



MESOPOTAMIAN FISH SKIN: BETWEEN RITUAL AND MATERIAL REALITY

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Ancient Mesopotamian societies dwelled in a world surrounded by supernatural forces, accessed through ritual practices conducted by priests. The fish-cloaked apkallu, a hybrid figure, survivor of the Deluge, associated with Enki and the primordial apsu, bridged terrestrial and aquatic realms. Their appearance on ritual basins, amulets, figurines, and bas-reliefs highlights their role in protection and purification. Yet, despite frequent iconographic representations, the material basis of their distinctive attire—fish skin—remains understudied. This study re-evaluates fish skin as a ritual material in Mesopotamian magic, arguing that, despite its absence in the archaeological record, it may have been used in robes worn by priests. The plausibility of such attire is supported by comparative examples, including leopard skin cloaks worn by Egyptian priests frequently depicted in temples. A third-century CE Egyptian Roman-period crocodile-skin armor linked to the cult of Sobek, and ethnographic records of fish skin clothing among Arctic Indigenous communities, demonstrate the technological feasibility of crafting garments from aquatic skins. These parallels situate Mesopotamian practices within broader cross-cultural frameworks of sacred animal material use. By highlighting this overlooked material, the study reassesses ancient ritual technologies and emphasizes ceremonial dress' role in mediating relationships between humans, animals, and the divine.

Keywords: Fish-cloaked apkallu, Mesopotamian ritual garments, Magical healing practices, Environmental knowledge, Animals in religion.

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MEZOPOTAMYA'DA BALIK DERİSİ: RİTÜEL İLE MADDİ GERÇEKLIK ARASINDA

Antik Mezopotamya toplumları, doğaüstü güçlerle çevrili bir dünyada yaşıyordu. Bu dünyaya rahipler tarafından gerçekleştirilen ritüel uygulamalar aracılığıyla erişiliyordu. Tufan'ın hayatta kalanlarından olan, Enki ve ilksel apsu ile ilişkilendirilen balık pelerinli apkallu, karasal ve sucul âlemleri birbirine bağlıyordu. Ritüel leğenlerinde, tılsımlarda, heykelciklerde ve kabartmalarda görünmeleri, koruma ve arınma işlevlerindeki rollerini vurgular. Ancak bu sık ikonografik temsillere rağmen, onların ayırt edici giysilerinin materyal temeli—balık derisi—yeterince çalışılmamıştır. Bu çalışma, Mezopotamya büyü pratiğinde bir ritüel malzemesi olarak balık derisini yeniden değerlendirmekte ve arkeolojik kayıtlarda korunmamış olsa da rahiplerin giydiği cüppelerde kullanılmış olabileceğini öne sürmektedir. Böyle bir giysinin olası kullanımı, tapınlarda sıkça tasvir edilen Mısır rahiplerinin leopar derisi pelerinleri gibi karşılaştırmalı örneklerle desteklenmektedir. MS üçüncü yüzyıla tarihlenen ve Sobek kültüyle ilişkilendirilen Roma dönemi Mısırı'na ait timsah derisi zırhı ile Arktik yerli topluluklarında balık derisinden giysilere dair etnografik kayıtlar, sucul hayvan derilerinden giysi üretiminin teknolojik olarak mümkün olduğunu göstermektedir. Bu benzerlikler, Mezopotamya uygulamalarını kutsal hayvan materyallerinin kullanımına ilişkin daha geniş kültürlerarası çerçevelere yerleştirir. Bu çalışma, gözden kaçmış bu malzemeye dikkat çekerek antik ritüel teknolojilerini yeniden değerlendirir ve törensel giysinin insanlar, hayvanlar ve ilahî güçler arasındaki ilişkilere aracılık etmedeki rolünü vurgular.

Anahtar kelimeler: Balık pelerinli apkallu, Mezopotamya ritüel giysileri, Büyüsel şifa uygulamaları, Çevre bilgisi, Dinde hayvanlar

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INTRODUCTION

Ancient Mesopotamian civilizations developed a scientific tradition encompassing astronomy, mathematics, physics, medicine, geology, zoology, and botany grounded in observation and documentation. Hundreds of cuneiform tablets from the third millennium BCE to the Hellenistic-Roman period attest to this technical knowledge. The integration of magical elements reflects a worldview in which natural and supernatural phenomena coexisted. Their achievements include the oldest chemistry texts, with techniques for producing colored glass, metal patinas for ceramics, and tanning agents for leather (Levey 1959; Forbes 1966). The Nineveh Medical Encyclopedia compiled under the Assyrian king Ashurbanipal (669–627 BCE) (Layard 1849) contained anatomical observations and medical and ritual healing procedures. These were accompanied by diagnostic descriptions and detailed pharmacological instructions. Treatments were administered by the physician *or asu*, while ritual interventions were conducted by the exorcist-priest or *asipu* (Black and Green 1992).

Neo-Assyrian and Neo-Babylonian records, both textual and iconographic, provide numerous depictions of rituals featuring fish-cloaked *apkallu*, figures interpreted as semi-divine sages or priestly intermediaries. Their cloaks suggest more than symbolic attire. The consistent representation of these garments supports the hypothesis that such items may have existed as ritual paraphernalia, including masks or full-body cloaks fashioned from processed fish skin worn by Assyrian exorcists (Nigro 2002). Viewing these garments as purely mythological may overlook their possible use in actual ritual practice. This study examines their iconography, investigating their association with water and the underworld, drawing on archaeology, art history, religious studies, tanning technologies, and environmental humanities to reassess the ritual-technological significance of animal materials in Mesopotamian ceremonial practice.

Fish (Fig. 1) held a central role in Mesopotamian religious practice through sacrificial rites (Fig. 2), evidenced by fish remains found in funerary offerings, settlements, and temples. Within the cult of Enki, fish were presented as votive offerings. Jars filled with fish bones have been found at temple sites, linked with marsh-dwelling communities (Fig. 3) who sought Enki's protection from seasonal flooding (Kreuzer 1984). While often dismissed in material culture studies as food waste, fish skins from large-scaled species like carp from the Tigris and Euphrates are technologically suitable for garment production. These species possess dermal structures that can be processed into leather using traditional tanning methods, as demonstrated by ethnographic examples by Arctic Indigenous Peoples (Palomino 2025b).

While zooarchaeology provides insights into past human-animal interactions, it tends to reflect the most exploited species, and smaller and fragile fish remains are sometimes underrepresented in the archaeological record, even if dietary preferences may also be a factor (Gilbert 2002). Despite direct archaeological faunal evidence from Mesopotamia, comparative examples help frame the technological plausibility of fish skin as a material for ritual attire. One such example is a third-century CE crocodile-skin armor from Manfalut, Egypt, linked to the cult of Sobek, and now held in the British Museum. While not directly analogous in species, time period, or religious context, this suit demonstrates that aquatic animal skins were historically transformed into ritual and martial garments. Additional parallels can be found in Indigenous Arctic traditions, where fish skin clothing served both practical and sacred functions (Palomino 2022). Together, these examples point to a broader cross-cultural practice of using aquatic skins for ritual dress, offering insight into the possible use of fish skins in Mesopotamian ritual.

