Ink is Forever: The Archaeological Impermanence and Cultural Permanence of Tattooing

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Abstract

The Archaeology-Heritage Divide consists of divisions that are derived from the dichotomy of tangible versus intangible cultural heritage. Archaeology is seen as the material beginning of human history, yet heritage not only fills gaps in the archaeological record but continues where archaeology leaves off. This continuum between archaeology and heritage is exemplified in tattooing. Tattooing generally presents the unique inversion of *permanence* (conventionally characteristic of archaeology and material culture) and *impermanence* (conventionally characteristic of heritage). Tattooing is perceived as a *culturally permanent* marking of the skin but is *archaeologically impermanent* due to the transience of human bodies and the process itself. This inversion exposes how nothing ever really belongs on one side of the Divide. These divisions are simply pragmatic constructs allowing scholars to isolate and make sense of certain data. In actuality, there is an interdependence between the disciplines, and it is impossible to truly extricate one from the other.

Introduction

The Archaeology-Heritage Divide is closely linked to the division of tangible and intangible cultural heritage. Archaeology is seen as the study of things, differing from heritage as the continual meaning-making around

those things. However, the inextricable entanglement of archaeology and heritage, the tangible and intangible, is aptly exemplified by the ancient and contemporary cross-cultural practice of tattooing. Tattooing, like any aspect of culture, seems to fall on one side of the Divide (in this case, intangible cultural heritage), yet is traceable both in the archaeological record and contemporary heritage-making. Tattooing generally presents the unique inversion of *permanence* (conventionally characteristic of archaeology and material culture) and *impermanence* (conventionally characteristic of heritage). Tattooing is perceived as *culturally permanent* marking of skin but is *archaeologically impermanent* due to the transience of human bodies and the intangible process itself. Like the Archaeology-Heritage Divide, which is artificial and presents a host of complications and contradictions, the division between permanence and impermanence is also relative and imprecise. By focusing on this general inversion in tattooing, it exposes how nothing ever really belongs on one side of the Divide. These constituent divisions are pragmatic constructions of terminology and categories allowing scholars to isolate and make sense of certain data. This is further complicated when such divisions are seen as reflecting reality rather than discourse. In reality, these divisions invert and overlap; there is interdependence of the disciplines, and it is impossible to truly extricate one from the other.

This article interrogates the constituent divisions of the Archaeology-Heritage Divide. The archaeological tangibles of tattooing (what is generally preserved in the archaeological record) are explored, followed by heritage intangibles (what is not preserved in the archaeological record). What causes archaeological impermanence is investigated followed by what explains the cultural permanence of tattooing and a summary of the interrelatedness and symbiotic nature of these divisions.

The Divide and Tattooing

Tattooing is well suited to analyse the artificiality of the Archaeology-Heritage Divide; it crosses divisions of time (antiquity and modernity), space (it is cross-cultural), and often other aspects of society, such as class and gender. Its simultaneous ubiquity and specificity, its status as a global heritage

and regional cultural practice, exposes fundamental issues in attempting to impose strict divisions.

The constituent divisions of the Archaeology-Heritage Divide—tangible/intangible, permanent/impermanent—are artificially grafted onto the continuum between the ancient material record and ever-changing heritage practices. Tattooing is a practice that produces tattoos, no more one than the other; yet is primarily considered intangible cultural heritage (ICH),

> practices, representations, expressions, knowledge, skills—as well as the instruments, objects, artefacts and cultural spaces associated therewith—that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity [...] (UNESCO 2003, ss 1).

Tattooing is a specialized traditional craft but there are often associated rituals. It can embody traditional knowledge including cosmology or be used as traditional medicine. In North America, for example, Indigenous Peoples historically "used the physical act and visual language of tattooing to construct and reinforce the identity of individuals and their place within society and the cosmos" (Diaz-Granados and Deter-Wolf 2013: xii). The process (tattooing) may often be more resilient in terms of preservation than the product (tattoo), and this is what creates the inversion of permanence and impermanence.

