kunstuniversitätlinz

Department of Fine Arts and Cultural Studies

Textile.Art.Design

The Warp and Weft of the HYBRIDITY

Study and Practice on the Concept of Hybridity

By MA. Sanaz Heiran pour

Advisor:

Univ.-Prof. Mag. Gilbert Bretterbauer

This dissertation is submitted for the degree of Doctor of Philosophy

Linz, February 2022

For Hassan.

Acknowledgements

First, I would like to thank my supervisor, prof. Gilbert Bretterbauer for accompanying me on this long journey and leading this thesis in the right direction by his consultations. In parts of this thesis, I had to change the study's course and add new topics to the manuscript that seemed confusing at first glance. I am grateful to my supervisor for giving me the freedom to try different ways and examine the issue from different aspects so that I can reflect my perception on a kilim. After creating this kilim, I feel that I have become a better artist.

I would also like to thank the members of Zistman Environmental NGO who extended my perspective on issues concerning nature, species diversity, and environmental problems, without whom I could not have seen the world as I see it now, nor would I have understood the coherence and integrity of life on earth the way I perceive it today. My special thanks also go to Mehdi Nosrati, the NGO's managing director who has always attempted to improve the Iranian society and his friends intellectually.

In the practical phases of this dissertation, many individuals went to great lengths to help me advance the project, considering the fact that the Corona pandemic had made the working conditions more stressful and difficult. However, while the long working hours in the closed environment of the workshop were sometimes very arduous and exhausting, they managed to successfully finish weaving the kilim, which was distinct from the traditional kilims. I would like to especially thank Saba Shouli, the workshop manager, who greatly helped me control the quality of the kilim's weaving.

Many thanks to my husband and my companion in life, Hassan Estaji. No one cared about the completion of this project as he did, and he always pushed me forward in this regard.

Abstract

Comprising of theoretical and practical parts, this thesis sought to investigate the manifestation of hybridity in human thoughts and works in the past and present. To this end, works of art and literature obtained from the Mesopotamian, Greek, and Iranian cultures were examined to discover humankind's viewpoint regarding hybridity in the centuries BC. Then, humanism, poststructuralism, and posthumanism were reviewed to explore contemporary human's perspectives on the concept of hybridity. This thesis also seeks to dispute the separation of human isolation from the environment and introduce hybridity as a solution to overcome the humanism-induced hierarchy, trying to expand the contemporary human's perspective towards the human-nature, human-technology, and male-female hybridity.

In terms of human-nature hybridity, the thesis elaborates, by mentioning Darwin's theory of evolution on the close relationship of humans and animals from the very beginning of life on earth, thus disputing the theory of the separation of nature from culture. As for the relationship between technology and humankind, the thesis discusses the developments made in recent years to make clear how technology is trespassing the human body's borders and getting into him/her inner world so that it could co-evolve with them. Moreover, on the topic of gender hybridity, the thesis refers to the efforts made by the LGBT community to be recognized, examining the novel concept of gender in the contemporary world.

Using textiles as a metaphor, this study attempts to create a deeper understanding of the issue of human's relationship with their surrounding environment. The practical part of the dissertation, i.e., a kilim, includes the signs and symbols of such a deep close interaction. The human-animal-plant-tool chain linkage, the hybridity of the sexes, and the blurred boundaries between the animate and inanimate beings are among the concepts portrayed on the kilim, which is the artistic representation of the current study.

Table of Contents

Acknowledgements Abstract Table of Contents List of Figures List of Tables		v vi vii xi
INTRODUCTION		1
Chapter 1	HYBRIDITY, PAST Early Civilizations and Hybridity Composite Creatures on the Soumaks of North-western Iran and Southern Azerbaijan	10 11 29
Chapter 2	HYBRIDITY, PRESENT Pre- and Post-Darwin Human New Hybridity	41 42 52
Chapter 3	HYBRIDITY IN TEXTILE LOGIC The Essence of Hybridity The Nature of Weaving (Warp and Weft)	69 70 72
Chapter 4	DESIGN Design Preliminaries Design Structure Design Process	79 84 91 95
Chapter 5	SYMBOLS, SIGNS AND NOTIONS Part 1: Reproduction Part 2: The Tree of Life Part 3: Dual Identity Part 4: Life Circle Parts 5 and 6: Hybridity and Power	106 109 113 119 122 124
Chapter 6	PRODUCTION OF THE FINAL KILIM Pre-weaving Arrangements Weaving Techniques Photo Shoot: Weaving the Final Kilim	129 130 135 141
CONCLUSION		154
BIBLIOGRAPHY		159

List of Figures

Fig. 1:	Horse cover, 182 x 147 cm, 19th century, Shirvan, Azerbaijan, Maria Mallet collection.	2
Fig. 2:	Cylinder seal, Akkadian, 2700 BC, Mesopotamia, The British Museum.	14
Fig. 3:	Impression of Achaemenid cylinder seal, (Porada, 1948).	16
Fig. 4:	Stone-Reliefs-Inscribed, Assyrian, 883–859 BC, Mesopotamia, The Metropolitan Museum of Art.	17
Fig. 5:	Herakles fighting the centaur Acheloos, about 510-500 BC, Greece, Toledo Museum of Art.	19
Fig. 6:	Theseus fighting Minotaur, stamnos 490 BC-480 BC, Attica, The British Museum.	21
Fig. 7:	Griffin on the wall, Achaemenian period, 6^{th} – 5^{th} century BC, palace of Darius I, Susa, Louvre Museum.	23
Fig. 8:	Lion inlay plaque, gold, repoussé and filigree decoration, Achaemenid dynasty, 400 BC, Royal Ontario Museum.	25
Fig. 9:	Ahura Mazdā, symbol from a doorway of the main hall of the Council Hall, Persepolis, Iran.	26
Fig. 10:	Protome of a double griffin, the Apadana, Persepolis, Iran.	27
Fig. 11:	Map of Iran, Photo from Perry-castañeda library.	30
Fig. 12:	Horse cover, South Caucasus, Azerbaijan, 172 x 144 cm, late 19^{th} century, Rippon Boswell collection.	32
Fig. 13:	Bird-like figures on different horse covers from Azerbaijan and northwest of Iran.	33
Fig. 14:	(a) Silk fragment from Rey, Iran, 10 th century AD, Buyid area. (Upham pope & Ackerman 1981); (b) Breastplate fragment, iron age, 800-500 BC, north-western Iran, The National Museum of Asian Art, Washington; (c) More advanced sampsamplescomposite figures can be seen on the walls of the palace of Darius I in Susa, Iran, circa 510 BC, Achaemenian period, The Louvre Museum, Paris.	34
Fig. 15:	(a, b) Horse bits, circa 1000-650 BC, Iron Age, Luristan, Iran; (a) is at the Los Angeles County Museum of Art and (b) the Asian Art Museum of San Francisco; (c) Horse bit, 7^{th} – 4^{th} century BC, Iron Age, Luristan, Iran, Museum of Fine Arts, Boston; (d, e, f) Animals depicted on Qashqai and Shahsavan horse covers.	35
Fig. 16:	Horse bits, circa 900-700 BC, Luristan, Iran. Left is at the Asian Art Museum of San Francisco and right at the British Museum, London.	37
Fig. 17:	(a, b) Shahsavan bag face woven in the soumak technique, North-West Persia, Mid-19 th century, (Frauenknecht 1993); (c) head of the figure on shahsavan bag has been compared with head of the animal in figure 16, right; (d) an imaginary composite animal that is compatible with the figure on the bag (b), designed by the author; (e) small figure on the back	37

of the animal is compared with finial from the first millennium BC, Iron Age, Ilam,	Iran, Ilam
Heritage Museum.	

Fig. 18:	Bedding bag (mafrash) woven in the soumak technique, Northwest Persia, 19 th century, located at the Museum of Fine Arts, Boston. The motif between the two animals is compared with a finial from 750-700 BC, Luristan, Iran, Asian Art Museum of San Francisco.	38
Fig. 19:	(a) Woven Silk, 7 th to 8 th century, Sassanid era, Iran. victoria and Albert Museum; (b) Griffin motif on the border of Pazyryk carpet, Early Iron Age. Photo from Bibliotekarru; (c) Gold roundel with winged lion (lion-griffin), 404-359 BC, Achaemenian, Oriental Institute Museum of Chicago; (d) Shahsavan mafrash panel, 19 th century, Southern Caucasia, GB rug collection.	39
Fig. 20:	(a, b) head of the figure on the shahsavan mafrash panel is compared with the Sassanid griffin on the textile fragment (Fig. 19a); (c, d. e) The tail of the figure on the Shahsavan mafrash panel is compared with the wings of griffins on the Pazyryk carpet (d) and the Achaemenid gold round (c).	40
Fig. 21:	Pablo Picasso, Minotaur Caressing a Sleeping Woman, 1933. National Gallery of Art, Washington.	46
Fig. 22:	Francis Bacon, Three Studies for Figures at the Base of a Crucifixion, 1944. Tate Britain, London.	47
Fig. 23:	Kate Clark, Licking the Plate, 2014. Installed at Nevada Museum of Art.	50
Fig. 24:	Oleg Kulik, I Bite America and America Bites Me, 1997, Deitch projects, New York.	51
Fig. 25:	Patricia Piccinini, The Young Family, 2002. Revival Exhibition at National Museum of Women in the Arts, Washington.	57
Fig. 26:	Thomas Grünfeld, Misfit – Flamingo, 1998.	58
Fig. 27:	Umberto Boccioni, Unique Forms of Continuity in Space, 1913. The Museum of Modern art, New York.	61
Fig. 28:	Stelarc, Ear on Arm, 2007. Photo by Nina Sellars.	63
Fig. 29:	Louse Bourgeois, Nature Study, 1984-94. Private Collection Courtesy Cheim & Read, New York.	67
Fig. 30:	Sophia Wallace, Photo Collection: Girls Will Be Bois, 2002-2007.	68
Fig. 31:	(a) Final project, designed by the author. A kilim designed based on research's findings; (b) The kilim in this illustrated version is divided into six parts, each of which is shown in a different colour; (Part 1) Pale turquoise; (Part 2) Pale green; (Part 3) Pink; (Part 4) Cream; (Part 5) White; (Part 6).	80- 83
Fig. 32:	Keywords extracted from the second chapter for kilim design purposes.	85
Fig. 33:	Bakhtiari rug from Iran, 20 th century; in a New Jersey private collection.	86
Fig. 34:	Tree motifs on the kilim: (a and b) trees' images adapted from Bakhtiari rugs (above tiles); (c) a tree of life; (d) a skeleton tree.	86

Fig. 35:	Parts of the animal's body on the kilim (right) are adapted from figures on shahsavan soumaks (left).	87
Fig. 36:	The illustration of a horse and its rider adapted from a Baluch rug.	87
Fig. 37:	Images of human organs on the kilim.	88
Fig. 38:	Image of a woman head with ornaments adapted from a Baluch rug.	88
Fig. 39:	(a&b) Animals' figures hybridized with different cultural and military signs to illustrate a state's power; (c) part of a Baluch rug.	89
Fig. 40:	Signs of the technology and communication on the final kilim.	90
Fig. 41:	Figures of the Conchita Wurst and a pregnant man on the final kilim.	91
Fig. 42:	Illustration of Electrical circuits inspired by Arabesque in Persian carpets.	92
Fig. 43:	(a) Large size medallion on the Persian Sene rug, Yassavoli, 1991; (b) Persian gardens' pattern, Shahcheraghi, 2008; (c) sample of a medallion on the final kilim; (d) Persian bowl with howz and goldfish design, 14 th century, Art Gallery of South Australia.	93
Fig. 44:	Part of a Baluch rug that presents different kinds of primary and secondary motifs and figures.	94
Fig. 45:	Space filler or secondary motifs on the final kilim.	94
Fig. 46:	Binary hybrids of the main keywords.	95
Fig. 47:	Format of a Shahsavan tile soumak.	96
Fig. 48:	Initial designs for the binary hybrid of human-plant.	96
Fig. 49:	The initial design for the binary composition of human-plant.	97
Fig. 50:	(a, b & c) Design process. These figures show how I went from paired compositions to multiple ones. (d) the outcome that is woven in the final work.	98
Fig. 51:	(a & b) Initial binary and triple designs; (c) multiple hybrids resulting from linking designs a & b.	99
Fig. 52:	(a to c) Low poly mesh exhibits human-plant and animal-plant and human-animal hybridity.	100
Fig. 53:	An eagle on the final kilim, designed by low poly technique to represent the concept of power.	101
Fig. 54:	Conchita Wurst performing at 2014 Eurovision contest, Dayliail.	103
Fig. 55:	Conchita Wurst in white dress and antlers on the head, Daylimail.	103
Fig. 56:	The initial design of Conchita Wurst, surrounded by different elements of nature, technology, and gender.	103
Fig. 57:	The stylized figure of Conchita Wurst is portraved on a Baluch rug.	104