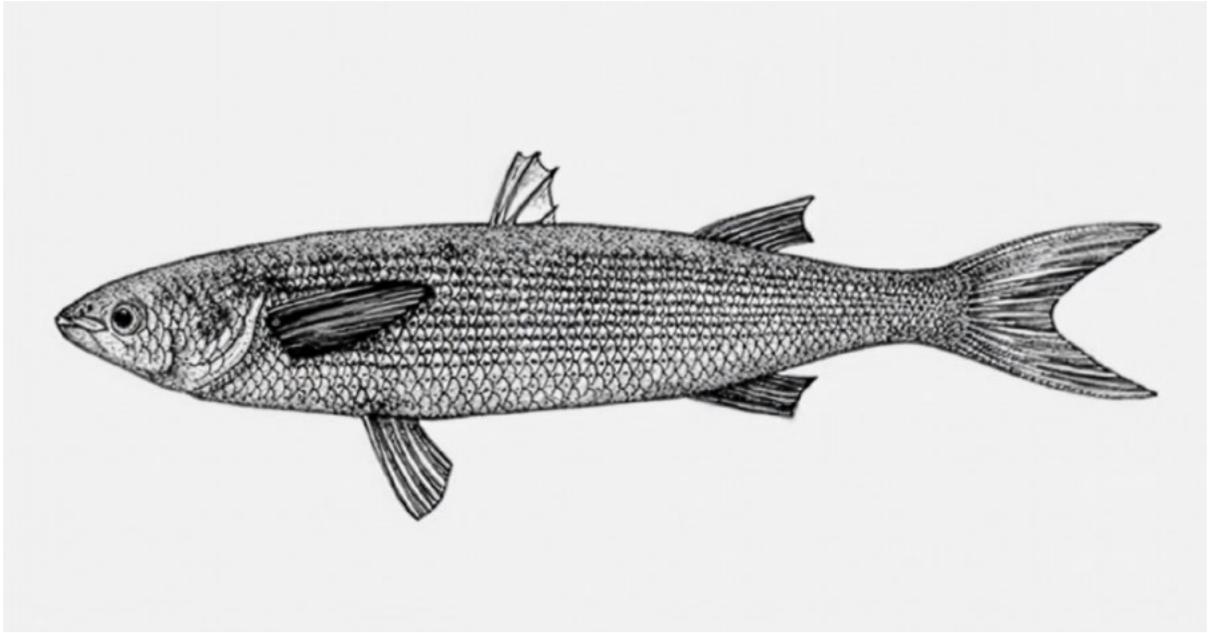


FIG. 1

Line drawing of Chelon auratus by S. Laurie-Bourque.

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FISH SKIN AND MESOPOTAMIAN RITUAL PRACTICES

Neo-Assyrian palace reliefs depict *genii* and *Mischwesen*—composite beings combining human and animal features—positioned at or near doorways. These figures' function extends beyond protection. They are part of a broader framework of initiation and gnosis, based on the knowledge cultivated by Assyrian scholars, in which the spiritual privileges of the monarch were administered by an intellectual elite (Ataç 2014). The pursuit of hidden knowledge was linked to religious and magical rites (Ferreira 1952). Priests, revered as highly trained specialists, engaged in mystical powers through transformative rites reminiscent of rites of passage (Burns 2014). Their worldview included forces of good and evil, with gods and demons playing central roles in rituals (Green 1984). The boundaries between disciplines such as magic, medicine, and divination were fluid, with practitioners employing a combination of techniques to address various ailments and supernat-

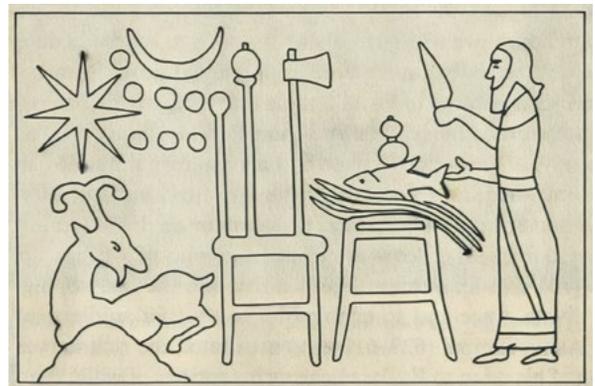
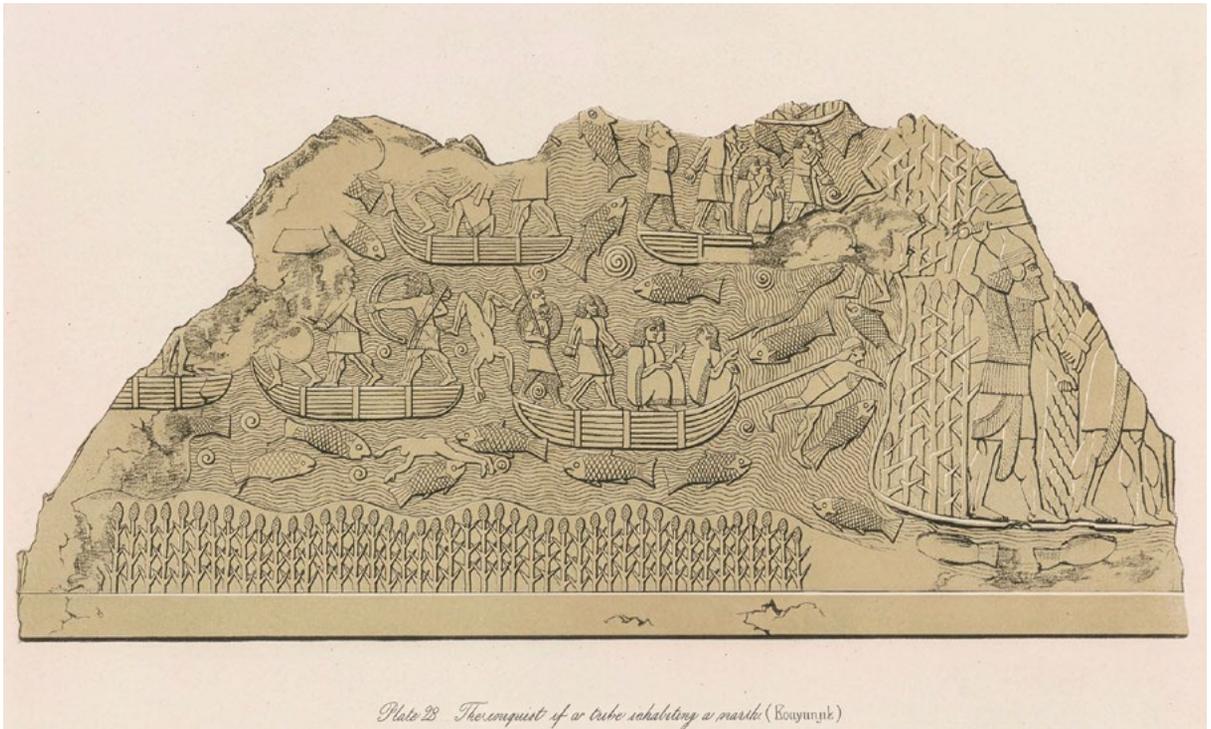


FIG. 2

Cylinder seal. Fish sacrificed to Ea (Green and Black 1992, 189, fig. 158).

ural threats (Geller 2018). The practice of magic served diverse purposes, from healing the sick to protecting individuals and communities from dark forces (Geller 2015). These ceremonies were designed to counteract and dispel evil magic and its harmful effects, aiming to protect while punishing and neutralizing those responsible for casting malevolent spells (Abusch 2015).



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Plate 28 *The conquest of a tribe inhabiting a marsh* (Boayunuk)

FIG. 3

A tribe inhabiting a marsh. Drawing by Henry Layard, from an Assyrian bas-relief at a temple at Nimrud (Layard 1853b, pl. 28).

In traditional societies, foundational acts are located in mythic time—an era preceding the division of heaven and earth, when animals could speak or assume human form, and the potential for creative transformation was unbounded. Myth, in this context, is not a primitive precursor of science but a cultural framework for interpreting human experience. As every society develops science, so too does it construct myths. These serve to organize social reality and express values. However, the overarching mythic narratives that have shaped modern historical thought have increasingly lost their explanatory power (Graeber and Wengrow 2021). Despite modern skepticism, the study of ancient magical systems offers valuable insights into human spirituality. Mythical narratives, dismissed as irrational or superstitious, provide timeless stories about how to lead meaningful lives and foster communal harmony

(Hall 2022). The exploration of the legacies of Mesopotamian fish-garbed apkallu illustrates the spiritual depths of ancient traditions that may otherwise go unrecognized in increasingly rationalized society.