It is outside the scope of this paper to explore permanence/impermanence philosophically (see Falkenstern 2012; Smith 2012) and as Lynch (2012: 232) notes, "obviously my tattoos are not really permanent, because I am not permanent". While it is relevant to acknowledge that in certain Indigenous cultures tattoos retain spiritual permanence after death, such as the Igorots of the Philippines who "believe that their tattoos enable their ancestors to recognize them easily when they enter the afterlife" (Salvador-Amores 2021:

469), for the purpose of this paper, permanence and impermanence are defined more broadly and less metaphysically. Archaeological impermanence refers to what is not preservable/rarely preserved in the archaeological record (e.g., tattooed skin, techniques). The relationship between archaeological impermanence and cultural permanence is generally that "the tattoo is a permanent emblem that is marked on a transitory entity" (Kosut 2000: 97). Bodies are archaeologically impermanent, but tattoos are perceived as permanent. Cultural permanence therefore refers to the sociocultural perception of tattoos as permanent body modifications and the resiliency and ubiquity of tattooing cross-culturally.

Archaeological Tangibles and Archaeological Science

The artistic medium of skin significantly contributes to archaeological impermanence of tattooing except with artificial intervention or extreme accidental natural intervention. Artificial preservation (and natural but intentional preservation) can be purposeful processes of mummification like Ibaloy "fire mummies" (Piombino-Mascali et al. 2018; Salvador-Amores 2018), Predynastic Gebelein mummies (Friedman 2018; Friedman et al. 2018) and later Egyptian mummies (e.g., Austin and Gobeil 2017), Māori "*upoko tuhi*—inscribed heads" (Te Awekotuku 2006), clinically-preserved tattoos of European criminological studies (Angel 2018), or donation of one's own tattoos for post-mortem preservation (Deter-Wolf and Krutak 2018b). There can also be natural accidental preservation, like the oldest evidence of tattooing found on the 5300-year-old Tyrolean Iceman, Ötzi (Samadelli et al. 2015); or a combination of mummification and natural accidental conditions, like the Pazyryk Scythian mummies (Pankova 2018). Depending on research questions and limited by the state of preservation, various methods of archaeological science can identify and analyse tattoos. Due to rarity and delicacy of preserved skin, and tattoos being externally visible, non-invasive methods are often preferred such as the infrared imaging employed on the Gebelein mummies (Friedman et al. 2018), Scythian mummies (Pankova 2018), and Ötzi (Samadelli et al. 2015). Such methods can expose tattoos no longer visible to the naked eye, as with all three cases, proving them to be more permanent than assumed.

Like skin, preservation of ink and its pigments is also rare due to the liquid or powder state of often organic ink substances. Nevertheless, preservation of tattooed skin always necessitates ink preservation. Various scientific methods (e.g., microscopy, spectrometry) can analyse these but can sometimes (though not always) be invasive and destructive, requiring tissue samples as displayed in Pabst et al.'s (2010) Peruvian mummy study.

Similarly, some tattoo implements and aspects of the tattooist's toolkit (e.g., thorns, wood, leather) are also organic and therefore largely archaeologically impermanent (Deter-Wolf et al. 2016: 194). However, many implements preserved are inorganic lithics, metals, or more preservable body parts like bone. Unlike with ink/pigments, use-wear analyses on tattooing implements are not invasive or destructive. Such analyses can elucidate *chaîne opératoire*, production and use-life, such as analyses of Polynesian bone comb tattooing implements (Clark and Langley 2020; Gates St-Pierre 2018) and even composite botanical implements like that recently identified as the oldest in western North America (Gillreath-Brown et al. 2019). One of the ways archaeologists conducting such studies test *chaîne opératoire* is through experimental archaeology.

