "Elle a un tattoo d'Nefertiti sur son avance-bra")

Possibly backing:

https://open.spotify.com/track/2Qz40Zr9WCcxRKANy4M1Uy?context=spotify%3Auser%3Aspotify%3Aplaylist%3A37i9dQZF1DX4NRPrbtVmnT&si=rQDqzdE9QfWDiGISP-Qqcw

Better backing: Dr Samy Farag - Habibti

VOICES:

The Great Fredini (medium) NUFF
Cosmo Wenman (medium) JORDAN CANNING
Al-badri (Safoura)

Walter Benjamin (ANTHONY)

Neues Museum spokesperson (Спукс) a very good model. (GANYMEDE) Charly Wilder (BEELZ)

Word count: 3323

SHOW NOTES:

The artists' page, ft torrent download of the Bust:

http://nefertitihack.alloverskv.com/

The wonderful Mexican heist film MUSEO is a meditation on the duplication and authenticity of artifacts, based on a true story. Also, Gael Garcia Bernal is an ABSOLUTE smoke show throughout. My God, he's SOOO hot. You should make time to watch it; I think you'll really be glad you did. Alonso Ruizpalacios is a cut above the rest of modern Mexican cinema. Roger Ebert said so! Available through YouTube Premium here:

https://youtube.com/watch?v=ikRdynR996c

Cosmo Wenman's article goes over the similarities between the museum's private scan and the one released by the artists:

https://cosmowenman.com/2016/03/08/the-nefertiti-3d-scan-heist-is-a-hoax/

Charly Wilder's two articles for the NYT:

https://www.nytimes.com/2016/03/02/arts/design/other-nefertiti-3d-printer.html https://www.nytimes.com/2016/03/11/arts/design/nefertiti-3-d-scanning-project-in-germany-raises-doubts.html

The Neues Museum still has those €8900 replicas for sale:

https://www.smb-webshop.de/en/subjects/nofretete/2502/painted-replica-bust-of-nefertiti-gf-539?c=101031

But I printed my own using this hollowed-out version of the #NefertitiHack model, And You Can Too:

https://www.thingiverse.com/thing:1372787

http://nefertitihack.alloversky.com/

https://www.nytimes.com/2016/03/02/arts/design/other-nefertiti-3d-printer.html

https://thegreatfredini.com/2016/03/06/theres-something-fishy-about-the-other-nefertiti/

http://www.amarna3d.com/nefertiti-hack-questions-regarding-the-3d-scan-of-the-bust-of-nefertiti/

https://www.smb-webshop.de/en/subjects/nofretete/2502/painted-replica-bust-of-nefertiti-gf-539 ?c=101031

https://earlymonasticism.org/dh/nefertiti/

https://hyperallergic.com/281739/could-the-nefertiti-scan-be-a-hoax-and-does-that-matter/

"it all culminated with the Times' Charly Wilder's follow up Nefertiti 3-D Scanning Project in Germany Raises Doubts (She was aghast that none of the three experts she had spoken to for her original article had picked up on the possibility that the data was too good for their capture method)."

We cannot reveal this process because it is not replicable," [Al-Badri] continued. "And we request your understanding that we cannot reveal our hacker source. We can only applaud to hackers, whistleblowers and citizens who might go on and free the data, which actually belongs to everybody."

When mentioned, these claims seemed to amuse the artists. Al-Badri simply replied, "Of course a scan of the same thing looks the same."

http://www.amarna3d.com/project/3d-modelling-bust-nefertiti/
Paul Docherty uses
photogrammetry to construct a high-rez 3d model of the bust, no hacking the museum required.
His methodology is laborious, but it greatly informs and qualifies him as an expert commenter on the nefertiti hack. His comments here:

http://www.amarna3d.com/nefertiti-hack-questions-regarding-the-3d-scan-of-the-bust-of-nefertiti/

http://marialenacarr.com/2016/03/09/nefertiti-everywhere/

Al-Badri and Nelles propose that a copy should reside in the Neues Museum and that the original should be in Egypt.

With the knowledge of the British Museum, Wenman scanned and printed <u>a head of Selene</u> from the Parthenon in 2012.

