

The Significance of “Red” Within the Pre-Columbian Funerary Rituals

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Abstract: *Religion-faith, art and science has dominated much of human existence since the early days of Homo Sapiens-Sapiens walking the earth. The intent of this two-part paper is to provide a wider understanding of the evolution of the colour ‘Red’ from its early beginnings, it also analyses the diverse characteristics of insects and plants-based colour of different Red’s such a cochineal, Vermillion-Cinnabar, Chinese red, red lead-minium and the relationship with pre-Columbian Peruvian funerary rituals. The first part touches on the historical aspect, its discovery, fabrication, commercialization of the colour ‘Red’. Even though blue or black may be the favourite colour in today’s Western accounts, ‘Red’ has always placed special meaning in our everyday life events, from Greco-Roman antiquity through to the Middle Ages, it has remained the most remarkably strong colour, full of richness in poetics and symbolic possibilities. The second part of this paper, focuses on providing evidence of the practise of the usages of the colour ‘red’ in the textiles of pre-Columbian Peruvian funerary rituals of the Andean civilizations such as Moche, Chimu, Nasca, Paracas, and subsequently the Incas as a means of symbolic connection with the afterlife. Finally, this paper concludes with a brief examination that the color “Red” acquires a dimension with a meaning which is based on the cultural context of the ‘Taki Onkoy’ or ‘Mal de Canto’ expression, historical and its psychological effects. It is a journey that captivates the fantasies of every generation across different continents.*

Keywords: Red, Cochineal, Vermilion-Cinnabar, Vermilion-Cadmium Red, Pre-Columbian, Funerary Ritual

1. Introduction

Colour is present and represented in every aspect of the human life, from the divine force of love, to lust and anger. This sensory affair is a psychological experience from the physiological stimulus of the light spectrum in the human eye which is interpreted by the brain and conceptualized by the mind. In recent years, there have been some studies on how humans react to colour and how it impacts us in our everyday interactions (Piotrowski, 2012). Donkin (1977), in his research on the ‘Spanish Red: An Ethnogeography Study of Cochineal and the Opuntia Cactus’, (p. 5) wrote:

“Colour may be aesthetically pleasing, emotionally disturbing and socially symbolic. They are often associated with particular moral or spiritual qualities with objects of religious

veneration, and with rank and position or cast...Red is especially important and almost everywhere, it is the colour of fire, sun, and blood, hence, life itself”

‘Red’ has garnered much of the attention of researchers and as a colour it is primarily and universally associated with emotions enhancing a strong visceral response (Elliot & Aarts, 2011). It may be difficult to imagine and measure how much colour is perceived as a colour per se, ‘intrinsically’ in the early times of the human history or how much the colour was as an essential part of the depicted object (Petru, 2006, p. 204). A good example in examining colour since the early days is the Cave of Altamira complex of monumental paintings incised with colour and designs (mark-making, drawings), situated in the town of Santillana del Mar in Cantabria, in Northern Spain; the site was discovered by a local hunter in 1868. (Figure 1, beneath).



Figure 1: Image of a bison, painted with ‘red ochre’ between 15000 and 16000 BC

Early evidence of pigment discovery has shown some ‘ochre’ artifact from the upper Palaeolithic period, these so called “artists” (medicine doctors, shamans, healers, spiritual leaders of the group or tribe), used two main natural colours; black in the form of charcoal or manganese oxide and a shade of ‘red’ which tends to be natural iron oxide. Ochre (ferric oxide), is a natural clay that is considered the first colour paint used in every inhabited continent. From the moment that drawing/painting began to be used as a vehicle of expression, ‘red’ and its different shades have been part of every artist’s palette ever since in history (Finlay, 2004, p. 20). The word ‘ochre’ comes from the Greek meaning ‘pale yellow’ it is accurately described as ‘natural earth soil’ clay that contains a measure of hematite (Haematite) or iron ore. Its name also derives from the Greek word for “blood” in allusion to its ‘red’ colour. Wandering around artists must have expend lots of time trying to find minerals with the properties of pigments and other natural elements to use and decorate their habitat according to their beliefs or as they may have needed. Research has been conducted to determine from where these natural minerals or organic pigments came from, and the type of colour palette needed to express their works. In France, at the Cave of Lascaux, located at the Village Montignac, Dordogne, drawings made some 17,000 years ago show colours such as red, yellow hydrated, iron oxide ochres, manganese oxide browns, clay ochre, blacks, kaolin and calcite white (line white) were found, which indicate that the colour pigment properties were important to these ‘artists’ and not the mineral type. These colours included the black colour that was used to paint the splendid and prolific bestiary of the animal’s portrait on the walls (Pastoureau, 2009). In this type of work the applied pigment sticks to the wall partially because it gets trapped into the porous rock and also because of the binding medium used such as animal fat, urine, vegetable juice, blood or saliva among others which dried and adhered the pigment to the wall making the pigment

firmer and preventing the paint from cracking after drying. There have been many discussions on how these pigments were applied to the cave wall surface, perhaps spitting or spraying it through the mouth or using hollow bones, using their own hand stencils to create patterns, using burnt sticks working as a brush or using it as black crayon/stick to create dark contour lines of animal or perhaps smearing with the fingers and dabbing with their palms (Duarte, 2014). This consistency was conducive to the creation of large crayons sticks or they may have made a liquid paste closely resembling current liquid paint. Artists used pigments found in the near vicinity of their habitat or they may have travelled large distance to hematite's deposit to mine them out. Naturally the colour is not 'red' in the modern sense of 'red colour', this colour in its natural form as a rock-stone-clay or gravel appears as brown/black and some cases brown/red, with slightly hints of violet colour as well. It only changes when it is pulverized and becomes a red powder. Prehistoric dwellers may have discovered that unlike dye colours derived from animal and vegetables other colours such as natural mineral iron oxide, 'red ochre', yellow ochre, yellow oxide, umber, would not fade with the changing environment therefore there was a better chance for the painting to last a long period of time. The role of 'red ochre' in human evolution remains confined to the development of the symbolic meaning and artistic expression (Duarte, 2014). 'Red' pigment is perhaps the oldest colour, used as far back as 17,000 BC made from the 'ochre' a common mineral family of earth pigments used in prehistoric art which is made of natural clay (red) known as hematite or limonite. This can be found in the form of aggregates of small red crystals or in the form of bigger black crystals which are difficult to crush (Petru, 2006). Evidence has been found that people in the late Stone Age were grinding red ochre to paint their bodies or to depict hunting scenes, maybe for cultural group practices and other forms of religious functions. The use of 'red ochre' is largely interpreted as a simple symbolic meaning and cognitive thinking (Observation of the living animals and surroundings) which carries evolutionary significance (Duarte, 2014). The exact meaning or symbolism of the images remains unknown to the community of experts but it is thought that the pictures were created within the shamanic framework of belief and cultural group practices. *Homo erectus* was interested in 'red' since early times and contemporary humans remain attracted to this colour in all its forms. Australian aboriginals, assigned great health properties to red ochre, traditional medicine of the Arabs, Chinese, Greeks, and Romans also involved the use of red iron in their medical practices (Duarte, 2014). In ancient Egypt, 'red' ochre was used as a female cosmetic for the cheeks and lips and was associated with life, health and victory. The walls of their houses were also decorated with a type of 'red' paint. During the pre-Columbian cultures the demised body and face (Funerary mask) was coloured in 'red' during the special occasions to honour the dead, establishing a relationship through the mask with the spiritual world. 'Red' was also associated in antiquity with war, wealth and power. During the medieval period 'red' held a dual position, a religious significance as the colour of the 'Blood of Christ' and also representing the 'Fire of Hell'. From the earliest Christians martyrs until today 'red' is the favourite colour worn by Cardinals. The secular meaning of this colour is identified with love, passion, seduction, violence, danger, glory and beauty across different continents. Yet during the Protestant Reformation, 'red' began to decline in status, it was viewed as an indecent and immoral colour linked to luxury and the excesses of the Catholic Church, so 'red' may have fallen out of favour. Subsequently, during French Revolution, 'red' again gained new respect as the colour of progressive movements and radical left-wing politics associated with patriotism, for example the Phrygian cap is known as the "red cap of liberty", a soft felt conical headdress fitting closely around the head (Britannica, T. Editors of Encyclopaedia 2017. *Phrygian cap*.). Another colour in favour was 'red Vermillion' as one of the first colours identified by ancient authors. From the grinding of 'red Cinnabar' a range of shades were produced from brilliant scarlet to deep red brick. This natural mineral of mercury sulphide (cinnabar) is highly toxic and was a