The apsu: water, wisdom, and civilization

In Mesopotamian mythology, the *apsu* represents the freshwater abyss beneath the earth, the primordial of all terrestrial waters. It was the domain of Enki/Ea, whose temple at Eridu symbolized his association with wisdom. Enki plays a guiding role in mythic crises, including floods and conflicts amongst the Gods in the narrative of the Epic of Gilgamesh (Ringgren and Sturdy 1976). The *apsu* serves as a metaphorical wellspring of sacred knowledge, with Enki as its custodian (Geller 2014). In Mesopotamian tradition, it was the birthplace of the Seven Sages (apkallus), mythical beings who emerge as bearers of civiliza-

tion, knowledge, and human progress (Black and Green 1992). All apkallus are tied to a cosmic proto-history (Green 1983) where scholars (*ummanus*) served as human successors to these semi-divine sages, transmitting their wisdom without surpassing it (Parpola, 1993b). In Neo-Assyrian palaces (Fig. 3), depictions of apkallus were part of an intellectual tradition that preserved a sacred understanding of the world (Ataç 2014).

The Sumerian terms *abgal* and *ummea* are translated in Akkadian to *apkallu* and *ummanu* to designate individuals with specialized knowledge. In the Mesopotamian king list tradition, each antediluvian ruler is paired with an apkallu advisor (Reiner 1961). Later *ummanus*—scribes, artists, or court scholars—assumed this role, inheriting portions of the lost pre-Flood wisdom (Glassner 1815). The apkallus flanking the sacred tree in reliefs represent guardians of the king's moral integrity and purity of soul (Parpola 1993a). The kings' lineage is framed around the Deluge, a cosmic rupture that marks the transition from a spiritually informed early age, represented by the apkallu described as 'pure' (*ebbu*), to one of restricted spiritual knowledge guarded by a select elite, the *ummanus*, who have access to a portion of the information formerly held by the apkallu. The declining 'spiritual quality' of the time cycles progressively contributes to a succession of world eras of deteriorating quality (Parpola 1993b). This shift is a division between an era of revelation and one of transmission, where access to divine secrets becomes limited. The first phase is characterized by the pre-Flood sages and the second by another group of experts who are their immediate followers that came after the Flood (Kvanvig 1988). The Epic of Gilgamesh exemplifies this: Gilgamesh, as *ummanu* and seeker of wisdom, is able to reach his forefather Utnapishtim, the eighth of the antediluvian kings in Mesopotamian tradition, an apkallu survivor of the flood and custodian of hidden knowledge (George 2003; Ataç 2014).

This association between water, wisdom, and civilization reflects true enlightenment flowing from the depths of existence, much like water gushing from springs hidden beneath the earth's surface. Enki's status as the god of wisdom reinforces this connection, highlighting the link between the physical and metaphysical realms in Mesopotamian traditions.

Berosus and the mythical sages

Berosus, a Babylonian priest writing during the early Seleucid period, composed the *Babyloniaca*, a three-volume account of Babylonian history and culture. Although the work is now lost, significant excerpts survive through later classical authors. Berosus describes a primordial age in which humanity lived without laws, like wild animals, reminiscent of earlier Sumerian myths that attribute the origins of civilization to deities such as Enlil and Enki (Beaulieu 2021). In Berosus' narrative, the culture-bringer is Oannes, a composite figure—half-human, half-fish—who emerges from the sea to teach humanity the foundations of culture, arts, sciences, agriculture, and governance before returning to the waters at sunset (Gane 2012). Berosus links Oannes to the antediluvian sages, legitimizing the priestly class as interpreters of divine wisdom (Beaulieu 2021).

Further evidence of the occultation of the knowledge of a vanished era and its restricted transmission appears in Berosus' reference to Utnapishtim—Ziusudra in the Sumerian tradition—who is said to have buried the "beginnings, middles and ends of all writings" at Sippar prior to the Flood. Survivors were later instructed to recover and redistribute these texts to mankind (Kvanvig 1988, cited in Ataç 2014, 154). This idea, echoed in the Babylonian scribal tradition, identified Oannes as the first sage and source of ancient literary knowledge (Parpola 1993b).



FIG. 4

Neo-Assyrian terracotta plaque of a winged human figure from Assur, Iraq, 800–600 BCE (© Allard Pierson Museum, Amsterdam).



FIG. 5

Neo-Assyrian terracotta plaque of a winged, bird-headed figure from Assur, Iraq, 800–600 BCE (© Allard Pierson Museum, Amsterdam).

REPRESENTATIONS OF THE APKALLU

In early Mesopotamian religion, divine beings were associated with animals and natural forces (Kreuzer 1984). The apkallu, or seven demigods, described as part man and part fish or bird are associated with the Babylonian tradition of the Seven Sages (Green 1994). In the Neo-Assyrian palace reliefs, the apkallu occurs in three principal guises: the winged human (Fig. 4), the winged bird-headed figure (Fig. 5), and the fish-cloaked figure (Fig. 6) (Dalley 2011). These figures are depicted in mirror-image pairs flanking sacred trees, gods, or kings, with the common pose of a standing figure holding one hand forward or downward while the other is raised.

The fish-cloaked apkallu is represented as a bearded human figure wearing the full body of a fish, with the fish head drawn over the human face (Wiggermann 1992). These figures, originated from the *apsu* and associated with the *purādu*-fish or carp (Dalley 2011), served as protective supernatural beings, embodying the figure of Oannes as described by Berossus (Wiggermann 1992). Representations show an intentional overlap between the fish-man antediluvian figure and the exorcist-priest of Ea, reflecting a tendency in Mesopotamian religion to merge the mythical and ritual spheres (Nigro 2002).

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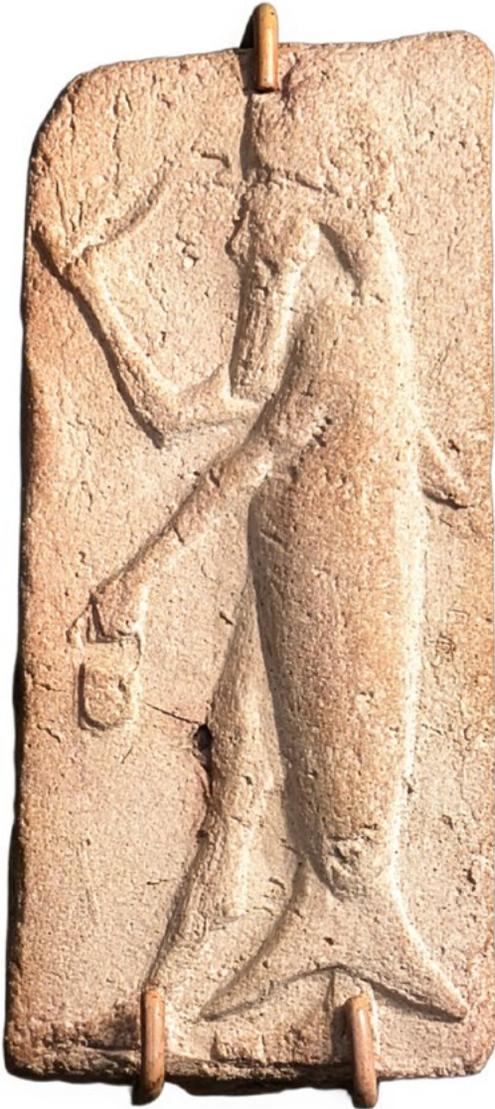


FIG. 6

Fish-cloaked apkallu. From Assur, Iraq; 800–600 BCE (© Allard Pierson Museum, Amsterdam).



FIG. 7

Freshwater mullets of Iran. *Chelon auratus* from the Anzali Shore. Photograph by K. Abbasi (Coad 2014).

Ichthyological representation of the fish apkallu

Due to their abundance in local rivers, fish (Fig. 7) played a crucial role in both subsistence and religious practices in ancient Mesopotamia (Batmaz and Uhri 2008; Coad 2010). The artistic depictions of fish (Fig. 8), particularly the Euphrates carp species (*Cyprinus carpio*), displayed the artists ichthyological expertise (Jawad 2021). These representations affirm Mesopotamians' exploitation of underwater life (Gilbert 2002) reinforcing its role as a cradle of human innovation and coastal adaptation and the region's relevance as a thriving center of early maritime culture. Beyond Mesopotamia, the symbolism of fish extended across cultures, representing prosperity and renewal (Ölmez and Kartal 2019).

