



The heritage futurism of *Blade Runner: 2049*

Andrew Reinhard

Department of Archaeology, University of York. York, United Kingdom.

Email: adr520@york.ac.uk

Blade Runner: 2049 (Columbia Pictures/Warner Bros.) is the most archaeological film I have ever seen, and even though it features neither excavation nor rugged men in hats punching Nazis, it is possibly the most archaeological film ever made. Written by Michael Green and Hampton Fancher, and directed by Denis Villeneuve, the sequel to Ridley Scott's *Blade Runner* (Warner Bros., 1982) embodies and explores archaeology, digital heritage, and heritage futurism in nearly each one of the film's 164 minutes without appearing to do so consciously.

The traditional definition of "Archaeology" is that it is the study of human history through excavation and analysis of artifacts and other physical remains. *Blade Runner: 2049* does this on film. Humans are (arguably) defined by the things we use, which comprise our material culture. As we become increasingly digital and post-human, the archaeology of our things changes to accommodate for the synthetic and immaterial. What follows is an examination of the archaeology of Villeneuve's film¹, what that means to a 2017 audience, and how we can plan for an archaeology of 2049 and beyond.

¹ Warning: major spoilers throughout.

Blade Runner: 2049 is a film about (among many, many other things) memory and being remembered, a feat accomplished through materials, through things, and through how the characters interact with them. The appearance and usage of things are supplemented by action: forensic and archival research, radiation testing, and off-screen excavation. More generally the film succeeds in demonstrating how people and media-obsessed culture in the near future choose to recall the past, living in the present among discarded artifacts and landscapes of abandonment. *Blade Runner: 2049* also recalls the original film through recycling symbols, creating a meta filmgoing experience where the viewer at times is watching both movies at once. In the interest of simplicity, I will review the archaeology of *Blade Runner: 2049* in the order in which things appear as the film plays (I'd say "unspools", but that would be an anachronism). Think of it more as a video game walkthrough, or an excavation of the film.

Blade Runner: 2049 opens on a tight shot of the eye of replicant blade runner "K" of the LAPD. Eyes feature heavily in both films, and become artifacts in each as proof of personal identity. We know from the original film that

eyes are manufactured, bioengineered for both replicants as well as humans who desire body modification, a post-human trait. One minute into the film, ideas are already in play about accuracy and authenticity, especially when considering the reproduction of original things. Late in the film, original blade runner Rick Deckard meets a reproduction of his wife Rachael, but notes that his wife's eyes were green. The reproduction's are brown. While the replicant conveys authenticity, it is not 100%

accurate. Archaeologists face this question when completing digital reconstructions of ancient structures. Where do we draw the line between authentic and accurate, and can something convey the feeling of authenticity without being completely faithful to the original? I can imagine that in the future archaeologists could attempt to recreate digitally not only structures, but also the people who inhabited them.



The replicant Rachel in the original *Blade Runner* (left) and a reproduction of her in *Blade Runner: 2049* (right). Credit: Warner Bros, Columbia Pictures/ Warner Bros.

K's first mission takes him to a farm run by bookish replicant Sapper Morton. The flight over Los Angeles and surrounding geometric farmlands reveals a world and a landscape in ruin and continued decline. However, the farmhouse occupied by Morton is clean and full of things hearkening back to the mid-20th century: a gas stove, a cast iron pot, simple, old furniture, an upright piano, and hardwood floors. We learn later that wood is a precious commodity, and becomes a symbol for the film. The things that are the most "real" to the

characters are always made of wood. For Morton, it is his house and the tree outside, symbolizing a rich internal life, and a rich past. For K, it is his wooden toy horse. For the spiritual heir to replicant-creator Eldon Tyrell, Niander Wallace's offices are paneled with rich wood. Wood has permanence; the digital is temporary. For the duration of the film, the loss of the digital is always either happening or is about to happen, without any way of retrieving what is lost. But this loss of digital things, as communicated by K's digital companion Joi,

makes things feel more real. Even though we live in a blended environment, our emotions remain real. Our attachment to digital things are quite real. And when real things cannot mitigate our loneliness, we turn to digital surrogates. We make these things to comfort

ourselves, yet they continue to bring us pain. But that pain, as Wallace reminds Deckard later, proves to us that our happiness is real. These emotions throughout the film are governed by the presence and absence of things.