Fig. 58:	human-nature and human-technology hybrids inspired by the figure on the Baluch rug.	104
Fig. 59:	The hybridity of human and nature displayed on the final kilim.	104
Fig. 60:	(a) DNA chain connecting a human to an animal; (b) DNA string in curved form, inspired by Persian traditional design.	105
Fig. 61:	A photograph of Thomas Beatie, the world's first pregnant transgender man (2008), L-FRII.	111
Fig. 62:	The image of two animals guarding the tree of life (Opie, 1992, 145).	113
Fig. 63:	Eye motifs are woven in Turkish kilims and carpets to ward off the evil eye. These eyes are abstract and are usually depicted as a dot inside a diamond, (ATES, 1997).	115
Fig. 64:	Apse Fresco Painting of Christ from the Church of Esterri de Cardos, 12 ^t century, (Eager 1961, p. 53).	116
Fig. 65:	Eyes among the electrical circuits, parts of the final kilim design.	117
Fig. 66:	Dotting and colouring a carpet design by hand. The photo was taken by Saba shouli.	130
Fig. 67:	Dotting and colouring a part of the final kilim design by photoshop software.	130
Fig. 68:	The table provided by the dyeing company shows the number of knots and the amount of yarn is used for the final kilim.	131
Fig. 69:	The final kilim's dyed yarns by the natural colours.	131
Fig. 70:	Warping the loom.	132
Fig. 71:	Equal distances between the warps on the loom.	133
Fig. 72:	The weaver is doing weft chaining at the beginning.	135
	the weaver is doing wert chaining at the beginning.	133
Fig. 73:	The kilim design was printed on the sheets and glued together.	136
Fig. 73: Fig. 74:		
_	The kilim design was printed on the sheets and glued together.	136
Fig. 74:	The kilim design was printed on the sheets and glued together. Each roll is hung over the loom and weavers weave the relevant section.	136 136
Fig. 74: Fig. 75:	The kilim design was printed on the sheets and glued together. Each roll is hung over the loom and weavers weave the relevant section. In the soumak technique, yarns w around the warps to create the patterns (Sherrill 1990).	136 136 137
Fig. 74: Fig. 75: Fig. 76:	The kilim design was printed on the sheets and glued together. Each roll is hung over the loom and weavers weave the relevant section. In the soumak technique, yarns w around the warps to create the patterns (Sherrill 1990). Parts of the final kilim are woven in the soumak method. Knots: a. symmetrical knots; b. asymmetrical knots, open right; c. asymmetrical knots, open	136 136 137
Fig. 74: Fig. 75: Fig. 76: Fig. 77:	The kilim design was printed on the sheets and glued together. Each roll is hung over the loom and weavers weave the relevant section. In the soumak technique, yarns w around the warps to create the patterns (Sherrill 1990). Parts of the final kilim are woven in the soumak method. Knots: a. symmetrical knots; b. asymmetrical knots, open right; c. asymmetrical knots, open left. (Ittig 1990).	136 136 137 137

Fig. 81: Weavers are filling the motifs by punching needle.	140
List of Tables	
	400
Table 1: Tools used for weaving the final kilim.	133- 134

INTRODUCTION

"This piece of paper I am holding in my hand is something that exists right now. Can we establish a time and place of birth for this paper? That is very difficult to establish, impossible actually because before it manifested as a piece of paper, it was already here in the form of a tree, of the sun, of a cloud. Without the sun, without the rain, the tree would not have lived, and there would have been no piece of paper, I touch the sun. When I touch this piece of paper, I also touch the clouds. There is a cloud floating in this piece of paper. You do not have to be a poet to see it. If I were able to separate the cloud from the piece of paper, the paper would not exist anymore" (Nhat Hanh 2009, p. 60).

The first thesis' question crossed my mind when I saw the figure of a hybrid animal on an old horse cover (Fig 1). This soumak¹ cover was woven by the Shahsavans² in northwestern Iran, who have been producing many handwoven products in that region for centuries. Having studied the origins of the Kurdish kilims' patterns in my master's dissertation, I found the concepts behind Eastern handwoven products' motifs fascinating and challenging. Although these motifs look simple and have fallen far from their origins, they imply some deep human concepts such as social structures, family ties, fear of death, and the concerns about and challenges of human-environment interaction that are not limited to the past, reappearing in new forms in every era.

In the middle row of the horse cover that belongs to the early twentieth century, one can view a row of animals that, at first glance, look like birds, but their sturdy legs and the mane-like lines woven around their necks raise some doubts as to their real nature. Having compared the images of these animals with the ancient relics of that region (which is discussed in Chapter One), I concluded that they are neither birds nor quadruples, but a hybrid form of multiple animals that probably carried symbolic meanings for the original creators. Then, investigating hybridity and its various aspects from past to present became the main concern of the thesis. The study's main questions were as follows: When did human beings start to produce hybrid images, and what meanings were these hybrid images supposed to convey? Why were animals

¹ A type of flat weave that look likes kilim. In this technique discontinuous wefts wrap the warps to make the patterns.

² Name of a number of tribal groups in various parts of north-western Iran.

chosen as the primary element of these hybrids? What cultures produced these hybrids, and what are the social and psychological aspects of hybrids in different societies? How did these hybrid figures help represent governmental power? Is hybridity limited to the past, or does the modern human being still entertain this idea? How is hybridity like for the modern human being, and how does it differ from the past? Finally, as a carpet designer, how can I design a flatweave rug based on this research's findings so that it can reflect the spirit of hybridity in the contemporary world?



Fig. 1: Horse cover, 182 x 147 cm, 19th century, Shirvan, Azerbaijan, Marla Mallet collection.

Although the history of hybridity and its reflection upon a soumak was a challenging yet interesting topic to investigate, it was the examination of the issue within the contemporary cultural and social context that highlighted the significance of conducting this research and pushed me to do it. In other words, modern societies and cultures are built upon the idea of the

separation of humans from their environment, that is, animals, plants, and tools, the origins and developments of which could be traced from ancient Greek philosophy to the early 20th century. For instance, Aristotle classifies animals somewhere between humans and plants, arguing that since only human beings possess rationality, other creatures must be at their service. "Plants are for the sake of animals, and that the other animals are for the sake of human beings, domestic ones both for using and eating and most but not all wild ones for food and other kinds of support, so that clothes and the other tools may be got from them" (Aristotle 350 BC).

The idea of separating human beings from other creatures on Earth continued in later periods and reached its zenith in the Humanistic period. Humanism's focal point, which covers a long period from the Renaissance to the middle of the 20th century, is anthropocentrism. In his famous statement expressed as "I think, therefore I am", Descartes (1637), the preeminent thinker of this period, suggests that human existence relies on his/her thinking power. Moreover, in his theory of dualism, known as Cartesian dualism, he (1641) divides mind and body into two separate foundations by drawing a boundary between them, arguing that it is the only human being that concurrently possesses mind and body and other living creatures such as animals, lack emotions, reason, and immortal souls: "That is nature that acts in them according to the disposition of their organs – just as one sees that a clock, which is composed only of wheels and of springs, can count the hours and measure the time more accurately than we can with all our wisdom" (Descartes 1637). The fact that he considered animals as machines strengthened the boundary between humans and non-human beings, including not only the division between humans and animals but also between humankind and other elements of nature. Such a boundary created a hierarchy in which human beings stood at the top layer, exploiting and consuming the natural world. Although Darwin's findings and Freud's theories challenged such a human-centred viewpoint, it continued to exist until the middle of the 20th century.

Meanwhile, following the Industrial Revolution of the 18th century, unprecedented exploitation of animals could be seen. With the expansion of industrial animal farming, which sought more

production and lowers costs, systematic violence was inflicted on livestock. The industry aimed to produce more meat, milk, and eggs for human consumption without ethical or environmental considerations³. In addition to livestock, the "number of animals hunted, kept as companions, used in laboratories, reared for the fur industry, raced, and used in zoos and circuses, is insignificant compared to farm animals..." (Matheny and Leahy 2007, p. 326). Apart from the ethical aspects of such a production method which has prompted fierce criticisms, its environmental aspects are also of great significance, with intensive livestock production being considered as one of the main factors involved in greenhouse gas emissions, habitat loss, biodiversity loss, and environmental degradation (Machovina *et al.* 2015).

In an article entitled Nature-Culture, Jones (2009) elaborates on how Cartesian dualism has turned culture into a "separate, primary actor" and nature into a "passive recipient of action" by separating thought, mind, and language from the rest of nature. Calling this separation "The Great Divide," Jones regards "deforestation, the overfishing of the oceans, the degrading of soil and water resources, pollution, and the overall decline in biodiversity" as its consequences. To solve this problem, he suggests that we should "dissolve the nature/culture divide to avert disaster and to better understand our relationships with and within the biophysical system" (p. 311).

The separation not only affected the relationship between humankind and the environment but also made the interracial, inter-religion, and inter-gender divisions within human communities more evident and systematic. For instance, the concept of white privilege that is rooted in European colonialism led to the preference of one race's interests over other races, considering the whites' appearance and lifestyle as normal while labelling the other races as distinct and exceptional. Moreover, the practice of *Othering* is an important point to consider when it comes to women's issues. Simon de Beauvoir (1952), a well-known 20th-century feminist, argued that a "woman is set up as the Other of man". According to her, masculinity reflects humanity, and man defines "woman not in herself but as relative to him ... He is the Subject; he

³ For instance, since cockerels cannot produce eggs, they are put into grinders, and to avoid overcrowding, piglets are castrated immediately after birth, and their tails are cut off.

is the Absolute – she is the *other*" (p. 26). This otherness and privilege are also found in other domains, such as social class and sexual orientation. In short, this systematic otherness could be summarized as "white homosexual male privilege" (Helms 2017). Considering othering as the core of Humanism, we can argue that Humanism is associated with various forms of mastery and emphasizes the superiority of its origins by exploiting domains such as nature, race and gender.

In the second half of the 20th century, postmodern thinkers and poststructuralists began to criticize the linguistic, artistic, and cultural boundaries of the modern period, paving the way for the emergence of post-humanism theories, which are the continuation of post-structuralism but focus instead on other areas such as biology and technology. Post-humanism's focal point is the decentralization of humans through their hybridization with other organisms and machines, arguing that the opening of humanity's boundaries to otherness is required for total contamination and hybridization. The elimination of boundaries transforms the identity defined for humankind by Humanism, giving them a fluid identity that encompasses human, nature, and technology altogether. Pepperell (2005) writes: "There is nothing external to a human because the extent of a human cannot be fixed. If we accept that the mind and body cannot be absolutely separated and that the body and the environment cannot be absolutely separated, then we are left with the apparently absurd yet logically consistent conclusion that consciousness and the environment cannot be absolutely separated" (p. 10-11). Introducing the cyborg concept, Donna Haraway (1991) refers to the porous boundaries between man and machine, showing how the contemporary human body is open to technological intervention. She and other post-humanists in the field of biology also stress continuity instead of separateness. On the other hand, advances made in genetics provide scientific evidence concerning the absence of a distinct boundary between species, making the distinction between species more complicated. Relying on these pieces of evidence, post-humanists argue that "nature" does not create clear boundaries between biological spectrums and that human beings cannot be separated from other species by nature. As put by Best and Kellner (2001), "[posthumanism] signifies the end of certain misguided ways of conceiving human identity and

the nature of human relations to the social and natural environments, other species, and technology" (p. 271).