From an ichthyological perspective, the most anatomically accurate representation of ancient Mesopotamian fish art is archaeologist Sir Austen Henry Layard's drawing (Fig. 9) of a stone relief (Fig. 10) at the temple of the god Ninurta in the Assyrian city of Kalhu (modern-day Nimrud) during the reign of King Ashurnasirpal II (883–859 BCE). The arrangement and gradation of the scales along the body, which increase in size towards the tail, a characteristic common to many species of fish, is remarkable. The artist also accurately depicted details such as the fin rays, the position of the pectoral fins, and the shape of the head and the lips. The three curved lines under the mouth of the fish, representing gill rays, may have had a symbolic function resembling a crown, reinforcing the status of the fish-cloaked apkallu as a figure of wisdom. It is likely that the species depicted belongs to the cyprinid family (Fig. 9), which are large and valuable. The choice of such species to represent a sage highlights the association between prized fauna and high-ranking social functions (Jawad 2021).

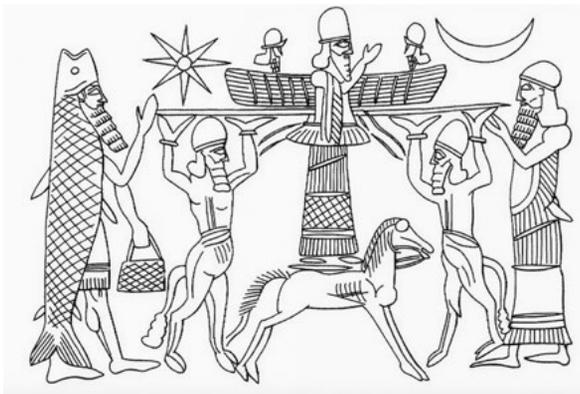


FIG. 8

Neo-Assyrian cylinder seal with the sun god Šamaš supported by bullmen (Green and Black 1992, 103, fig. 82).

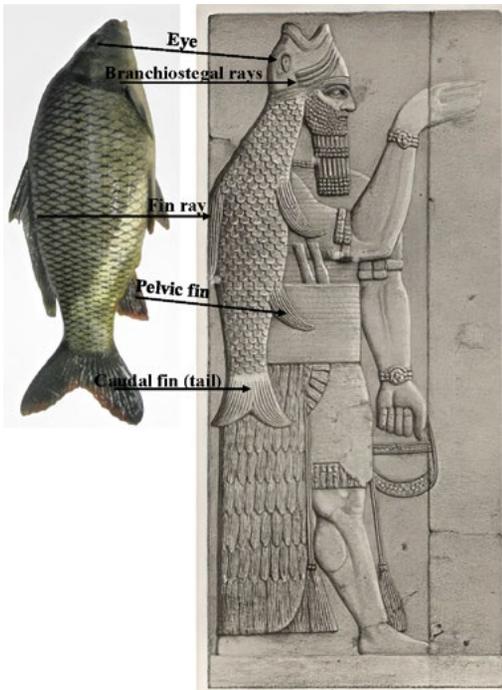


FIG. 9

Example of an indigenous Cyprinid (carp family) from Iraq (left) compared with a fish apkallu (right) in an original drawing by Sir Austen Henry Layard depicting a genie dressed in a fish garment from the Northwest Palace of Nimrud (after Layard 1853b, pl. 6).



FIG. 10

Fish apkallu wall-panel relief excavated by Sir Austen Henry Layard (© The Trustees of the British Museum).



FIG. 11

Image of figures wearing fish skin from fourteenth century BCE. Aleppo (Layard 1853b, pl. 6; © The Trustees of the British Museum).

The geographical, chronological, and artistic range of the fish-cloaked apkallu

The geographic range of the fish-cloaked apkallu spans the ancient Near East, encompassing modern-day Iraq, Syria, Turkey, and Iran. The term “Mesopotamia,” meaning “land between rivers,” refers to the Tigris and Euphrates Basin—a cultural and religious heartland where the apkallu tradition emerged (Ringgren and Sturdy 1976). Sumerian, the earliest recorded language of southern Mesopotamia, used cuneiform writing and laid the foundation for religious texts in which rituals related to the fish apkallu have been recorded. The apkallu figures depicted in Neo-Assyrian art are not novel creations but rather reinterpret a long-standing mythological tradition from the repertoire of earlier Mesopotamian periods, facilitated

by Assyria’s dominance over southern regions such as Babylonia, Sumer, and Akkad (Ataç 2014).

The fish apkallu figures in Assyrian iconography reveal a fascinating blend of human and aquatic characteristics. Throughout different periods, their distinctive attire evolves. The fish apkallu, depicted as a bearded human with a fish over the scalp and a fish body hanging down the back, emerged in the late second millennium BCE. Initially appearing in the Kassite period, it gained popularity in Neo-Assyrian and Neo-Babylonian art. Assyria served as its origin, spreading to Babylonia, and eventually influencing Persian and Seleucid art. The figure’s representation evolved over time, with its fish skin garment transitioning from reaching the ground in the fourteenth–tenth centuries BCE (Fig. 11) to a shorter cape



FIG. 12

The Northwest Palace of Nimrud, ninth century BCE (Layard 1853b, pl. 6).



FIG. 13

Detail of a fish-cloaked apkallu from an Assyrian cylinder seal, seventh century BCE (© The Pierpont Morgan Library, New York).



FIG. 14

Detail of fish attire from Pasargadae, Iran, 546–529 BCE (after Godard 1998, 96, fig 40).

by the ninth century BCE (Fig. 12), before reverting to a longer form in the eighth century BCE (Fig. 13) (Black and Green 1992). This attire was also depicted in reliefs at Pasargadae (Fig. 14), the imperial capital and heart of the Persian Empire (Godard 1998). The fish-garbed figure persisted in cylinder seal designs, finally appearing in Seleucid art (Green 1994). This widespread and evolving visual tradition positions the apkallu figure across temporal and regional contexts.

Apotropaic deposits of fish-cloaked apkallu

Several archaeologically-recovered deposits reflect the apotropaic nature of apkallu figures in Mesopotamian religious practice, providing protective functions that “turn away” malevolent forces (Nakamura 2017). Clay figurines of fish-cloaked apkallu were crafted as votive objects, buried beneath houses and

temple floors (Smuts 2019). The deposition of these figurines mimicked human creation and reproduction, providing protection in a precarious existence through offerings to the gods (Black and Green 1992). As Nakamura (2004) explains, such rituals channel sacred forces to secure protection in daily life, with the act of burying the figurines symbolizing both consecration and a negotiation with invisible supernatural powers. These rituals targeted evil forces residing in the underworld that could penetrate through cracks in the earth, making foundation deposits essential for safeguarding space (Green 1983; Black and Green 1992). Archaeological excavations have revealed brick boxes (Fig. 15) containing groups of seven fish-cloaked apkallu figurines (Fig. 16) beneath floors, invoking the sacred number seven known from ancient texts (Muroi 2014). Their placement followed strict placement rules



FIG. 16

Unbaked clay fish-cloaked apkallu figurines
(© The Trustees of the British Museum).

outlined in ritual manuals composed by scribe-scholars, including detailed material descriptions and numerical specifications for the figurines (Ataç 2014). Strategically placed beyond the human realm, these figurines guarded entrances and key areas within buildings, such as doorways, walls, corners, thresholds, and the middle of rooms (Nakamura 2004), protecting individuals and buildings from disease and evil forces (Wiggermann 1992). The rituals surrounding their placement involved elaborate ceremonies performed by trained practitioners (Gane 2012).



FIG. 15

Brick capsule with fish apkallu figurines.
Assur (after Preusser 1954, table 28b).

Fish-garbed genii on amulets containing magical incantations

Amulets containing magical incantations held important roles in exorcism rituals (Wiggermann 2007), serving as protective instruments against diseases believed to be manifestations of divine wrath. These rituals involved the invocation of major deities such as Ea, Enlil, and Marduk by ritual specialists (Kreuzer 1984). Bronze or copper plaques, such as the *Lamassu* relief (Fig. 17), illustrate exorcism scenes featuring genies clad in fish garb alongside other protective beings like lion-demons and smiting gods (Wiggermann 2007). The *genii* figures are positioned at the sick person's bed (Fig. 18-19) protecting against demonic entities (Green 1984). These exorcism rituals, conducted at night by oil lamps, involved specialized priests known as *baru* and *asipu* (Fig. 18), each with specific roles in divination and ritual practices, respectively (Geller 2018). Given that these plaques include lion-headed demons and two turtles, animals associated with divination, and that the fish *genii* are shown holding a flabellum in the act of sprinkling (Nigro 2002), reinforcing their protective function (Andrae 1937), it is possible that the fish-cloaked figures represent priests wearing animal disguises.

