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RESEARCH ARTICLE

Archaeological Artifacts from the Stone Age Solve the Mystery of the First Native Americans

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Abstract—Many scholars have sought to uncover the mysteries relating to the origins of the earliest Native Americans. Among many hypotheses, the Beringian Standstill Hypothesis and the Kelp Highway Hypothesis claim that the first Native Americans stayed in Beringia during the Last Glacial Maximum, before migrating to the New World by boat as the climate warmed. Unfortunately, neither hypothesis was devised with tangible supporting evidence, such as archaeological artifacts; as such, both remain controversial. To address this issue, this paper compares and analyzes the genetic data related to the first Native Americans and the data of six archaeological artifacts from the Stone Age. The results show that both hypotheses are correct, but that the first Native Americans stayed in Southern Korea rather than in Beringia.

INTRODUCTION

The mystery of the origin and diffusion of the first Native Americans (FNAs) continues to vex archaeologists, geneticists, and anthropologists. MtDNA—genetic material inherited from the maternal line—is an important tool for disentangling the origin and the numerous waves of migration of Native Americans (Nesheva, 2014). All FNA mtDNAs can be traced back to five haplogroups: A, B, C, D, and X (Mizuno et al., 2014). Our study focuses on the appearance of the sub-haplogroup X, which is genetically related to Europeans (Derenko

et al., 2001), and the discovery of Australo-Melanesian DNA in several contemporary Native American groups, including those of the Aleutian Islands and the Surui people of Amazonian Brazil (Balter, 2015). This focus area was chosen to clarify why and how the genetic code of Native Americans contains both European and Australo-Melanesian DNA. While investigating this complex issue, Tamm et al. analyzed 623 complete mitochondrial DNA samples (mtDNAs) from the Americas and Asia, including 20 new ones from the Americas and seven from Asia (Tamm et al., 2007). Based on their results, the geneticists claimed that FNAs had occupied northeast Asia before becoming genetically isolated in Beringia during the Last Glacial Maximum (LGM) approximately 25,000 to 15,000 years ago. This argument is known as the Beringian Standstill Hypothesis (BSH) or Beringian Incubation Model (Tamm et al., 2007). This hypothesis is strengthened by accumulated evidence from various fields, including genetics (particularly the analysis of nuclear DNA, including Y chromosomes), physical anthropology, linguistics, and paleontology (Hoffecker et al., 2014).

Nevertheless, the BSH argument remains in question since no archaeological artifacts to confirm its hypothesis have been found. It is essential to find archaeological evidence to determine the true origins of FNAs, and to eliminate conflicting theories. The Kelp Highway Hypothesis (KHH), for instance, claims that FNAs moved not by land, but by sea, following the coastline from northeastern Asia and Beringia to as far south as Monte Verde in Chile, approximately 16,000 to 13,000 years ago (Braje et al., 2017; Wade, 2017). While a number of archaeologists have tried to find archaeological artifacts to support the BSH and KHH, rising sea levels since the LGM have, unfortunately, prevented them from discovering anything (Hoffecker et al., 2014; Braje et al., 2017; Wade, 2017). Consequently, other questions arise: What archaeological artifacts are archaeologists looking for to prove their claim? How accurate are their ideas and methods in their search of archaeological artifacts? In the search for explanations, existing literature was referenced to collect genetic data of skeletons related to the origins of FNAs. The six archaeological artifacts found near the skeletons are representative of the Stone Age and were selected to be used as study materials in this research. The sites where the artifacts and genetic data were found were visited. Consequently, all the

archaeological artifacts and genetic data were compared, connected, and mapped. The results were nearly consistent with the places where Native American mtDNA appeared and the six archaeological artifacts were found. Additionally, it shows that FNAs of various races inhabited Southern Korea and Southern Japan, instead of Beringia, during the LGM (Potter et al., 2018; Alves et al., 2016). During this period, genetic mixing occurred (Turner, 1990; Jin et al., 2009; Achilli et al., 2013), and as the climate warmed and glaciers retreated, parts of these populations migrated to the New World as KHH claims (Braje et al., 2017; Wade, 2017). This means that studying both existing genetic data and the six archaeological artifacts found in proximity is critical to solving FNA-related mysteries.

MATERIALS AND METHODS

Selected Background of Six Archaeological Materials

Early studies on Native American mtDNA variation have demonstrated that all Native American mtDNA belong to haplogroups A, B, C, D, and X. Among these haplogroups, A, B, C, and D appear in Southern Siberia and adjacent areas of Mongolia (Starikovskaya, 2005; Derenko et al., 2000), while traces of haplogroup X appear in Europe, Western and Central Asia, Altai in Siberia, and North Africa (Derekno et al., 2001; Starikovskaya, 2005; Reidla et al., 2003).