costly colour to make, much better than Egyptian blue and the ‘red’ ochre from Africa, this ‘red Vermillion’ colour should not be confused with the later paint also called “Vermillion”. Most of the ‘red Cinnabar’ came from the mines of Almadén in Spain, the largest liquid mercury producer in the world. ‘Red Cinnabar’ also appears in the Macedonian monuments found in small quantities in Pontokeresia town of Kilkis, Greece. Unfortunately, this ‘red’ colour was extracted by slaves and prisoners of war through imposed hard labour. Obviously, ‘red’ appears as a symbolic colour in many different warrior settings. In Roman mythology, this ‘red Cinnabar’ colour was associated with blood and courage. It was the colour of the god of war represented in the figure of “Mars” – and the colour of the Roman army, soldiers wore ‘red’ tunics at all levels while gladiators were adorned in ‘red’ before their fights. Rich women sacrificed their health for beauty using a ‘red’ lipstick made of it (Finlay, 2004, p. 163). Roman Generals also wore a scarlet cloak, a rich ‘red’ slightly tinged with violet which became the emblem of power and was soon exclusively reserved as an imperial colour to celebrate and commemorate victories having their bodies painted entirely in ‘red’. Brides at a Roman wedding wore a red shawl, a wedding veil called flammeum, perhaps from the Latin word “flamma” which means flame, used to cover the bride’s head like a scarf and not the face as in modern times. This was a large piece of cloth big enough to wrap around her body and head. ‘Red’ is the colour of blood and was a symbol not just of ‘death’ but for ‘life, fertility and love’. The Byzantine ‘red’ colour is basically a dark tone of reddish-purple known as ‘Tyrian purple’ closer to crimson (another shade of red) originally made from the scale insect or kermes that was the source. This is a word that derives from the Persian or Turkish “*qirmiz-kirmizi*”. In China ‘red’ plays an important role. Originally known as Chinese lacquer, it is made from the lacquer tree *toxicodendron vernicifluum* a relative of the sumac tree. It is a resin extracted from the tree that is poisonous. During the Han dynasty (202BC-220AD), artisans began to use cinnabar malachite, azurite, or ‘red Ochre’, which is the characteristic of this source of ‘red’ (Schafer, 1956). By the Tang dynasty (618-907AD), Chinese chemists began making synthetic vermilion from mercury and sulfuric acid produced in large scale making this synthetic colour a lot cheaper. The colour was traded by the Arab caravans to the West during the Middle Ages and it was used to illuminate important aspects of manuscripts as was also the case with lapis lazuli, commonly known as ‘blue Ultramarine’, brought from Afghanistan (Finlay, 2004).

Dyestuff, colorants, and pigments in their mineral form were suitable for long distance travel and commerce involving many middle-men. This movement of goods was costly and needed to find a ready market where only luxury materials were manufactured such as carpets in western Asia or silk from China. Venetian merchants had close ties with the markets in Constantinople (Istanbul). From the ports of the Levant to Venice the trade of ‘red’ either from mineral, kermes or cochineal reached much of western Asia. The colour was widely used by Tiziano Vecelli, known as “Titian”, a Venetian painter of the 16th Century high Renaissance who is considered the most important member of the Venetian School. This particular ‘Titian-red’ pigment is typically a very warm and reddish brownish-orange colour that gave the author’s a warm and sensual atmosphere in his paintings; his style of using ‘red’ also influenced the ladies of the time who dyed and bleached their hair trying to equal the ephemeral and ethereal beauty. The white skin and *red-brownish-orange* hairs expressed great femininity, refinement and sensuality of the women depicted in his wonderful works. However, some disadvantages are present in this *red-brownish-orange* colour; For instance, it darkens over time and becomes dark-purple-brownish. Whilst it was a very popular pigment it was also highly toxic which eventually led to artists switching to Cadmium-red. Anthony van Dyck, a contemporary of Rembrandt, loved to use cochineal lakes to paint the glowing red fabrics, such as the shimmering scarlet in the portrait of “Agostino Pallavicini” (c, 1621). (Figure 2, beneath). For many cultures across the continents ‘red’ has come to signify both life and death

(Findlay, 2004, p. 142), a beautiful and terrible paradox, but in modern language ‘red’ may also mean the power of love, the heart-beat, wild feelings and lust. It has also been used to represent the God of war and its absolute powers.



Figure 2: Anthony van Dyck. Portrait of Agostino Pallavicini. c. 1621. Oil on canvas. 2.162 cm x 1.410 cm.

(a) Full portrait; (b) cloth details

These concepts were very well understood by the ancient colour codes, for example during pre-Columbian cultures the cochineal beetles were seen as a fundamental colour encompassing everything in life. Another point to highlight is that, no matter how well a painting can be produced by an artist, its success solely depends in great deal by its colour appeal and application (Holtzschue, 2006, p. 125). For an artist it might be critical that the colour selected perhaps be represented as closely as possible to the real life of the chosen object or could represent an abstraction of the object. However, the experience of colour is very much closely related to how people experience the flatness of the earth; people know that the earth is rounded but their sense tells them that they walk over a flat surface. For colour it is a very similar experience. It does not matter how colour may appear to others, people always believe “*their eyes*” (Holtzschue, 2006, p. 3). All colours have a powerful impact in peoples mind, body and soul but most of the time people experience colour with an astonishing lack of awareness. This experience is an involuntary response to the sight of a stimulus of the visible light spectrum which is influenced by the unconsciousness of what has previously been learned. In the case of the early cave paintings the response may have been from the interactions between the animals and the humans in their very aggressive environment. This positive or negative learned impression with the emotional evaluation of colour is either hostile or friendly (Kuniecki et al., 2015), and may have produced these early works of art. It’s only been since the 19th Century that artists have really benefited from the ready-made colour pigment products (cheap and with a new range of colours such as cerulean, cadmium-yellow, chrome-orange and others) which has freed artists from the unscrupulous and pestilent colour-man who sold unstable colour mixes that would fade or discolour within weeks or may react with the mixing and combination

with other colours. The new invention of the collapsible colour tube in 1841 allowed artists to work outside using brighter colours that no one had ever seen before (St. Clair, 2016).

2. Discussion and Result

Michel Pastoureau, in his book, *Red: The History of a Colour*, 2017, presents 'red' as the colour of blood, fire, fertility, passion, sacrifice, privilege, lust and revolution, remaining a powerful emotional mediator and universal symbol throughout the ages. 'Red' may be examined over a long period of time in all its aspects, from the lexical to the symbolic, social customs, technical applications, religious-rituals and moral codes as well as its artistic creation and aesthetic functions and effects. However, 'red' never stands alone and it is impossible to consider it in isolation, its meaning fully functions from the social, artistic or maybe its symbolic perspective. Some difficulties may appear in the study of this colour 'red' that could be grouped into three areas; **First**, the discrepancy between the original colour of the artwork and the state of present look, for example the wall cave painting that can be seen with today's new technology may appear very different from those preceding societies where the painting was illuminated by a wooden torch, oil lamp, candle or gaslight producing different effects compared to what electric lighting provides nowadays. **Second**, the procedure, this issue may raise other challenges and problems of perception and understanding of these artworks. Technically the pigments could be analysed from the chemical view point, giving a definitive and perhaps clear thought on the elaboration, material selection, and sourcing of these materials, or on its radiocarbon dating to determinate the age and time period; But the visual analysing of these artworks also presents bigger challenges from its iconographical, ideological, or symbolic meaning all happening at the same time. What is the function of the colour in the artwork? How did these works present themselves to the audience? Or how to organize these studies, in what order? Perhaps the answers may be in obtaining from the researcher what is important to retain and demonstrate in relation to the process of enquiry. **Third**, the perception, how to project our definition, conception and understanding of this 'red' colour, as it is onto the past and how to bring this meaning to future generations. For example, Newton gave us a new paradigm of the conception of colour from the visible spectrum of light that challenged and changed the way colour is understood since the time of Aristotle (Pujazon & Elias, 2021, p. 698). However, whatever the historical period is, the perception of 'red' is always cultural. The theory of the visible spectrum set by Newton brought new meaning to the colour wheel (Holtzschue, 2006, p. 87), and its uses are mostly set in the scientific realm differentiating tangible pigments and intangible light of warm from cold colours, complementary and other combinations asserting new psychological and physiological effects on us (Pujazon & Elias, 2021, p. 698). Our current knowledge and sensibility of today is not that of yesterday and will not be of those of tomorrow. For the social sciences and historian 'red' is a social phenomenon with all such connotations. For the hard sciences such as Physics 'red' is a phenomenon of the visible spectrum of light and its innumerable hues and shades. For the chemist 'red' is a tangible raw material to be analysed in its structure; and for art, aesthetics, artists and its creations 'red' carries strong and complex visual and cultural meaning. In this paper, the colour 'red' aims to be associated with its cultural meaning, code, values, practices and religious-spiritual significances of an ancient civilization that developed a high degree of belief within their rituals and funerary practices for the body and the soul of the demised person.