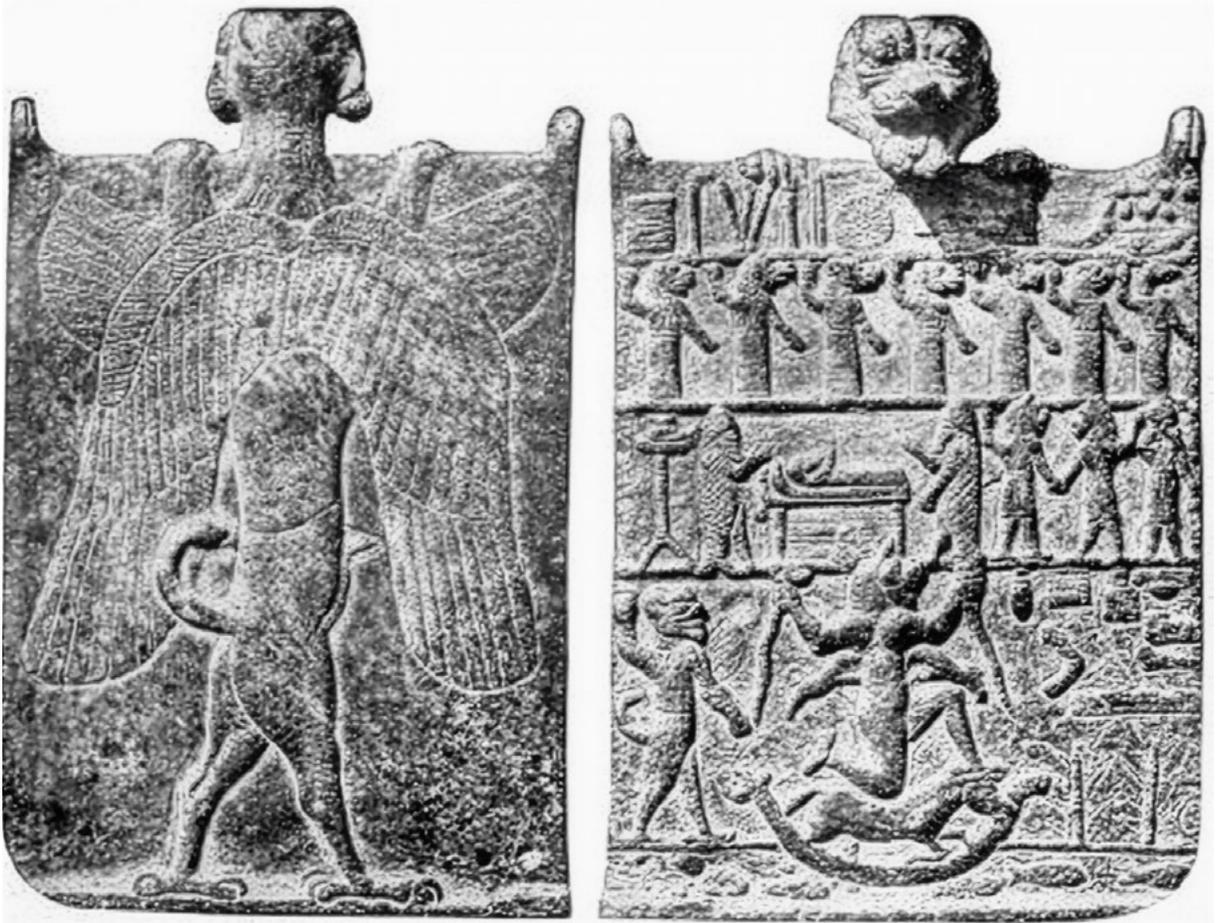


FIG. 17

Lamassu relief. Louvre, Paris (Green and Black 1992, 181, fig. 151).

Large-scale fish apkallu on relief slabs decorating the Neo-Assyrian palaces

Large figures of fish apkallu adorned the relief slabs on Neo-Assyrian palaces, arranged prominently at the entrances. These reliefs served as imperial propaganda, depicting various animal-human composites (Ataç 2014). Within sacred spaces, the placement of fish-garbed *genii* showcase their protective function in areas connected with healing and purification rituals. It is therefore important to distinguish between

fish-*genii* and fish-cloaked priests. In reliefs and statuary, the fish-cloaked figures consistently represent tutelary *genii* rather than actual priests wearing fish disguises (Madhlom 1970; Nigro 2002). This applies to the fish-cloaked figure sculpted in the Northwest Palace at Nimrud (Fig. 12). Nineteenth-century excavations conducted by Austen Henry Layard at Nimrud and Nineveh yielded numerous sculptures and relief panels (Layard 1849, 1853a). Among these was a figure of a fish-apkallu, a protective spirit depicted with a fish cloak (Layard 1853b).



FIG. 18

A reconstruction of a painting by H. M. Herget with *genii* in fish garb (after Green and Black 1992, 125, fig. 104).

Fish-cloaked apkallu on Neo-Assyrian cylinder seals

In most Neo-Assyrian cylinder seals and stamp seals (Fig. 20-21), figures clad in fish garments are usually identified as representations of the apkallu (Nigro 2002). These objects served administrative purposes and were used to mark property and authenticate documents, while also functioning as amulets that invoked the protective powers of the supernatural beings they depicted (Gane 2012). Artistic representations show fish-cloaked apkallu alongside other mythical figures, reinforcing themes of cosmic balance and divine au-

thority. Their proximity to the sacred Tree of Life (Fig. 20) symbolized the transfer of divine power and fertility to the king, who was portrayed as the perfect image of a god, the guardian of cosmic order, and a conduit of fertility (Parpola 1993a; Gray 1969). The seal owner is usually shown in a position of reverence before a deity, further affirming their role as intermediaries between the divine and human realms (Ataç 2014).

Three cylinder seals dating to the Kassite period, excavated from the Royal Palace at Thebes in Boeotia, feature figures clad in fish skin garments (Porada 1981). One example from the Pierpont Morgan Library (Fig. 20) portrays two fish-garbed men sprinkling a sacred tree topped by a winged solar disk (Porada 1948). Given the symbolic link between the sacred tree and Assyrian royalty, this gesture symbolizes the transmission of divine wisdom to the king and his dynastic line (Nigro 2002). A second seal from the British Museum (Fig. 21) shows a fish-cloaked figure, identified as a fish-*genie*, holding a pinecone sprinkler. The fish skin covers approximately two-thirds of the figure, leaving visible a long, fringed robe of woollen tufts. This garment, combined with the use of the aspergillum, marks the figure as semi-divine, a trait of mythological beings and divine ancestors (Nigro 2002).

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FIG. 19

Lamassu relief detail of apkallu with sick man. Louvre, Paris (Green and Black 1992, 181, fig. 151).



FIG. 20

Impression of an Assyrian cylinder seal depicting fish-cloaked apkallu attending the Tree of Life (© The Pierpont Morgan Library, New York).

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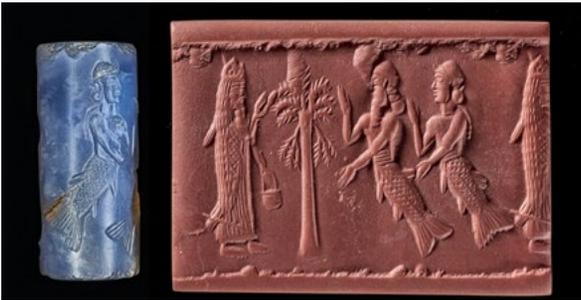


FIG. 21

Chalcedony cylinder seal with a fish-cloaked apkallu (© The Trustees of the British Museum).



FIG. 22

Water basin from Assur Temple excavated by Walter Andrae. Assyrian reign of Sennacherib, 704–681 BCE. Pergamon Museum, Berlin (Andrae 1937, 30, fig. 1).