K and the tree outside Morton's house. Credit: Columbia Pictures/ Warner Bros.

At the conclusion of the opening confrontation, K removes Morton's eye; it becomes an artifact. It is used as proof-of-capture, but before that serves as a trigger for K's melancholy. The presence of this thing — the eye — binds both replicants together with their shared experience, but K is a Nexus-9

replicant; Morton is a Nexus-8, an older model able to think and behave more freely. The newer generation must "retire" the old. We destroy our past in order to bury it. But burying it also serves as an act of preservation for the future. The buried must become "reactivated" through excavation and study, creating a new

(or at least modified) history based on the presence of something newly discovered in the archaeological record.

K notices via a remote-sensing drone that something is buried at the base of Morton's tree. It is a crate that holds the bones of what K will later learn might be his mother, a "miracle" of a sexually produced live birth of a replicant child with two replicant parents. We never learn how replicants are assembled under the skin, so the presence of DNA is assumed as part of the creation of a non-human workforce. And we never learn why replicants (at least by Tyrell Corporation) were given a functional reproductive system. What's interesting is that when the bones are analyzed in the LAPD's forensics lab, K discovers inscriptional evidence: a serial number inscribed on one of the bones. Archaeologists are always looking for inscriptions, and the presence of the inscription in the bone points to a thing that is made, not born.

In an interlude early in the film, K returns home, passing by biocentric, anti-replicant graffiti on his way to his quiet sanctuary. The humans who remain on Earth resent their non-human neighbors, and mark their environment accordingly. Even though he's a replicant, K clearly has human — perhaps designed — needs, which are satisfied by things: cooking pots, a shower, entertainment, including paper books. The food is instant, practical, and disposable. The scene is driven by a dialogue with a woman off-screen, revealed over time to be an AI. K's relationship with "Joi" helps him with his loneliness. He uses a thing as a human proxy, reminding viewers of Spike Jones' AI film *Her* (Warner Bros., 2013). Joi is tied to K's apartment via a hologram projector on the

ceiling, and she appears to K in a variety of outfits conveying tropes about the women men theoretically want (at least as the media portrays them): 1950s housewife, 1990s manic pixie dream girl. Clothing serves as an icon communicating time as well as presumed values. The things K possesses help define his character: he is simple and practical, lonely, longing for conversation and meaningful interaction. I imagine he could have easily chosen a pornographic hologram to welcome him home, but instead he has selected a woman companion to keep his brain company, to make him feel welcome and appreciated, something or someone who remembers him.

At the conclusion of the scene, K gives Joi a gift, an anniversary present. It is a portable projector so Joi can travel with K. This device delights the AI, and gives K a mobile companion who not only is a friend, but who also looks out for him and seemingly feels for him. The film's audience must remember that both of these characters are, at their simplest, robots, or at least synthetic people. They are both things that interact with each other and with other things (as well as people). The way humans interact with K (replicant) and Joi (portable AI) are reprehensible if one projects humanity onto the digital. It reflects the way modern humans treat their entertainment: disposable commodities that offer a brief reprieve from loneliness and boredom, yet will never be on equal footing with "authentic" experiences and relationships. To be a digital entity is to be abused. No wonder the Nexus-6s, 7s, and 8s rebelled against their creator and users. The fact that Nexus-9s (of which K is an example) were programmed for obedience confirms that

humans are fully aware of how they treat their things, and that things are ultimately disposable. We throw everything away, and these things neither resist nor resent their disposal. Everything is rubbish, and is therefore archaeology.

Armed with the serial number from the bones buried under Morton's tree, K travels to Wallace's headquarters, which contain its corporate archives. K shares the number with the archivist who recognizes it as from a very old replicant dating to before the Blackout, which wiped everything stored digitally. As K and the archivist walk into the archives, the archivist quips about the only thing permanent is saved on paper. He reminds K that everything digital can be lost forever. The interesting thing about paper is that it is a product created from wood pulp, and we are back to the idea of the analogue nature of wood yielding the only things of reality and of permanence.