The History of Red

'Red' as a pigment has been conjugated in various hues, shades, tones and for many other different purposes that originated from rituals to a universal archetype. As a primary psychological and an emotional experience, it is potent, tangible and fundamental; 'Red'

establishes the life principles contained in blood and death. In ancient civilization the custom of spreading the body with red ochre has been attested since prehistoric times. The goal of this chromatic ritual was to restore the vital force that death had stolen from the body and accompany the deceased on the mysterious journey towards the unknown afterlife. Humans have been exploiting plants, rocks and insects in search of inks and colorants (dyestuff) throughout history (Donkin, 1977); some plants and insects were imported as a source of medicine (proteins, sugar) and drugs. ‘Kermes’ (*genus*) is a bug, (Figure 3, beneath) an insect from the order Hemiptera, a parasite that lives and feeds on the sap of evergreen oaks (*Quercus coccifera*) of the host plant, this plant is native to the Mediterranean region and North African Maghreb. The Kermes creates a lump that grows in the trees which was probably called the “oak berry”. Pliny the Elder was confused with the “kermes” origin. In his book “*Naturalis Historia*” 77AD, it was called both a “berry, grain, seed” (Coccum, from the Greek *kókkos*) and a “little worm” (*Scolecium*) (Finlay, 2004, p. 146). Since the time of the ancient Egyptians kermes has been imported and traded through the length and breadth of the known world by camel load, from Persia and Mesopotamia to the old continent. This trade increased to cover the known world from Europe to China. During the Roman expansion to Spain, they would demand taxes to be paid using sacks of kermes, a superior dye for woollens, silk and for medical purposes. The important nature of this product was understood from the early stages of classical times. During the Dark Ages, the importance of kermes declined but re-emerged during the Middle Ages. This kermes was known as vermiculus (small worm) hence the name “vermilion” and was the most expensive dye in Europe (Finlay, 2004, p. 147).

This ‘red’ dye is from the dried female bodies of a scale insect primarily known as “kermes vermilio” (*Kermococcus vermilis*), which is a rich dye; It may also be found under the name “crimson”. ‘Kermes’ is also known in various other languages: Sanskrit kirmira, kirmidja; Pahlavi kamir, kalmir; Persian kirmiz; Turkish qurmuz; Arabic qirmiz; and Hindi kirmdana. ‘Kermes’ (Figure 3, beneath), was brighter than “Madder”, “*rubiaceae*” or ‘*Rubia Tinctorum*’ which is a plant root, relatively cheap and mostly used to dye carpets and ordinary people’s clothes. Reasonably lightfastness and widely employed in the preparation of ‘red’ dyes containing “alizarine” (Barnett et al., 2006), a colour used to create other permanent purples and browns, this ‘alizarin’ colour continued to be used throughout the Middle Ages instead of “scarlet” until the Polish *Cochineal* was found (Figure 4, beneath).

Originally, ‘Scarlet’ was a word from the old French language ‘*escarlate*’ and it was not necessarily associated with the colour ‘red’ per se. Sometimes it also referred to ‘blue’, ‘green’ and occasionally ‘black’. ‘Scarlet’ was a fine and high-priced woollen broadcloth that sometimes fetched even four times the price of ordinary cloth made from the finest English wools commonly used by rich people during the fourteenth and fifteenth century in Medieval Europe. This cloth was customarily dyed with ‘kermes’ and even fixed with ‘woad’ which made ‘indigo’ colour, which was another dye-plant to make cheap and strong dye colourant (Finlay, 2004, p. 147).



Figure 3: Kermes Insect



Figure 4: Polish Cochineal

The Polish Cochineal

The Polish *Cochineal* (*Porphyrophora polonica*), was known as Margarodes (*Coccus porphyrophora*) or Polish carmine scale (Figure 4, above), which is a sessile parasite insect that lives on various herbs and especially on the root of the host perennial plant “Knawel” (*Scleranthus perennis*). This is the ‘Polish carmine’ formally used to produce ‘crimson’ known as the “Blood of Saint John” belong to the sandy soils of Eastern Europe, Lithuania, Poland and Ukraine (Figure 4, above). Before the development of the aniline and other synthetic colorants, this cochineal was an important product of economic income in Europe, although its commercialization declined with the introduction of the Mexican cochineal during the 16th century. Despite the labour-intensive harvesting and manufacturing, this was a very popular product through the Middle Ages and highly sought after as an economic commodity, an alternative to the popular ‘kermes’ most popular from Spain. Its colouring strength derived

from the carminic acid (aluminium salt), which is produced when the female adult sessile parasite insects are feeding and sucking on the prickly pear nopal or tuna cactus sap (Mengual & Thompson, 2011) producing a carminic acid in different concentration that deters predation by others Anthropos. The female insect is killed in boiling water, or in the same manner of the kermes exposed to or immersed in vinegar. It's then dried in direct sunlight over a short period of time (two to three weeks) which increases its colour strength, cooked in the oven, dissolved with beer or sourdough, then it is collected and used to dye cotton, wool, or silk. Mordants and others auxiliary compounds such as aluminium, salts, derivates from iron, plant ash, tannins, lime, urine-ammonia, and vinegar were used to fix the dye to the cloth. In 1547 Polish cochineal (*Porphyrophora polonica*) disappeared from the market, instead perennial knawel plantations were replaced with cereal fields or pastures for raising cattle. Curiously this was an ingredient in the local production of vodka colorant and folk medicine.

Once the first Europeans arrived in the Americas several years after Christopher Columbus in 1492, they gratefully settled down in the Bahamas. The age of the Conquistador officially has come to be remembered for it guns and its greediness (Finlay, 2004, p. 148). The Spanish soldiers found gold and silver but they also found 'red'. The Conquistadors found the cochineal dye in the great marketplaces of Tenochtitlan, Mexico in 1519 and this event helped to be a turning point of the Spanish economy. This exotic and mysterious source of 'red' dye became a sensation back in Europe where it was deemed as the 'perfect red' creating a dazzling spectrum of reds, from soft rose to gleaming scarlet to deepest burgundy. The monopoly of this colour made it one of the most valuable commodities from the New World, second only to the export of gold and silver. The first news of the cochineal (Figure 5, beneath) arriving in Spain came shortly after the conquest of the Aztec Empire by the Spanish conquistador Hernan Cortez in 1521. Emperor Carlos V in 1523, wrote to Cortes indicating that he had received reports indicating the existence of a 'red' dyestuff, referring to it as 'grana' (cochineal) and urging him to send cargoes to Spain since it could be of great importance as new sort of commodity for the royal treasury (Salinas, 2018, p. 255). This Iberian expansion in the early 16th century created a monopoly of American products which included several types of new dyestuff that would transform traditional European practices and later also have an impact in Asia (Serrano et al., 2011). By the second half of the 16th century many of the European textile production centres requested domesticated cochineal, which was much stronger, and contained a higher content of colorant than the typical European kermes. This unmatched 'red' could also be used to make shades of pink, purple, and black (Greenfield, 2019).

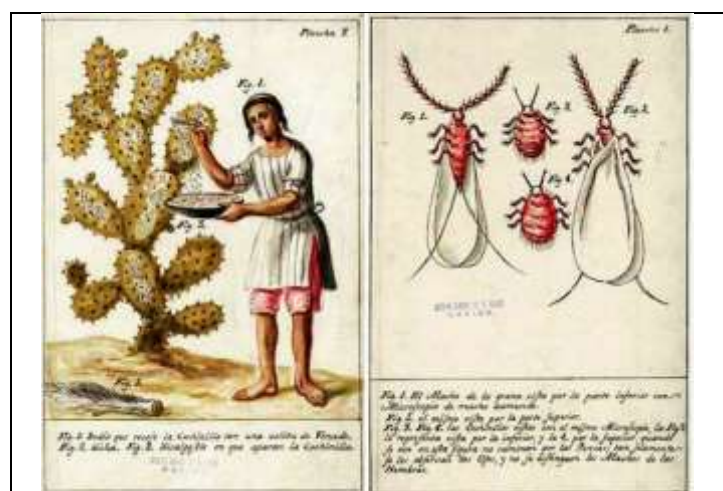


Figure 5: Cochineal collection by Mexican Priest and Scientist Jose Antonio de Alzate Ramirez, 1777. (Newberry Library, Edward E. Ayer Manuscript Collection)

Cochineal was the result of careful cultivation of small pots of nopal, a common name in Spanish for ‘*opuntia cacti*’ a certain variety of prickly pear cactus, that was tended by the local farms mostly used in Mexican traditional cuisine and medicine (Figure 6, beneath).