In ritual contexts, the fish-head mask was an integral part of the exorcist-priest's costume during purification ceremonies. It signaled the priest's role as a conduit for divine power, enacting a mythic archetype. As emissaries of Ea, and under the authority of Marduk or Aššur, these priests performed rites modeled on the primeval acts of the fish-*genie*, who restored order to the world after descending into the underworld, returning with the gods wisdom (Thompson 1903; Nigro 2002).

Ritual water basin from the Temple of Assur

Another remarkable representation of a *genie* in fish garb (Nigro 2002) is found on a ritual water basin (Fig. 22) excavated by Walter Andrae in the Temple of Assur by Sennacherib (Andrae 1937). This basin, used for ritual purification, emphasizes the importance of water in Mesopotamian religious practice. Decorated with detailed representations of deities and fish-cloaked *genie*, the basin symbolized fertility, abundance, and protection against malign influences (Ornan 2005).

Prominently featured is the god Ea (Fig. 23) carrying vessels of flowing water, accentuating the sacred and purifying role of water and sacred substances in rituals aimed at cleansing both the physical body and spiritual soul (Dalley 2011). The fish-cloaked figures hold ritual implements—a pinecone and a bucket—used in the cone-smearing purification rite. The pinecone, or *mul-lilu*, and the bucket, *banduddū*, are linked in ritual texts with blessings and protection (Spence 1916; Black and Green 1992; Wiggermann 1992). These figures flanking the sacred tree or the king perform acts of symbolic pollination, with the cone resembling a male date palm flower. This act represents divine fertilization or sanctification, reinforcing the spiritual role of the apkallu as mediators of divine order (Ataç 2014) and suggesting the semi-divine nature of the figure (Nigro 2002).

FISH AND OTHER ANIMAL SKIN IN CROSS-CULTURAL CONTEXTS

Dress has long played a crucial role in ritual practices, serving as a potent tool for reinforcing religious values. In the ancient Near East, the use of costume in ritual performance has a rich and well-documented history, illustrating its association with specific rituals. Rituals, inherently, are meant to be enacted, and early ritual practices are likely to have been based on the use of mimicry, particularly with the use of animal skins to mimic beasts, representing a breakthrough in the cognitive evolution of humans (Cifarelli 2019).

The transformation of animal skins into leather used for clothing and other purposes is among the earliest known technological practices documented across ancient civilizations (Van DrielMurray 2000; Schwarz 2000). The process requires stabilizing the collagen fibers so they resist decay and become pliable and durable (Covington 2006; Thomson 2006). Identifying which species were used for leather provides insight into material choices and technological knowledge (Brandt et al. 2023). Understanding ancient leather production requires a multi-faceted approach: visual representations, textual records, artifacts, ethnoarchaeology, experimental studies, and scientific analysis (Veldmeijer and Ikram 2024). My own research on Arctic fish skin traditions and 200 artifacts held in more than 40 museums worldwide (Palomino 2025a), and on Indigenous processing and dyeing techniques (Palomino and Rahme 2021; Palomino et al. 2024; Palomino 2025b) and conservation (Palomino et al. in press), provides comparative insight into how fish skins can be processed into wearable material.

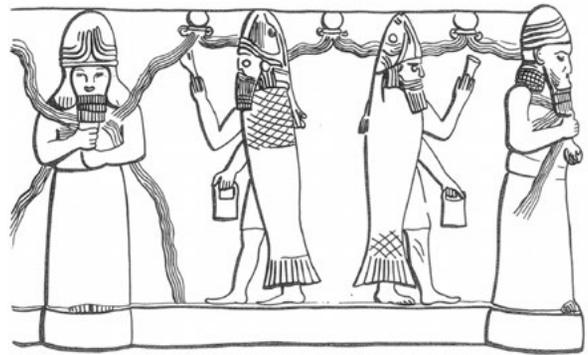


FIG. 23

Drawing of basalt water basin from the Temple of Assur (after Ornan 2005, 253, fig. 102).



FIG. 24

Figures dressed in the pelts of lions. Royal palace of the Assyrian king Ashurnasirpal II (883–859 BCE) at Kalhu (modern Nimrud) (Green and Black 1992, 33, fig. 24).

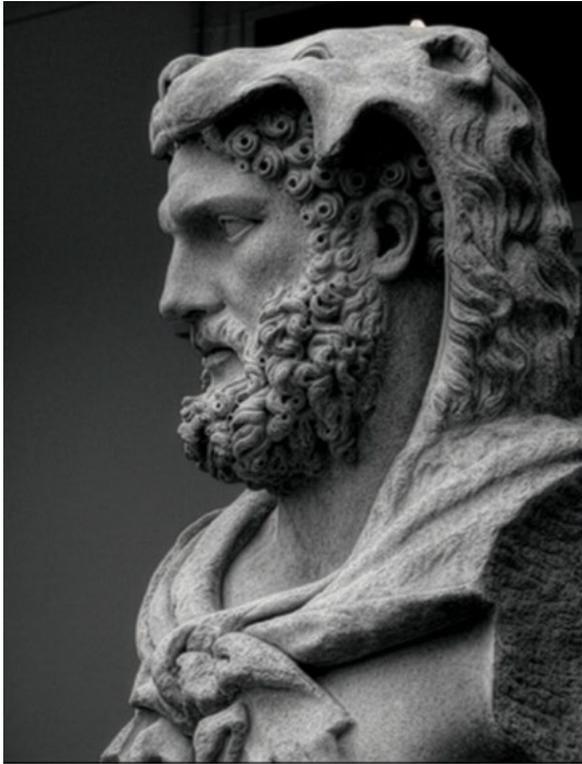


FIG. 25

Hercules wearing the skin of the mighty Nemean Lion, ca. first century CE, Metropolitan Museum of Art, New York.

Mesopotamia

Within Mesopotamian culture, ample evidence exists for ritual attire (Fig. 24), both in the visual representations found in relief decorations and in textual records. However, interpretations regarding the identity of the individuals wearing these costumes (Fig. 25) and the nature of their performances vary significantly among scholars. While some suggest that the many depictions of animal-headed humans and hybrid figures could represent shamans in a state of transcendental possession, others argue that these figures are primarily linked to Mesopotamian myths.

Leather was used for clothing and footwear in ancient Mesopotamia (Klauber 1913; Singer and Holmyard 1954). Cuneiform texts indicate the existence



FIG. 26

Man holding a Barbus esocinus (Mangar), weighing 32–34 kg and measuring 1.32 m, Camp Slayer, Baghdad, Iraq.

of skilled leather workers. A tablet from the first millennium BCE describes a slave workshop specializing in “the entire art of leather working” (Schenato 2014, 2). While the species used are not always clearly identified, cuneiform sources indicate both domesticated animals (such as cattle, sheep, and goats) and wild animals: wildcats, caracals, mongooses, ibexes, deer, sharks, surmulletts, hyenas, mouflons, wild boars, elephants, camels, wolves, lions, tigers, panthers, bison, jerboas, and hamsters were also tanned (Klauber 1913). These were crafted into objects such as breastplates, liquid containers, medical bags, sheaths, shoes, and belts (Brunello 1991; Schenato 2014). Animal skins were also used as flotation devices in ancient Mesopotamia, examples of which appear in British Museum reliefs (Grasso et al. 1990; von Behr 2023; Veldmeijer and Ikram 2024). Overall, leatherworking in Mesopotamia remains poorly documented. Simpler skin processing methods may have been used, and direct archaeological evidence is lacking.

In material culture studies, fish skin has mainly been seen as a food byproduct rather than as a raw material for garments (Hurcombe and Williams 2002). Arctic fish skin garments held in museums date no earlier than 1830 CE (Palomino 2022), and there is



FIG. 28

Pirarucu leather bomber jacket. Rick Owens Fall Winter 2023.

no fish skin archaeological record (Hurcombe 2014). However, comparable techniques to those used in Egypt—oil- or mineral-based—are found in historical and contemporary Arctic fish skin tanning traditions.