From a world of multiplication of images, where Malraux's museum without walls has expanded almost exponentially because of the internet, *The Other Nefertiti* and works such as those of Wenman, Kahl and Docherty, carry us into a world of multiplication of objects. A tactile

expansion made possible by technological breakthroughs that seemed science-fiction to non-experts even five years ago.

Wenman proposes in his <u>piece</u> on *The Other Nefertiti*:

The world's back catalog of art should be set free to run wild in our visual and tactile landscape, and whether it turns up lit in pixels on our screens, rematerialized in our living rooms, or embedded in our architecture or clothing, it's all to the good.

https://youtu.be/iDarwoA-oK4 35 min YT vid of the artists discussing the piece
https://en.m.wikipedia.org/wiki/Nefertiti_Bust
https://blog.nationalarchives.gov.uk/nefertiti-affair-history-repatriation-debate/
https://www.afr.com/life-and-luxury/arts-and-culture/how-nefertitis-bust-ended-up-in-germany-20
180220-h0wdyb

CLIP: first 10 or so seconds of this video: https://www.youtube.com/watch?v=ESC-LsefBQo "If Berlin has a queen, it's Nefertiti..."

POSSIBLE B PLOT: Ransomware attack on a museum:

https://abc7news.com/exclusive-cyberattack-launched-on-sf-museum-computers-/5399932/https://news.artnet.com/market/hackers-attack-asian-art-museum-san-francisco-1604188

POSSIBLE B PLOT: man-in-the-middle attacks on art sales https://news.artnet.com/market/team-gallery-hack-1559818

POSSIBLE B PLOT: looted art/artifacts listed on amazon/other online retailers https://www.wsj.com/amp/articles/the-online-bazaar-for-looted-antiquities-1509466087

The early prophet of mass production, Walter Benjamin, once mused, "in the trace, we gain possession of the thing; in the aura, it takes possession of US".

For the first time in world history, mechanical reproduction emancipates the work of art from its parasitical dependence on ritual. To an ever greater degree the work of art reproduced becomes the work of art designed for reproducibility. From a photographic negative, for example, one can make any number of prints; to ask for the "authentic" print makes no sense. But the instant the criterion of authenticity ceases to be applicable to artistic production, the total function of art is reversed. Instead of being based on ritual, it begins to be based on another practice – politics.

Al-badri and Nelles call the project #NefertitiHack, a sly little admission that the data was indeed hacked

Tell the story like a heist story maybe? The episode should be about the statement by the artists that they scanned the bust themselves vis a vis the allegation that they hired a hacker to gain access to the existing high-resolution scan owned by the museum. there's probably a lot to talk about when it comes to releasing the 3d printing data of this artifact via torrent,

[If Berlin has a queen, it's Nefertiti...]

Created 33 hundred years ago by Ancient Egypt's most famous sculptor, Thutmose, the Nefertiti Bust is one of the most recognizable - and most copied - pieces of sculpture in the world. Nefertiti was the wife of Akhenaten, a pharaoah who converted polytheist Egypt to monotheism, worshipping Aten, the sun god. It's one of Egypt's most recognizable ancient artifacts, too, maybe after only the death mask of Tutankhamen, or King Tut. When I was a teenager, my hairdresser had a plaster replica of the bust in her salon. But the original bust, as we just heard, is in Berlin's Neue Museum.

In 1912, the bust was discovered in Thutmose's workshop, on the banks of the Nile, by a German archaeologist. The *German* government alleges that he had the necessary permits to return his finds to Germany, and the Egyptian government shies just a hair's breadth away from calling him a criminal. The Egyptian government began to impose sanctions on Germany over what it saw as the plunder of their cultural heritage a dozen years later, as soon as the Bust finally went on display in Berlin.

When that German archaeologist found Thutmose's workshop, and the Bust, Egypt was effectively a British protectorate. The German archaeologist misled the Egyptian authorities, misrepresenting the bust's material and showing them only a bad photo instead of the artifact itself.

The Nefertiti Bust has remained on display in Berlin for the century since its plunder, and German governments going all the way back to Hitler have refused to return it to Egypt. At the time, the British had Tutankhamun's death mask, and keeping possession of the Bust let Germany compete on the world archaeological stage. But the death mask of Tutankhamun has since been returned to Egypt, where it occupies a prime position in the Egyptian Museum in Cairo, which is the largest museum in the world. In a less impressive part of the Egyptian Museum is an unfinished bust of Nefertiti, painstakingly reassembled from plaster shards.