Wallace's replicant-in-charge, Luv, finds K in the archives, and leads him into literal cold storage to listen to a digital audio recording maintained on a physical marble dropped into a reading device. Older media is read on older technology preserved in a cold, dark place. The more things change, the more they stay the same. K and Luv listen to a recording of Rachael (whose recovered bones contained her serial number) from the original *Blade Runner*. It is her interview with Deckard as he conducts his Voight-Kampff test on her to confirm if she is a replicant. This test recalls the Turing test for identifying AI. Future technologies are developed to satisfy the same needs of technologically enabled humans from 100 years ago. Although humanity's needs and desires

have not appreciably changed during the history of the human race, the things people invent to satisfy those fundamental needs continually appear, are updated, are replaced.



Luv retrieving an old record from the archives. Credit: Columbia Pictures/ Warner Bros.

After the visit to the archives, K begins his search for Deckard in order to learn about Rachael, and finds himself interviewing Deckard's associate from the first film, Gaff, who is able to connect the dots for K about what happened to Rachael and Deckard, the mystery that closed the original *Blade Runner*. Archaeologically, the most interesting thing from the brief interview between K and Gaff is the origami sheep Gaff creates. The figure recalls the origami unicorns Gaff made and left in locations throughout the original film. It also recalls the eponymous sheep Deckard was saving to buy for his wife in Philip K. Dick's source story, "*Do Androids Dream of Electric Sheep?*" What we see in the new origami figure is an example of material memory, but for the viewer. The presence of the origami animal in the new film reminds us of what we saw and felt in the old film. The audience continues to experience the sequel in a meta way. Also, origami is a paper art, a medium that communicates something real. It separates Gaff, a human, from his replicant counterparts. At the same time, the origami sheep is a

facsimile, drawing a further distinction between real and virtual.

As the interview happens, Luv meets with Wallace as he prepares to witness the “birth” of a new replicant model. Wallace is blind (possibly intentionally), his “eyes” being six Bluetooth drones, which allow him to see in a more holistic way than a two-eyed person. Body modification continues to be a trope shared by humans of the future as we physically merge with digital technology, becoming post-human. Luv carries a box of computer chips with her, but only one is used to activate the eye-drones. As we saw in the first film and at the beginning of the sequel, eyes remain key to what is human, and what is “other.”



Wallace and his Bluetooth implant. Credit: Columbia Pictures/ Warner Bros.

The birthing scene merges the organic with the synthetic. A replicant in the form of a naked adult female tumbles out of a clear plastic sac, covered in gel. She is clearly cold and afraid, and Wallace takes the opportunity to demonstrate how precious life is, even to something that is literally born digital. The newborn replicant’s near-immediate death at the hands of Wallace (who uses an analog blade, something else conveying the meaning

of “reality”) shows again how humans treat their things, even their own creations. We make. We discard. The death of the nameless newborn contrasts with the tenderness taken to bury Rachael. In the latter case, replicants observed care in the afterlife of one of their own. For humans, replicants remain as objects. In fact, as we see later in the film, the whole of Earth has been abandoned by those humans who can afford to make the voyage, leaving a planet that exists as a global rubbish heap. We have thrown our own planet away, and it remains as one giant archaeological site. Wallace wants humanity to conquer the universe, to control everything natural, and to do so he needs to create replicants who can replicate each other through procreation. Humans, to Wallace, need a slave-labor replicant force to support their conquest of the stars. He must learn Tyrell’s secret of live birth, but these records (along with all other digital records) were wiped out in the Blackout of 2021. Compare this to all of the science that was likely lost when the Library of Alexandria burned in 48 BCE and again in 270 CE and what needed to be rediscovered over the next 2,000 years.

Jumping back into the main mission of the film’s narrative, K is ordered by his LAPD superior to return to Morton’s farm to destroy everything. This is a kind of *damnatio memoriae*, a destruction of memory, a phenomenon familiar to Egyptologists and Roman archaeologists. Before he torches the house, K finds a baby sock hidden in a small box in the analog upright piano. The sock is a human thing, with its own material memory, kept because its owners saw it as precious. K’s supervisor would later dismiss it as “just a sock,”

but it clearly had meaning to the replicants present at the live birth at Morton's farmhouse.

