



## Hand Representation in Paleolithic Sanctuaries of Spain and France /

## La Representación de la Mano en los Santuarios Paleolíticos de España y Francia

It is unsettling to contemplate the gesture of the Paleolithic man, leaving the imprint of his hand on the wall.

The discovery of bear claw marks on cave walls will trigger the gesture of also leaving his own mark as a way of signaling territory.

The sight of a handprint, left by a stained hand pressed against the wall—the spark of recognition of one's own trace, the resemblance to the master animal from which the benefit of shelter and territorial marking had been learned— was the reason behind the later, now conscious act of perpetuating in stone that extremity auction, so distinctive, which is the hand.

We consider that the owners of the hands depicted were not the ones who created the hand panels, but only the models.

Hand representations are the oldest known artistic expression to date, created by Neanderthal artists

Even assuming they were unaware of the possibility of preserving their work and memory, they transcended prehistory to become the first graphic artists to leave behind their creations as part of humanity's artistic heritage.

*Es inquietante contemplar el gesto del hombre paleolítico, de dejar la huella de su mano impresa en la pared.*

*El descubrimiento de las huellas de las garras de los osos, en las paredes de las cuevas, provocará el gesto de dejar también su propia huella como señalización del territorio.*

*La visión de una huella dejada por la mano manchada, apoyada sobre la pared, el chispazo de reconocimiento del propio rastro, la semejanza con el animal maestro del que se había aprendido el beneficio del cobijo y el señalamiento de su territorio, fuera el motivo de la posterior realización ya consciente del acto de perpetuar en la piedra, ese remate de extremidad, tan característico, que es la mano.*

*Consideramos que, los dueños de las manos representadas, no fueron los que crearon los paneles de las manos sino solamente los modelos.*

*Las representaciones de manos son la muestra artística mas antigua, hasta hoy conocida, obra de artistas neandertales.*

*Aun suponiendo que no eran conscientes de la posibilidad de perpetuar su obra y su memoria, trascendieron la prehistoria para ser los primeros artistas gráficos en dejar su obra como patrimonio artístico de la humanidad.*

**Palabras clave:** Arte Paleolítico, Plantillas de manos, Pinturas rupestres, Artistas neandertales, Simbolismo prehistórico, Técnicas de arte rupestre, Patrimonio arqueológico

**Keywords:** Paleolithic Art, Hand Stencils, Cave Paintings, Neanderthal Artists, Prehistoric Symbolism, Rock Art Techniques, Archaeological Heritage



**Fig. 01.** Cueva del Castillo in Puente Viesgo, Santander, Spain. Tectiforms Gallery. General view of the Great Panel.



**Fig. 02.** Red signs in the shape of foot, hand and animal extremities, as Breuil follows. Photography taken from José Camón Aznar "Los Artes y los Pueblos de la España Primitiva" Espasa Calpe 1.954.

"When in a nook of a cave a hand is discovered reaching us through the millennia, it is an exciting moment caused by the <<corporeal presence>> of that artist ancestor's extremity that reaches out to us through time.." (Eduardo Ripoll 1986: p.74).

It remains unsettling, even chilling, to contemplate this gesture of Paleolithic man—intentionally engraving an unmistakable sign of his presence. This ritual or magical gesture of leaving the handprint on the wall has been repeated in numerous caves far apart from one another. There are even hand representations in caves in Argentina, Borneo, Africa, and Australia.

Regarding the feeling one experiences when observing these millennia-old hands, we bring in Giedion's quote:

"The barely visible outlines of buffaloes, dots, and tectiforms convey the legacy of each era to its successors, but the hands are the oldest signs. A permanent veneration seems to have always protected them from total destruction." (Giedion, S. 1961, p.129).

The discovery of bear claw marks on the ground and walls of caves—a sign quickly interpreted by humans as evidence that the cave was inhabited by a fearsome animal—may have been the trigger for the gesture of also leaving their own mark, as a way of signaling territory, a deterrent against unwelcome visitors.

The sight of a mark left by a stained hand, placed purposelessly on the wall—the spark of recognition of one's own trace, the resemblance to the master animal from which the benefits of shelter (the cave) and territorial marking (claw prints) had been learned—may have been the reason for the later, now conscious act of perpetuating in stone that distinctive extremity of man: the hand.