The Egyptian government, the Egyptian Museum, and the Egyptian Supreme Council of Antiquities have, at various times and with increasing urgency, demanded the return of the Nefertiti Bust to her place of origin. In 2020, Egypt will open a new museum, even bigger than the Egyptian Museum in Cairo. The Grand Egyptian Museum will be two kilometres away from

the Giza pyramids and feature the full Tutankhamun collection, but the German government refuses to repatriate the Nefertiti Bust for the Grand Egyptian Museum's opening.

So two German artists and an unnamed hacker, or hackers, took matters into their own hands.

I'm Stephanie Bee, and this is ephemera.

[intro sting]

[possibly intro sting directly into Arab sounding heist music - Dr Samy Farag - Habibti] In October 2015, two German artists, Jan Nelles and Nora Al-Badri, entered the Neues Museum with a modified Kinect scanner, hidden under Al-badri's scarf. In the large domed room where the Bust of Nefertiti is kept, they learned where the guards stood, the cameras watched, and where the extra guards patrolled, and when. And then, in moments where the guards stopped to chat to each other, she scanned the statue.

THEN, the artists say they handed off the data to their shadowy hacker friend; the one who'd hacked up their Kinect in the first place. The heist was profiled in a 2016 New York Times article by Charly Wilder, who lives in Berlin. In her piece, Charly interviews the Neues Museum, who say through a spokesman that *Legal steps are not currently being undertaken as the scan seems to be of minor quality* and that a detailed comparison with the museum's own 3-D data has not yet been made.

Charly draws attention to the fact that many museums have their own 3d private scans of exhibits for conservation and research purposes. In 2015, the Neues Museum even used their 3d scan of the Bust to create a series of limited-edition painted replicas, life-size and painted to match the original. They sold for 8900 euro each.

She interviews a couple of 3d experts, who tell her that for consumer-grade tech, *it's a very good model (GANY)*. She speaks to Nelles and Al-badri, who call for the original Nefertiti bust to be returned to Egypt, with a 3d-printed replica taking its place in Berlin. Her article pointedly mentions the Elgin Marbles as another example where two nations differ about cultural patrimony and the right to their own artifacts.

But the 3D printing world, and to a lesser extent the art world, had a bone to pick with the story. For one, in the teaser video al-Badri and Nelles uploaded, there's no light, infrared or otherwise, coming off the Kinect - if it had been turned on, actually scanning, the phone camera that took the video should've seen it. Well, maybe that ruined the shot, and so they faked it with the Kinect turned off. But if so, why release the video at all?

Fred Kahl, who describes himself on his About page as The Great Fredini, America's Worst Magician, and below that, a 3D printing guru, wrote a much-cited blog post about The Other Nefertiti.

The video shows the two using a Kinect Xbox controller to capture Nefertiti, and while I have no doubt the artists may have done the Kinect stunt, there is simply no way the scan being distributed was made with a Kinect. Simply put, the scan being distributed which is made of more than 2 million triangles is far too detailed to have been made with that hardware.

After talking about more technical details, like the HD resolution of the scan, The Great Fredini continues:

So if it wasn't made with a Kinect, How was this scan created, and why lie about it? When confronted about how the scan was made on the 3D in Review Podcast, Mr. Nelles is vague in his answers and claimed that he and Ms. Badri knew nothing about the device and that some hacker types had set up the hardware for them. The "hackers" then took the data and created the model for them. When asked about the hacker's technique, Mr. Nelles stated that the hackers had left for New Zealand and were unable to be contacted.

Hackers who don't use email - that's a new one. The Great Fredini muses for a little bit about something called 'photogrammetry', which is cool enough that I'd like to take a little sidebar here to explain it. Photogrammetry involves using a bunch of high resolution photos - these days, phone cameras are plenty good enough - in the same lighting, and a little computer software, to build a 3d model from a couple dozen reference photos.