Accordingly, although there are some theoretical constructs based on post-structuralism and post-humanism that can be used to help narrow the gaps in society and the environment, we are, in practice, still faced by environmental crises, racism, gender gaps, and a violation of the LGBT's⁴ rights. For instance, thirteen million hectares of forest fall to the blade annually (Biello 2010), and the gender pay gap is still significant all over the world, even in Europe and the USA (Eurostat 2020). Furthermore, different sexual orientations are impossible to be accepted in many places, and violence against the LGBT community is still prevalent everywhere (Poushter and Kent 2020). In these circumstances, any thinker could contribute to solving such problems with any medium he/she has access to.

In my opinion, expanding the idea of hybridity with new mediums is the solution because hybridity is the essence of posthumanism. This thesis, therefore, seeks to examine why and how of hybridity in the past and present, offering the study's findings in the textile language. Defined as "anything derived from heterogeneous sources" (Random House Dictionary 2020, hybrid entry), hybridity emphasizes impurity and contamination. It stands against fixed and impenetrable categories, suggesting that human nature is not pure, but it results from interactions with the environment, which comprises diverse elements. Also, hybridity highlights becoming rather than being. Therefore, hybridization is an unstoppable process, which mixes the human and unhuman so that new entities with novel capabilities are created. This concept infiltrates any gap like a liquid, dissolves the surfaces, and mixes the contents to create unity. No phenomenon is unique and independent in this unity, and in each element, one can find the traces of others.

To find the external realization of hybridity, I chose textile and regarded warp and weft interweaving similar to the hybridization process. In hybridity, two forms are joined to create a third form. Similarly, in the weaving process, warp and weft are intertwined as two different

⁴ LGBT is an initialism that stands for lesbian, gay, bisexual, and transgender.

forms to create a third form, i.e., textile. Therefore, should the hybridization process be looked at through the textile logic, many post-human, post-structuralist phenomena could easily be found to be the same as the interweaving of warp and weft. For example, human beings' entanglement with technology can be compared to the weaving of warp and weft, i.e., how technology entered the human's world gradually and was mixed with the human mind and body, and thus affected human evolution's process.

To make the concept of hybridity more concrete, a kilim was designed, which reflects this study's findings concerning hybridity in the contemporary world and displays the connection between human beings, technology, and nature in a unified whole. It also demonstrates the relationship between hybridity, power, and gender. In this design, the conventional symbols, signs, and familiar motifs were mixed in such a way that they result in combinations and figures which reflect my understanding of hybridity. Therefore, the final design is something between collective concepts and personal impressions, which helps hybridity to be understood both collectively and individually at the same time.

In the first chapter of this thesis, it is explained that in the prehistoric era, hybridity has helped understand dualities such as chaos/order, civilized/uncivilized, wild/tamed, and life/death. Moreover, the chapter investigates the history of the emergence of hybrid figures such as the minotaur, bull-man, and griffin that reflect the concerns and social structures of human life in the ancient civilizations, including Mesopotamia, Greece, and Persia. Therefore, this chapter aims at delving into the concept of hybridity in human thought, which is not limited to a particular time or place and is represented in various forms in different eras.

The second chapter, which provides the theoretical basis of the final practical work, examines hybridity in the contemporary world. Explaining the human-animal relationship in the modern world and analysing the philosophical and cultural aspects of this relationship, it discusses cultural hybridity and defines its status in the post-humanistic philosophy. It also refers to the fact that hybridity has developed new meanings in the 21st century to help solve physical and cultural limitations, covering a wide range of human beings, nature, and objects. Hybridization with nature, hybridization with technology, and gender hybridity are the main sub-sections of

this chapter. The first one suggests that the human body needs constant interactions with other natural elements in the process of evolution, and, thus, the theoretical separation of human beings from nature is impossible. The second one elaborates on how technology is moving beyond its mere external and instrumental status and finding its way inside human, with the current unidirectional relationship between human beings and technology being changed into a mutual one. The third one, i.e., gender and hybridity, addresses how the stereotypes defined by society for men and women are challenged, and a new gender that falls somewhere between the other two genders is formed.

Chapter 3 explains the features of warp and weft in textile to clarify the nature of weaving. Various roles played by warp and weft in creating the textile give them different characters. Warps are often longitudinal, durable, non-decorative, low-flexible and hidden. On the other hand, wefts are lateral, flexible, colourful, decorative, visible, and free. The chapter then compares and contrasts the features of warps and wefts with reality and illusion and Jacques Derrida's text and context, concluding that the weaving process, eliminates the boundary between the fibres and thus approaches the concept of hybridity. Therefore, many post-structuralist post-human world phenomena can be considered the same as the weaving of warp and weft.

Chapter 4 deals with the kilim's design. Elaborating on the basics of the design and the method for finding the appropriate forms and motifs for the main keywords of this thesis, i.e., hybridity, nature, human, power, technology, and gender, it discusses the mechanisms for applying the classic Iranian carpet design principles in this kilim. Finally, the design process that includes the creation of binary and triple combinations and, eventually, the integration of all of them is explained. Moreover, chapter 5 of this dissertation divides the kilim into multiple episodes, clarifying the concepts indicated by each episode. This chapter seeks to provide a comprehensive view of the design process and the concepts created in the kilim to complement the theoretical part.

Chapter 6 is about the production process of the final kilim. These steps include pixelating the kilim design, dying the yarns, building a loom and warping. Then, the weaving techniques used

in the kilim are explained so that the reader is fully acquainted with the kilim's weaving style in detail.

Chapter 1

HYBRIDITY, **PAST**

Early Civilizations and Hybridity

MESOPOTAMIA

Prehistoric cave paintings indicate that human beings' greatest concerns before civilization were observing, knowing, and possessing animals. The earliest examples of these paintings which belong to the Upper Palaeolithic period, encompass images of a wide range of animals, including the carnivores and herbivores. The animals have been portrayed distinctly in different regions, the reason for which could be attributed to distinct regional, geographical, climatic, and cultural elements. Even when the Palaeolithic man began to make small, portable sculptures and jewellery, the subject of most of them were animals (Kalof, 2007, p. 10). As John Berger puts it: "The first subject matter for painting was animal. Probably the first paint was animal blood. Before that, it seems reasonable to suppose that the first metaphor was animal" (Berger, 1980, p. 7). Animals have been portrayed in abstract or naturalistic forms during this period, conveying concepts such as speed and power⁵, stability, and stillness. However, there are a few traces of hybrid animals in paintings of the Palaeolithic and Neolithic periods.

In the Origin of Monsters, David Wengrow (2013) discovers a strong link between the emergence of hybrids in arts and urbanization expansion, arguing that the rapid spread of hybrid animal images worldwide is directly connected to political development and commercial networks. Locally, the spread of these motifs relates to urban settlements' growth and social elites' emergence. Based on a series of experiments carried out on children, cognitive psychologists suggested in 1999 that the human being's ability to make mental images of non-existing creatures was the outcome of an increase in their capacity to create more complex social relationships. It could also be attributed to complex cycles of social, technological, and ethical processes (Wengrow 2013, pp. 19, 20, 128). The frequency of hybrid creatures on the cylinder seals found in Mesopotamia, the first city-state established in 4000 BC, may prove this claim (Kielt Costello 2010, p. 25). These hybrid creatures are mostly portrayed as battles between bull-men and rampant bulls.

⁵ Like the Chauvet cave's paintings in Franc that belong to Upper Paleolithic.

In early civilizations, the bull was of great cultural importance. A cattle shrine has been discovered in a small urban community formed nearly 6000 years ago in present-day Turkey, with some horn sets mounted on its walls, indicating the importance of this animal in Neolithic culture of Çatalhöyük. Moreover, during the transition process from the "hunter-gatherer" lifestyle to herding and farming, new concepts were associated with the bull when humans started to tame and keep it as a farm animal. In the third millennium BC, the bull's image was the most commonly used image in large parts of the world's art, including Mesopotamia and Egypt. As the bull symbolized fertility and great strength in this era because of its ability to carry heavy weights and pull agricultural facilities, its image began to be used for emphasizing masculine physical power when kings assumed power and the urban elite class was formed (Schwabe 1994, p. 37). The bull-man whose image has frequently been portrayed on cylinder seals found in Mesopotamia is found to be in a fight with bulls or leopards such as lions in most of such seals. So, these images could be regarded as a symbol of organized wars that began as a consequence of wealth accumulation in city-states. However, no image in Mesopotamia bears fixed meanings, assuming new senses based on the context in which they are used.

The concepts of nature-culture or civilized-uncivilized is among the themes conveyed by Mesopotamian works of art and literary works through depicting the fight of bull-man or nude hero with animals such as bulls or lions. The Enkidu, a character in the famous epic of Gilgamesh⁶, could be considered as an instance of such hybridity. In this story, Gilgamesh, the king of Uruk, oppresses the people who, finally, complain about him to gods, urging them to create a mighty opponent to stand against him. Aruru God creates Enkidu from water and the wilderness clay. He had long hair and a hairy body, drank from watering holes, and ate grass like animals. One day a trapper sees him living in herds and freeing the animals from traps. The trapper, who was surprised by Enkidu's strength and grandeur, reported the issue to Shamash, the god of the sun, who dispatched a temple prostitute to Enkidu's residence to seduce him. Enkidu sleeps a couple of nights with Shamhat, and she tells him about the pleasures of living in

⁶

⁶ The oldest surviving fragments of the epic are the work of an anonymous Babylonian poet writing more than 3700 years ago. The Babylonian epic was composed in Akkadian, but its literary origins lie in five Sumerian poems of even greater antiquity (George 2000).

the city, encouraging him to leave the herd and accompany her to live in Uruk. Enkidu lives among shepherds for a while and learns how to live with humans. Then he goes to Uruk to fight with Gilgamesh. When Gilgamesh learns Enkidu's strength, he makes friends with him, and their friendship turns into the start of a great adventure (George 2010).

The character of Enkidu is a hybrid form of animal strength as a symbol of nature or uncivilized humankind and human reason as an epitome of civilization and human knowledge. He is a human being who is not aware of his humanity. Like animals, he lives in the wilderness, feeds like them, and relies on his physical power and instinct rather than rational thinking. However, making love with a woman gets him to know his human self and the whole human civilization. During the short period when he lives with shepherds and hears from passengers about the sufferings inflicted upon people by Gilgamesh, his human feelings such as empathy and helping his fellow men arouse, and, therefore, he heads towards Uruk to help people. He uses his brutal nature – lied in his physical power- at the service of wisdom and human feelings such as friendship, bravery, and adventurism, and ultimately loses his life in this way.

Believing that the Sumerians knew anthropology, F. Lutz (1927) argues that their understanding of pre-cultural state and cultural development could be seen in Gilgamesh's epic where "genuine Sumerian cultural possessions" are epitomized in characters of Gilgamesh. He states that the character of Enkidu is an embodiment of foreign settlers who are non-Sumerian and non-Semitic and settle somewhere close to town. The people of the town who had been surprised by those foreign settlers' primitive lifestyle and appearance accepted them gradually and let them marry their daughters, probably because they had been defeated by them. In contrast to Enkidu, the character of Gilgamesh represents urbanized people who could be Sumerians, Akkadians, or the local population. Consequently, it could be said that the epic of Gilgamesh is an ancient account of the "invasion of barbarous hordes" to urbanized or semi-urbanized people. Having been mixed with myths and religions, this epic's characters have gradually turned into new characters such as Adam and Eve (p. 203-205).

In old Sumerian seal cylinders, Enkidu has been illustrated as a hybrid animal, with animal hoofs, tail, and bull horns while his head, hands, and upper body has a human shape (Fig 2).

This wise combination indicates how Sumerians have referred to hybridity by selecting specific parts of the human and animal body and combining them into a single figure. Head could be regarded as a symbol of reason and consciousness, and hands as a symbol of human's power and ability in making tools, farming, and hunting. Choosing these humane organs to combine with the animal ones, such as feet, indicates that early urbanized people were able to recognize their human self and unique capabilities. He lost some of his previous natural abilities, such as great physical strength and high speed in chasing in return for being urbanized. Now, he sees these abilities merely in animals and primitive humans, so to combine what he has lost in nature with what he has achieved in the city, he creates characters like Enkidu in stories and arts. These characters could be a sign of human transition from primitive communities to more complex ones, leading to the integration of concepts such as instinct-wisdom, nature-culture, civilized-uncivilized



Fig. 2: Cylinder seal, Akkadian, 2700 BC, Mesopotamia, The British Museum.