MA-1 and Anzick-1 are used as genetic evidence to determine FNA mtDNA distribution. Geneticists mapped the genome (MA-1) of a four-year-old boy who died in Mal'ta, central Siberia, dated to approximately 24,000 years ago (Raghavan et al., 2014). The Y chromosome of MA-1 has frequently been found in hunter-gatherers of the Paleolithic and European Mesolithic periods (Bramanti et al., 2009), is basal to present-day western Eurasians, and is genetically closely related to contemporary Native Americans (Raghavan et al., 2014; Lell et al., 2002). In Montana, a construction worker discovered more than 100 stone and bone tools, and a young child's skull from about 12,700 years ago (Rasmussen et al., 2014). The child, called Anzick-1, is genetically similar to MA-1 (Jin et al., 2009) and European Mesolithic genomes. However, this boy has no clear affinities with Chinese, Korean, Japanese, or other East Asian populations (Raghavan et al., 2014). In addition, a *Science* and *Nature*

genetic research team detected a trace of DNA in modern Native Americans related to indigenous groups from Australia and Melanesia (Balter, 2015), raising questions about why and how these traces exist.

In 2011, geneticist Lee and his team analyzed Neolithic human bones discovered on Gadeok Island, near Busan, South Korea. Estimated to be approximately 7,000 years old, the remains had been damaged by oxidization of acidic soil, resulting in the researchers analyzing just 17 of the 48 bones (Shin, 2014). Nonetheless, they discovered that some of the remains had Asian DNA, and some had H-type European mitochondrial DNA (Shin, 2014). Moreover, as with the DNA of MA-1 and Haplogroup X, this H-type maternal DNA was not detected in current residents of South Korea and Japan (Raghavan et al., 2014; Shin, 2014). Certainly, European skeletons of the Neolithic Period and Bronze Age have been discovered in South Korea, including those under dolmen No. 13 in Hwangseok-ri, Jecheon, Chungcheongbuk-do, in 1962 (Kim, 2010), and a dolmen in Auraji, Jeongseon-gun, Gangwon-do in 2005 (Lee, 2008).

At this point, various questions arise: Why are MA-1, Anzick-1, and Gadeok Island Man's mtDNA not currently found in Koreans, Japanese, or other East Asians (Raghavan et al., 2014; Kim, 2010)? Why are the mtDNA in the three regions associated with Europeans? To address these questions, this study investigated and compared archaeological artifacts, such as the Venus figurines found around MA-1; Clovis points found around Anzick-1; and artificial cranial deformations, dolmens, and comb-pattern pottery found around Gadeok Island. During the investigation of these archaeological artifacts, each object's shape was scrutinized against existing literature. In addition, the area where the artifacts were found and where mtDNA haplogroups X and H appeared were mapped and comparatively analyzed. Archaeological data were collected from November 2012 to January 2021, through direct observation of original artifacts. Known sites of findings related to FNA genes, in Europe, Turkey, Egypt, Northeast Asia, North and South America, the Pacific Islands, and Indonesia, were visited during this process. Museums, archaeological sites, and antique shops served as the primary locations of archaeological data collection. Archaeological data that could not be obtained by direct visits, was obtained through literature and data from more than five million Google images. Finally,

the collected genetic and archaeological information was synthesized to create a new hypothesis: Both BSH and KHH are correct, but FNAs stayed in South Korea and southern Japan instead of Beringia. Existing paleontological and new archaeological data were analyzed to reaffirm this hypothesis.

Archaeological Artifacts Found in the Americas

Acheulean hand axes (Wynn & Gowlett, 2018), one of the oldest relics of the Paleolithic period, have primarily been found in Africa, Europe (Figure 1I), Western Asia, and the Indian Subcontinent, with a few scattered examples discovered in East Asia (Hou et al., 2000). In 1978, Greg L. Bowen, an American soldier, discovered a hand ax (Figure 1J) comparable to the Acheulean technology in the Hantang River near the Chongokni site, South Korea. This site has recently been dated to 350,000–300,000 years ago (Bae, 2010).

Pressure flaking, referred to as *nulerddeki* in South Korea (Seong, 2017), is a retouching technique used by prehistoric knappers to shape stone artifacts; the technique involves using the narrow end of a tool to exert pressure close to the edge of the worked piece (Mourre et al., 2010). Leaf-shaped projectile points not only exhibit morphological similarities to the leaf-shaped aspect but also use the same pressure flaking. It has also been found in Europe (Figure 1I, 1O), South Korea (Figure 1M), Japan (Figure 1L), Kamchatka and western North America (Figure 1K, 1N), and South America (Erlandsona & Braje, 2011).

Neolithic European skeletons (Shin, 2014) and leaf-shaped projectile points (Figure 1M) discovered in South Korea were commonly found in or around dolmens. In this scenario, should FNAs like Anzick-1 have been connected to South Korea, they would have introduced Neolithic cultural items and procedures, such as leaf-shaped projectiles, dolmens, and artificial skull deformations. To confirm the hypothesis, I visited Montana, from August 30 to September 3, 2019, where a dolmen (Figure 1E) with one large table stone supported by several small stones is located on the Dunn Peak along the Dunn Canyon Road, Route 69. Its shape (Figure 1E) is similar to those found in Gochang (Figure 1G) and Hwasun (Figure 1F) in South Korea. It is important to note that the quarries (Figure 1P), leaf-shaped projectiles (Figure 1K, 1N),

Figure 1. Leaf-shaped projectile points and dolmen in Europe, Korea, and North and South America.