Experimental archaeology particularly blurs the line between archaeological practice and ICH. While it is regulated as an experiment, it necessarily replicates ICH processes. For example, experimental use-wear analyses have been conducted replicating the flint-knapping process to produce replica lithic tattooing implements and imitating the tattooing process by creating tattoos on proxies of human skin (Deter-Wolf and Peres 2013; Gates St-Pierre 2018; Kononenko et al. 2016). While this may seem divorced from a cultural process of embedding heritage markers into a person's skin, Deter-Wolf and Clark's (2018) experimental study of bone tattoo implements complicates the strict division of archaeology and heritage further when one researcher tattoos himself. Experimental archaeological tattooing is foremost an experiment, but it reproduces practices and implements of the original heritage and produces an ICH product that exists permanently in the researcher's skin. This is perhaps an uncomfortable connection between archaeology and ICH, but an

undeniable connection, nonetheless.

A more extreme example is tattoo artist Steve Gilbert recreating an ancient Pazyryk chief's set of tattoos (Dale and Krutak 2018). Gilbert was not an archaeologist and this was not a regulated scientific experiment, but because of experimentation with traditional *tebori* tattooing and the precise recreation of ancient Eurasian iconography on a subject who connected with it (Mazierski in Dale and Krutak 2018: 105), the division between experimental archaeology, contemporary tattoo artistry, and ICH is less clear. The distance between archaeological science and heritage practice that is typically assumed is no longer as discernible when researchers literally have skin in the game.

Iconography can be preserved in that very skin or through material culture proxies. Because tattoos and much associated material culture are largely archaeologically impermanent, more resilient types of material culture act as proxies. To extrapolate from implements for example, "the presence of bone combs in the archaeological record is a key proxy for the prehistoric tattooist's kit (predominantly made in perishable material)" (Clark and Langley 2020: 408). Archaeologists make inferences about what is intangible and impermanent from what is tangible and permanent.

Related to this method is what Buss and Hodges (2017: 10) call a "reciprocity of imagery". They refer to iconography seen both in material culture (e.g., Japanese woodblock prints) and tattoos (e.g., Japanese traditional style). In the Hokusai-illustrated edition of the legendary *Suikoden* (*The Water Margin*), the illustrations "were probably based at least in part on tattoos that the artists had seen in life, but they also certainly influenced the direction that tattooing took going forward" (Buss and Hodges 2017: 10). There is feedback between material culture and tattoos in various global contexts which is mobilized by anthropologists and archaeologists as a method of interpretation. This method assumes

> transferability of ornamental motifs and compositions between material culture and tattoo designs [which] is known from ethnographic documents and is considered a potential correlate for

> temporary and permanent prehistoric body art (Zidarov 2018: 142).

Interpreting material culture and comparing artefacts is archaeological praxis grounded in the material world but validated by oral history and continuity of ICH. It is archaeological impermanence that forces archaeologists to recognize the significance of ICH and allow it to inform the archaeological record.

Heritage Intangibles and Traditional Knowledge

The intangible process of tattooing is not preserved in the archaeological record like the previously mentioned tangibles, but neither is the meaning behind tangibles that are preserved. Raw materials may seem neutral in terms of meaning as they are simply harvested to later be modified, yet meaning behind their selection can hold heritage significance. For example, raw material historically processed for Samoan tattoo combs includes vanquished enemies' bones (Clark and Langley 2020: 411). Osteoarchaeological science can provide insight into the material itself but meanings behind whose bones they were and their warfare context are only available through observing the ICH process and consulting with practitioners. Similarly, intended effects of raw material can be a primary factor in their selection, such as elder Whang-ud using lemon thorn as her implement of choice in practicing Kalinga *batek* tattooing in the Philippines "because the strong lemon scent drives away bad spirits, which can interfere with her tattooing" (Salvador-Amores 2021: 460); but this too is not archaeologically available information.

Meanings behind tattoo iconography (e.g., who could (not) wear it, in what context it was applied) also cannot be captured solely in the archaeological record. In many cultures, tattooing was/is bound by strict regulations, such as for North American Osage warriors (Krutak 2013: 157) or *batek* traditionally applied to warriors (Calano 2012; Salvador-Amores 2002). For Osage warriors, "only those who had performed great deeds could earn tattoos, and that considerable ire was directed at any who acquired the marks under false pretenses" to the extent he "would have the design torn off

him, skin and all" (Jean-Bernard Bossu quoted in Wallace 2013: 30–31). This high price for earning tattoos—and high cost for those that did not—provides archaeologically invisible insight into the rarity of tattoos in certain contexts beyond due to poor preservation.