These hero nudes and bull men could be found in other works of art discovered in Mesopotamia and its relevant civilizations. For instance, the Master of Animals is a combination of these two figures with new elements. The figure whose earliest examples are believed to have been used in Mesopotamia's prehistoric arts (Costello 2010, p. 26) enjoyed a special status in Middle Eastern and Egyptian arts. The figure could also be found in other nations' arts, such as ancient Greece or Rome. It illustrates the figure of a man standing between two animals

facing towards each other, who harness them by his hands or generally keeps them under his control and dominance. This act that may reflect a heroic act conveys various meanings in different ages and cultures.

The image of the Master of Animals is seen in works of art created from the Neolithic age to the Christian era. The earliest examples of this motif were depicted in Mesopotamia as shamans surrounded by birds and animals. During the 4th millennium BC, some nude figures emerged in the art of southern parts of Mesopotamia who stood between two animals or held two snakes by their hands (Costello 2010, p. 27). This figure, who is known as "nude hero" and is frequently seen in the arts of the third millennium BC, wears a belt and usually, three curls of hair hung from both sides of his face. In the early dynastic period (2900-2350 BC), when the kings and urban elites appeared in Mesopotamia, some contest scenes are found on cylinders seals in which nude heroes were illustrated as fighting with lions and bulls or as protecting cattle. These nude heroes who indicate the same theme as that of the Master of Animals reiterate the confrontation between civilization and wilderness mentioned in Gilgamesh's story. The contest scenes could also symbolize the superior power of the king or the elite class whose authority in the new monarchic structure was based on military and royal power. Neo-Assyrian kings have usually been portrayed as fighting with lions, stressing their ability to win the hunt. In inscriptions, Neo-Assyrian kings' power has been compared with lions and birds, and the king has been referred to as 'shepherd of his people' (Counts 2010, p. 144). Moreover, in Achaemenian seals⁸, the Master of Animals has been portrayed in the crown and fine cloths, fighting with lions and bulls. Such a figure emphasizes the king and the court's worldly and supernatural power (Fig 3)

[.]

⁷ Based in the floodplain of the Tigris River in ancient northern Mesopotamia (now northern Iraq), the Neo-Assyrian Empire emerged during the 10th century BC from the remnants of the earlier Middle Assyrian Kingdom. Over the course of the next two centuries, the Neo-Assyrian Empire, accompanied by an ideology of universal conquest, expanded rapidly through military campaigns and forced taxation to become the "superpower" of the Near East (Sinha., et al, 2019).

⁸ ... it is obvious that Achaemenid [550 to 330 BC] cylinder seals are well executed, as can be expected from seals that were the tools and probably also the privilege of higher administrators during the three millennia of the use of cylinder seals (Porada 2011).



Fig. 3: Impression of Achaemenid cylinder seal, (Porada, 1948).

Being widely popular in ancient iconography, the motif implied dual notions that in some cases hybridized and sometimes opposed each other, forming the basis of political, religious, and socio-economic ties: human vs. nature; earthly vs. divine; strength vs. weakness; authority vs. subordination; wild vs. tamed; life vs. death; and order vs. chaos (Arnold and B. Counts 2010, p. 16).

In later eras of Mesopotamian arts, the human's hybridization with more powerful and predatory animals, including lions and birds of prey, could be seen. For instance, Lamassues that appear to have been created from the bull men's evolution emerged in Assyrian arts (Fig 4). They stood as guardians in the entrance of palaces, inculcating the presence of great power to the observers. The combination of some parts of the predatory animals' bodies with the human head granted the Lamassues a supernatural power that no other creatures possessed, making it impossible to put them in any specific animal category, thus placing them in a supernatural position. Moreover, this hybridization made their nature flexible in different circumstances and places. However, their nature was obscure, conveying to the observers the sense of intimidation or guarding and protecting humans depending on the context in which they appeared.

Hybrid animals could also symbolize chaos before order, especially in cases where the bodily parts of several animals are combined to create a horrific animal or monster. In the Babylonian

creation myth⁹, Tiamat, the god of salty waters who is mostly portrayed as a dragon and sea serpent, is a symbol of chaos before creation. He is killed by a god called Marduk, who has been depicted on cylindrical seals as a human. Marduk creates the world from his body, and, therefore, order dominates chaos. In Babylonian New Year's feast known as Akitu, the king fights with a dragon, symbolizing Marduk's triumph over Tiamat. With the dragon's defeat at the start of the New Year, the universal, seasonal, and social order is restored in the world (Mark 2018).



Fig. 4: Stone-Reliefs-Inscribed, Assyrian, 883–859 BC, Mesopotamia, The Metropolitan Museum of Art.

⁹ Enuma Elish is a theological legitimization of the rise of Marduk as the supreme god in Babylon, replacing Enlil, the former head of the pantheon. The poem was most likely compiled during the reign of Nebuchadnezzar I in the later twelfth century BC, or possibly a short time afterward. At this time, Babylon, after many centuries of rule by the foreign Kassite dynasty, achieved political and cultural independence. The poem celebrates the ascendancy of the city and acts as a political tractate explaining how Babylon came to succeed the older city of Nippur as the centre of religious festivals (Spar 2009).

GREECE

The broad communications between ancient Greece and Middle Eastern civilizations such as Persia, Egypt, and Mesopotamia, provided the ground for their intercultural relations and the transfer of images and artistic traditions. Images of hybrid animals that were of great artistic and cultural significance had widely been exchanged between these civilizations. However, as sometimes such images reached ancient Greece through some intermediary cultures, it is unclear whether any concept had been imported into the Greek culture through those images, or they were mixed with local elements of Greek culture and developed new meanings. Figures such as sphinx, Centaur, and Minotaur are found in all these cultures, but some of them such as Centaur enjoyed a more significant status in the Greek culture and had more diversity.

Created from the upper body of a human and the lower body of a horse, Centaur has a mysterious nature in Greek mythology, and it is unclear whether it is a friend or a foe for humans (Fig 5). It has a close affiliation with concepts such as rebellion and violent sexuality. According to Pindar's account, even its creation was the result of forbidden and improper sex (Platte 2017). Proved by its background, look, and behaviour, it is the symbol of abnormality. Some authors such as Homer and Hesiod have referred to Centaur or Chiron – another equine creature similar to Centaur – in their writings, but they have offered no description regarding the creatures' physical attributes. Different myths and stories recounted about Centaur suggest that the Greeks differed in their opinions in this regard and that it took time for this figure to be developed and stabilized in their imagination and fantasies (Gantz 1996, p. 145). Pindar (522-443 BC) was the first author to present in his *Third Pythian Ode* some details concerning the Centaur's creation via a sexual relationship made between Ixion and a cloud nymph. Offering different accounts regarding the origins of equine creatures such as Chiron and hordes of Mount Pelion, he also differentiates between good and evil centaurs (Posthumus 2011, p. 51). He refers to Chiron as a good centaur who has a respected divine ancestor, while the evil proponents of this hybrid are the descendants of the Ixion, a notorious character in Greek myths.



Fig. 5: Herakles fighting the centaur Acheloos, about 510-500 BC, Greece, Toledo Museum of Art.

Coinciding with the emergence of the centaur in literature, this figure appeared in Greek works of art. Although they could not precisely be regarded as the centaur, they prepared the ground for its advent in Greek arts and literature. The later instances of centaurs could be found in Middle Eastern art, including the Assyrian. However, among hybrid animals in Greek art, the centaur was influenced the least by Middle Eastern art. The centaur's first manifestations on Greek works of art such as the Middle Eastern examples, primarily represented good and evil forces, playing the protective or damaging roles (Bianchi 2004, p. 19). But, from the middle of the first millennium BC, centaurs found their own character in Greek art, defining the Greek stories and myths around such a creature. The centaur's image has transformed in Greek arts from "apotropaic to the narrative" and from "grotesque monstrosity to paragons of familial harmony", indicating how the understanding of monstrosity is changed through centuries. In the early days of Greek civilization, the Greeks needed powerful and supernatural creatures in their arts and literature to illustrate the hidden forces of chaos that were in opposition to order

and civilization. However, the monsters became more complicated in subsequent eras, representing internal and psychological challenges rather than external threats (Posthumus 2011, p. 63).

Minotaur is another hybrid creature in Greek ancient culture which represents internal psychological crises. Minos, the king of Crete, disobeys the command of Poseidon, the God of seas, to kill the bull sent to him as a sacrifice. Poseidon gets angry and makes the Minos' wife fall in love with the bull, from whose relationship a hybrid creature called Minotaur is created with a human body and a bull's head (Fig 6). Minos imprisons Minotaur in a labyrinth close to his palace, feeding it with fourteen young people who are annually sent to him as a tribute, being revenge for his son who was killed in Athens. Finally, Theseus, the Greek hero, kills the Minotaur with the help of Minos's daughter (*Britannica 2020*, Minotaur entry).

This myth could be divided into two parts. The first part is related to the way Minotaur was created. Here, the Minotaur symbolizes Crete's king's inner feelings, revealing the psychological characteristics that changed him from a fair king into a tyrant. His first wrongdoing was made when he followed his desires and decided not to kill the bull that belonged to the gods' world and kept it for himself. Then, he expanded his tyranny by offering the Athenian youths to the Minotaur. Disrespecting the gods and oppressing people, he changes the order and transforms from a king who preserves the order to a monster who acts against it. Consequently, the Minotaur is created and trapped in a labyrinth close to the palace, symbolizing Crete's king's monstrosity, who has been lost in a dark labyrinthine place and cannot find the exit way.

As for the second part of the myth, Minotaur could be regarded a symbol of the non-human and wild aspect of Theseus' character to whom he should confront so that he can achieve heroic piety. The confrontation of Theseus and Minotaur, whose image frequently appears in ancient Greek art, is actually the confrontation of a hero with his own ego's terrible aspects (Fig 6). The ego, which is depicted as Minotaur, symbolizes the animal nature, anger, and unharnessed instinct. Moving past all the labyrinthine ways of the labyrinth, Theseus reaches the heart of the labyrinth where the Minotaur lives. By killing the bull, he defeats his ego and proves that he is a hero.

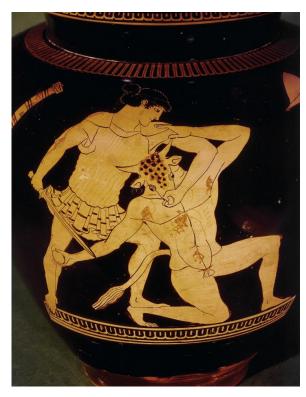


Fig. 6: Theseus fighting Minotaur, stamnos 490 BC-480 BC, Attica, The British Museum.

The above-mentioned part of myth has even been attended by modern psychology. Doctor Diamond (2009) considers the Minotaur as an allegory for primal fear of the unconscious that people usually encounter in psychotherapy. Since the unconscious is unknown to human beings, such a confrontation is fearful, just like the confrontation with Minotaur. This fear of the unknown which genetically exists in the human psyche functions as protecting human beings against natural threats. Death, and human's basic nature that comprises animal, human, and God, are two major unknowns for human, both of which are symbolized by the Minotaur. Created out of the sex between a woman and a bull, it links binary opposites such as feminine and masculine, beast and human, rational and irrational, spiritual and instinctual, deity and demon, good and evil. Confronting the Minotaur is like confronting the other's self in the unconscious where fear of death, animal nature, anger, and sexuality resides. Defeating this Minotaur requires human bravery that was a heroic act in ancient Greece but is a psychological act in today's world.

PERSIAN GRIFFIN-LIONS

The Achaemenes Empire existed from about 550 to 330 BC For over 200 years, it was the largest empire the world had seen¹⁰. The empire was made up of various people with various religions, arts, and customs. "It was arguably the first empire in world history based ideologically on the embrace of diverse people into an incorporated whole ..." (Root 2000, p. 19). As a vast territory, Achaemenids needed to exhibit their glory and power to nations of newly occupied lands; hence they applied imperial iconography, monumental architecture, and inscriptions to display their hegemony. This new art style that symbolized the empire's power was totally planned by the court to introduce the new foundation's ideology whose art and architecture give extensive information concerning the ruler and religion's status in this vast empire.