It is important to clarify that the artistic gesture, systematically repeated, of leaving the handprint on the cave wall is by no means the result of chance, such as pressing a blood- or paint-stained hand against the wall. This is evidenced by the large number of handprints on a single panel, and by the fact that, most of the time, the pictorial technique used was to spray paint over the wall covered by the hand, using an airbrush-like method. When the hand was removed, it left a negative print—a process that could only have been intentional, never accidental.

The act of painting the hand on the wall was much more complex than modeling hands by pressing them into the clay, which was abundant in some caves—yet this gesture was never performed. The existing imprints in clay are generally footprints, left unintentionally while walking across the muddy cave floor.

Due to the use of color, Giedion considers this the beginning of painting:

"The relief impressions on clay and the abstract representations of hands are scarce in comparison with the direct images of hands painted on wall surfaces with the aid of colors, in positive or negative. It is here that color makes its proud first

appearance in the history of art. This invention was not inevitable. Today, it is difficult to grasp the magnitude of this leap forward for humanity—we are witnessing the beginning of the art of painting.” (Sigfried Giedion, 1961, p. 123).

If we consider the most significant morphological traits of humans in contrast to nature—their upright posture and hands adapted to the use of tools—it is highly meaningful that the first part of the human body to be represented by early humans was precisely the hand.

For the hunter, tracking animals by following their traces must have developed an immediate ability to identify prey through their footprints. The identification of man with his own trace thus seems evident.

As Eco would say:

“To have the ability to identify footprints as tokens of a footprint-type, recognizing them as signs of a particular class of animals, means sharing a specific (codified) competence with regard to imprints.” (Umberto Eco, 1992, p. 268).

Although the footprint nature of the handprint is undeniable, it is worth noting that, for the hunter—accustomed to distinguishing species by the traces left by their feet (claws, hooves, or pads)—it would have made more sense to represent the prints of his own feet.

However, man chose to leave the imprint of the hand, having already discovered its usefulness: the hand, with which he could craft and wield weapons, is what allowed him to survive in the hostile surrounding nature and to leave his mark on the landscape. The hand is the source of his power—and he already knew it.



**Fig. 03.** Gary Cooper's Feet and hadprints, in the Chinese Theater's concrete of Los Ángeles (California, United States). Photography of Richard Carroll.



**Fig. 04.** Courtyard of the Chinese Theatre in Los Angeles (California, United States) Photograph by Richard Carroll.

The hand on the wall reveals another unique characteristic of humans: upright posture. The height on the wall where the hand appears also suggests the possible stature of the person to whom the painted hand belonged. Perhaps for this reason, man—using ladders, trestles, or scaffolding—sometimes painted his hands at unreachable heights, to give intruders the impression that the cave's inhabitants were dangerous giants.

The frescoes and engravings of animals in prehistoric caves reproduce the external reality through a magical, hunting-related strategy, on a metaphysical plane—that of Art.

The artist distinguishes the real world from the painted world as parallel realities that exist on different, we might say mirror-like, planes—so that what happens in the realm of Art must simultaneously occur in the Real plane. This belief is closely related to fetishistic rituals, which provoke an event or occurrence in the representational plane with the intent that the same event will manifest in the real one.

By believing that everything represented will happen in reality, the artist identifies Art and Reality. Yet, aware that physical reality unfolds in real space—not in the metaphysical realm of Art—when he desires to capture an actual animal, he must also include his own hand in the painted scene: the hand of the man who must bring down the prey, on the same ideal plane of art, on the plane of the spell, of the magical events of the hunt.

The feeling of reunion, of presence, that we experience when we observe a handprint still “fresh” on the stone, is not unrelated to the origin and provocation of the gesture. The man who leaves his mark intuitively knows—that it will endure longer than he himself will, and this certainty provokes the irresistible urge to leave a permanent testimony of his temporary presence. This feeling is, therefore, the first creative act in overcoming the precariousness of his existence—an act to overcome his fear of death, which, from that moment on and forever, remains present in the human pact with art.