While direct evidence of fish skin in Mesopotamia is absent, the technological feasibility, combined with textual and iconographic cues, justifies exploring this domain. The inclusion of mullet fish species in ancient texts as a raw material used to make leather (Klauber 1913) suggests the possibility of fish skin processing. Artwork depicting figures dressed in fish-shaped capes, associated with priests or sages (Black and Green 1992), are undoubtedly symbolic.

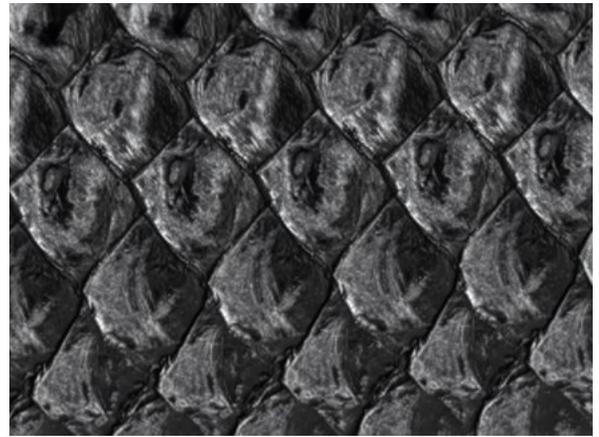


FIG. 27

Black Pirarucu leather. Noeva Kaeru tannery, Brazil.

However, this symbolism does not preclude the possibility of physical counterparts. Such garments may have existed, even if only in ritual contexts. Alternatively, symbolic imagery might have inspired the use of fish skin garments in ceremonies (Vávra 2020). While direct archaeological evidence is lacking, fish were a major resource in Mesopotamian diets and offerings. The size and durability of some species, such as carp, make the use of their skins for garments technically plausible (Fig. 26).

Their possible production and use in Mesopotamia (Fig. 13) invite renewed attention to the economic and ritual dimensions of aquatic resources. Modern parallels highlight the relevance of such practices. The Brazilian tannery Nova Kaeru has developed sustainable leather from the Amazonian pirarucu fish (Fig. 27) (Sebille 2019). This material has gained status as a luxury exotic skin in the fashion industry (Fig. 28). Following the introduction of a sustainable management plan two decades ago, pirarucu populations have increased, contributing to the stability of a traditional food source and the regional economy (Wightman-Stone 2019).



FIG. 29

Armor used by a Roman soldier during cult processions, a helmet and cuirass, of crocodile skin, third–fourth century CE (© The Trustees of the British Museum).

Egypt

Leather remains underexplored in archaeology due to its degradation and poor preservation. In Egypt, leather technology is better preserved due to the dry climate and better documented thanks to the exhaustive research on the leather industry and its archaeological remains over the past 25 years by André Veldmeijer (Veldmeijer 2008; Veldmeijer and Ikram 2024). Ancient leatherworkers used materials such as animal and plant oils, fats, alum, and tannin-rich vegetal substances (Reed 1972; Van Driel-Murray 2000). In ancient Egypt, the three major leathering process were oil tanning, using unsaturated fatty acids such as brain or fish liver oil, oil dressing, applying fatty or oil-based materials to a skin, and alum tawing (Skinner 2017); vegetable tanning, involving treating the skin with tannin extracts of vegetable origin (Van DrielMurray 2000), was not used before the Greco-Roman period (Veldmeijer 2008; Veldmeijer and Ikram 2024).

Leopard skin cloaks

In Pharaonic Egypt, pelts from large feline skins such as lion, panther, cheetah, and leopard (Reed 1972) were employed by royals and the clergy (Veldmeijer 2014). An example comes from Tutankhamun’s tomb, which contained leopard skin objects (Veldmeijer 2014; Skinner 2017; Veldmeijer and Ikram 2024). While some garments were made from textiles that imitated animal hides, stylized or incorporating features from multiple species, actual leopard skins were also employed in ritual contexts, especially in priestly dress (Veldmeijer and Ikram 2024). These garments were worn by *sem*-priests, who oversaw funerary and temple rituals, and by priests of Iunmutef, a funerary deity linked to Horus and prominent in royal mortuary cults from the Nineteenth Dynasty onward. Although these garments are usually identified as leopard skins based on their spotted patterns, some visual details, such as the tear markings on the animal’s face, more closely resemble those of a cheetah. This may suggest that by the New Kingdom period, the Egyptians either used the pelts of both animals

interchangeably or had come to associate their attributes in a syncretic ritual role. Despite frequent depictions in temple and tomb art, only one archaeological example of such a pelt survives, recovered from Tutankhamun's tomb (Veldmeijer and Ikram 2024).

Today, big cat skins are still used in African ritual to transmit power. Their appearance in numerous ancient Egyptian scenes supports the likelihood that Egyptian priests wore leopard skins (Veldmeijer and Ikram 2024). Similarly, given the frequency of fish-cloaked apkallu in Mesopotamian iconography, it is reasonable to consider that priests may have worn real fish skin robes.

A crocodile-skin armor

Egyptian leather was primarily produced from the hides of cattle, sheep, and goats, with gazelle hides used occasionally. The use of exotic skins, including leopard, lion, cheetah, antelope (Reed 1972), crocodile (Van Driel-Murray 2000; Wills 2000; Veldmeijer 2014), and possibly elephant (Veldmeijer 2008), have also been documented, though these were reserved for royalty and certain segments of the priesthood (Veldmeijer 2014). While there are no direct parallels to Mesopotamian fish skin garments, a later example from Roman Egypt—a third-century CE crocodile-skin suit of armor—illustrates broader cultural associations with aquatic animal materials. The suit, comprising a helmet and cuirass made from crocodile skin, was discovered in a grotto associated with the cult of Sobek, the crocodile god (Fig. 29-30) (Kockelman 2017) and is now housed in the British Museum (2025). Although this object is interpreted as protective armor rather than ritual dress, its material and findspot suggest symbolic associations. The crocodile's religious significance in Egypt demonstrates how the properties of certain animals could be transferred through their skins. Thus, crocodile skins may have embodied Sobek's divine powers, and wearing it signified their assimilation, even if the garment's function was not explicitly ritual.

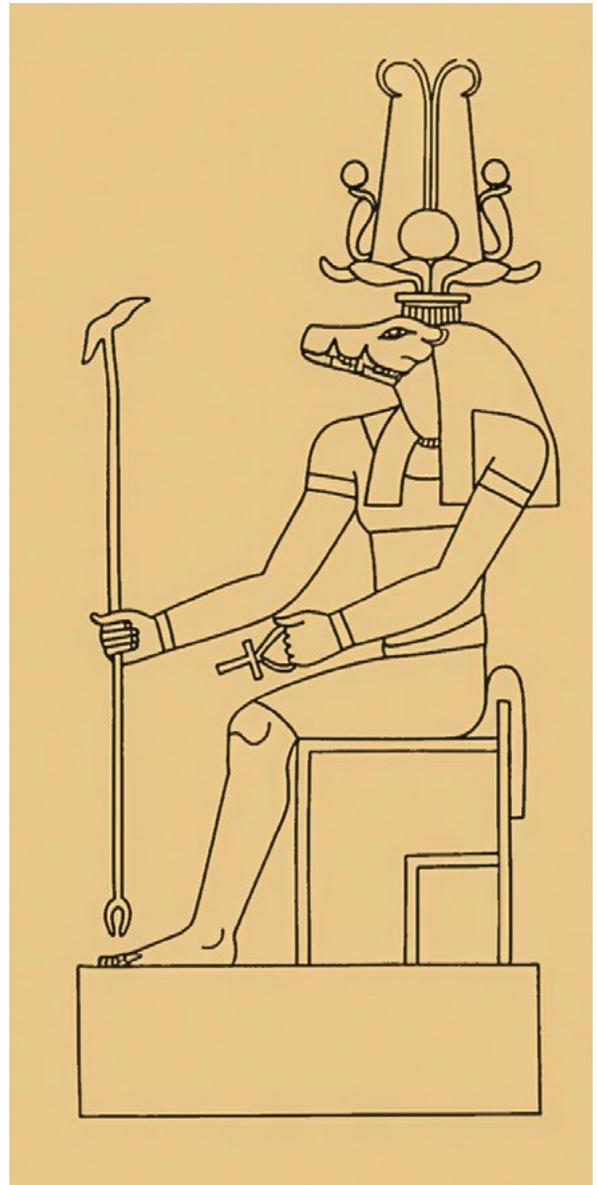


FIG. 30

The lord of lakes, swamps, and rivers
(Kockelmann 2017, fig. 1, cover).