Paul Docherty is a researcher and 3d printing guy, and a year before the nefertiti hack, he used photogrammetry to make a pretty high-res model of the Nefertiti Bust. He goes over his process in an article - I've linked it in the show notes - but if you don't feel like reading it yourself, suffice to say that it's laborious and the initial model created looks "bubbly" from noise in the point cloud model built from the initial photographs. He does a bunch more work and cleans it up so it looks like the original, but if al-Badri and Nelles had used photogrammetry in the first place, why wouldn't they say so?

And photogrammetry seems to be, well, a bust. The Bust of Nefertiti is in a large glass case, in a room with multiple guards, and there are no cameras allowed. Taking the dozens of photos it would require to do the project this way would be almost impossible, especially since they'd also need a top-down view, which would be impossible to get under normal visiting conditions. And that's to say nothing of the issues with consistent lighting and distance, with reflections off the glass.

Less than a week before the New York Times story was published, Nelles went on a 3d printing industry podcast to not really talk about the project; he's tight-lipped and tries not to give up the game, but he keeps answering questions with non sequitir talking points about copyright and digital repatriation:

https://youtu.be/t1jCHS2E294

[6:23 Yeah, thanks for your question, but I'm afraid I can't deliver you this technical details which you, uh, uh, desire to get from me]

[15:40-16:10-ish the intellectual property they don't reclaim, but all the photographs, ... this is the question, Imean, if you're doing a copy, from a photograph, of an artifact, is there intellectual property, is there a creative act, which gives you the right to reclaim the copyright?] Nelles explains that he told this hacker what he needed, and received equipment from them, and then sent back the device so they could process the data, but that the whole process was effectively a black box to him.

Charly Wilder, who wrote that New York Times article, published a followup, where the story becomes the one I'm telling now, about the mystery of how the data was liberated, but she was absolutely aghast that none of the experts she talked to were able to point out the issue with the high resolution scan and the alleged use of a Kinect sensor.

From her followup article:

When asked whether they believed when they released the data that it had been derived from their own scan, Ms. Badri said cryptically that they "didn't really think that way," adding that this was "for legal reasons."

We didn't talk about the quality of the scan. In the conversation, the hackers told us just not to ask questions.

Cosmo Wenman is another 3d printing guru - he appears to prefer 'consultant' - who chimed in about the Nefertiti Hack. Like Paul Docherty, he's uniquely positioned to talk about it; in 2012, four years before the hack, he used photogrammetry to create 3d models of some of antiquity's most famous sculptures, including sections of the Elgin Marbles, which we all know were abducted by the British Museum.

He expressed a hope at the time that he *would jump-start this conversation myself*. He writes about being jealous of what Nelles and Al-Badri have achieved, and quotes his artist's statement from 2012:

I believe that with 3D scanning and 3D printing, private collectors and museums have an unprecedented opportunity to recast themselves as living engines of cultural creation. They can digitize their three dimensional collections and project them outward into the public realm to be adapted, multiplied, and remixed, and they **should** do this because the best place to celebrate great art is in a vibrant, lively, and anarchic popular culture.

It's an idea that calls to mind Malraux's *musee imaginaire*, the 'museum without walls' of all art we remember seeing. But it's not all praise. His article is titled "The Nefertiti 3d Scan Heist is a Hoax", and he goes over the HD nature of the scan.

The model that the artists published is of such high quality that I initially thought the scan had to be either the museum's own unpublished scan, or that the artists had scanned a high-quality replica and were passing it off as a scan of the original.

I soon realized that these two theories dovetailed with each other when I began looking for the highest quality Nefertiti replica I could find. My search led me to the museum's own replicas, and the museum's own 3D scan.

In my opinion, it's highly unlikely that two independent scans of the bust would match so closely. It seems even less likely that a scan of a replica would be such a close match. I believe the model that the artists released was in fact derived from the Neues Museum's own scan.

For her part, al-Badri replied cryptically, saying "of course a scan of the same thing looks the same." Speaking elsewhere: "We cannot reveal this process because it is not replicable. And we request your understanding that we cannot reveal our hacker source.

And in an email:

Maybe it was a server hack, a copy scan, an inside job, the cleaner, a hoax, but who cares, **first** of all it is an art piece.