Limiting ourselves to Europe, there are hand representations in the francocantabrian zone, south of the ice limit, during the Würm glaciation, in “Maltravieso, Atapuerca, El Pindal, Altamira, El Castillo, Santían, la Pasiega, en España y en Gargas, Tibirán, Ganties-Montespan, Trois-Freres, Le Portel, Bادهilhac, Pech-Merle, Rocadour, Font-de-Gaume-Combarelles, Bernifal, Beyssac, Arachambeau, Cap Blanc, Sregeac, Bara-bahau, Baume-Latrone, Collias y Grotte du Bison, as last compilation of abate Verbrugge en 1.976” (Carlos Callejo Serrano 1.981).

In this sense, we cannot fail to mention the custom of today's “immortals” of cinema, who leave the imprints of their hands in the cement outside the Chinese Theatre in Los Angeles.

Also worth noting is Le Corbusier's gesture of imprinting his hand—also in red—for posterity. The architect's fascination with the representation of hands is curious, as they appear frequently painted and sculpted throughout his work, especially in Chandigarh.

The Lissitzky also seems obsessed with an image of his own hand holding a compass, which he includes in numerous collages alongside his face—often giving more importance to the hand than to the face—as a symbol of the artist.

Henry Moore, likewise concerned with hands and prehistory, left us numerous drawings of his own hands, as well as several striking sketches of the megalithic calendar monument of Stonehenge, which connects his interest in both hands and prehistory as themes worthy of representation.

Eduardo Chillida also seems, at times, fascinated by the image of his own hand, repeatedly drawn with a truly remarkable line. This fixation of the sculptor was commented on by Juan Daniel Fullaondo as follows: "A few years ago I noticed—and later found it recorded somewhere—Chillida's obsession with drawing hands. Eduardo has a very peculiar line, almost constantly broken, when he draws those things... From some of them, other seemingly abstract drawings even appeared to emerge... Around that time, I was reading a book by Peyrefitte about the Jews, in which he closely relates the hand to the sexual world..." (J. D. Fullaondo and M<sup>a</sup>. T. Muñoz, 1991, p. 164)

It is not only in Chillida's hand drawings, but also in some of his sculptures, where we see the twisted, broken gesture of a hand—sometimes with only four or three fingers—in an abstract motion, capturing that part of the body so vital and so well equipped for gesture, mimicry, and expression: the hand. Often, in the absence of a comb, we smooth our hair with our hands... We, too, see hands in Chillida's *Peines del Viento*.

Also noteworthy is the fantastic architectural gesture of Vitoria's Plaza, with that hand-cromlech, lowering the plaza's surface to imprint the shape of a hand.

There are also numerous representations of hands in the work of Jorge Oteiza, particularly in his experiments in the chalk laboratory. His fantastic, playful, abstract, and obscene monument to Madrid, *Hau Madrilentzat* ("THIS for Madrid"), is rich in symbolism (Pelay Orozco, M. 1978, p. 237).

In the Cave of Cargas, handprints are found in every area of the cave: at the entrance, in the middle section, and deep within. In 1907, Breuil and Cartailhac counted 150 hands.

At the Cave of El Castillo in Puente Viesgo, there are also groups of handprints. In 1911, Henri Breuil drew a distribution map of the hands in this cave, including what he called the *frise des mains* ("frieze of hands").





**Fig. 05.** Cave of Castillo (Puente Viesgo, Santander, Spain) Negative silhouette of a hand. Photo taken from Erich Pietsch's book "Altamira y la Prehistoria de la Tecnología química".



**Fig. 06.** Representation of Charles Édouard Jeanneret-Gris "Le Corbusier"'s hand. Photo taken from Le Corbusier's book, coordinated by Willy Boesiger "Le Corbusiercomplete works 1.965-69". Volume VIII, "Verlag Fur Architektur, Artemis, Zürich 1970. Fotografy credit to Eugène Claudius Petit, Paris.

Much has been published about the mutilations seen in a large number of the hands depicted on cave walls. It is worth remembering that certain present-day primitive societies still practice acts of self-mutilation—whether to prove bravery, as rites of passage during initiation, or even as self-punishment to be accepted again by the clan after committing a transgression.