As with other historic buildings lost in history, the farmhouse then burns. K preserves the tree, however, the base of which contains another inscription written at the bottom of the trunk: 6.10.21. It's a date, likely a birthday, and is tied to the burial nearby. K literally finds his roots and returns to them. It's a human thing to do, to be curious about our parents, about previous generations. This is communicated in the landscape, but also in the objects with which we become connected. Seeing the date triggers a memory for K: as a young boy he was chased by other boys who wanted his toy wooden horse. Carved into the base of the horse is the date 6.10.21. We have inscriptional evidence tying the thing (wooden horse) to the

tree. It is like finding a join between two pieces of pottery found far apart. They connect, yet come from different contexts.

K visits a human archives to search for DNA with Joi's assistance. Here the synthetic being researches the natural, discovering that two people (impossibly) share the same DNA, a boy and a girl. As opposed to the Wallace corporate archives where research is done digitally, K conducts his human archival research through a fiche-reader, something analog. Yet again, the analog is treated as real in the film. According to the archives, the girl died of a genetic defect, but the boy survived and was placed in an orphanage. K is playing the role of an archaeologist throughout this film, conducting research prior to heading back out into the field to find material remains.



K and Joi researching in the archives. Credit: Columbia Pictures/ Warner Bros.

As K approaches the ruins of San Diego, which has been turned into a gigantic disposal center for technology, he is shot down in his Peugeot police prowler. Scavengers attempt to kill him and seize the remains of his Spinner (flying car), but they are killed via a rocket-firing drone controlled by Luv from Wallace HQ as she gets her nails done: animated, luminescent cartoon figures. Looters are punished by death in order for K to track down the boy. This is not too far from modern history where in areas in Syria controlled by ISIS/ISIL, looters are killed if they do not turn in their finds to local antiquities processing centers, or if they are caught stealing antiquities to sell themselves. K enters a metal hut, and discovers that the orphanage contains hundreds of children tasked with recycling digital materials, something currently happening in modern-day Ghana and elsewhere in Africa. Humans continue to recycle and repurpose things for other purposes. In this case it is digital *spolia*.

The records K consults at the orphanage are kept in bound, printed volumes, pointing to the reality of what once was. The pages he needs are gone, ripped out of the book. K's dismay at losing physical evidence is heartbreaking, and it is as if that history is now lost forever. Before he leaves, K wanders through the remains of a factory attached to the orphanage. His presence within this architecture reminds him of the memory triggered by the date on the tree, and he finds his toy horse hidden where he left it 30 years ago. His material memory runs full-circle as he is reunited with his toy. It proves his memories are real, and he makes the connection that he was the boy who was born, and that Rachael and Deckard are his parents.

The combination of landscape and artifact recalled history that K believed to be implanted. He acknowledges that in his time it is nearly impossible to determine what is "real", but as a cop, his appreciation of material evidence and the location in which it is found gives him the proof he needs.

Through an interlude with Joi, K comes to terms with his near-humanity, perhaps made more human because of his birth, birth imbuing the child with a "soul." Regardless of what your opinion is on the "miracle" of birth or the absence or presence of souls in people, the film gets at the question of what makes humans human, and how are they different from the things that they create. Humans make tools, and replicants are the superior tool, human-like but not human. One wonders how humans could identify their own humanity if there were no things at all. Joi gives K his birth name, "Joe." K, skeptical of memories, decides to visit Wallace's chief memory-maker, Ana Stelline, to determine if his memory of the horse is true and not an implant.