A Poulnabrone dolmen (4200 bc to 2900 BC) located in the Burren, County Clare, Ireland.
B Dolmen on display at the Liaoning Provincial Museum in Manchuria.
C As a result of a field survey in 2008, it was found that there is a total of 1,550 dolmens in Gochang, Jeollabuk-do, Korea. The dolmens in the picture are similar to the Poulnabrone dolmen.
D This dolmen is located in the San Agustín Archaeological Park, Colombia, South America. It is similar to the Maison des Fées dolmen in Brittany, France.
E This dolmen was found around Dunn Peak, in Montana, USA.
F This dolmen is located in Hwasun, Jeollanam-do, Korea.
G The dolmens in Gochang, Jeollabuk-do, Korea.
H Dolmen in Fukuoka, Japan. Picture displayed at the Liaoning Provincial Museum.
I European hand ax and leaf-shaped projectile points found in Europe. Photo taken at the Seokjang-ri Museum in Korea.
J This hand ax was first discovered in 1978 in Jeongok-ri, Gyeonggi-do, Korea.
K This Clovis point is at the Blacktail Ranch Museum, Montana, USA.
L This point was excavated at the site of Shirataki, Hokkaido, Japan. Exhibition at Seokjangni museum.
M Korea point displayed at Seokjangni museum.
N A representative Clovis point displayed in the same place as K.
O Europe's representative leaf-shaped projectile points. Photo taken at the Seokjang-ri Museum in Korea.
P Quarry found around Helena, Montana.

and stone arrowheads (Figure 5H) found around dolmens there are consistent with findings in Korea. Dolmens have also been found in Great Britain and Ireland (Figure 1A); France, southern Scandinavia, the Netherlands, Denmark, Germany, the Iberian Peninsula, Italy, Malta, Bulgaria, Tunisia, Algeria, Israel, Syria, Jordan, Turkey, Iran, the Russian Caucasus, and Manchuria (Figure 1B); South Korea (Figure 1C, 1F, 1G); Southern Japan (Figure 1H); and Colombia (Figure 1D).

In South Korea, artificial cranial deformation (ACD) customs can be found in the *Records of the Three Kingdoms* (三國志魏書東夷傳), which were written by Jinsu, of Chinese heritage (陳壽, 233–297 BCE): "People who had lived near Gadeok Island had the custom of artificially transforming the skull by wrapping wood, stones, or cloth around their heads at infancy." A Korean skull with ACD (Figure 2B) was excavated in 1976 at the Yean-ri site in Gimhae, approximately 30 km from Gadeok Island (Jung & Woo, 2017). These customs were also performed among North America's Chinookan tribes of the Northwest, the Choctaw of the Southeast (Meigs, 1866), and in Latin America (Meigs, 1866; Schijman, 2005). This practice is evidenced by the jade sculptures representing ACD that have been found in other areas, including Panama, Costa Rica, Nicaragua, as well as coastal and mountainous regions of Mexico (Childress, 2011). Well-preserved ACDs have been found in Ica, Nazca, Paracas in Peru (Figure 2A), and in Tiwanaku in Bolivia (Figure 2C). Meanwhile, Friedrich Ratzel reported in 1896 that ACD had been discovered in Tahiti, Samoa, Hawaii, and the Paumotu Islands (Ratzel, 1896). Skulls exhibiting ACD have also been found at the Houtaomuga archaeologic site in Manchuria and are estimated to be 12,000–5,000 years old (Zhang et al., 2019). Similar customs have been identified in Indigenous Australian remains, such as the Nacurrie skeleton, which is estimated to be approximately 13,000 years old (Zhang et al., 2019). Meanwhile, in Japan, evidence of ACD has only been seen at Hirota, Kyushu (Heritage of Japan, n.d.). ACDs have also been found in Europe (France, England, Hungary, and Germany), Russia (Omsk, the Pyatigorsk Museum, and the Museum of Kislovodsk), Ukraine (Crimea), and Uzbekistan (the Afrasiab Museum of Samarkand).

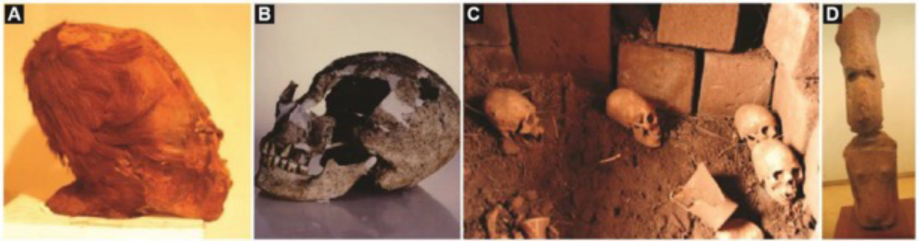

Figure 2. Cases of ACDs.
A Red-haired ACD in Paracas History Museum, Peru.
B This ACD was discovered at the site of Yean-ri, in Gimhae, Korea.
C ACDs found in a private museum located on the left side of the entrance to PumaPunku historic site, located in downtown Tiwanaku, Bolivia.
D Stone ACD displayed in the Father Sebastian Englert Anthropological Museum, Easter Island.