Figure 6: ‘Cochineal’ plantation and collection process

The Peruvian *Cochineal* and other Colour Plants

Peru has a unique global biodiversity with no fewer than 84 of the 104 life zones of the planet. With 25,000 species of flora, this has made possible the polychromatic variety found in its well-known and exquisite textiles and pottery developed during the pre-Columbian period. Peruvian flora has supplied local artisans with a large variety of potential dyes and colorant materials (de Mayolo, 1989). Cochineal bugs and plants such as indigo (a shrub that grows wild and is also cultivated), antanco (a herb that grows wild in temperate climates), chamiri, chilca (a bush that grows wild and cultivated, used as an anti-inflammatory and anti-rheumatic treatment), mullaca (a herb and shrub that grows wild), and molle huina (a tree which grows wild and cultivated) which was highly appreciated during the pre-Columbian period due to its medicinal properties, used as a pesticide, dye for textiles during the “Wari” culture period and it was known as a ‘virtuous tree.’ These are some of the plant colour components found within the textiles that have been woven with a great deal of detail and quantity during the pre-Columbian period. The most common source of Peruvian ‘red’ dye was the ‘*cochineal*’ (*Dactylopius confusus*) an insect scale parasite commonly found on cactus of a closely related group: ‘*opuntia cactus*’ and ‘*Nopalea coccinellifera*’ (Donkin, 1977), similar to the Mexican cactus found in Central and South America (Wouters & Rosario-Chirinos, 1992). The typical Peruvian species ‘*Dactylopius confusus*’ feeds on ‘*opuntia exaltata cactus*’ (Long-spine cactus, known as San Peter cactus) and it is identified as ‘magno’ used to produce bright ‘red’ shades found in pre-Columbian textiles and other fabrics (Wouters & Rosario-Chirinos, 1992). It was crushed to form cakes (tortas, tortillas, panecillos, pastas) that were left to dry for future use (Roquero, 2008). In Quechua and Aymara two of the most widely spoken native languages during the pre-Columbian era, the word for ‘*cochineal*’ was also known as ‘macno’. Gonzales Holguin in 1586 describe it as ‘macnu’ (Quechua) as “Color colorado par tenir” (English translation: ‘colour for dye cloth’); Baltazar Ramirez in 1597, wrote of the Province of Condesuyo, (North of Arequipa): grana que alla se llama magno” (English translation: ‘grana

that is known as magno’); Martin de Murua (c. 1600) states that the “indios serranos dyed alpaca wool” -con magno- (with magno). ‘Grana-cochineal’ was first reported from the north costal area of Peru. The ‘cochineal’ grows in different regions and at different levels of altitude in Peru; from Ayacucho (central Peru) to the farther northern regions of Ecuador (Loja, Cuenca); central Bolivia (Sucre); northwest Argentina (Tucuman, *Dactylopius ceylonicus*) and Paraguay (Talavera) (Donkin, 1977, p. 33). Vazquez Espinosa (c. 1620) tells us that ‘the Indians of La Plata’, Sucre, Bolivia, sell wool dye in different colours and bricks of wild cochineal (unos panecillos de grana silvestre - little cakes of wild ‘grana’) which they make in various dye colourants (Figure 7, beneath).

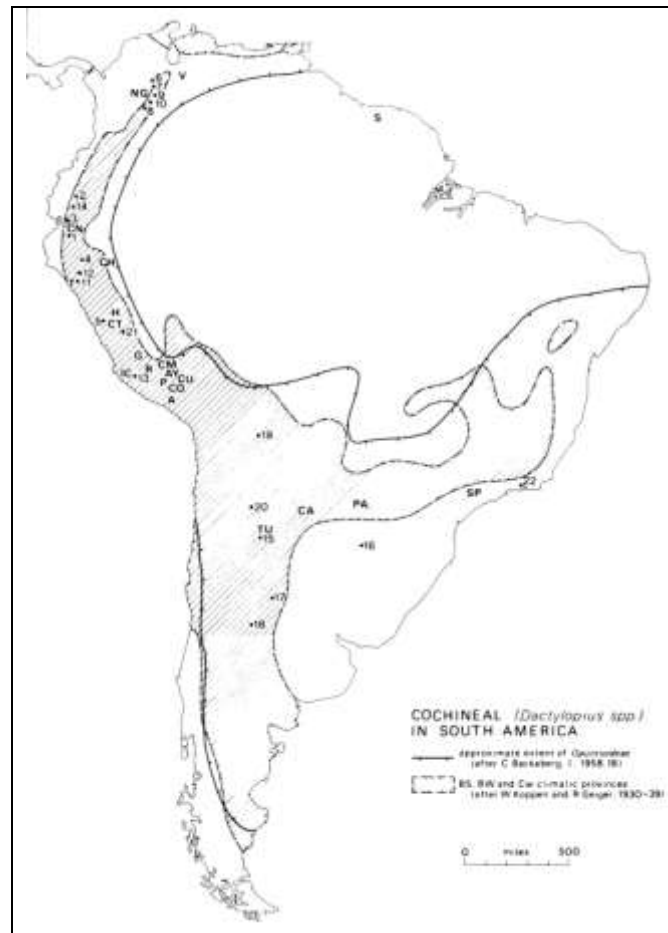


Figure 7: ‘Cochineal’ development in South America

Despite the superiority, richness and versatility of the cochineal ‘red’, the ancient Peruvians also used other sources of dyes as well, such as ‘red Cinnabar’ which forms a highly valued red pigment (vermillion) when powdered. This pigment was found in graves of high-status individuals and as paint covering funerary masks and adorning ceremonial artifacts spanning cultures from the Chavin culture (900-200 BC) to the final pre-Columbian culture, the Incas. It has been suggested that this ‘red Cinnabar’ was mined from Huancavelica quicksilver district in central Peru and traded during pre-Columbian times (Cooke et al., 2013), as mercury amalgamation is a process that allowed the extraction of gold and silver even from low-grade ore. Another source of dye is the ‘*Relbunium hypocarpium*’ family plant, commonly known as ‘*Galium hypocarpium*’ which in the local Peruvian dialect of Quechua is called chamiri or chchapi, chapi chapi. It was described by Bernade Cobo in 1653. It is a small plant whose roots were much appreciated since ancient times because it produces a lovely ‘red’ tint and was associated with the development of the great pre-Columbian textiles found in the necropolis of

Ancon-Peru north and Paracas south coast of Peru. Many of this species were mentioned in the literature of ‘red’ dye and were used during the pre-Columbian period, in the Moche culture (100-700 AD) and Chimú culture (c. 900-1470 A.D.). Both ancient cultures represented a great deal of details in their textiles, cloth and fabrics as well as their pottery. Paracas culture is also a great example of this practice where ‘red’ robes and other textiles were stained with these colorants made of natural plants and roots or from cultivated insects. ‘Cochineal’ as colorant also found its way into the European artists paint box procured from fresh-grounded insects yielding better results and usually combined with binder creating a pigment known as ‘lake’. Recent developments with chemical analysis have confirmed its presence in Rembrandt’s oil painting titled “The Jewish Bride” 1665-1669 (Figure 8: (a) & (b), beneath), a vermilion based *cochineal* glaze giving the dress its great depth and gentle sheen. The end of the ‘red’ reign began when the German chemical industry discovered the compound alizarin in 1869. With it, they invented the synthetic ‘red Cadmium’ which eventually replaced ‘red Vermilion’ (made of mercury that was poisonous) from many of the artists palette. As for the cochineal, it was used to make the ‘red’ coats of the British army but not all the ‘red’ coats. The lower ranking redcoats’ officers had to settle for less costly dyes like ‘madder’ which faded more easily. The cochineal scarlet cloth was used to make many of the British officer’s uniforms for the next two hundred years (Greenfield, 2005). ‘Red’ became popular and cheap as well as the scarlet fabric much sought-after by the poorest labour class for underclothing (underwear), stocking and trimmings, the brighter the better. It was also worn and used as lipstick by the women of the oldest profession in the streets from Spain to London (Greenfield, 2005). Eventually black, once signed as mysterious and sinister, supplanted ‘red’ as the ultimate power colour.



Figure 8: The Jewish Bride. c. 1665-1669. Oil on canvas. 121.5 cm x 166.5 cm (Rijksmuseum, Amsterdam). (a) Full portrait. (b) Cloth detail.

History of the Pre-Columbian South American Cultures

Most of what we now know about the history of the Andean region, the pre-Columbian cultures and ordinary people of those areas come from the archaeological evidence which regularly focuses on the arts and architecture and other remarkable precious objects. Among other utilitarian craft, textiles are considered one of the greatest achievements of the ancient Peruvian cultures known in the New World. Finely woven into an elaborate pattern, they have survived for inspection chiefly at the burial sites in valleys along the arid coastal terrains. In the ancient Andean society across all its levels, textiles and cloth were a sign of wealth, status, and power (Jones, 2010, p. 222). Francisco de Xerez, Secretary of Pizarro wrote of Cajamarca (c. 1534) that:

“The cloth was the best that had been seen in the Indies, very fine wool and the rest of fine cotton of rich colours beautifully variegated” (Donkin, 1977).

Textiles, clothing and fabrics were exchanged by rules, given as rewards for good service and used to fulfil reciprocal functions and obligations between members of the same 'ayllus' - (*same community*). An important relationship between the State and the subject (person), textiles and clothes were presented at State ceremonies as a means of reward, it also marked changes in the cycle of life of the people of the 'ayllus'. Textiles/clothing was divided into two categories, the finest cloth was called 'qompi' as a form of tribute, the best was made, kept and sent to be worn by the royals (The Inca) and used during religious obligations; and the 'awasca' cloth which was plain, a kind of coarse fabric for ordinary use (Jones. 2010, p. 222). Most of these clothing's were depicted on the surface of the daily pottery and often also found in graves. Rich in dye colorants of different shades of cochineal, they provided a medium for representing the gods and religious imagery reflecting the cosmological vision and concepts of the ancient Andean societies. For the people of the Andes, the body serves as a symbol and mediator of the cosmic structure and process, this duality refers to left-right, female-male, upper and lower halves, body and soul.