A less extreme consequence of tattooing is simply that it hurts. Regardless of implement or technique, tattooing is skin trauma. Yet this common quality cannot be reflected archaeologically despite often being meaningful to the process. For example, Osage wives of warriors are tattooed to showcase solidarity of strength (Dye 2013: 223), Bosnian Catholics comprehend the pain of tattooed crosses as a connection to Christ's suffering and sacrifice (Krutak 2018a: 152), bodysuit tattoos distinguish Japanese *Yakuza* members as a form of extreme endurance and dedication (Smith et al. 2021: 16–17), and Māori women's "mark of pain, a *kauae moko*" (Te Awekotuku 2006: 132). Pain may be a by-product but testimony from those who have participated in culturally bounded ICH reveal it need not always be meaningless.

Tattooing rituals (including pain distraction/avoidance) are ICH in themselves and significantly intertwined with the materiality of tattooing, but they also utilize, rely on, or even impact other ICH and facets of heritage. In the case of the Igorots, "observance of certain rituals and taboos bring about the (in)/auspicious and intended effects of tattoos on the person or group" and hold that tattoos "possess magical values, which are embedded on the skin by the very act of tattooing and the materials used" (Salvador-Amores 2021: 455, 454). Various forms of ICH, their significance, and how they connect to tattooing and resultant tattoos are invisible in the archaeological record; they rely on oral history and observations of ICH through ethnographic records.

The dividing line between tattooing rituals and the ritual of tattooing is further blurred by tattoos that act as rituals in themselves. For example, iconography on a Gebelein mummy has been interpreted as representing "crooked staves" based on material culture proxies of ritual objects used by individuals like the deceased (Friedman et al. 2018: 120–121). This specific iconography is always shown in the midst of the ICH process, therefore the tattoo becomes a duplicate of the ritual object so that "the woman

herself may be considered to be the actor, using the implement with every movement of her arm" (Friedman et al. 2018: 120–121). This unique quality of Egyptian iconography is seen in interpretations of later mummies' tattoos, such as a mummy from Deir el-Medina whose "body is not only the actor of worship, but also the object of ritual [...] in some sense participating in ritual unremittingly, with every word spoken or every movement of her arms" (Austin and Gobeil 2017: 34). In these analogous interpretations, ICH becomes embedded into the skin and literally embodied. The iconography is not simply an inscription of "visual language" (Diaz-Granados and Deter-Wolf 2013: xii) or a "sign vehicle" (Kosut 2000: 79) but ICH halted in action by death. Death then creates the potential for archaeological impermanence to take hold.

Archaeological Impermanence

Certain implements, ink/pigments, objects within and including tattooists' toolkits, and the very skin tattoos are embedded in are organic and break down quickly in archaeological terms (e.g., Deter-Wolf et al. 2016: 194; Smith et al. 2021: 2). Nevertheless, archaeological impermanence is not created solely in nature but through archaeological study and curation. Nothing is ever really gone; it is a matter of what archaeologists can physically extract from site stratigraphy, perceive within material culture, and intellectually infer. The dilemma facing archaeologists regarding what is/not a tattooing implement is an issue of "artifact typologies and modern assumptions of tool function" (Deter-Wolf and Clark 2018: 232; see also Deter-Wolf et al. 2018; Deter-Wolf et al. 2021). Implements are sometimes minimally-worked raw materials like thorns, plant stalks, bones of birds or fish, or stingray barbs (Deter-Wolf and Peres 2013; Furey 2018: 173; Salvador-Amores 2018: 49; Salvador-Amores 2021: 459); sometimes they are more obviously processed but difficult to categorize as diagnostic visually, requiring further study like use-wear or residue analysis (Deter-Wolf and Clark 2018: 232). This can create a perceived archaeological impermanence that may not accurately reflect what is actually there.