This artifact is chronologically and geographically distant and involves a reptile rather than a fish. Although fish and crocodile skins differ in structure, particularly in thickness and scale type, both can undergo tanning using similar processes through vegetable or mineral agents. This supports the view that both materials were,



FIG. 31

Henry Lansdell (1841–1919), British explorer, dressed in a Nanai fish skin coat, Siberia.

and could have been in the past, suitable for leather production. Though materially and culturally distinct, both cases suggest a cross-cultural tendency to use animal-derived garments as mediators of divine qualities and cosmological knowledge.

Arctic societies

The use of fish skin for garment-making was not limited to ancient Mesopotamia; it was also a recognized component of cultural and ritual practices in Indigenous Arctic societies. Among the Inuit, Yup'ik, Alutiiq, and Athabaskan of Alaska, the Ulchi, Nivkh, Nanai, and Udege of Siberia, the Ainu of Hokkaido,

Japan, the Hezhe of northeastern China, Saami from Scandinavia, and Icelanders, fish skin was used not only for its durability and climatic suitability but also as a material imbued with spiritual meaning (Palomino 2022). In these communities, fish skin garments functioned as expressions of resilience, identity, and ecological knowledge, with women playing a central role in their production through techniques transmitted across generations. These garments integrated artistic, practical, and spiritual functions, reflecting the wearer's connection to water, ancestry, and the spirit world. Fish skin art, especially among Siberian groups like the Nivkh, Nanai (Fig. 31), and Udege, carried protective symbols such as the Tree of Life (Fig. 32-33) embroidered into the fish skin as ritual safeguards. A black border was painted on the openings of garments—collar, hem, front overlap, and wrists: areas believed to make the wearer vulnerable to malevolent forces (Palomino 2025b), mirroring the protective function of Mesopotamian apotropaic figurines buried at strategically vulnerable areas such as entrances and doorways. Recent comparative scholarship has further expanded this cross-cultural frame. Nigro (2002, 27) draws attention to an ethnographic parallel between the Mesopotamian tradition and that of the Native Hezhe People of northeastern China (Heilongjiang province). In Hezhe animist practice, fish skin robes made from tanned salmon skins were worn by shamans to communicate with the non-human realms (Palomino 2022). Nigro connects this practice to Mesopotamian water purification, fish skin attire, and exorcist-priests. These ethnographic examples support the hypothesis that Assyrian exorcists may have worn actual fish skin robes, challenging views that regard such depictions as purely symbolic.

These garments played a role in rites of passage, including death and marriage. Among the Nanai, the fish skin wedding robe served not only as ceremonial attire but was later repurposed for burial, guiding



FIG. 32

Fish skin coat, Siberia, ca. 1900, V&A Museum, London.

the deceased with embroidered symbols to the underworld (Dalles Maréchal 2022). Such traditions affirm the status of these garments as vehicles of spiritual communication and transition between worlds, akin to Mesopotamian clothing used in ritual contexts.

Fish skin practices also intersected with Arctic shamanism. Shamans, who mediated between the human and spirit realms, wore specially-adorned fish skin garments during ceremonies. This powerfully spiritual attire parallels the symbolic use of fish-cloaked figures like the apkallu in Mesopotamian visual culture. Like their Mesopotamian counterparts, Arctic shamans relied on ritual knowledge tied to natural materials and ancestral insight.

Among the Nivkh and Nanai peoples, fish skin garments (Fig. 32) were adorned with motifs such as the Tree of Life (Fig. 33), symbolizing connections between the earthly realm, ancestors, and the spiritual world. These designs, featuring intricate embroidery, not only provide protection but also convey narratives of fertility, identity, and the cyclical nature of life. In Mesopotamian iconography, the Tree of Life similarly represents a cosmic axis linking

heaven, earth, and the underworld. Depictions include figures like the apkallu flanking the tree, emphasizing themes of divine order and kingship. This motif highlights the importance of maintaining harmony between the human and divine realms.

Ethnographic accounts highlight the largely overlooked role of women as custodians of ecological and technological knowledge in these communities. The crafting of fish skin clothing, along with plant-based dyes and tanning techniques, reflects a sophisticated understanding of material science developed outside formal institutions. As Graeber and Wengrow (2021) argue, Neolithic and Indigenous technological innovation—spearheaded by women—should be recognized as scientific practice, not dismissed as myth or informal knowledge. Fish skin technology in Arctic societies provides a meaningful comparative framework for understanding Mesopotamian ritual dress. It reinforces the broader thesis that fish skin garments across cultures represent a convergence of material utility, ecological insight, and

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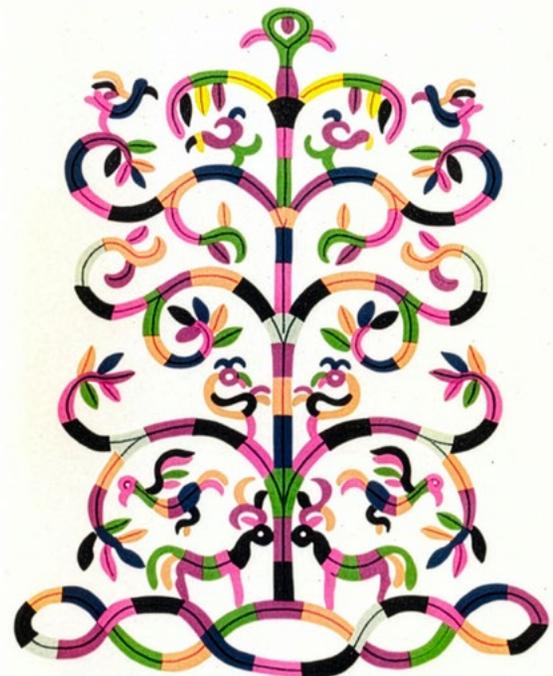


FIG. 33

The Tree of Life, embroidery motif on a fish skin robe (Ivanov 1955, 241, fig. 111).

spiritual practice—areas led and preserved by women. This tradition affirms the need to reassess ancient magical technologies not as superstitious relics but as integral cultural systems of traditional knowledge.

The convergence of these symbols in both Arctic and Mesopotamian contexts highlights a shared human inclination to represent and navigate the complexities of existence through material culture. Fish skin garments exemplify how societies across diverse geographies articulate their understanding of the world and their place within it.

CONCLUSION

68 An examination of Mesopotamian ritual practices reveals how magic served as a structured means of engaging with transcendent forces and unseen realms. Within this cultural framework, fish skin was not merely a utilitarian material but one imbued with ritual potency, used to mediate spiritual experiences. The depiction of the fish-cloaked apkallu in Neo-Assyrian palace reliefs transcends protective symbolism. These figures functioned as visual representations of wisdom and cosmic authority. Their inclusion in palace iconography evoked not only scribal knowledge but also the foundational, mythic past to which the apkallu were linked. The apkallu were portrayed as mediators between divine order and terrestrial kingship, their gestures suggesting the transfer of primordial wisdom from the mythological past. Cuneiform texts parallel these visual renderings, with appeals to the wisdom of Enki/Ea and his apkallu, reaffirming their role as custodians of sacred knowledge.

In modern contexts, there is a distancing from ancestral spiritual systems. The dominance of consumer-oriented globalization has marginalized ritual and mythic consciousness, diminishing spaces for reflection on existential questions that have historically shaped human cultures. Yet mythological narratives—across religious,

philosophical, and ritual traditions—continue to encode models for communal harmony with nature and inner life. The study of Mesopotamian fish skin rituals, through the figure of the apkallu, offers insight into a broader human concern with metaphysical continuity and the sustenance of spiritual knowledge. As current global conditions evoke historical anxieties—such as those mythologized in Mesopotamian flood narratives—the imperative to follow spiritual wisdom, once confined to elite *ummanus*, becomes increasingly relevant. Recognizing and re-engaging with these traditions offers both historical insight and potential applications within contemporary cultural and material practices.

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