'Cochineal' as a raw ingredient was not demanded as tribute by the Inca state as it was by the Aztecs during the Moctezuma reign. Instead, textiles and cloth with its exquisite design and patterns in rich and brilliant shades of colours were regularly demanded by the Inca state. Ancient Andeans had much more excellent and available local animals' fibres such as Alpaca, Guanaco, Vicuña, and Llama, that took cochineal dye much better than cotton, a significant material very common to Central America. An important element used during the pre-Columbian period was the mordant or binders to fix the pigment to the cloth. This was natural aluminium sulphate called 'Qolla', iron salts' or 'urine as a source of ammonia'. Paul Hughes, in the "*Fine to Sublime in Space and Time*" 1994, explains that these peoples, whose primary medium of expression was textile/cloth and the geographical conditions of weather and climate, brought us incredible information in the textiles left for future studies unequalled elsewhere in the world (Hughes, 1994). Textiles and cloths are a form of communication also expresses individual identity. From the technical method of dyeing and weaving the fibre, a trained observer would be able to interpret the aesthetic, the correct selection of colours and design, perhaps a cloth used for the civil ceremony or religious status, wealth position, gender, age, the community or 'ayllus' and the rank within the 'ayllus'. Most important of all is the manner in which textiles and cloths commemorate significant moments in the cycle of life of every individual of the 'ayllu', perhaps the birth of a new child, the first cut of the child's hair, the first initiation of adulthood, marriage and finally the death of any member of the group. These stages of life were very important and special to celebrate or to mourn. In the Andean communities each event was marked by a given special type of cloth which played a crucial role in the spiritual and religious life. Andean weavers carried textiles/cloth making to the zenith of the highest art, in isolation from any other part of the known world (Hughes, 1994). Every aspect of these textiles is admired for its perfection, not only their technical mastery but also for the aesthetic and spiritual meaning of the finished product, the splendour of the colour dyes, and the faultless beauty of the design. The fibres made of animal hair were used in their natural colours or they were dyed with natural local colourants. The act of dying the threads became a common practice for these ancient cultures (Szyszlo, 2006, p. 19). Archaeological excavation of different tombs has shown corpses dressed in sumptuous robes with extraordinary headgear. Moche pottery and textiles has shown astonishing variety of geometric designs on tight-fitting headgear, which is a long strip of cloth wrapped twice around the head and tied at the back (Jones, 2010, p. 223). This practice strongly suggests that textiles and accessories defined the person's status during life and also served as a sacred votive offering to cosmic and ancestral forces after death (Hughes, 1994). The term 'Andeans' refers to the

people of the South Andes in general before and after the Spanish conquest by Francisco Pizarro in 1532.



Figure 9: Unku (Poncho), with staggered simplified design. 500-700 AD

Much of the textiles and colour dye produced during the pre-Columbian Andean cultures had ritual purposes. This complex method of colour use, imagery and patterns bore religious significances expressing the Andean Cosmological concepts (Jones, 2010, p.156). Art had its unique destiny within these early cultures, it also fell victim to the limitless greed of the conquering Spaniards in two areas; First, when the object in concern was made of precious metals such as gold or silver; Second, if the object in concern was religious in nature, in which case it would be destroyed due to religious intolerance. By destroying ancestor images and tombs, Christian extirpators effectively sought to erase the traditional link between the person and his livelihood (Lau, 2008, p. 1030). Spanish attribution of erroneous belief and superstitions to devil worship was a common way of distinguishing between ‘*Them*’ from ‘*Us*’. This Spanish belief reflected the cosmic vision of the Conquistador (Ramirez, 1996, p. 135). The production of utilitarian items by the Andean people such metal, ceramic pottery, textiles, wood and stone was multipurpose and it was not produced for its own sake. These items were produced under two important aspects; its religious application and simplified expression (Jones, 2010, p. 246). These early artists were not concerned in reproducing the external world as they would have seen it. Instead, they were concerned with occult forces, the spirits of the thing that lived within them, expressing themselves in using channels that connected them with their religious beliefs, their myths and all their thoughts that explained the world they lived in. The aesthetic was not the main concern in the creation of an artifact, the purpose was more complex in which the religious and magic of the cosmovision was part of the human group (Szyszlo, 2006, p. 16). The Andean cosmovision and the Western worldview are based upon two different sets of assumptions about the nature of reality. In the Andean view, a meditation is needed to bring into our awareness all aspects of our existence, mind, soul, body and hearth with the reality of nature. It is known that a great part of the produced art within the Andean cultures had spiritual and funerary connotations linked to the demised person. Those artists who executed it had a sense of perspective and a way to look into the cosmos. In that process they grasped the reality that basically provided them with the true image of the world in which the artwork was produced. When craftsmanship is filled with content and resonances then transcends the purpose for which it was created, it becomes art (Figure 9, above). In the Peruvian landscape of pre-Columbian cultures, two ancient traditions were strongly associated with burials, cemeteries or Necropolis. ‘Nazca’ may have been associated with ‘Paracas’ due the fact that both are located in the coastal area of the present-day province of Pisco, in the

south valley of Chincha. Pisco, Ica, Palpa and Acari valley developed in different transitional periods and the 'Chimu Kingdom' and the city of Chan-Chan, are located in the north coastal zone of present-day Peru. Dr Jorge Muelle once said:

"The priests of the Paracas wear an embroidered oneiric pantheon in their clothing" (Szyszlo, 2006, p. 19).

Although these cultures may bear some centuries of differences in their historical evolution and development, they did pay special attention to their funerary practices. 'Paracas culture', is the name assigned to one of the most important social formations of the Early Horizon, (c. 900 BC - 750 AD). 'Paracas' name has been used to designate a style used in their ceramics and textiles belonging to a long cultural tradition that had its centre in the Paracas peninsula and at the independent Bay of Pisco (Isla, 2006, p. 51). The Paracas 'Mantos' (Mantles-textiles) are well known for an explosion of their richness in colour (four basic colours were used). The design was used to decorate on top of a weaved fabric by embroidery which normally goes around the edges of the mantle. The purpose and meaning which have survived almost two millennia in all their splendour come from the pigments. Earth, clay colours, vegetables, plants, roots, leaves or resins and the animal products made from cochineal and molluscs. The clean fabrics from the local animals were dyed before the wool was spun or sometime after it. Specialists have distinguished up to a hundred and fifty different shades of those four colours. This wealth of colour can be appreciated in the wool-based fabrics, in contrast to cotton which adsorbs dyes badly. An explanation of the Paracas-Mantles is expressed by Makowski as follows: (Spanish text)

'Los vestidos ceremoniales concentrados en las capas superiores sugieren que fue voluntad de los oficiantes del rito funerario otorgar una identidad al muerto, igual o distinta de la que tenía en vida. La presencia de las imágenes bordadas en todos los niveles nos hace suponer que este cambio de identidad pudo estar relacionado con un ciclo escatológico. En tal caso, las imágenes deberían constituir una secuencia narrativa en la que se habría figurado el destino póstumo del individuo junto con los símbolos, cuya presencia tenía fin propiciatorio; es decir, ayudaba al difunto a cruzar los umbrales de la inmortalidad. (...) A mayor estatus social del difunto, mayor cantidad de piezas bordadas ofrecidas y mayor número de capas necesarias para lograr no sólo su renacimiento, sino también su transfiguración en un ancestro todopoderoso' (Makowski, 2005, pp. 60-61). (English text)

The ceremonial dresses concentrated in the upper layers suggest that it was the will of the officiants of the funeral rite to grant an identity to the dead, equal to or different from the one they had in life. The presence of embroidered images at all levels makes us suppose that this change in identity could be related to an eschatological cycle. In such a case, the images should constitute a narrative sequence in which the posthumous fate of the individual would have been depicted together with the symbols, whose presence had a propitiatory purpose; that is to say, it helped the deceased to cross the threshold of immortality. (...) The higher the social status of the deceased, the more embroidered pieces offered and the greater number of layers necessary to achieve not only his rebirth, but also his transfiguration into an all-powerful ancestor (Makowski, 2005, pp. 60-61).



Figure 10: Shaman of the Orcas. Funerary Mantle. Plain weave, cross-knit looping and embroidery in the block Colour style; camelid fiber. 277.5 cm x 140 cm

The motif in this mantle (Figure 10, above), has a large mask made of two orca silhouettes facing each other with two appendages ending in the same animal. It is wearing a tunic and fringed skirt and has a trapezoid-shaped pendant hanging around its neck. In its hands the figure holds a triangular knife with an orca-shaped handle and a severed head with mouth sewn shut with cactus needles. Girdling its waist is a skirt with a band of orcas. Archaeology, Anthropology and History National Museum Lima, Peru. (INC-MNAAHP, RT-1444).