Lack of identification or misidentification extends from implements to iconography, framed as a distinction between decorative/ornamental and therapeutic/spiritual. The separation of *decorative* and *therapeutic* is seen in, for example, Pabst et al.'s (2010) conclusions regarding a Peruvian mummy possessing different inks/pigments for different tattoos. They differentiate ink for what they define as "decorative" tattoos, mostly of animals, "ornaments", or "symbolic ciphers", and what they define as "therapeutic" tattoos, consisting of multiple circle neck tattoos they argue align to Chinese acupuncture meridians and points (Pabst et al. 2010: 3261–3262). Their conclusions justify some differentiation based on iconography, placement, and ink/pigments; however, the imposed designation of "decorative" is reductive in most tattooing cultures. For example, Shan tattoos explicitly "are not decorations; they are medicine" and they too are applied using different ink/pigments based on type (Tannebaum 1987: 695). This may seem to support Pabst et al.'s (2010) separation of decorative and therapeutic tattoos but common forms of *acun* and *kat* type medicinal tattoos are of animals or fantastical figures (Tannebaum 1987: 696, 698) that would have been classified as simply "decorative" under Pabst et al.'s (2010) criteria. It is possible for ancient figural tattoos in Peru to have entirely non-medicinal significance, but cross-culturally

> [f]or millennia, tattooing has been more than mere ornamentation. Instead, the practice has been integral to the social fabric of community and religious life, and has anchored societal values on the skin (Deter-Wolf and Krutak 2018a: 8).

Furthermore, even depth and level of ink pigmentation can affect how Indigenous groups internally classify tattoos, such as how bold *batek* is considered "a protective layering that encloses the skin against malevolent spirits" but is differentiated from less saturated images derived from other forms of tattooing "serving a purely decorative function" (Salvador-Amores 2021: 463).

Reducing tattoos to decoration from outside of a culture can deny significance and hide meaning from archaeologists. Classification of

decorative tattoos is not a contemporary invention intended to be dismissive but rather a relic of centuries of misunderstanding/misinterpreting tattoos "filtered through the lens of Western and Judeo-Christian history, in which these traditions were regarded as curiosities or marks of barbarism" (Deter-Wolf et al. 2016: 194). The influence on today's scholarship can create a perceived archaeological impermanence where the significance of certain tattoo practices is not investigated or preserved through study.

Western and regional biases surrounding tattooing have also created archaeological impermanence by suppressing the ICH process, which in turn diminishes associated production of material culture and deposition in the archaeological record. Attempted eradication of tattooing is seen in various global contexts of cultural and colonial contact. The most extreme examples tend to be contact with religious entities and states, such as the Judeo-Christian perception of a biblical ban on tattooing and associated body modifications (Scheinfeld 2007: 363), and the Greco-Roman privileging of the "purity" of the "idealized" body (Buss and Hodges 2017: 12). However, those marginalized because of tattoos and what they are perceived to represent can be found beyond Western subcultures, for example, in the Ramnaamis of the "caste of untouchables" in India (Hawthorne in Scheinfeld 2007: 363), the Ainu of Japan, and Khmer of Cambodia (Hawthorne in Scheinfeld 2007: 364; de Bernon in Scheinfeld 2007: 365). The suppression of tattooing was not always from without or from a great distance but could be endemic to states and regions, yet always defined by othering those who made and wore tattoos. The decline of tattooing was not a by-product of contact and cultural genocide but targeted by, for example, European colonizers and the Christian Mission designating it "the Devil's art" (Thomson quoted in Te Awekotuku 2006: 129). By attacking tattooing which was heavily tied to identity in many Indigenous cultures globally, it attacked the very essence of heritage etched into their bodies. Suppressing tattooing created archaeological impermanence as there were less tattooists practicing, less implements in use, and less bodies bearing tattoos. However, tattooing still exists today due to its cultural permanence.