Although Al-Badri and Nelles take pains to call their project The Other Nefertiti, the name under which they presented their remade bust to Egypt, when they released the torrent with the model file, they needed a hashtag. They chose NefertitiHack, which I think is a sly little hint to how they actually got the data. Whether they hacked into the Neue Museum, or the databases of the firm that did the museum's 3d scan, or had a collaborator from within either organization, Cosmo Wenman effectively argues that their scan is based on the museum's, and not on a replica or the original artifact. Either way, German law is quite strict about theft of intellectual property, and so protecting their hacker, or inside man, makes a lot of sense.

We've solved the heist, but I think we still have more questions than we started with. In a conference presentation - unfortunately one with terrible audio, so I can't just clip it here - Al-Badri asks: "Is the bust in the museum — as people have raised in the past — original? And is this even meaningful? I don't know..."

For an answer, let's go to early twentieth century marxist art critic Walter Benjamin. A German Jew who fled to Paris as Hitler's machine ground into life, he wrote his most important works as a stateless exile. He wrote a treatise on mechanical reproduction of art in 1936, informed by the technical evolution of the camera, and then film.

Mechanical reproduction emancipates the work of art from its parasitical dependence on ritual. To an ever greater degree the work of art reproduced becomes the work of art designed for reproducibility. From a photographic negative, for example, one can make any number of prints; to ask for the "authentic" print makes no sense. But the instant the criterion of authenticity ceases to be applicable to artistic production, the total function of art is reversed. Instead of being based on ritual, it begins to be based on another practice – politics. [ANTHONY]

His most important idea in this essay, I think, is the idea of art and artifacts having an 'aura', what he terms its presence in time and space, its unique existence at the place where it

happens to be.[...]The whole sphere of authenticity is outside technical – and, of course, not only technical – reproducibility. Confronted with its manual reproduction, which was usually branded as a forgery, the original preserved all its authority; not so vis-à-vis technical reproduction.

[...]One might generalize by saying: the technique of reproduction detaches the reproduced object from the domain of tradition. [...] In the trace, we gain possession of the thing; in the aura, it takes possession of US.

If art theory makes you weak at the knees, I'm really happy for you, but I'll summarize what Benjamin is saying here for the rest of us. He says that before mechanical reproduction - in his day, that's photographs, copies of film reels, recordings of symphonies - the function of art was a sort of ritual cult of the object, and of the object as specific to a certain historical context. But he says that now that the cat is out of the bag - now that we can scan museum artifacts and get our neighbour to print them for us - the idea of 'art' is completely exploded in on itself. A mechanical copy of something exists outside of history, outside of even the context of its mechanical reproduction. He's a little negative about this idea - he says the Dadaists destroyed the aura of their creations: Before a painting of Arp's or a poem by August Stramm it is impossible to take time for contemplation and evaluation as one would before a canvas of Derain's or a poem by Rilke.

But I think he's one of the most prescient answers to Al-Badri's question of authenticity. Indeed, which print of a photo negative is the 'authentic', 'true print'? The question no longer makes sense. And so I think that Al-Badri and Nelles are scratching at this same truth, that because the world has shifted in its ways of seeing and reproducing art, the question no longer makes sense. But at the same time, we have an answer to what makes the Bust of Nefertiti in the Neues Museum "original", in a way that the artists' copy, and the one I had my neighbour print for me, aren't: its aura, that it was found in the desert, that it's been worn away by three thousand years of fatigue and decay, that it was taken from Egypt by a German archaeologist who lied to the Egyptian government.

Al-Badri and Nelles argue that a copy should be on display in the Neues Museum and the original Bust should be returned to Egypt, given a place of reverence much like the Tutankhamun exhibit, the icon of female beauty in the same building as the the boy-king's golden mask.

And there's precedent for museums displaying copies of art, too. Not only do many museums keep fragile originals in their collections, away from the public, there's a really wonderful story about the Victoria and Albert museum, which in 1873 opened something it calls the Cast Courts to the public. Let's visit them together.

[music cue. I'm thinking this should almost be the memory palace-esque, especially since I for sure had that in mind when writing the graf. maybe cheb laila]

Two enormous galleries, 25 metres tall and longer than you can imagine, stretch out before you. Maybe the first thing you see is a reproduction of Trajan's Column, the original plaster cast made by Napoleon. Maybe you see the five metre tall reproduction of Michelangelo's David. Maybe you see a 15th century Lubeck bas-relief of Jesus washing the Apostles' feet, whose original has since fallen into decay. Maybe it's any one of the famous great pieces of architecture, a discipline that our Marxist Jewish friend Walter Benjamin called "more ancient than any other art". As you look closer, maybe you notice details, fine little shadings, which on the 'originals' have been lost to the weathering of time. The Cast Courts remain most visitors' favourite part of the museum, and my favourite detail might be the plaster fig leaf that Queen Victoria ordered to cover Michelangelo's David's dick. Today, the fig leaf is displayed as its own artifact, behind the statue of David.