Figure 11: Paracas Necropolis. Mantle

Aponte (2006) also explains the meaning of the images presented in the mantles as follows: (Spanish Text)

Espécimen: 290-39 (...) Manto de algodón de color rojo ladrillo con el campo decorado y bandas que presentan reborde decorado y flecos retorcidos polícromos. Las bandas, reborde y flecos han sido elaborados con hilos de pelo de camélido. En el fondo de las bandas, reborde y algunos flecos se han utilizado hilos de color verde petróleo. Para las figuras de las bandas, del reborde y el resto de flecos se han utilizado hilos de color azul, ocre, salmón, índigo, verde olivo, castaño oscuro y castaño claro. No se sabe si la disposición actual de las figuras es la

original, ya que el tejido del fondo ha desaparecido. Tanto las figuras cuanto las bandas están montadas sobre una tela moderna. El montaje de este manto debió hacerse en la década del 40. (...) Figura en las bandas y campo: Es un personaje que lleva un gorro o casco con puntas que se prolongan hacia fuera, cual corona de rayos, y pendientes cortos compuestos por dos láminas circulares que terminan en una cabecita. Viste un unku con flecos tubulares y debajo una pampanilla o wara de borde decorado. Tiene líneas de pintura o tatuaje en los muslos. Frame ha interpretado estas líneas como marcas del descarnado de los muslos, que dejarían ver las venas (Frame, 2008, p.65). En una mano porta una cabeza trofeo y un cuchillo de punta triangular y en la otra, una vara anillada y una vara con dos borlas. Presenta dos apéndices: uno surge de la boca y termina en una cabeza de serpiente, la otra brota de la cabeza haciendo un bucle entre los pies-al centro del cual se ve una cabeza trofeo – y termina en la cabeza y dos patas de un animal. (Aponte, 2006, p. 38-40) (Refer to figure 9, above) (English text)

Specimen: 290-39 (...) Brick-red cotton mantle with decorated field and bands that present a decorated edge and polychrome twisted fringes. The bands, border and fringes have been made with camelid hair threads. Petrol green threads have been used at the bottom of the bands, edge and some fringes. For the figures of the bands, the edge and the rest of the fringes, threads of blue, ocher, salmon, indigo, olive green, dark brown and light brown have been used. It is not known if the current arrangement of the figures is the original, since the background fabric has disappeared. Both the figures and the bands are mounted on a modern canvas. The assembly of this cloak must have been done in the 40s. (...) Figure in the bands and field: It is a character who wears a cap or helmet with points that extend outwards, like a crown of rays, and short earrings composed of two circular blades that end in a head. He wears an ‘unku’ with tubular fringes and underneath a ‘wara’ with a decorated edge. He has lines of paint or tattoo on his thighs. Frame has interpreted these lines as marks of the flesh of the thighs, which would reveal the veins (Frame, 2008, p.65). In one hand he carries a trophy head and a triangular pointed knife and in the other, a ringed rod and a rod with two tassels. It has two appendages: one emerges from the mouth and ends in a serpent's head, the other sprouts from the head making a loop between the feet - at the centre of which is a trophy head - and ends in the head and two legs of an animal (Aponte, 2006, pp. 38-40). (Figure 11, above) (English text)

‘Paracas’ cultural traditions are represented by its elaborated embroidered textiles, its fine multi-coloured ceramic, its deformed trepanned skulls and its great public buildings located in the valley of Chincha, Pisco, and Ica. The origin of the name of ‘Paracas’ varies, perhaps it was chosen from the textiles, ceramics or cultural practices. However, for most of the archaeologists and historians ‘Paracas’ was chosen to identify the pottery of the Early Horizon within the chronology of the ancient Peruvian history. Peruvian archaeologist Julio C. Tello recognised two chronological periods with different styles in them. “Paracas Cavernas” (older period) and “Paracas Necropolis” (most recent period). The first was associated with the burial chambers discovered in the shape of a bottle containing a group of individuals wrapped (Bundle) in fine decorated textiles and fabrics. As for the Paracas Necropolis, which is the latest period, it is mostly associated with pottery also known as ‘Topara’ with some variation developed parallel to the early phase of the Nasca culture (Tantaleán et al., 2016). The textiles may represent a record of what life was like in the Peruvian south coastal areas 2000 years ago, and also help to illustrate and pass down stories about their families, communities and heritage (Isla, 2006, p. 53).

The Andean Cultures' Funerary Traditions and Sites: ‘Huaca’s’

Rituals associated with death are common across many cultures since the first people walked the earth. From the New Orleans jazz parade, South Korean burial beads and prayers, to sky

burials leaving the corpses in the open fields of the mountaintops in the natural environment in Mongolia and Tibet, to the Balinese cremation ceremonies representing the accomplishments of the individuals most sacred duty, which is to liberate the souls of the dead; these practices were associated with specific means of disposing the corpses. Evidence of the manipulation of human remains such as cutting, removing or disarticulating are often associated with their religion and their community following the traditional prescribed movements in the wake of a demised person. Rituals which are often thought of as actions that express shared meaning, can also provide a great source of detailed information and the possible meaning of this behaviour (Toyne. 2017). Funerary rituals are encoded with rich symbolic connotations which are best understood in terms of cultural and religious ideology, social context and group perception of their own relation to the cosmic spirits, environment and community (Chicoine, 2011, p. 525). These social events are arenas for manipulation and negotiation between the forces of the living and the dead. This also helps us deal with the changes that are taking place partly because of the shared understanding of the actions involved. Funerary monuments of some kind such as the '*Huaca*'s' were a common practice in ancient times, a way in maintaining connection between the life of the individual and their death (Jones, 2010, p. 156). A '*Huaca*' is an object that represents something revered. The Quechua people of the Andes believed that every object has a physical presence and two spirits, one to create it and another to animate it. These human burials, '*Huaca*'s' (*holy places*) abound, with their tangible and intangible components provide a wider range of information and insights about the local culture, practices, rituals, population, and environment, which depend on the analytical method used to explain this phenomenon (Shimada et al., 2004). Under this cycle of life and death, tombs were sometimes re-opened to deposit additional bodies making it a traditional kingship mausoleum. '*Huaca*'s' were common to Andean people, where the mummification of the demised person was a way of preserving their power, respecting the ancestor, and honouring their legends and immortalizing their life achievements, thus retaining them as a living presence. Individuals of high social rank received greater numbers of offerings, so often they were unearthed to introduce more layers of cloaks. Frank Salomon noted that a mummified corpse was not at the end of the journey instead it was at the beginning of candidacy for greatness. They were ambassadors of the natural world who ensured the fertility of their descendants and their resources. Far from relegating the dead to distant and unvisited areas, the Andean cultures wanted them around, they wanted the tangible connection to power and the future. The burial, '*Huacas*' was considered a channel to another world. Irrespective of how much time has passed since the pre-Columbian era or since the conquistadors arrived in Peru, the belief in another world after death still remains a strong practice within these communities. The soul and the body were two entities that occupied special consideration in the Andean cultural beliefs, these rituals were passed on from generation to generation. Worshiping the intangible body, the ancestor, the 'memory', and the tangible body of the deceased was a common practice in many cultures across the world in its various forms, but it is important to indicate that children do not usually seem to have been recognised as ancestors as they had not multiplied as a new family of individuals, therefore they were not integrated into the ancestral lineages. However, the practice of scarification of children was part of the common rituals prior to and under the Inca domination called '*capac hucha*' (Quechua language), meaning '*royal obligation*' as a reciprocal relation between the ruler and the ruled (Winzenz, 2004, p. 101). Through state selection these children, boys and girls between the age of nine to eleven were brought to Cusco in a ritual procession to be married in a symbolic ceremony and taken back to be buried in the most sacred peaks of each region. The child could have been drugged or intoxicated by the priest, strangled or bludgeoned to death, then buried. This interpretation of the mountaintop sacrifices has changed over the time, although during the Inca culture (1476-1534 AD), it was thought to be part of the cult to the '*Inti*' (Sun), a patron deity of the Tahuantinsuyo empire where the Inca was considered the

son of the Sun. John Reinhard, has convincingly argued that these sacrifices were specifically in honour of a sacred mountaintop in the belief that it would provide a source of benefit in the form of rain or other similar events (Winzenz, 2004, p. 102). This belief could have been brought by the Moche or Chimu civilizations once they were incorporated into the Tahuantinsuyo empire, some hundred years before the Conquistadors arrived in Peru. Another concise example can be taken from the Nazca culture (100-750 AD) and its religious practices, man and nature are interrelated in an active sacred relationship where supernatural forces control the resources that affect human life, often symbolized in their ceramic-pottery with images of mythical creatures composed of elements such as the sky, earth, and ocean. The shaman (spiritual leader) was the keepers of these ritual (Proulx, 2007, p. 14). Nazca, in a similar procedure to Paracas culture (900 BC-750 AD), developed a peculiar construction of vaults on the ground that have an unusual characteristic of a single shaft bottle neck with a round burial chamber at the base and stone entrance at the top, known as caves. The body was wrapped with many layers of textiles in their familiar foetal position naked so they could be born again. The heads were artificially elongated and some of the tongues had a metal sheet, something apparently magical in nature. They were placed in a basket or inside a huge ceramic jar in a sitting position with the limbs strongly bent. The body was placed in this position irrespective of social differentiation. The demised person would then watch over the living. The position was held firm with ligatures, filling the empty space with textile garments to form a rounded bulge. Along with these funerary bundles were deposited some pieces of pottery and food: corn, peanuts, beans, yuca and sweet potato. (Figure 12, beneath).