Cultural Permanence

Socio-culturally, tattoos are viewed as permanent body modifications but tattooing practices and practitioners are equally resilient. During European colonialism, some explorers and ethnographers attempted to stave off the impermanence of tattoos by recording accounts or illustrations of them to be preserved in institutions like archives and museums. However, for many Indigenous peoples tattooing can actually be seen not as subject or object of the archive or museum, but actually equivalent to those institutions in itself. Calano (2012: 99) presents this perspective wherein "societies whose concept of the Western archive is absent, the body becomes a repository of significant life events and rituals tangibly and symbolically expressed by traditional tattoos". In the study's example, the archive of *batek* is "helpful in the reconstruction of personal and local histories" (Calano 2012: 110) which is significantly resonant in other Indigenous tattoo cultures and their survival/revival globally.

Tattooing's survival relied on keeping practices (and thus "archives" of cultural heritage (Calano 2012)) alive, but in some cases required iconography and its heritage meanings be imbued in different mediums. This is seen through the remediation of Māori *ta moko* tattooing to wood carving (Te Awekotuku 2006: 124). Similarly, *burik* tattoo iconography is incorporated into garments and "*burik* worn as clothing has also become part of the modern way of (re) expressing identity in the Philippines" (Salvador-Amores 2018: 52). It is not just that iconography is assimilated into fashion, but that the ICH is seen to be worn as clothing because the clothes

> effectively bundle the embodiment of the social character and historical nature of the tattoos within the texture of the fabric in order to transform the status of a once extinct and ancient tattoo to a vibrant and living one (Salvador-Amores 2018: 53).

Remediation from skin to garments is possible because tattoos were already understood to "function" as clothing (Salvador-Amores 2021) and so the shift was the most natural progression in the unnatural situation of

colonization.

Revival of tattooing in other Indigenous contexts is similarly tied to reasserting presence and identity. Reviving traditional techniques alongside original iconography within contemporary Indigenous communities shows how the heritage can retain original significances but also how "it heals, it reminds them who they are, where they come from and the strength our people have. The tattoo makes a powerful statement that we are still here and will continue to live and thrive in this world" (Tahbone quoted in Krutak 2018b: 289). Tattooing is a marker of survival through the same culturally permanent ancient process, but also takes on new anti-colonial meanings. In Aotearoa-New Zealand, revival of *ta moko* was/is "a political act, an exercise of will, and a declaration of resistance" (Te Awekotuku 2006: 134) for Māori people. Te Awekotuku (2006: 137) specifically notes that *ta moko,*

> as an artifactual and tangible object, and also as a living, organic medium, it has been collected and commodified. And it continues to grow, beyond the colonial notions of containment and categorization, beyond the strictures of Western academic inquiry and scholarly reflection.

It is fitting that the ICH of *ta moko* exists beyond divisions and constraints imposed upon it through colonization, just as tattooing does not fit comfortably in the divisive categories scholars construct within the Archaeology-Heritage Divide.

Conclusion

Tattooing presents a host of dichotomies, contradictions, and divisions. It is old and new, here and there, embedded in the body and embedded in the culture. However, tattooing follows a continuum traced from the ancient archaeological record to survival/revival of tattooing today. When considering tattooing in terms of the Archaeology-Heritage Divide and its constituent divisions, it inverts conventional archaeological permanence of tangibles and cultural impermanence of intangibles. Breaking down these divisions and

exposing their fluidity and interdependence showcases how limitations on one side can be circumvented by their supposed binary opposition.

In an interdisciplinary field like archaeology where scholars have the benefit and expectation to borrow theories and utilize methods from other disciplines, divisions can serve practical functions of isolating and making sense of specific data. These divisions can be used judiciously and consciously but they must be understood to be artificially constructed rather than representing real divisions in the archaeological record or heritage of cultural groups. It is necessary to acknowledge these boundaries, the purpose in their construction, and how looking beyond them is the only way to truly understand a subject holistically.

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