In 2017 we already know that digital media can be faked, and that the real can be enhanced. We know that human memory is unreliable. When K visits Stelline, she uses a camera-like tool with analog controls to manipulate the appearance of a digital insect, and later of a child's birthday party, the notion of a birthday hinting at K's origins. Humans speak through symbols and images, and it's as if Stelline knows something about K that he himself does not. They discuss the difference between real and manufactured memories. Real memories are messy; the synthetic is too detailed. Compare this to digital archaeological

reconstructions of structures, and we return to the idea of authentic versus accurate. The absence of things in the archaeological record makes for incomplete reconstructions that the archaeologist must fill in (or choose to leave as a void). The memory-maker is engaged with this kind of recreation, making conscious decisions about what to omit, what to leave messy to lend authenticity to the memory. She herself is a formation process, with the brain as an archaeological site.

K returns home to process what he's learned, and is met by both the holographic Joi and the real prostitute Mariette. They merge, the digital woman overlaying the real, turning a synthetic sexual encounter into a "real" one, merging the digital mind and desire of Joi with the physical surrogate of Mariette. As we've seen earlier, the digital is in control of the situation, manipulating the human to do something, in this case to have sex with a replicant. This is perhaps commentary on how our digital things control our lives (or at least our actions) instead of humans having the illusion of control. Wallace realizes this in his Nexus creations, but general consumers do not. We have stopped being able to make our own conscious decisions, and instead elect to purchase things, giving them license to have power over us. We have abdicated our freewill to the things we make.

In two scenes in the film, K must undergo a "baseline test" after a traumatic LAPD service event. He easily passes his first test after retiring Morton. He completely fails his second test after learning about his past. The phrases repeated in the baseline test come from Vladimir Nabokov's novel *Pale Fire*, which itself

is a tricky piece of meta fiction and poetry that can be read in both a linear and nonlinear fashion. It is a reflection of the film (albeit from 1962), and the presence of the book in K's apartment, and the presence of its text in the baseline test, makes for another meta event in the film, bringing the film world and the real world together. The book is a clue about what is happening in the action of the film, the clue being given by the presence of a thing in its context. What is this book to K, and why won't he read it to Joi when she asks?

Returning to more traditional archaeology, K brings his wooden horse to an antiquarian, Doc Badger, who runs a radiation test in order to source the material. Instead of being from the tree on Morton's farm, the tritium signature points to Las Vegas. Doc Badger also notes the value of such a small piece of pre-Blackout wood, saying he could trade it in for a real horse, and that K could become a rich man. K won't part with his toy, speaking to the nostalgia we have for the things we each cherish. Our things possess our memories, or at least trigger them. Possession of things makes access to these memories easier.

The Las Vegas K visits is radioactive, vacant of people, dust-covered, with abandoned casinos and ruined sculptures. The colossal sculptures ruined in the dust recall Shelley's poem "*Ozymandias*," but in a perverse way. In the poem, the ruler Ozymandias laments what has become of his empire. In Las Vegas, the broken statues of objectified naked women mock Las Vegas and its permissiveness towards instant gratification of humanity's basic needs. This empire of entertainment has also fallen. K finds Deckard in the Vintage Casino, a place

that recalls an idealized mid-20th century America where he lives with his dog. “Is he real?” K asks. “I don’t know,” Deckard replies. “Why don’t you ask him?” K and Deckard’s introduction to one another comes by way of a fight in an empty cabaret where a glitched recording of Elvis singing “*Suspicious Minds*” plays on stage, occasionally interrupted by a moving image of Marilyn Monroe. We see what is already the future of entertainment, with dead entertainers (e.g., Tupac Shakur) appearing digitally in front of a live audience, a technology being developed now by Japan’s Crypton Future Media. We see a futuristic jukebox in Deckard’s bar playing a Frank Sinatra tune while appearing as a 3D black-and-white hologram atop the player. Our analog musical heritage has become digital.



K examining a hologram of Frank Sinatra. Credit: Columbia Pictures/ Warner Bros.

Deckard and K have an uneasy conversation about Rachael, tying up more loose ends from the first film. K also notices several hand-carved wooden sculptures of animals on the bar, matching the size and style of his own toy horse. Luv arrives at the casino in order to kill K and to kidnap Deckard so that Wallace can interview him about the live birth event. Luv destroys the device K uses to take Joi with him;

she is lost forever. Left for dead, K is rescued by a group of rebellious replicants who want K to help them find Deckard and Rachael’s daughter, confusing him. His memory was manipulated by Selline to protect the identity and location of the daughter, proving that memory is always fallible no matter how true the possessor might find that memory. K returns to Los Angeles where he is approached by a colossal advertisement of a Joi model who says he looks nice but lonely, a good “Joe.” The AI was just an AI after all. It can be replaced and retaught.