Venus Figurines, Neolithic Stone Statues, and Comb-Pattern Pottery

The 31 Venus figurines (Lipnina, 2012) (Figure 3A1) excavated around Mal'ta, where MA-1 was found, provide evidence of broad cultural connections and contacts between Europe and Central Asia during the Upper Paleolithic Period (Jung, 2001). Of the 31 Venus figurines, only 20 (64.5%) have two hands, where both hands are around the navel, and are in exactly the same positions (Lipnina, 2012). It is noteworthy that the positions of the hands of these figurines are the same as is seen on the T-shaped pillars (Figure 3B2) and Neolithic stone statues (NSSs) (Figure 3B1, 3B3–3B6) of Göbekli Tepe, Turkey, which is estimated to be about 11,500 years old. This supports the hypothesis that the Paleolithic Venus figurines could have gradually evolved into NSSs. In support of this hypothesis, a composite stone statue (Figure 3B1) of a bird and a human (Lipnina, 2012) was found in both regions. Additionally, the Y chromosome found in MA-1 relates to findings near Göbekli Tepe, Turkey (Raghavan et al., 2014; Lell et al., 2002).

While Venus figurines are female (Figure 3A1, 3A2), and most are in a standing position, most NSSs are male and are in upright, seated (Figure 3A4, 3A6), or kneeling positions (Figure 3E2, 3E3, 3F3). The positions of both hands of NSSs are mostly akin to those of Venus figurines, but in some statues, one hand is placed on the chest and the other around the belly button. Unlike other regions, statues

found in the Anatolia region of Turkey (Figure 3A3–3A6) were crafted in varying shapes and positions, similar to the NSSs mentioned above, but illustrating how Venus figurines morph into NSSs. The criterion that differentiates NSSs from ordinary statues is that neither hand originates from the chest. However, in the female statues (Figure 3A6) of Çatal Höyük, Turkey, which dates to approximately 5500–6000 bc, the positions of both hands deviated from the chest. The custom of crafting NSSs persisted through the Bronze and Iron Ages, and persists in some regions today, including South Korea (Figure 3D3). Although the names of NSSs vary by region, they share a common meaning. All of them are references to ancestors, grandfathers, and ancestors of the gods (Forostyuk, 2004; Smith, 1915). NSSs were primarily made of stone, but wood or animal bones (Figure 3E6) were also used in some areas. Unfortunately, due to archaeologists' indifference and disinclination to conducting detailed research, most NSSs around the world are left unexamined.

NSSs have also been found in France and Ireland (Figure 3F4); Spain, Italy, Serbia, Bulgaria, Greece, and Turkey (Figure 3A3–3A6, 3B1–3B6); Ukraine (Figure 3C4); Azerbaijan, Uzbekistan, Kazakhstan, Kyrgyzstan, and Tajikistan (Figure 3C2); Altai and Russia (Figure 3C3, 3C5); western Mongolia (Figure 3C1); Manchuria (Figure 3C6); South Korea (Figure 3D1–3D3); southwestern Arabia, Iran, and Indonesia (Figure 3E5, 3E6); the South Pacific (Figure 3E3, 3E4); the Philippines, Mexico, and Colombia (Figure 3D4–3D6); Peru (Figure 3F1); Bolivia (Figure 3F2, 3F3); and Easter Island (Figure 3 E1, 3E2).

A 2013 genetic study suggested that East Asian haplogroup C3* chromosomes had been introduced into Ecuador no more than 6,000 years ago, perhaps via coastal or transpacific routes (Roewer et al., 2013). Venus figurines and comb-pattern pottery serve as archaeological evidence to support this claim. The locations of the hands of Venus figurines found in Ecuador's Valdivian Cultural Site (3500–1800 BC) coincide with those of the Mal'ta Venus figurines. The oldest pottery demonstrates many striking similarities in terms of decoration, vessel shape, and periodization to the comb-pattern pottery crafted in ancient Korea from 6,500 to 5,500 years ago (Figure 4B, 4C) (Estrada et al., 1962; Shin, 2019). In addition to South Korea (Figure 4B, 4C), comb-pattern pottery has been found in Finland, Sweden, northern Germany, the