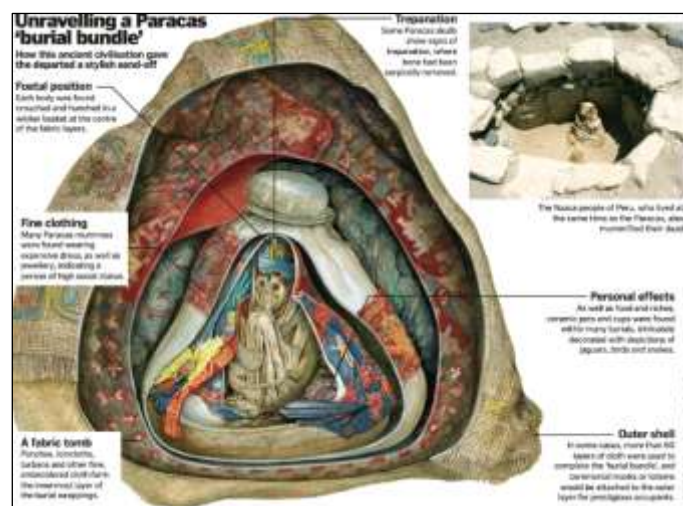


Figure 12: Burial Bundle, section cut and levels

The Chimu Empire and its Funerary Rites

Human sacrifice, among other activities, was not an exclusive practice during the Inca period prior the arrival of the Hispanic conquistador; in fact, it originated long before the Inca rose to prominent status of empire, and this was also true of other mortuary practices (Gaither et al., 2008, p. 109). The kingdom of Chimor or Chimu Empire (900-1470 AD) was a highly sophisticated hierarchical society that immediately preceded the dominance of the Inca empire, approximately fifty years before the arrival of the Spanish in the region (Lau, 2008). The Chimu believed in an afterlife closely linked to their earthly world. Like most mortuary rituals, ceremonies help to reconcile the physical death with the local concepts of the body and soul (Lau, 2008). Recent excavation has found a number of burials sites or centres alongside the city complexes such as Lambayeque valley, 'Huaca de la Luna' located in the Moche valley, 'Huaca Cao Viejo', and 'El Brujo' complex in the Chicama valley (Gaither et al., 2008, p.

110). The dead were prepared for their journey into the next life with elaborate tombs and copious amount of goods buried alongside the demised. Mummies were carefully wrapped and adorned with elaborate ornamentation of which the mask was part. There is no clear evidence on why it was sown onto the fabrics around the wrapped head. The mask played an important role in the intricated conveyance of this world and the next, as it was believed to protect and beautify the dead, showing their status and social power. It is believed that the mask represents the demised person as if they were alive. Universal symbolism tells us that the mask depends upon the use to which it is put (Chevalier & Gheerbrant, 1996, p. 638). In its esoteric belief, death symbolizes the profound changes effected in the person's life. The funeral mask is the unchanging archetype in which the dead persona was judged to return.

The Mochica culture and its people were established on the north coast of Peru, in the Lambayeque valley (c. 100-700 AD), well known for its decorative motif of pottery and metallurgy forms. The most important religious ritual was the sacrificial ceremony in which prisoners of war and children were sacrificed to the Gods, (Alva, 2006, p. 82). The deceased were typically buried underground in a fully extended position on their backs with the arms extended aside or placed on the pelvis. This position tells us that the body was associated with the concept of rest or sleep (Chicoine, 2011, p. 528). The faces were offered special treatment and covered with red pigment, and the hair braided or bundle wrapped in textile shrouds and the bodies were sometimes placed in a wooden coffin. This touches on the essence of the Moche people's view of time and space. They conceived the universe in two opposing yet complementary halves, like day and night, Sun and Moon, positive and negative. In this equilibrium resides the order of the world, maintained by the gods and watched over by the ruler (Alva, 2006, p. 82).

Some recent discoveries have shown 'sacrificial' practices among the Chimú culture that succeeded the Moche culture. Children and animals were often 'offered' to their god, with visible cut marks across their sternum and ribs. They were buried in unusual positions - prone on their back or curled on their sides instead of sitting upright, as was customary. They lacked adornments, pottery and other grave goods commonly found in other Chimú burials. These practices of killing and sacrifice within a ritualized framework took many different forms in the Andean cultures, it may have served to bridge the gap between the elite and their communities (Chicoine, 2011, p. 528). Some other burials have shown bodies in different positions, such as face down with the head turned to one side, which could be interpreted or associated with prisoners' execution, sacrifice or violent deaths, depicted in Moche pottery iconography. The Moche's religious ideology was centred around the concept of 'sacrifice' and 'offering' with the purpose of stimulating increased agricultural fertility and the production of marine sources (Chicoine, 2011, p. 544). These cultural practices present some challenges of moral judgement; the terms 'victims' and 'offering' bring some challenges or are problematic to analysis in a cross-culture practice (Wilson et al., 2013). Children did not die accidentally, they were commissioned (*offered*) as a central and defining element of the ritual. Prisoners of war normally were executed to show the power over a conquered land. Animals were part of these rituals, perhaps as companions to the children. The endowment of children to perform a human sacrifice may have brought direct economic benefits to the tributary groups, therefore this practice may have been unavoidable creating a climate of fear. This brings two interpretations, first on the type of 'offering-victim' and; second, the behaviour and belief behind the purpose of the ritual. For example, in one instance, the sacrifice is made to a deity for the purpose of religious ritual in a non-funerary context (sacrifice of a child to request the gods to cease the drought) and in another instance, the sacrifice is made in a funerary context for the purpose of helping or accompanying a deceased individual of high status

(Gaither et al., 2008, p. 120). Many debates and questions still remain under discussion with no final conclusions.

'Red' and its Multisensory Andean Corporeity

The links that exist between colour and its cultural context are inextricably tied to aspects of symbolic interpretation in communities also because the temporal functions of a specific time in precise historical conditions of human experience within its social order. As a result, the utilization of manifest colour in intangible socio-cultural products expresses its symbolic corporeity within the inherited significant everyday traditions through the collective's social interactions with fundamental intersubjective paradigmatic contents in "understanding the role of colour in the materiality of social practise" (Ávila, 2011, p. 90) of its members. It stands certain of the interpretative agency of collective multisensory experiences. 'The use and selection of colours as malleable expressions and social interaction implies the evaluative requirement in modifying the qualitative attributes of an exact colour for the look and for the indisputable significant chromatic categories that favour a certain colour palette, supported by the experience and the daily practise of the social group', Florencia Ávila wrote in "Polychrome Archaeology". As a result, Ávila's emphasises the importance of diverse agents' intersubjectivity in social activities and therefore the creation of significant objects with an equivalent qualitative assessment in textiles, architectural construction elements, religious expressions, and other similar forms (Ávila, 2011). The appreciation from one pigment over another results in a reconsideration of the symbolic value that it encapsulates in social, political, religious, and economic activities, taking under consideration, for instance, that it will be valued within the West because of scarcity, rarity, or difficulty in obtaining it (Finlay, 2004). However, within the new world and within the Amerindian philosophical-religious conception, certain colours were involved within their own perception of an experimentation of the first shamanic cosmogonic (Vega-Centeno & Dulanto, 2020) and rooted in initiation rituals that allowed integration within the daily and sacred reality of mother earth or 'Pachamama' (Mother earth in Quechua language). Similarly, the chromaticism of life and therefore the a-chromaticism of death, also because of the balance of the '*Huaca's*' during which the old Andean gods reside (Shimada, 2018).

The Amerindian (Andean Cultures) Red

The Amerindian red colour manifested itself within the new world through shamanic experiences that allowed initiated priests to enter the transcendent centre of their ontological reflections and esoteric practical meditations with the intention of becoming one with the creative force that gave life to the simpler and more extraordinary things with which those native priests were involved (Pease, 2014). Examples of this will be found in Mesoamerica, in the Mayan or Aztec cultures, and in South America within the Inca empire, because the usefulness that the red pigment provided them was related to religious ceremonies that only the initiates understood, and therefore the neophyte perceived the corporeal '*red*' as part of the trousseau, decoration, or artefact that highlighted the magnificence of the founding propitiatory act of the custom governed by ancestral traditions inserted within the community. It is not surprising that, in the 16th century, observers, visitors, and western European chroniclers perceived the colour '*red*' as imperial, symbolic of struggles and battles won, inherently materialising the mere sumptuous and stark expression of the privileged opulence that they experienced in their own existence (Prieto-Olavarría & Tobar, 2017). The approach to the colour '*red*' within this writing, whose topic exposes the organic product obtained from the cochineal, briefly shows the procedural scope of the elaboration and distribution of the '*red cochineal*' (grana cochineal) and therefore vicissitudes during which it was seen materially involved in the West in the mid-sixteenth century and, above all, with reference to the economic

privileges acquired by the European elites, which legitimised their socio-economic value (Butler, 2010). For the South American cultures, the colour 'red' derived from cochineal did not symbolise economic value except for the central American cultures; on the contrary, the commercialization and profits made up of the sale of an equivalent within the Iberian Peninsula established a climate of fabric well-being rarely seen within that region (Herring, 2021). The richness gained by the 'red' pigment in cochineal induced subtractive dependency in Western Europe, which became increasingly apparent as the colonial period progressed (Marichal, 2017).