The fact that most of the hands depicted are left hands has also sparked debate. Breuil counted, in the Cave of Cargas, hundred and twenty four left hands and twenty six right hands.

This predominance of left hands is due precisely to the technique used. The method employed here involves spraying, with an airbrush-like tool, over a hand placed still against the wall, using pigment mixed with water. Upon contact with the damp surface, the mixture adheres like a fresco (producing a negative handprint). Naturally, a right-handed person would prefer to place their left hand on the wall in order to operate the container of pigment and the two small bones that form the airbrush with their dominant right hand.

When the painting technique involves directly staining the hand with paint and pressing it onto the wall (resulting in a positive print), the hand most often represented is the right one.

In the case of self-mutilations, the hand represented is the injured one—the very hand that plays the central role in the ceremony. Naturally, in the case of a right-handed person, this would be the left hand (as these were voluntary acts of self-mutilation).

Giedion, drawing on the theses of Bachofen and Baumann, points out the feminine character attributed to the left hand and the masculine to the right. He adds: "The Aurignacian-Perigordian is famous as the period of female figures, from the Venus of Brassempouy to the Venus of Savignano, from the bird-headed goddess of Pech-Merle to the high-relief Venus of Laussel." (Giedion, S. 1961, pp. 139–141)

What Giedion does not go so far as to suggest is the possibility that—if it were indeed the feminine quality of the left hand that was being represented, and if this were the reason behind the majority of left-hand prints—then the hands depicted on the walls of Paleolithic sanctuaries might actually be women's hands.

A recent study, which analyzed the proportions between phalange lengths, as well as the width and length of hands in men and women, concluded—after examining a large number of Paleolithic handprints—that most of them are women's hands, albeit by a small margin. The researchers acknowledge the potential for statistical error and note the presence of prints belonging to children and adolescents, concluding that the handprints represent individuals of both sexes and all ages.

The most recent study, conducted by researchers from the International Institute for Prehistoric Research of Cantabria (IIIPC) and the University of Cambridge, led by Virginia Fernández Navarro, analyzed hand morphology to determine age. The findings show that between 20% and 25% of the handprints belong to children between the ages of 2 and 12.

The caves where these examples of children's handprints were found include Fuente de Salín, El Castillo, La Gama, Maltravieso in Extremadura, and Fuente del Trucho in Huesca.

Two types of hand representations can be distinguished—an aspect extensively studied from an aesthetic perspective by J. R. Hernández Correa: some are in positive and others are in negative.

"The hand is obviously manifested, with an undeniable and evident presence, but it is precisely what is not there. Thus, emptiness arises as absence, as evidence of something that has been removed." (Hernández Correa, J. R. 1991, p. 220)

The "positive" handprints are created by pressing a hand stained with paint onto the wall, leaving a direct impression.



**Fig. 07.** "Peine del Viento" (Wind Comb).  
Eduardo Chillida 1.976. San Sebastian.



**Fig. 08.** Los Fueros Plaza. Eduardo Chillida  
1.979, Vitoria.

The hand representations in the Maltravieso cave in Extremadura have been the subject of this recent study, which uses a novel method—uranium-thorium dating—to precisely determine their age. The results show that these paintings are the oldest known artistic representations: negative hand stencils created by spraying pigments, estimated to be at least 66,700 years old.

“The hand silhouettes found in the Maltravieso cave, in Extremadura, Spain, are not only the oldest cave paintings in the world, but were also created by Neanderthals at least 66,700 years ago.” Standish, Christopher D. 2024.

One known airbrush was found in the cave of Altamira. It was made of two fragments of bird bone, with small clumps of paint on the outside and a thin layer of pigment inside, consequence of liquid paint having been blown through it.

We had the opportunity to witness paint being sprayed firsthand in the cave of La Pileta, where the cave’s curator, Pedro Cantalejo, demonstrated the technique with great skill—using half a walnut shell as a paint container.

It must be assumed that the “owner” of the hand is not necessarily the person operating the airbrush—especially in the case of children—nor the one holding the paint container.