A. Venus figurines **(A1–A2)** and NSSs during Anatolian Civilization **(A3–A6)** in Turkey.

B. NSSs found around Göbekli Tepe in southeast Turkey **(B1–B6)**

C. NSSs found in Central Asia **(C1–C5)**, Manchuria **(C6)**

D. NSSs of Korea **(D1–D3)** and Colombia's San Agustin **(D4–D6)**

E. NSSs of Easter Island **(E1–E2)**, the Pacific Ocean **(E3–E5)**, and Indonesia **(E5–E6)**

F. NSSs of Bolivia (F2-F3), Europe (F4), Manchuria (F5), and Olmec (F6)

Figure 3. Venus figurines and NSSs from around the world. Venus figurines (**A1–A2**) and NSSs from the Anatolian Civilization (**A3–A6**) in Turkey. NSSs found around Göbekli Tepe in southeast Turkey (**B1–B6**). NSSs found in Central Asia (**C1–C5**), Manchuria (**C6**). NSSs of Korea (**D1–D3**) and Colombia's San Agustín (**D4–D6**). NSSs of Easter Island (**E1–E2**), the Pacific Ocean (**E3, E4**), and Indonesia (**E5, E6**). NSSs of Peru (**F1**), Bolivia (**F2, F3**), Europe (**F4**), Manchuria (**F5**), and the Olmecs (**F6**).

A1 and **A2** are imitation Venus figurines displayed at the Seokjangri Museum in Korea. **A3–A6** are NSSs found in Anatolia, Turkey, showing the process of changing from the Venus figurines.

B1–B6 are NSSs displayed at the Sanliurfa Museum, around Göbekli Tepe, in Turkey, showing the first NSSs.

C1 is an NSS of Western Mongolia and is locally called Balbal or Kurgan stelae. **C2** is an NSS found in Tajikistan. **C3** is an NSS of a Turkic warrior in the Altai, Russia, region, similar to **C2**. **C4** is a Scythian anthropomorphic NSS found in Berdyansk, Ukraine. **C5**, called Stone Turkic Man (618–907 CE), was discovered at Altai, Xinjiang Uygur Autonomous Region. **C6** is an NSS of the Manchurian Xinglongwa culture (8200 to 7200 years ago).

D1 and **D5**: The two teeth protrude from the lips, and **D2** and **D4** are characterized by close similarities. **D1** and **D2** were photographed in Korea, and **D4** and **D5** were shot in San Agustín, Colombia.

E1 is an Easter Island NSS and has a particularly big nose. **E3** is an NSS from the Open-Air Tiki Temple park in Tahiti; it is very similar to Easter Island's **E2**. **E4** is a Melanesian NSS exhibited at the Museum of Anthropology at The University of British Columbia, in Vancouver, Canada. **E5** and **E6** were found at antique shops in Bali and Sulawesi, Indonesia.

F1 is displayed at the Peru Lima Larco Museum. **F2** is called Kontiki after the Inca god Viracocha. **F3** is in front of the Tiwanaku Cathedral, in Bolivia, and looks so much like the **D3** in Korea. **F4** is on Boa Island, in Ireland, and resembles **C3**. **F5** is an NSS of the Manchurian Hongshan culture (6500 to 5000 years ago). **F6** is an NSS representing the Olmec civilization and resembles Africans and faces.

Vistula River (Poland), Estonia, the Upper Oka-Volga River (Russia), Ob River (Siberia), Lake Baikal, the Mongolian Plateau, Manchuria (Figure 4A), and southern Japan (Jung, 2001; Marek, 1997).

RESULTS

In addition to genetic evidence of H and X mitochondrial haplogroups, remnants of the Stone Age—namely, stone tools (i.e., Clovis points and microblade technology), Venus figurines, ACDs, dolmens, comb-pattern pottery, and NSSs—have been found in Europe, South Korea, and the Americas. However, south of the Great Wall of China, and in Honshu (Japan), northern Siberia, Beringia, and

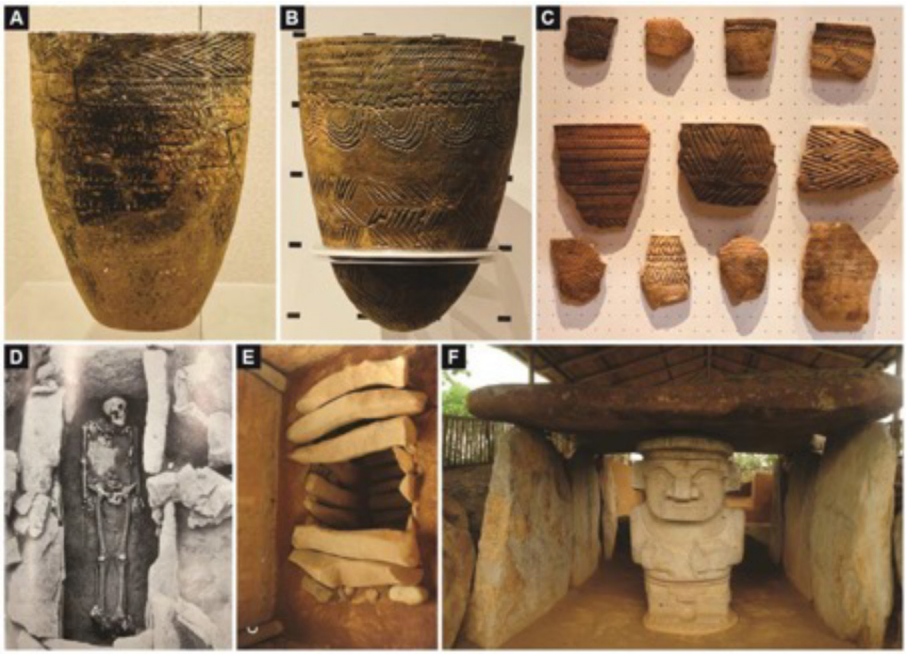

Figure 4. The comb-pattern pottery and the stone tombs.