According to Hernández-Hernández et al. (2005), the red pigment or colourant obtained by the cochineal has geographical origin in Mexico. Although Butler (2010) does not confirm this assertion, it is noteworthy to understand that the Secretary of Culture of the United Mexican States (2017), during a Communication dated November 7, 2017, in Bulletin number 1459 and entitled "El pigmento de México para el Mundo, the Cochineal Grana in Art," expresses the appreciable contribution provided by this country as a global provider of Mesoamerican products, also because the scientific-academic backing for the organic pigment's genesis in Mexico. This was backed by a variety of local and international multidisciplinary research (Secretary of Culture of Morelos & Museum of the Palace of Fine Arts, 2014), which resulted to an exhibition titled "Mexican red, the red cochineal in art" at Mexico City's Museo del Palacio de Bellas Artes. (Canal22, 2018).

The Song of Evil, “*Mal del Canto*” or ‘*Taki Onqoy*’

A multimodal approach to the study of red pigment would require not isolating it as a colour in itself, but integrating it into the primordial cultural expressions during which its transcendent meaning is found (Ávila, 2011). Even in the absence of pigmentary materiality, the meaning inherent within the perception of red with the human experience is intuited from a standpoint of perceptible realities. To do so, and to reveal the scope of those unpublished and unique expressions of native communities, we might mention a cultural phenomenon with Andean roots referred to as the "*Mal del Canto*", which is embodied as a movement of unprecedented religious and political expression in response to a profound psychological state generated by the incipient colonial administration that repressed the traditional religious expressions of Peruvian native people. The Song of Evil or *Taki Onqoy* (originated between 1565 and 1566 within the Peruvian Andes town of Huamanga, Ayacucho district), was subject to multiple interpretations by Spanish chroniclers of the 16th century (Curatola, 1990). One among these legends was recounted by Cristóbal de Albornoz in "transformations of merits and services," during which he described how, after burning numerous Huacas, he discovered a new sect named *Taki Onqoy* when he visited Huamanga between 1569 and 1571 (Guibovich, 1991). In his relationship, he detailed the places visited and therefore the actions he took to eradicate (these) the manifest idolatries of Andean zealotry (Fossa, 2014), indicating that the persistence of those religious expressions of the language (Segovia, 2014) that project their indigenous divinities endangers the effective evangelization of Catholicism (Guibovich, 1991). The '*Taki Onqoy*' reflected the initial settlers' obvious resistance against the Spanish interventionist presence and therefore the repeated injustices perpetrated by the unrelenting persecution of Andean society to extirpate the colony's unique religious traditions in conformity with European Christian ideology. Although we will not enter into detail of the ritualistic description of initiatory step agency, we must see that, while the perception of colour materialises as a physical incontrovertible fact that is often verified by practise, its evocation transcends the material experience visible when conceptualised in the depths of human consciousness and interpreted in its metaphysical value through the verbalization of Amerindian languages (Fernández, 2020). The dancer performs a spasmodic and constant dance with the intention of

achieving an altered state that permits him to urgently attend the Huaca's meeting, in whose symbolic communion he manifests feeling red. "They went into a trance state during the good and unbridled celebrations organised in honour of the *Wak'a*" (Huaca-place of worship) (Curatola, 1990). The feeling 'red' was selected as a response to the disease brought on by adopting a foreign deity. This position places us within the centre of the Andean society's ritualistic practise of purification and includes a description of the setting of the ritual action the utilization of the expression red or red on the faces of the practitioners/initiates, even when the said pigment is materially absent through this illusory manifestation in its chromatic category. It depicts the initiate's bodily state within the development of the symbolic setting, which adds value to the very manifestation of the ritual or frantic dancing amid verbalizations or creative melodies. (Castro et al., 1990). Thus, the singular and multisensory expression manifested by the '*Taki Onqoy*' movement anticipated a germinal anti-colonial action by the Andean component, which had its transcendent equivalent in the materiality of the red fervour that alludes to the temperature of red within the look for the regenerative effervescence of the primary things. The '*Taki Onqoy*' purification ritual sought to shed the religious impurity of the conquerors' god and therefore the imposed foreign customs, in search of the rescue and regeneration of the Tahuantinsuyo traditions upon reunion with the *Huaca*'s, which ontologically materialised the incarnation of the Andean gods in their centres of worship. We would therefore deduce that this movement was millennial from its inception (Guibovich, 1991), and hence the cardinal return to the imperishable genesis. Conversely, the millenarian movement '*Taki Onqoy*' had the same equivalent word, which is expressed as Ayrampu (Segovia, 2014), which is coloured just like the fruit of the molle, or Ayra, which suggest crazy or anxious (Castro et al., 1990), as an expression that breaks call at an insurrectionary way through the ritual of dance and frantic singing to expel the foreign evil from the contaminated body of the faithful. '*Mal del Canto*' was also termed after the flaming activity that might decide the individual's crimson, incarnated, red character within the face of the bewilderment caused by the pain and dementia of dwelling in a faulty world (Curatola, 1990). The ritual is articulated as a historical component mediated by the Andean worldview, expressing itself through song, because "*Taki*" is interpreted as a song within the original language and completes the genuine multisensory locution of the red or red context within the metaphysical environment conducive to purification in colonial Andean society.

3. Conclusion

There are two points in discussion to summarize; First, "*red*" and its cultural meanings, code, values, practices and non-secular significances; Second, its association with an ancient civilization that developed a high degree of belief within their rituals and funerary practices.

The challenge on how people perceive colour is complex and difficult as science is still trying to uncover how the human brain processes information. It's difficult to answer the various questions posed. We may ask about the choice and preparation of pigments, their uses, the way in which pigments generate meaning within the arts and their usage for everyday life. Colours are crucial and an important motivator in transmitting positive or negative emotions and feelings, tacit or unspoken information, and this motivation combines with the ability to speak and being able to express ourselves. This slow evolution through thousands of years of existence must be taken into consideration and understood. Conversely, plants and insects were exploited for aesthetic meaning, industrial and medico-pharmaceutical purposes in every part of the world from Europe to Asia and from Africa to America long before the age of discovery of those new and remarkable lands. The development of the cochineal culture may have started in the '*sierras*' (Highlands) or in the 'coastal' zone of Peru along with the evolution of textiles,

clothing and other exquisite arts and crafts. There is such a lot to research in all areas of science, history, arts and humanities. The cochineal also was a primordial item for the meso-American and Sub-American cultures. Elaboration was inevitable with the domestication of natural dye plants and with the discovery of those little insects rich in colour. The rearing and preparation of cochineal was a time and labour-intensive occupation, and it needed an enormous amount of meticulous peasant labour involving considerable risk and high level of necessary skills, similar to the production of silk worms in rural China at an equivalent period.

There is no single nation which has not given expression to the ambivalence from which the colour '*red*' derives its power and fascination. Intimately connected within it are the two most profound human experiences and emotions, "Life and Death" to be born within a splash of blood and to demise from this life until its ultimate physical death. To call upon a single universal symbolic meaning for the colour '*red*' across time and space would be very difficult, apart the one that has been placed upon the period of time and by a gaggle of individuals sharing our own geographical and cultural beliefs and identities. It is important to notice that we may also never know when the turning point was for humans in mastering fire and gaining control over it, which may have been one of the things which distinguished us from the rest of the animal kingdom. The domestication and production of fire at will may have influenced and altered the lifetime of these early humans, removing the fear of darkness. It was at this point that people began using natural pigments, probably black charcoal and red oxide. Ochre, found naturally and utilized in many cave paintings, was the primary encounter with these resources. Counting on the originality of the source and therefore the degree of the bone calcination the shade of colours was more or less brilliant and less dense. During this sourcing, elaboration and fabrication of colours either from insects, minerals, plants and other type of compounds, knowledge may have been acquired by trial and error. Humans may have managed a degree of language communication and therefore the most vital of all events the development of the sense of sight through "observation" of those essential bases by these early habitants. It might be impossible to understand how long this transition took or what the steps were that these early habitants may have followed. Science still cannot reach common consensus despite settling for a chronological linear time, trying to insert every new discovery into this linear time sequency. Finally, believing in the life after death gives those with religious faith a greater sense of purpose in life, a hope that they are immortal beings living a mortal experience and it will not cease to exist but continue on living. Soul and body were, and still are, two important entities within the realm of life; what happens after death may still be a mystery yet to be known.

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