As K returns home, Deckard sits in Wallace’s office with Luv and watches as a facsimile of Rachael enters the room. Deckard detects the difference in the eyes (a human trait and additional evidence of reality), and Luv executes the replicant, leaving Deckard shocked in the midst of his nostalgia, a thing-as-person (or person-as-thing) disposed of without hint of love or care. He sentences this Rachael to destruction by calling it a fake. Humans crave the real, the original, the first edition. Any copy is of lesser value, something that is evidenced in the antiques marketplace.

After a fight in which Luv is killed and Deckard rescued by K, who has somehow learned that Deckard is being transported to the Off-World Colonies. K and Deckard return to the offices of Selline, who lives and works in a sealed environment because of her genetic condition. Selline is the true replicant child of Deckard and Rachael. Replicant meets replicant, a reunion of “soulless” things that are somehow no longer things, reconnected by love and memory, separated by a screen.

As the replicant (and real child) Selline works on a memory of snowfall inside her

creative space, the replicant K bleeds out on the steps to the office, catching real snowflakes in his hand. The snow itself is a metaphor for humanity, unique to one another, yet of the same shared materials, left to occupy the ground, resting atop each other over time, ultimately disappearing, ignorant of what came before and what will come after. It is no different that the pottery dumps at any number of archaeological excavations, where sherds are collected, counted, and weighed, then thrown away after yielding their data.

One wonders then what Ridley Scott thought after releasing the final edition of his *Blade Runner* film in 2007, 25 years after its initial theatrical release, if it would produce a sequel that shared the same DNA with his film. As already described above, watching Villeneuve's interpretation of the world and its characters proves to be a meta experience, seeing at once the original, analogue film overlaid with what was filmed and projected digitally. Both films are real, but are produced in two separate worlds. *Blade Runner: 2049* uses many visual and audible cues to recall its parent, ranging from Gaff's origami to Vangelis' "Tears in the Rain" from the original soundtrack. The ambient noise in K's apartment is re-used audio from Scott's 1979 film *Alien*. The clear raincoat Joi wears when leaving K's apartment for the first time recalls that of Pris in the first film. Deckard's original Spinner car from the first film makes a brief appearance in the casino where Deckard currently lives. Even the first scene where K confronts Morton was written for the first film (but not used), and instead introduces the second movie, old words in a new environment. This is a kind of

archaeology of film, making connections between the things shared between original and sequel, actual props created for one and re-used in the other. It's recycled media in the service of a new story.

The archaeology of *Blade Runner: 2049* is complex and present throughout the film, focusing on materials and memory, about how people and things interact with each other, and about what separates humans from the things they create. We confront the traps of nostalgia. We recycle materials and memory. We occupy landscapes that affect our behavior. And we let our things determine our actions. As we look ahead to 2049 and after, we must consider the presence of our digital selves, how they manifest, and how they can be preserved, and what happens when our digital lives are lost. It's an attempt to communicate the new idea of heritage futurism, and serves as a cautionary tale for 21st-century archaeology and beyond.

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ABOUT THE AUTHOR

Andrew Reinhard is a PhD student at the University of York's Centre for Digital Heritage, part of the

Department of Archaeology, and he is also the Director of Publications for the American Numismatic Society. In 2014 he led the team of archaeologists who excavated the Atari Burial Ground in Alamogordo, New Mexico. He runs the Archaeogaming blog (<https://archaeogaming.com/>) and Twitter (@archaeogaming). His book, *Archaeogaming: An Introduction to*

Archaeology in (and of) Video Games, will be published in May 2018 by Berghahn Books, and he has even recorded a song inspired by *Blade Runner: 2049* (<https://soundcloud.com/andrew-reinhard-798315768/2049a>). Despite his obsession with science fiction and horror films and video games, he'd rather be outside before the fallout-crazed zombies arrive.