One of the remaining buildings from the Achaemenid era is Darius's Palace in Susa, constructed By Darius I between 521 and 525 BC and decorated with remarkable reliefs. The palace had an Apadana¹¹ resembling the one in Persepolis¹² but with more extent. Susa Apadana that was built when Darius assumed power was a place for reflection of the new king's authority; hence architecture and ornaments of the building were designed for specific objectives. Although Apadana's decorations have been destroyed over time, it is speculated based on other findings regarding this palace and other Achaemenid works that the glazed brick-friezes of the Susa Apadāna may have had both traditional motifs: processions of lions, winged bulls, winged griffins, and long files of royal guards, and a copy of Darius' forceful image of conquest, that is still preserved in his rock-cut relief at Bīsotūn" (Schmitt and Stronach 1986). Griffin-lion is a prominent relief among the decorations of Susa palace.

¹⁰ Spanning from the Hellespont to northwest India, including Egypt (most of the time) and extending into Central Asia up to the frontiers of modern Kazakhstan (Kuhrt 2001, p. 93).

¹¹ The term *apadāna* was possibly used exclusively to describe a distinctive type of columned audience hall introduced by Darius I (r. 522-486 BC). It seems Apadana halls have had two main functions in this era: a royal audience hall and a suitable place for monarch when he observed ceremonies on the plain below (Schmitt and Stronach 1986).

¹² Persepolis was the ceremonial capital of the Achaemenid Empire (c. 550–330 BC).

Griffin was created by Susian in the late 4th millennium BC and evolved in different forms over time, the commonest form of which was consisted of an eagle's head, a lion's body, wings, and sometimes clawed feet (Hall 1994). The griffin found at Darius palace is different from the typical griffins (Fig 7). It has a bull's body and ears, a lion's forelegs and head, a falcon's hind legs, and a goat's horns whose wings join the body at the top of the forelegs. Therefore, it is referred to as a griffin-lion in this dissertation. Since the motif is marked with Achaemenid Empire symbolism, it seems necessary to examine *lion* and *falcon* as main parts of this relief and compare them with *king* and *Ahura Mazda* as symbols of power in Achaemenid art.



Fig. 7: Griffin on the wall, Achaemenian period, 6th –5th century BC, palace of Darius I, Susa, Louvre Museum.

LION AND THE ROYAL POWER

Achaemenid art, widely known as kings' art, focused on the King as the ideal Persian man. Court planners employed skilled artisans and chose specific motifs to represent the distinctive iconography of kingship. Hence, it could be argued that the Achaemenid art is a primary source for studying the imperial concepts of Achaemenid Kingship (Root 1979). In these works of art, the king, who was presented as the world's master, has been portrayed in hunting, war, rituals, and some other exploits to identify him as an extraordinary person who can protect people against enemies. His portrait as the principal emblem of the monarchy was "also used to

represent the relationship between the king, the people, and the god Aura Mazda" (Colburn 2014, p. 780). Accordingly, the visualization of his body unites both notions of politics and divinity.

Depiction of the king in Achaemenid art is rooted in Mesopotamian art. Nonetheless, the Persian King's image is partly affected by the local art and the Achaemenid dominant cultures. In Persian's art, the lion symbolizes the king, emphasizing the king's power in protecting his people. "The lion, like the bull, had a venerable place in the ancient Near East as a symbol of kingship. Undoubtedly this related in part to the simple reason that the lion was observable as a powerful and beautiful wild animal; a predator with a regal bearing" (Root 2002, p. 198). Egyptians were the first people to mix a lion's body with the human's head to make a composite figure. Later, Assyrians in Mesopotamia added two large wings to it to make a perfect body, combining a human's head, an ox or a lion's body, and an eagle's wing. Lion has also been the symbol of Mithra¹³ among Aryan societies, and Mithra symbolized Aryans. Hence, the lion was known as the emblem of the Aryans in the ancient world, but it became the symbol of the Persian kings in later centuries (Ghaem Maghami 1966, p. 116).

The lion's image played a key role in Achaemenid art, conveying many notions in terms of legitimacy and power display. It appeared at the king's ornaments to stress his power as absolute monarch (Fig 8). At reliefs of Persepolis, hems of Darius and Xerxes'¹⁴ robes were adorned with lines of marching lions (Thompson 1965, p. 122). Several lion-like golden appliques of the era sewn on royal fabrics have been discovered. Moreover, the king's throne's feet were decorated with a lion's paw as a very attractive and favourable element (Schmidt 1939, p. 23). The fights between a lion and the king were depicted on Achaemenid reliefs and seals to show the royal power. As royal animals, lions were inhabitants of the Persian king's hunting grounds. During the Sassanian period, lion hunting was considered as a manifestation of the king's power. Posener shows that Egyptians added a new letter to the hieroglyph language for writing the name of Iranian lands and kings during the Achaemenid reign over

¹³ God worshipped in four different religions: in Hinduism (as Mitra); in Zoroastrianism (Mithra); in Manichaeism (Mithra), and in the Roman Mithraic mysteries (Mithras).

¹⁴ Darius and Xerxes were Achaemenid kings.

Egypt. This letter is like a seated lion and is never used in other words. Therefore, it seems this lion-like letter was an Iranian royal sign which indicated respect and reverence (Posener 1936).



Fig. 8: Lion inlay plaque, gold, repoussé and filigree decoration, Achaemenid dynasty, 400 BC, Royal Ontario Museum.

The lion's repeated figure on decorative schemes or the hybrid animals' drawings was already common in Babylon¹⁵, conveying a religious notion. However, it gained a new meaning in the Achaemenid monarchy, indicating that the King outpowered religion. It could, thus, be argued that the lion's body in Achaemenid art was a declaration of royal authority and grandeur embodied in the king of beasts.

BIRDS OF PREY: PROTECTION AND FORTUNE

The second significant symbol in the Achaemenid art is Ahura Mazda, regarded as Zoroastrian's supreme god. In Zoroaster's doctrine, He is the uncreated Creator of the universe (Yasna 44.7). Darius was the first Achaemenid king to mention Ahura Mazda in his inscriptions, placing the basis of his monotheistic ideology on Ahura Mazda's supremacy (Soudavar 2010, p. 119). "Darius' repeated reference to Ahura Mazda as a source of legitimacy was probably not out of religious zeal but in consideration of the political necessity to propagate a unifying and quasi-

¹⁵ Situated 85 km south of Baghdad, the property includes the ruins of the city which, between 626 and 539 BC, was the capital of the Neo-Babylonian Empire ... Its remains, outer and inner-city walls, gates, palaces and temples, are a unique testimony to one of the most influential empires of the ancient world (UNESCO 2019).

universal concept of authority over a vast empire" (Soudavar 2003, p. 89). As the empire needed a universally recognizable symbol for the new religion, he chose a Mesopotamian symbol for Ahura Mazda's embodiment: a bearded man within a winged circle (Soudavar 2010, p. 120). "The most frequently occurring type consists of a half-length human figure with eagle's wings, tail, and legs" (Shahbazi 1974, p. 136). This symbol is usually depicted by persons or rarely by animals (Fig 9). He attends above the scenes of rituals, hunting, or fighting in the centre of the upper part. "It hardly admits any doubts that the various forms of motif represented a certain power primarily concerned whit the Great King" (Shahbazi 1974, p. 136). In this sign, the eagle's wings represent Ahura Mada's divine power.

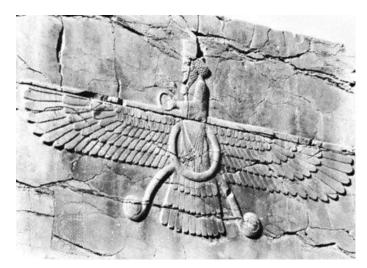


Fig. 9: Ahura Mazdā, symbol from a doorway of the main hall of the Council Hall, Persepolis, Iran.

Birds of prey and different parts of their body, including the head, wings, and claws, were favourite motifs in the Middle East and most parts of the world. The birds' capabilities in flight and hunting helped them find an adorable place in ancient culture, being considered as mediators between the earth and the sky. As a large high-fly bird linked to the sun's god, Falcon attracted the special attention of eastern peoples. Horus, the Egyptian-created Falcon-God, is one of the oldest zoomorphic deities. His image is portrayed as a wholly bird-like figure, or more typically, as a figure with the bird's head on a human body (Hall 1994). Birds of prey have been depicted frequently in Iranian prehistoric and historic works of art. A small golden falcon

with spread wings was found in Susa, dated back to the second millennium BC Moreover, a cauldron attachment from Hasanlu, made about one thousand years later, shows a bird of the same type (Porada 1965, p. 54).

Birds of prey are depicted individually or in combination whit other figures in Achaemenid art. In addition to the Ahura Mazda's symbol, an eagle or falcon's image could also be found on different artifacts such as jewellery or capitals. A miniature banner discovered at Persepolis represents a falcon with outstanding wings, holding solar disks in his claws and on his head. This motif's origin goes back to Horus, the Egyptian god, but its display in this period is presumably concerned with Persian traditions. This banner is reminiscent of Xenophon's depiction of the Achaemenid royal emblem: "a golden eagle with outspread wings" (Walker and Martens 2017, p. 202). A double griffin protome capital survived in Persepolis represents an eagle-like bird in combination with other animals (Fig 10). This bird is known as *Homa*, a mythical Persian bird that symbolized luck and happiness in Persian literature.



Fig. 10: Protome of a double griffin, the Apadana, Persepolis, Iran.

It seems that the falcon and eagle had been primarily the symbols of protection in ancient Persia. Ahura Mazda, the main god of Achaemenids, was displayed in a circle attached to an eagle or falcon's wings, hovering over the king and the warriors with widespread wings to

support them in troubles and battles. The protective role of birds is also notable in Persian mythology. According to a famous legend, Achamenes, the Persian dynasty's ancestor, was raised by an eagle (Wittkower 1939, p. 306). Simorgh, the most famous mythical Persian bird, is originally a raptor-like falcon or eagle who raises Rostam, a Persian epic hero in Shahnameh¹⁶.

Birds of prey were also significant in ancient Persia due to their relevance to fortune. It was believed that if Homa sat on someone's head or shoulder, he/she would become the king. Moreover, its shadow was also considered auspicious. The Sassanian kings, Bahram II and Hormozd II assumed a crown that represented varəγna¹⁷, who supported a pearl-studded globe (Shahbazi 2004), suggesting that birds of prey denoted both support and fortune in Iranian beliefs and works of art. In another myth mentioned in Avesta (Yasht 19.35-36), khwarrah (divine power dedicated to kings) was granted to Jamshid¹⁸ in the shape of a varəγna, a falconlike bird. Furthermore, Bahram, the deity of military might and victory, appears in the form of a bird of prey in Avesta (Yasht 14.19-21). As suggested by the Persian literature, raptor birds were also symbols of happiness, fortune, and protection in the Iranian culture.

According to what was said it can be concluded that the combination of these two animals, the lion and the falcon in the body of griffin-lion included concepts that emphasize the two important principles of the Achaemenid Empire: royal power and religious and cultural power. They reflect the power and glory of the government as the guardians of Darius' palace and ward off aliens and evil forces with their terrifying faces to keep the nation and the empire safe. Their presence on the walls of the Apadana palace, which hosted the king's foreign guests, is an embodiment of Achaemenid ideology and can be considered a manifestation of governmental art.

_

¹⁶ The Shahnameh ("Book of Kings", composed 977-1010 CE) is a medieval epic written by the poet Abolqasem Ferdowsi (I. c. 940-1020 CE) in order to preserve the myths, legends, history, language, and culture of ancient Persia (Joshua 2020).

¹⁷ "Glory-bringing varayna bird" is an eagle or the related royal falcon (Shapur Shahbazi 2011).

¹⁸ JAMŠID (or JAM) [is] mythical king of Iran (Encyclopedia Iranica 2021, JAMŠID entry).