- **A** The comb-pattern pottery on display at Shenyang Xinle Ruin Museum, in Manchuria.
- **B** The comb-pattern pottery on display at the National Museum of Korea.
- **C** The comb-pattern pottery remnants found around the skeleton at Gadeok Island, Busan, Korea.
- **D** Stone tomb at the site of Yean-ri, where an ACD skull was found.
- **E** Alto de las Piedras, from the stone tomb in San Agustín, Colombia.
- **F** Another NSS that "protects" the tomb of Alto de las Piedras in San Agustín.

the regions formerly covered by the Cordilleran Glacier (i.e., much of present-day Canada), no examples of these five types of archaeological artifacts, except stone tools, have been found.

The correlations between the findings of these artifacts in particular areas suggest that MA-1—an ancestor of the FNAs, who began migrating from Mal'ta about 24,000 years ago (Raghavan et al., 2014)—moved to South Korea and Southern Japan via Manchuria, the Lower Amur/Sea of Okhotsk region, to avoid the cold of LGM (Starikovskaya et al., 2005). While staying there, genetic variations occurred due to intermixing with people from Mal'ta, Australia, and Melanesia (Turner, 1990; Jin et al., 2009; Achilli et al., 2013). This explains the genetic variety

(A, B, C, D, X) of Native Americans (Mizuno et al., 2014). Archaeological evidence related to the verification of the above facts is found in ACD and NSSs. DNA tests of the red-headed ACD (Figure 2A) found in Paracas, Peru, indicate that this ACD originated in Europe and the Middle East (Holloway, 2016). Meanwhile, NSSs with facial features from Europe (Figure 3E1, 3F1), Mongolia (Figure 3D4), and Africa (Figure 3F6) are found in Latin America. Faces are distinguished through criteria relating to the shape of the eyes, the size of the nose, and the overall shape of the object. The above archaeological data are consistent with the complex and diverse genetic makeup of Native Americans.

The six archaeological artifacts presented by the study support the BSH and KHH, indicating that FNAs were largely divided into two groups that migrated to the New World. The first group migrated from Southern Korea to the New World by boat due to the population increase revealed by female lineage diversification when the climate started to grow warmer around 16,000–12,000 years ago (Potter et al., 2018). This group's representative archaeological artifacts are leaf-shaped projectile points, dolmens, and ACDs. The second group's representative archaeological artifacts are comb-pattern pottery and NSSs found only in Latin America. Additionally, only Native Americans in Latin America had full metallurgy with smelting and various metals purposely alloyed (Anawalt, 1992). This indicates that the second group had more advanced skills than the first group and migrated from Southern Korea to the New World around 12,000–6,000 years ago.

DISCUSSION

The concordance of genetic and archaeological data related to Native Americans proves that the perspective in the research method is accurate. The basis for the above argument is fourfold.

First, MA-1, Anzick-1, and Gadeok Island Man are both genetically and archaeologically related to each other (Raghavan et al., 2014; Shin, 2014). This explains why we should study the stone age archaeological and genetic data found inside and outside the Americas together. However, existing research tends to continue using existing research methods rather than finding new ones. As a result, many archaeologists are not interested in ACDs and dolmens (Figure 1E) found in the

Americas, and are attempting to find the archaeological artifacts they want underwater (Hoffecker et al., 2014; Braje et al., 2017; Wade, 2017).

Second, most scholars have not considered Korea's importance in North-East Asia. As an example, scientists who support KHH believe that there is no clear evidence that humans were in North-East Asia around 50,000 years ago (Potter et al., 2018). However, there are many archaeological sites in South Korea dating from the Paleolithic (350,000–12,000 years ago) to the Neolithic (12,000–6000 years ago) periods (Jeju National Museum, 2011; Kim, 2012). It is particularly noteworthy that more than 30,000 dolmens, or about two-fifths of the world's total (Nesterkina et al., 2017), are in Korea. Moreover, dolmens and ACDs are found in southern Japan, but rarely in Honshu, Japan (Heritage of Japan, n.d.). This is consistent with the hypothesis of this study that South Korea and southern Japan were refuges in the LGM period (Potter et al., 2018; Alves et al., 2016).