The other type of representation, “negative”, involves placing the hand against the wall to mask the area, then spraying it with a primitive airbrush. This tool was made of two bird bones arranged at a right angle; the user would blow through one bone, causing the paint—held in a small container—to be projected through the other. When the hand is removed, the wall remains stained with paint, generally red, except for the clean silhouette of the hand.



**Fig. 09.** Hands drawing of sculptor Henry Moore. “Las manos del Artista” (Artist hands) (1.977). Photo taken from Ann Garrould’s Book “Henri Moore Dibujos”(Henry Moore Drawings). Editorial Polígrafa. Barcelona 1.989.





**Fig. 10.** Airbrush. Altamira Cave, Santillana del Mar, Cantabria. Bird bones. Photography of Pedro Saura Ramos.

In any case, although undoubtedly some of the artists may have been capable of depicting their own hand in negative using the airbrush technique, it is more likely that the person blowing the paint was someone else—perhaps always the same individual, possibly the tribal chief or the shaman.

And this leads us to consider that the owners of the hands depicted were not the ones who created the hand panels, but merely the models—especially in the case of children under the age of 12.

We wonder whether the right to leave behind that greeting to posterity had to be earned through the prestige of performing some beneficial act for the community, or whether it was a privilege reserved for dominant individuals.

In any case, even assuming they were unaware of the possibility of preserving their work and memory, they transcended prehistory to become the first graphic artists to leave their creations as part of humanity's artistic heritage.

## Note for the publication in 2025

We send this present article, titled “The Hand” to REIA Magazine in November of 2024, after it had already been written for several months.

We were informed a few days ago, in early July 2025, that it has been classified as “publishable.”

Coincidentally, on November 30, 2024, an international team of researchers led by Christopher D. Standish, using the Uranium-Thorium dating technique, determined that the hand representations in the Maltravieso cave, in Extremadura (Spain)—which were already mentioned in our original article—constitute the oldest known work of art in the world to date, with an age of at least 66,700 years, and that they were created by Neanderthal, not Cro-Magnon, artists.

Although this discovery warrants far more complex studies and considerations, we felt that this news should be mentioned, even briefly, and have therefore taken the liberty of including its citation.

Additionally, this finding contradicts the aesthetic theory initiated by Jorge Oteiza Embil regarding the construction of emptiness, and further developed by José Ramón Hernández Correa, which interprets negative handprints as a creative relinquishment of the hand and as subsequent to positive representations

While it has not been proven that older positive samples cannot exist or be discovered in the future, we have removed from our article the assertion that negative handprints are generally older than positive ones, as we no longer consider this to be scientifically established.

Madrid 2025

## Nota a la publicación en 2025

Mandamos el presente artículo, titulado “La Mano” a la revista REIA, en Noviembre de 2.024, cuando ya llevaba varios meses redactado.

Se nos ha comunicado hace unos días, a primeros de julio de 2025, que ha sido calificado como “publicable”.

Precisamente el 30 de Noviembre de 2024, un equipo internacional de investigadores, liderado por Christopher D. Standish, utilizando la técnica de datación de Uranio-Torio, determinó que las representaciones de manos de la cueva de Maltravieso, en Extremadura (España), que ya estaban citadas, en nuestro artículo original, constituyen la mas antigua obra de arte conocida hasta hoy en el mundo, con una antigüedad de al menos 66.700 años y que fue obra de artistas Neandertales, no Cromañones.

Aunque este descubrimiento merece estudios y consideraciones mucho mas complejas, hemos considerado que esta noticia debía ser, aunque brevemente, recogida, con lo que nos hemos tomado la libertad de incluir su cita.

Adicionalmente este descubrimiento contradice la teoría estética iniciada por Jorge Oteiza Embil, respecto de la construcción del vacío y desarrollada por José Ramón Hernández, Correa, relativa a las manos en negativo como desocupación creativa de la mano y posteriores a las representaciones en positivo.

Aunque no queda demostrado que no pueda haber, o encontrarse en el futuro, muestras en positivo aún mas antiguas que las citadas, hemos eliminado de nuestro artículo la aseveración de que las huellas en negativo sean, en general, mas antiguas que las positivas, por no considerarlo ya científicamente demostrado.

Madrid 2025

## Figures

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