Composite Creatures on the Soumaks of North-western Iran and Southern Azerbaijan

As said before composite figures were rare in prehistoric art. However, with the advent of cities, elites, and international trade networks, composite figures became widespread in the ancient world's artistic works (Wengrow 2014). The heartland of these composite creatures was Mesopotamia. They were brought to Persia throughout the first millennium BC (Rostovtzeff 1922, p. 192–193). During this period, the Achaemenid dynasty rose to power and, as a strong monarchy, started to build huge palaces in the west of Iran. As mentioned earlier, hybrid creatures formed these palaces' main decorations, showing the Achaemenids' imperial power. But these decorations were not limited to the walls of palaces. The oldest example of a composite figure on rugs could be seen on Pazyryk, the earliest well-preserved pile rug. Rudenko (1970), the Russian archaeologist that found the rug frozen in Scythian tombs, represented carpet's figural motifs in his book and identified them as belonging to the Achaemenid (p. 299-304). Some researchers argue that this carpet was made in Central Asia or Siberia, but it is generally accepted that the rug reflected the influence of Achaemenid art and probably carpet design (Rubinson, 2016).

Traces of hybrid creatures can still be seen on the flatweave rugs produced in north-western Iran and southern Caucasia (Fig 11). The animal motif is frequently used in the kilims and soumak horse covers made by the tribes living in the area. Mugan Plain, located between Iran and the Republic of Azerbaijan, is a wintering settlement for many of these nomads. "Before Safavid times, the population of Mugan was probably a mixture, or an alternation of Kurdish, Turkic, Mongol, and other elements" (Tapper 2012). Traditionally, this plain's inhabitants' economy and culture revolved around cattle raising, and since Mugan plain is a native habitat for a wide variety of wild plants, they had enough wool and dye for producing soumaks, kilims, and rugs. This plain and the surrounding mountains were settlements during the Bronze Age and the Iron Age.

Traces of prehistoric cultures can be seen on the flat-weave rugs made in this region. For example, Lorestan bronzes, which are the Bronze Age's archaeological findings in the Zagros

Mountains, have some similarities with these weavings' motifs. In recent years, many researchers compared motifs of rugs and kilims woven in Lorestan with archaeological findings of the region, confirming a close similarity between the two. In his book Tribal Rugs, James Opie (1998) provides a survey on tribal rugs of Iran, Afghanistan, Turkey, the Caucasus, and Central Asia. He studied the origins of motifs and presented their evolution pattern by referring to ancient objects found in the area. In response to a question regarding the importance of such origins, he (1987) said: "... a deeper appreciation of what we are looking at, a deeper relationship with these objects, can come with the acquisition of understanding about the designs which they contain and the historical patterns of change and continuity which they manifest".

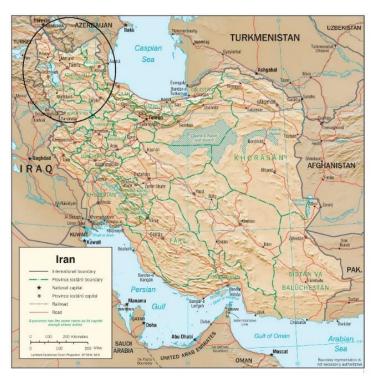


Fig. 11: Map of Iran, Area inside the circle indicates the border between Iran and Azerbaijan. This region has been inhabited by different ethnic groups from the 1st millennium BC, most joined together to form a Turkic-speaking tribe called Shahsavan in Safavid era (16th and 17th century). Traditionally, women of this tribe weave flat weaves from the wools obtained their herds. Photo from Perry-castañeda library.

BIRD-LIKE FIGURES

Some bird-like creatures with long tails and strong necks on the soumaks woven in Iran and Caucasia make them instantly recognizable as peacocks (Fig 12). These figures, which are seen more on the horse covers of the Caucasus, have two or four long legs which are often widely spaced (Fig 13). Their neck is generally thick and long, and usually, mane-like parallel lines are connected to the neck or legs. These animals' tails which are located at the end of the body, are depicted in various shapes, being always pointed upward. Most of them have horns on the head, which, along with the thick legs and neck, present imposing figures. Some similarities can be observed by comparing these figures with the peacocks depicted on early Islamic Persian textiles (Fig 14a). Textiles produced in the Buyid era (10th-11th century AD) are mostly decorated with birds and mythical creatures. Generally, as the Buyid era preceded the Mongol invasion when the Iranian arts endured a rupture, its art is said to have the closest similarities with Iranian pre-Islamic art (Fathi, 2009, p. 42). During the Buyid era, textile design moved from depicting mythical creatures toward depicting the birds, but the details of these designs demonstrate pre-Islamic artistic traditions. When figures on a piece of fabric shown in Fig 14a are compared with animals depicted on horse covers Fig 13d, some similarities such as standing on either side of a tree and small animals under their body can be found. However, if these horse covers are compared with iron age breastplates discovered in north-western Iran, giant animals in a row make them more similar (Fig 14b). The more refined examples of hybrid creatures can be seen on the walls of the Darius I Palace in Apadana. These reliefs are in the entrance of the palace as guardians (Fig 14c).



Fig. 12: Horse cover, South Caucasus, Azerbaijan, 172 x 144 cm, late 19th century, Rippon Boswell collection. This yellow-ground horse cover is decorated with animal and plant motifs. Four animal friezes depicted at the bottom of the panel. One of the friezes is more prominent and it seems that the focus of the design is on these large-scale animals.



Fig. 13: Bird-like figures on different horse covers from Azerbaijan and northwest of Iran. These figures are depicted in different shapes but are usually arranged tandem and central figures are facing each other. Most figures have horns, and their tail is upwards, resembling a peacock.



2







С

Fig. 14: (a) Silk fragment from Rey, Iran, 10th century AD, Buyid area. (Upham pope & Ackerman 1981). Two large symmetrical peacocks are depicted on either side of the tree of life. Two cows have been caught in their claws; (b) Breastplate fragment, iron age, 800-500 BC, north-western Iran, The National Museum of Asian Art, Washington. This breastplate shielded the chest from arrows or other weapons. It consists of mythical creatures, whose images was believed to provide magical protection for the wearer; (c) More advanced sample of composite figures can be seen on the walls of palace of Darius I in Susa, Iran, circa 510 BC, Achaemenian period, The Louvre Museum, Paris.

BRONZES OF LORESTAN: COMPOSITE FIGURES

Bronze work flourished in Lorestan in the first half of the first millennium BC These works are characterized by stylized human and animal forms, often combined to create fantastic creatures (Muscarella 1986). Lorestan artifacts include standards, horse trappings, tools, weapons, and ornaments. Horse cheek pieces found there are typically zoomorphic figures striding on a ground line. Some of these creatures are winged and are comparable with the bird-like figures on the horse covers of western Iran and Caucasia. As seen in Fig 15, the figures are similar in general, but due to weaving limitations, the horse covers' figures are abstract and simplified. For example, the wing's place on today's weavings is at the end of the body and is like a tail instead of a wing (Fig 15f). It is like some samples found among Lorestan bronzes where the wing was shifted to the end of the body in the process of simplification (Fig 15c). Furthermore, the figures on the horse covers are, in most cases, two-legged. However, there are still some figures that are depicted with four legs (Fig 15d). Hence it can be assumed that the original samples were four-legged, but in the process of abstraction or combination with the peacock, two legs have been removed.

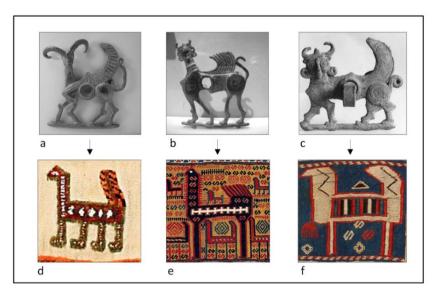


Fig. 15: (a, b) Horse bits, circa 1000-650 BC, Iron Age, Lorestan, Iran, (a) is at the Los Angeles County Museum of Art and (b) the Asian Art Museum of San Francisco; (c) Horse bit, 7th—4th century BC, Iron Age, Lorestan, Iran, Museum of Fine Arts, Boston; (d, e, f) Animals depicted on Qashqai and Shahsavan horse covers.

BRONZES OF LORESTAN: MASTER OF ANIMALS

As mentioned before, the Master of Animals is a motif in ancient art that consists of a humanoid hero grasping two confronted animals or fighting with beasts. This supernatural figure demonstrates power over animals. "... a king/hero/god qualifies if he is controlling, destroying, or even hunting wild beasts. As such, the type is not only extraordinarily long-lived but demonstrates almost universal appeal. The elements of the master's depiction are nonetheless variously mixed and recombined in different cultural contexts" (Weingarten 2011). Master of Animals is particularly widespread in the Near East and Egyptian arts and is one of the major themes among Lorestan bronzes. One type which is more common on horse bits is a horned man flanked by animals (Fig 16 left). He has a thin mouth, prominent nose, large and round eyes framed by thick brows that meld with his hair, which forms a curl over his shoulders, and a plain cap covering his head (Harper and Muscarell 1981, p. 7).

In some cases, heads with such features are masters' heads, and in other cases, they are beasts' heads. Both samples are seen in Image 16 (right), showing a Master of Animals mounted on a two-head beast's back. This beast is like a mysterious motif on western Iran and Caucasus mafrashs and bags (Figs 17a & 17b). Both heads of the animal figure on the bag are abstract forms of the horned man's head, which is simplified and distanced from its origin (Fig 17d). Figure 17c shows an imaginary Master of Animals drawn by the author. One can guess that the motif on the bag is the abstract form of this figure. The small figure on the back of the animal is compatible with the Master of Animals in Lori finial standards (Fig 17c). In these kinds of finials, a slender humanoid figure is encircling the necks of two stylized leonine creatures. The simplified forms of these finials are also seen between every pair of beasts on this soumak (17a). The other common design on Shahsavan mafrashs and bags demonstrates a bird-like figure with a Master of Animals mounted on its back. The upright finials between the two figures are also seen here (Fig 18). Those are hybrid forms of human, chicken, and beasts.



Fig. 16: Horse bits, circa 900-700 BC, Luristan, Iran. Left is at the Asian Art Museum of San Francisco and right at the British Museum, London.



Fig. 17: (a, b) Shahsavan bag face woven in the soumak technique, North West Persia, Mid-19th century, (Noack 1993); (c) small figure on the back of animal is compared with finial from the first millennium BC, Iron Age, Ilam, Iran, Ilam Heritage Museum; (d) head of the figure on shahsavan bag has been compared with head of the animal in figure 16, right; (e) an imaginary composite animal that is compatible with the figure on the bag designed by the author.



Fig. 18: Bedding bag (mafrash) woven in the soumak technique, Northwest Persia, 19th century, located at the Museum of Fine Arts, Boston. The motif between the two animals is compared with a finial from 750-700 BC, Lorestan, Iran, Asian Art Museum of San Francisco.

GRIFFIN

The griffin, a legendary creature composed of a lion's body as king of the beasts and the body of an eagle as king of the birds, was a common motif in Mesopotamia, Egyptian, Iranian, Indian, and Greek arts and myths. A prominent example of this creature in Persian art is an Achaemenid capital in Persepolis. The other Persian sample is Simurgh, which is sometimes equated with the griffin. This bird's motif was popular in the Sassanid era and was more common on textiles, stucco works, and silver containers. The Simurgh's body in Sassanid works of art is a combination of a dog's head, lion's paws, bird's wing, and peacock's tail (Fig 19a). It can be said that the Simurgh motif in Sassanid art is an altered version of the earlier griffin motif in Iran. On the Pazyryk rug, The border consists of five stripes separated by narrow guards. The outer and inner stripes contain schematic lion-griffins with heads turned back (Rubinson, 2016). The griffin in this carpet is depicted in some details and is close to the griffin's typical image in pre-Islamic art (Fig 19b). Pazyryk's griffin is comparable with the golden-winged lion, belonging to the Achaemenid period (Fig 19c). There are bird-like patterns on the mafrash shown in Fig 19d that are comparable with the griffin and Simurgh motifs in Persian art. The

head part in both cases has a roaring mouth and a dog's face and ears (Figs 20a & 20b). The tail may be the tail of a bird or an altered form of griffin's wing, as in Fig 20 (c, d, e). According to these details, it seems that this figure is a modified form of pre-Islamic griffin which has probably been a common motif on the weavings of that area.



Fig. 19: (a) Woven Silk, 7th to 8th century, Sassanid era, Iran. Victoria and Albert Museum; (b) Griffin motif on the border of Pazyryk carpet, Early Iron Age; (c) Gold roundel with winged lion (liongriffin), 404-359 BC, Achaemenian, Oriental Institute Museum of Chicago; (d) Shahsavan mafrash panel, 19th century, Southern Caucasia, GB rug collection.