Third, China in East Asia during the Stone Age should be studied by clearly dividing it into north and south of the Great Wall. This is because most of the six archaeological artifacts mentioned are found in Manchuria, north of the Great Wall. This result aids in determining the route of FNAs, who began migrating from Mal'ta around 24,000 years ago to migrate to Korea via Manchuria, and then to the New World. It is important to note that the regions using the Ural Altai language, such as Manchuria and Korea (Kim et al., 2015), the regions where haplogroup X and the six archaeological artifacts were found, and the Silk Road route, all coincide.

Fourth is integrated thinking on archaeological artifacts. The San Agustín ruins in Colombia, dating back to around 3,300 BC (Velandia, 2005), are located about 900 km off the coast of Ecuador. Archaeologists are still looking for answers to determine by whom these ruins were made, and where they came from. To answer this question, this article proposes a novel study that integrates evidence with Ecuador's Valdivian culture. This suggestion is made because comb-pattern pottery and ACD found in Ecuadorian Valdivian culture, as well as dolmens, NSSs, and stone tombs found in San Agustín, are found on Gadeok Island as well. As a specific example, when comparing the NSSs of San Agustín (Figure 3D4) and Jeju Island, South Korea (Figure 3D2), the eyes, hat shapes, and Asian-like facial features are very similar. Similarly, a Korean stone

statue (Figure 3D1), characterized by rounded eyes and two exposed fangs, is also found in San Agustín (Figure 3D5). In the case of the NSSs protecting the tomb of Alto de las Piedras in San Agustín (4F), the belt on the statue's waist and the position of the hands are very similar to the stone statues guarding the ancient Korean tomb. Additionally, the stone tombs of Manchuria, South Korea (Figure 4D), and San Agustín (Figure 4E) have similar shapes. All of this is consistent with the East Asian haplogroup C3* chromosome, which was introduced to Ecuador no more than 6,000 years ago (Roewer et al., 2013). Haplogroup C3* is virtually absent from North and Central America, but occurs in Kamchatka (38%), Mongolia (36%–38%), Korea (10%), and Japan (3%) (Roewer et al., 2013). Finally, 7,000 years ago, Koreans were made up of a variety of races, unlike present-day Koreans, and over time, they were replaced by Mongolian populations from Central Asia (Derenko et al., 2001).

The rationale for this hypothesis is as follows: a) European and Asian skulls discovered in Gadeok Island (Shin, 2014); b) Anthropologists claim that the territory near where MA-1 was discovered, from at least Neolithic times, was populated by mixed tribes with Caucasoid and Mongoloid anthropological features (Derenko et al., 2001); c) The phenomenon in the two regions not only coincides, but also raises the possibility that the Europeans found in Gadeokdo are Caucasoids from Mal'ta. Additionally, this hypothesis explains why the mtDNA from MA-1, Anzick-1, and Gadeok Island Man is currently not found in East Asians (Raghavan et al., 2014; Shin, 2014).

Nevertheless, no Korean historians or archaeologists have officially studied these skulls, and there appears to be a tendency to deny or ignore this (Kim, 2010). This is probably due to the political and religious beliefs held by Koreans about having been a "single race" for 5,000 years.

Why and How Did FNAs Move to the New World?

Monte Verde (Chile) provides some of the most promising evidence of the early inhabitation of the Americas before the widespread FNAs' Clovis culture (Dillehay et al., 2008). Radiocarbon dating of charcoal remains, charred animal bone fragments, and several lithic artifacts

found on site in 1982 demonstrate that this area's average age is 14,800 years, about 1,000 years earlier than the Clovis culture (Dillehay et al., 2008; Taylor et al., 1999). However, the above archaeological artifacts have limitations for ascertaining who their protagonists were and how and from where they came. To address these questions, this paper focused on whale hunting petroglyphs found in the Atacama Desert, in Chile (Ballester, 2018), near the Pegtymel River, in Chukotka, Russia (Bland, 2010), and at Bangu-Dae, in Ulsan, South Korea (Shin et al., 2013) (Figure 5 A, 5C). These three sites depict a scene of a caught whale being dragged by a ship. The shape of the ships in the petroglyphs of these regions appear to be surprisingly similar. Additionally, petroglyphs associated with whales were found at the Beach State Historic Park, in Alaska (Heizer, 1947), and at the Ozette site, near Seattle (Figure 5E). The distribution of the above petroglyphs matches areas where leaf-shaped projectile points and shell middens were found (Schijman, 2005; Shin et al., 2013). In the end, observing the above petroglyphs and their connection with the discovered areas reveals who the protagonists of Monte Verde were and why and on what route they came.