The effect of the Cast Courts was to democratize access to sculpture, and art. The people of Britain could see Michelangelo's David, the Porta de Gloria, Trajan's Column, without needing to travel. And everyone agrees that displaying the casts is good, and important as an educational tool. Even the things we do to models, like covering a penis with a fig leaf, acquire their own 'aura', gain their own original history. Maybe one day the Cast Courts will have a reproduction, not of the Bust of Nefertiti, but of The Other Nefertiti, which may have, by then, like that fig leaf, acquired the patina of art.

I say return the original to Egypt, where its aura will resonate. For Berlin, a city with a uniquely German connection to this artifact, why not display the work of two German artists, and tell a modern story, one that doesn't (dismissive voice) happen to include Hitler. Paint it like the original and people might not even notice. It's a profound artistic statement.

[end song: FouKi - nefertiti]

[end spiel!!!!]

Audio engineering for ephemera is provided by the generous and wonderful Miguel Tanhi, who was quite ill and busy recently. This was supposed to be February's episode, but it got away from us both. There'll be the regular March episode in a couple weeks.

If you like ephemera and want it to thrive, consider supporting the show on patreon. Patronage comes with a few hours of bonus content, and the right to perform a voice for the show. There's more details in the show notes. I've been working on another ephemera zine - more TBA. This month, I'm sending moai emoji out to Aidan D, Al O, Expropriated Valor, Drew K, Alice, Tankiefactory, Kevin W, Brady B, Sam K, Discourse Stu, Al O, and Meredith H. Thank you for listening.

Interview questions for Morehshin Allahyari:

Morehshin Allahyari is an artist, activist, writer, and educator. Raised in Iran, she moved to the United States in 2007, and makes art about the political, social and cultural contradictions that make up our everyday life. She thinks about technology as a philosophical toolset to reflect on objects and as a poetic means to document our personal and collective lives and struggles in the 21st century. Morehshin is the co-author of The 3D Additivist Cookbook in collaboration with writer/artist Daniel Rourke, and has a dizzying array of artist residencies and received awards.

Morehshin, it's my distinct pleasure to welcome you to the program. Is there anything you'd like to add to that bio?

* * *

I'm working on an episode about the Bust of Nefertiti, and specifically about the 'digital repatriation' of a 3d-printed replica to the American Museum of Cairo by two German artists. Do you remember the incident? (followup w/ a softball question)

* * *

What does addivitism mean to you? (Rewrite This Q It FUCKIN Sucks)

* * :

I'd like to turn now to your own work, specifically "Material Speculation: ISIS".

You describe this piece as "a 3D modeling and 3D printing project focused on the reconstruction of 12 selected (original) artifacts (statues from the Roman period city of Hatra and Assyrian artifacts from Nineveh) that were destroyed by ISIS in 2015, and say that it creates a practical and *political* possibility for artifact archival, while also proposing 3D printing technology as a tool both for *resistance* and *documentation*. It intends to use 3D printing as a process for repairing history and memory.

Where did the genesis, the seed, of this project come from?

Could you talk about the decision to embed USB drives and memory disks into the sculptures? What about this, uh, I guess mixed media approach between physical and digital worlds attracted you?

* * *

This kind of overlaps with your Additive Manifesto, but could you talk to me about the potential of 3d printing as a radical act?

* * :

What changes in a sculpture when we print it and stage it in an incongruous place? I'm all for cyberpunk, and my replica bust of Nefertiti currently holds my gym headphones. What happens when we stage this direct attack on the 'aura' of art?

* * *

How is recontextualizing art different from exhibiting Egyptian sculptures in Berlin, or the Elgin Marbles in the British Museum?

* * *

The dadaists wanted to destroy the aura of art. How does that overlap with, differ from, the aims of Additivism?