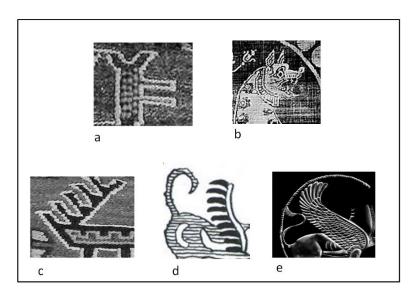


Fig. 20: (a, b) head of the figure on the shahsavan mafrash panel is compared with the Sassanid griffin on the textile fragment (Fig. 19a); (c, d. e) The tail of the figure on the Shahsavan mafrash panel is compared with the wings of griffins on Pazyryk carpet (d) and the Achaemenid gold round (c).

This study indicates that the bird-like animal motifs usually depicted on horse covers and bedding bags woven in north-western Iran and southern Caucasia originate from the Iron Age's composite animals. Among the Iron Age heritage, composite beings of Lorestan treasure demonstrate many similarities with these motifs. These objects owned by wealthy individuals were probably the primary source of inspiration for weavers but have been distanced from their early forms through the time, getting closer to a peacock that was more common in the art of the Islamic era. This approach is also visible in the post-Islamic textile design of Iran.

Chapter 2

HYBRIDITY, PRESENT

Pre- and Post-Darwin Human

Darwin introduced the theory of human evolution at the end of the 19th century, according to which human beings have evolved from unicellular organisms and, like other species, do not have a fixed and static essence. Based on extensive scientific and laboratory research conducted after and during Darwin's life, it turned out that humans have common ancestors with the great apes who lived in Africa 5 to 8 million years ago (Peoples and Bailey 2008, p. 6). This theory challenged the previous theory of the Middle Ages which was consistent with the form theory of Aristotle. Based on Aristotle's theory, natural phenomena like humans are imperfect actualizations of fixed natural possibilities called forms, each of whom has been designed to realize specific objectives in the divine system¹⁹. This view was merged with the Christian teachings to create a common understanding of human nature in the Middle Ages. Throughout the Renaissance, many of the Aristotelian viewpoints were challenged, but the Aristotelian view concerning the human's fixed nature remained unchanged. With scientific advancements in the 17th century, scientists tried to explain natural events through physical rules, not the divine cosmetic order. These efforts provided the background for the emergence of the Darwinian evolutional theory that revolutionized the scientific and philosophical views regarding humankind and other species before the start of the 20th century. This theory led to a novel understanding of human based on duality and hybridity: a creature with animal ancestors, or an animal that turned into today's Homosapien in less than 50 thousand years.

The theory of evolution was introduced when the Western industry was quickly expanding, as the result of which, human supremacy over other species was becoming more noticeable. By then, it was commonly believed that since human could change or improve the world to his will through science and technology, he had moved beyond nature into a superior position. Therefore, accepting the common ancestors' proposal was not an easy task for Darwin's contemporary philosophers and theologians. Even centuries earlier Francis Bacon (1609), the

-

¹⁹ In his natural philosophy, Aristotle combines logic with observation to make general, causal claims. For example, in his biology, Aristotle uses the concept of species to make empirical claims about the functions and behavior of individual animals. However, as revealed in his psychological works, Aristotle is no reductive materialist. Instead, he thinks of the body as the matter, and the psyche as the form of each living animal (Humphreys 2021).

father of modern physics, stated that "Man, if we look to final causes, may be regarded as the centre of the world insomuch that if man were taken from the world the rest would seem to be all astray, without aim or purpose" (mentioned by Hegel 2002, p. 293). Moreover, Descartes and Kant believed that human was distinct from and superior to other living creatures.

Descartes internalized the hidden dualism lied in the relationship between human and animal.

Absolutely separating the body from the mind, he considered the body subservient to the physics and mechanics rules, reducing animals to mechanical constructs as they lacked any wisdom (Berger 2011, p. 11).

This humanistic perspective intensified in the 17th century did not stop for centuries and continued in the 20th century. According to Mayr (2009), the studies carried out on humankind found that he was unique among his consanguineous creatures. His intelligence cannot be compared with any other creature, and he is the only creature whose language includes complex syntactic rules. Furthermore, only human has managed to develop a genuine ethical system. Finally, he has been able, for better or worse, to dominate nature with the help of his great intelligence, language, and culture.

This scientific certainty was gradually undermined, and it was finally collapsed as numerous ecological findings showed that humans, like other organisms, were integral parts of nature. This altered attitude towards the human position in nature could be found in some of Nietzsche's writings²⁰ who wanted to 'translate man back into nature to place him back among the animals'... In Beyond Good and Evil, Nietzsche warns us of the "siren songs of old metaphysical bird-catchers who have too long been piping to [humans] you are more! You are higher! You are of a different origin!" (mentioned by Causey, 2014, p. 36).

It could be argued that unique characteristics that have made humans, along with the common genes and DNAs that tie them to other living creatures on earth, have led to the creation of a hybrid entity that swings between the realms of human beings and animals. While this modern

²⁰ Nietzsche asks: "When will all these shadows of God no longer darken us? When will we have completely dedeified nature? When may we begin to naturalize humanity with a pure, newly discovered, newly redeemed nature?" (Friedrich Nietzsche, The Gay Science, §109).

human undertakes to improve his brain and body through science and technology, he still needs to refer to his long history of evolution to be able to analyse many of his brain's social and psychological functions. As Nietzsche stated in his definition of *übermensch* or "Overman": "Man", says Zarathustra, "is a rope tied between beast and Overman, a rope over an abyss" (Gooding-Williams 2001, p. 66).

HUMAN-ANIMAL STUDIES

With the introduction of post-humanism theory, which became more prominent at the end of the 20th century and early 21st century, many discussions were made regarding *otherness*, which was mainly embedded in concepts related to class, race, gender, and sexual orientations. However, as this category developed, the scholars' attention was directed toward the non-human other, and a new scientific field named Human-Animal Studies was formed. Studying animals' position in human social life and how humans and animals interact, this field of study seeks to discover different intersections between humans and animals and analyse the animals' representations in art, literature, film, and media.

Challenging the human/animal binary, post-humanism seeks to deconstruct humanistic assumptions regarding animals and criticizes the consideration of non-human animals as the *other*. According to some post-human theorists, as the human being is a type of animal, categorizing animals and humans in two distinct groups is problematic. As Freud said, human represses his/her animality to live in the civilized society. This repression is so strong that it makes it difficult for the civilized man to accept Darwinian evolution theory, as this theory removes the boundaries made between humans and beasts (Freud 2001, p. 221). According to Carry Wolf, efforts to understand the outside world, such as the animals' world through seeing, represses man's animality because it is only in humans that the seeing has gained superiority over other senses. Wolf believes that one of the post-humanism functions is to "decentre the human and the visual from its privileged place as the transcendental signifier to which all other phenomenological differences are referred for meaning" (Wolf 2003, p. 3-4).

Human-Animal Studies that formed as the result of moving from Humanism to post-humanism seek to express new viewpoints concerning human-animal relationships by criticizing

anthropocentrism in different areas including language, literature, philosophy, and art so that they create a new perspective regarding the othering process in both non-human and human areas.

INTEGRATION WITH ANIMALS IN ART

As the evolution theory at the end of the 19th century and genetic engineering at the end of the 20th century blurred the line between culture and nature, artists showed more interest in the relationship between humans, the environment, and animals. Although in the 19th century "animals are increasingly seen as the dark mirror of human passions"²¹, with the advent of realism in arts and literature in the late 19th century, humanistic attitude towards animals reduced, and animals found a roughly similar status to that of humans in some realist works.

In Picasso's *Vollard Suite* collection produced at the beginning of the 20th century, examples of attributing moral vices to animals could be found²². Using a figure composed of a bull's head and a masculine body, he portrays the relationship between a minotaur and a woman in some of those works, combining a violent, animalistic lust with humane love. It seems that the minotaur symbolizes Picasso himself. Through these drawings, he showed his troubled relationships with his lover while still married to his wife Olga (Fig 21).

_

²¹ Andersen 2012, p. 15

²² In the last prints the scene darkened from the sunny artist's studio of the early works. Fascism was on the rise in Germany, Italy and Spain, and the swaggering, lustful Minotaur of Picasso's imagination became a maimed, blinded, pitiful creature, led on a rope by a child-sized, helpless Marie Therese. The bombing of Guernica and Picasso's famous response to it were just months away (Kennedy 2012).



Fig. 21: Pablo Picasso, Minotaur Caressing a Sleeping Woman, 1933. National Gallery of Art, Washington.

In the early twentieth century, futurists used animals in symbolic terms, promising human dominance with the help of science and technology. In futurists' works, animals are considered mechanical instruments for representing futurism's core concepts, i.e., motion and speed, and their animal identity is weakened. For instance, in Balla's artistic work (1912) named *Dynamism* of a Dog on a Leash²³, only the dynamicity of the dog has been displayed.

With the prevalence of existentialism in arts and literature following the Second World War, animals were used figuratively to portray post-war violence and anxiety. In other words, those figures displayed what the human figure could not display. In Francis Bacon's works, animal carcasses are repeatedly used, representing human isolation and loneliness in the post-war era marked by anxiety and atheism. In some of his works, he portrays human as animal carcasses, emphasizing human's common fate with the animals. In an interview, he said: "We are meat, we are potential carcasses" (Sylvester 1993, p. 64). "In place of formal correspondences, what Bacon's painting constitutes is a zone of indiscernibility or undecidability between man and

²³ See Goldenberg; R, Kimme, R; Rivlin, E; Rudzsky, M 2002, 'Dynamism of a Dog on a Leash' or Behavior Classification by Eigen-Decomposition of Periodic Motions, Springer, Berlin, Heidelberg, pp 461-475.

animal" (Deleuze 2003, p. 21). In his famous work *Three Studies of Figures at the Base of a Crucifixion,* Bacon shows three figures in three scenes (Fig 22). The figures are featureless, portrayed in a half-human and half-animal mode with long necks, open mouths. As seen in the right scene, the figure's opened mouth is wider than a human jaw; it is something between a human's jaw and a beast's jaw. It seems that Bacon has attempted to create a link between human sufferings and what animals suffer when they are waiting to be slaughtered in a slaughterhouse. As he states, "When you go into a butcher's shop and see how beautiful meat can be and then you think about it, you can think the whole horror of life" (Penn Warren 1997, p. 183). The open mouth observed in most of Bacon's works seems like a window through which deep and distressing human emotions are expressed. It appears that portraying these animal-like screams is an effort to make humans aware of their bestial selves and addresses emotions such as pain, fear, and anxiety that are shared between humans and other animals.

In the middle scene below, a bird-like figure with a human head is displayed. The downward curved neck, the closed eyes covered by a piece of cloth, and a half-open mouth that shows the teeth in anger, refer to a body captured in the corner of a room. The figure in the left scene is the only one that shows a half-length human body, and it is the only figure that likens Jesus' body after the crucifixion.



Fig. 22: Francis Bacon, Three Studies for Figures at the Base of a Crucifixion, 1944. Tate Britain, London.

ANIMALS AND ENVIRONMENTAL ETHICS

According to John Berger (1980), the emergence of the zoo in the second half of the 19th century marked the beginning of human's ontological separation from animals. Since then, the relationship between humans and animals is filtered through the gaze. "Photography and cinema, zoo, circus, and entertainment are different techniques for keeping the distance between animal and human life" (Andersen 2012, p. 15). "Bob Mullan and Garry Marvin have a similar view – zoos consist of a gallery of images arranged for human enjoyment and benefit that expresses the power of culture over nature" (Kalof 2007, p. 153).

In the middle of the 20th century, the zoo was the only place where citizens could be in direct contact with animals; a place where animals from different parts of the world were gathered and kept in an artificial environment, away from biological needs so that the urbanized humans could take a look at them; an objectifying view that was a collection of amusement, sympathy, and an effort to know. In this approach, the human being was considered the centre of the universe to whom the animals came to entertain. However, as global concerns concerning bioethics increased in the late 20th century, some efforts were made to change this approach. For instance, the expansion of Safari parks in the middle of the 20th century reversed the approach. This time, animals did not move from their habitat, but humans went to their habitats to see them. At the same time, pressures mounted on the zoos, circuses, and labs, and new rules were set for the use of animals in such places. As global awareness of and sensitivity to environmental issues increased in the second half of the 20th century, the attitude towards animals started to change in developed countries.