Their migration is closely related to the food chain and the ocean currents traveling at up to 6 knots (11.11 km) per hour, as the latter determines the direction of plankton, thereby also determining the direction of whales (Kim, 2010). This would explain why FNAs may have migrated to the New World by boat rather than on foot. What should be noted here is that many archaeological artifacts presented in this paper are found around regions where ocean currents flow. For example, NSSs and ACDs are found on Easter Island (Figure 2D and Figure 3E1, 3E2), the South Pacific (Figure 3E3, 3E4), Indonesia (Figure 3E5, 3E6), the Philippines, Southern Japan, and South Korea (Figure 3D1–3D3) where the Equatorial Countercurrent and Kuroshio Current flow. This is consistent with the fact that the population of Sundaland, including Indonesia, was genetically related to indigenous Australians, Papua New Guineans, and Northeast Asians—including Koreans—during the LGM (Turner, 1990). Meantime, a ship from about 5,700 BC was excavated in Bibong-ri, Gyeongsang-do, Korea (Figure 5C) (Park et al., 2010). This ship had a length of 3.1 m, maximum width of 60 cm, thickness of approximately 2–5 cm, and depth of about 20 cm (Park et al., 2010). It is likely that human voyages during the Stone Age

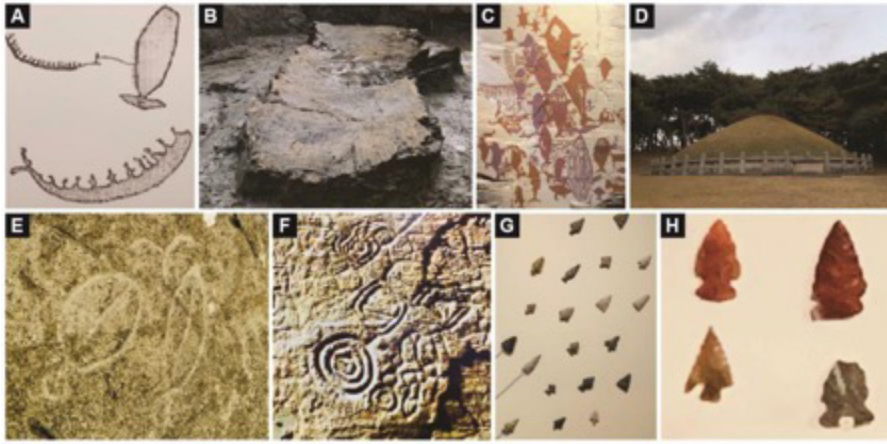

Figure 5. Relics related to the movement of humanity in the Stone Age.

- **A** Whale catch ship inscribed on rock engravings on the Ulsan Bangu-Dae archaeological site, South Korea.
- **B** A ship of about 8,000 years ago, excavated from Bibong-ri, Gyeongsang Province, Korea.
- **C** Rock engravings on the Ulsan Bangu-Dae archaeological site.
- **D** This tomb was filmed in Gyeongju, Korea, and has a similar overall shape as the 5,200-year-old Irish tomb Newgrange and the Enon Mound in Ohio, USA.
- **E** Whale petroglyphs at the Ozette site, near Seattle, USA.
- **F** Petroglyphs of the spiral symbol, Cheonjeon-ri, Ulju, near Ulsan, Korea. The spiral symbol is also found at Newgrange in Ireland and at the Sun Dagger in New Mexico, USA.
- **G** Stone arrowheads and Korean points from Korea during the Stone Age.
- **H** This stone arrowhead photo was taken at the Blacktail Ranch Museum, Montana, USA. The surprising fact is that the stone arrowheads found in Ireland are similar to those found in Korea and the United States.

were far more advanced than we think today. As a specific example, an archaeologist and chemist who studied obsidian discovered that 6,000 years ago, people sailed from Indonesia to the South Pacific, 3,500 km away (*Science* News Staff, 1996). Neolithic boat petroglyphs have been found near the site of Wadi el Baramiya in eastern Egypt, depicting 70 sailors (Rohl, 1999). Another example of archaeological evidence of advanced seafaring is African bottle gourds (*Lagenaria siceraria*) used by FNAs. One of the first plants grown by humans, African bottle gourds (Wade, 2014) would have been carried by boat when FNAs moved to the New World from Southern Korea. The basis for this claim is the result

of an ancient DNA analysis of archaeological bottle gourd specimens that found the African bottle gourd was used in East Asia at least 11,000 years ago and in the Americas some 10,000 years ago (Kistler et al., 2014; Erickson et al., 2005). In addition, no archaeological evidence of African bottle gourds was found in Siberia, Alaska, or Canada (Wade, 2014), similar to the results of this study.

Meanwhile, this study was conducted by only one individual, who did not receive financial support from any organization, a limitation being that the researcher solely focused on similar shapes of each archaeological artifact. However, Europe's Neolithic tombs, Newgrange in Ireland, and three spiral symbols and arrowheads found around the upper tombs have also been observed as having similar shapes to items in South Korea (Figure 5D, 5F, 5G) and the Americas (Figure 5H). Furthermore, the mtDNA haplogroups H and X and the following archaeological sites are consistent: Stonehenge (England), Le Grand Menhir Brisée (France), Hypogeum (Malta), the Egyptian and Sumerian civilizations, Göbekli Tepe (Turkey), the Liao River civilization (Manchuria), the Olmec civilization (Mexico), San Agustín (Colombia), and the Tiwanaku civilization (Bolivia). Finally, we should all rethink why Stanford University's Ian Hodder argues that all previous theories of the Neolithic period were wrong (Symmes, 2010).

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