Anthropocentrism was challenged by environmental ethics in this era. It was a basic belief in many religions and western philosophies to perceive human as the centre of the universe. Environmental philosophers argue that ethical boundaries should encompass all beings and should not be limited to humans. At the same time, important actions for recognizing the animals' rights were carried out. *Animal Liberation*, written by Peter Singer in 1975, became one of the basic resources of the animal rights movements, referring to the human moral commitments to avoid disturbing and harming animals. At this time, the question of Jeremy

Bentham, raised in the late 18th century, was repeated: "The question is not, can they reason? Nor can they talk? But can they suffer?" (Bentham 1789, p. 144).

In the early 21st century, animals' representation in artistic works altered with the increased awareness of the natural sciences and the changing attitude towards animals. Advancements in biology and increasing awareness of the ecosystem which is composed of different common genes and bacteria among humans and animals led to this question of whether the human parameters are the only criteria for measuring the world, or every living creature is linked to the world's reality via its own unique intelligence?!.

The answers to this question and ontological understanding of animals became the topic of many works of art in the 21st century. The emergence of hybrids which mark the special characteristic of animal-based works reflects these efforts very well. In 2004, Mark Wallinger spent ten nights in bearskin cloths in Neue Nationalgalerie of Berlin. This bear which seems to have been trapped in a glass space sometimes walks, sometimes runs, and sometimes lies on the granite floor. It also interacts with the viewers who are standing behind the glass wall. In addition to conveying political and social meanings, this performance also challenges the human gaze toward animals. The people who have come to see the artistic works look at the bear behind the glass wall the same as they glance at other objects²⁴ and the impatient bear interacts with them angrily or playfully.

In taxidermy art that boomed at the beginning of the 21st century, we can see many hybrid forms of animals. The works of this genre are pop-surrealist sculptures in which taxidermy materials are used unconventionally. Kate Clark, a taxidermy artist who works on the transformation and expression concepts, combines the animal body with the human head in his works. Through these sculptures, he tries to reveal the internal connection between humans and animals and redefine the relationship between the two accordingly, which seems unlikely in the technology era. Clark says (2010), "By creating human features, the animal is able to

²⁴ Objectification of women has also been studied. See Morris, K; Goldenberg, J 2015, WOMEN, OBJECTS, AND ANIMALS: DIFFERENTIATING BETWEEN SEX AND BEAUTY-BASED OBJECTIFICATION, Presses universitaires de Grenoble, pp. 15-38.

communicate, at least visually through his face, which allows for a stronger understanding between man and animal" (Fig 23). She has used the animals' heads in these sculptures to bridge the relationship between humans and animals²⁵. The heads that Clark has installed on her sculptures are the ones with violence-free human faces that invite the viewers to identify with them.



Fig. 23: Kate Clark, Licking the Plate, 2014. Installed at Nevada Museum of Art.

Oleg Kulik, the well-known Russian artist, who presents himself as an artist-animal in his performances, tries to cross the pre-defined boundaries of humanity and culture and create a new creature that is neither human nor animal. In his famous work "I Bite America and America Bites Me", he spent two weeks inside a cage as a dog (Fig 24). During this time, instead of

²⁵ In his book *Francis Bacon: The Logic of Sensation,* Gilles Deleuze considers the head as the apex of the human body: "[Body] can even be reduced to the head ... It is not that the head lacks spirit; but it is a spirit in bodily form, a corporeal and vital breath, an animal spirit. It is the animal spirit of man: a pig-spirit, a buffalo-spirit, a dog-spirit, a bat-spirit ..." (Deleuze 2003, p. 20).

speaking, he growled and drank water and ate food from a bowl. The viewers could see him from outside the cage or put on special suits and enter his cage. In this work, where the artist and the animal have been united, interactions between viewers and the artist form important parts of the performance. Kulik says, "People entering my cage faced very simple question, whether I would bite or would not bite them, whether I'm clever or an idiot They examined this unprecedented *becoming an animal* and even looked if it matched them". dog²⁶, which is Kulik's favourite character, is a symbol of the other; an embodiment of nature and instinct, which is close to the social lives of humans because of its sociability, and on the other hand, distinct from humans due to its strong instincts. It is an example of the human himself who vacillates between instinct and civilization. Also, the sense of humiliation arouses from turning a human into a dog challenges the human's selfish and humiliating treatment of animals.

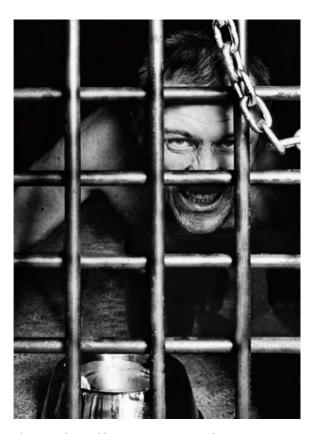


Fig. 24: Oleg Kulik, I Bite America and America Bites Me, 1997, Deitch projects, New York.

٦,

²⁶ Among contemporary artists, Jeff Koons has paid more attention to dog art and created famous *Balloon Dog* sculptures. See his works on his website: http://www.jeffkoons.com/ .

New Hybridity

CULTURE AND HYBRIDITY

Hybridity is not a new phenomenon in its racial and cultural senses. Ever since humans started their social life, they have inevitably been hybrid. Trade, war, and political relations have always made the old civilizations benefit in variant degrees from other nations' sciences, inventions, and literature, mixing the native and non-native knowledge and culture to make hybrid societies. Although such a mixture took place in different cultural, scientific, and biological aspects, the biological mixture was despised in most ancient societies. Both Plato and Aristotle were against racial mixture and considered it as a source of racial decadence and social disorder (Benjamin 2004). Racial discrimination continued for many centuries. With the rise of western powers' colonialism in the 18th century, interracial contacts developed, and the phobia of White Europeans racial hybridity increased. In the 19th century, following the increased competition among European powers to exploit Asian, American, and African countries, the fear of racial hybridity²⁷ was supported by quasi-scientific discussions (Kraidy 2002).

Following the decolonization in the 20th century, some new concepts were introduced during the post-colonial era which changed the attitude toward interracial contacts, considering hybridity as a significant factor in cultural and political developments. Homi Bhaba is one of the leading theorists of modern hybridity who discusses the hybridization and formation of new cultures in the contact zone of multiple cultures. As for the relationship between the colonizer and the colonized, he emphasizes the "interdependence and mutual construction of their subjectivities" (Ashcroft, Griffiths and Tiffin 2013, p. 136). In his view, recognizing this mutual cultural identity helps us overcome the exotism of cultural diversity and move toward the conceptualization of an international culture based on cultural hybridity (Bhabha 1994, p. 38).

⁻

²⁷ In 1864 the term "miscegenation" was coined for this subject. No one had ever seen the word "miscegenation" before. In fact, the pamphlet's anonymous author invented it, giving the reason that "amalgamation"—then the most common term used to describe "race mixing"—was a "poor word, since it properly refers to the union of metals with quicksilver". The term "miscegenation"—from the Latin *miscere* (to mix) and *genus* (race)—had only one definition (Sussman 2019).

Other than Bhabha many researchers consider hybridity as the product of tradition and modernity or local and global interactions. Therefore, cultural globalization could be regarded as one of the hybridization's consequences. Born out of the interaction and integration of different nations throughout history, globalization has been accelerated in the communication and technology age. As Pieterse (2015) puts it, globalization as hybridization is not cultural homogeneity, but it is the creation of new and diverse cultural combinations. This cultural mélange is not just limited to westernization but includes different cultural tastes. In his view, while Macdonaldization²⁸ is regarded as the manifestation of standardization and homogeneity, it has adapted itself to the distinct cultural and nutritional tastes of different cultures. "Hence, it should rather be understood along the lines of global localization" (p. 52).

In the 21st century, hybridity has gained new meanings, including a wide range of human, nature, and objects. With great advances in technology, biology, and digital sciences, the shared existence between human-nature and human-object is expanding. It could be argued that this commonality leads to a new hybrid entity with multiple identities.

Through hybridization, two forms are linked together to create a new form which is neither this nor that. Hybridity is not the narrative of oneself or the other, but it is the creation of a "third flexible post-human entity" (Reimer-Walsted 2016). Thus, it could be said that the underlying concept of hybridity in the 21st century is the openness of borders and joining the *otherness*. In this context, the other is not defined in conflict with oneself, but it is a part of the constantly changing self. "In the post-humanist thought, the human is no longer [...] the adoption or the expression of man but rather the result of a hybridization of man with non-human otherness" (Marchesini, 2007, p. 54).

_

²⁸ The McDonaldization of Society links classical sociological theory to many aspects of contemporary life in a globalized world. Max Weber's rationalization thesis is updated and applied to the late 20th and early 21st century: where Weber focused on bureaucracies as the "iron cages" of rationalization in his time, the central premise of McDonaldization is that the fast-food restaurant has become the model for the rationalization process today (Ritzer 2004).

POST-HUMANISM AND HYBRIDITY

While the central concept of humanism is based on the human's distinction of and superiority over animals, the focal point in post-humanity is hybridity with other living creatures and non-living materials — the state in which a supra-human entity exists. This transformation, which results from biological and technological advancements, offers a new definition of humankind that differs from the definition presented by the humanism of human. Post-humanism considers human beings as belonging to one of the natural species living on the earth, whereas humanism considers human as the centre of the earth.

Human is crossing the boundary of the body via digital and biological sciences, which may remove or blur the borders between the living and non-living creatures in the long term. The newly emerged phenomena have created new opportunities and possibilities for humans, which expose their bodies to various changes: digital identities have decentralized the body into something no longer a mere space for social interactions. Plastic surgery, artificial organs, and RFID chip implants have provided humans with new opportunities to reconstruct their bodies as they wish.

Post-humanism argues that western industrialized societies are experiencing a new phase of humanity wherein 'no essential differences or absolute demarcations between bodily existence and computer simulation, cybernetic mechanism and biological organism, robot teleology and human goals', exist (Hayles 2008, p. 3). In other words, resorting to technology and other sciences, post-humanism seeks to release the human body from its natural limitations which force him/her to live with the organs, race, and gender they have been born with.

Consequently, cultural restrictions could also be eliminated, and the body could transform into a boundless flexible shell with multiple and variable identities. The posthuman is not a singular, defined individual, but rather one who can *become* or embody different identities and understand the world from multiple, heterogeneous perspectives (Haraway 1991).

When animals and matters become parts of a human, he changes into a constantly changing hybrid being. This hybrid being is like a vampire described by Donna Haraway (1997): a creature that goes beyond natural categorizations by polluting concepts such as natural and purity of

linage. Vampires violate the integrity of body, community, and kinship (mentioned by Kalof 2007, p. 161). It could also be like the monster described by Jacques Derrida: "a composite figure of heterogeneous organisms that are grafted onto each other. This graft, the hybridization, this composition that puts heterogeneous bodies together may be called a monster" (mentioned by Smith 2005, p. 2).

Post-humanism forces humanities to enter into a dialogue with technology and nature so that it can penetrate the boundary between the fixed and impenetrable categories and thus eliminate the distinction between human and nonhuman. Being related to different forms of mastery, humanism emphasizes its lineage superiority by exploiting areas such as gender, species, and nature. Hence, post-humanism manifests itself in movements against the exploitation of women, animals, and nature.

HYBRIDISATION WITH NATURE

The long history of evolution shows that human physical and psychological evolution has not been limited to specifically defined boundaries, and from the initial cells which passed the process of evolution, humans have accompanied other natural elements. For example, to survive as a human, we need a huge number of microbes that, despite lacking common genes with humans, coexist with us as inseparable parts of our bodies. Jane Bennett (2010) says: "My 'own' body is material, and yet this materiality is not fully or exclusively human. My flesh is populated and constituted by different swarms of foreigners" (p. 112). This collaboration to survive via the overcrowding of otherness in the body means that living as a human being involves crossing the borders of human nature and integrating with other elements in nature. This perspective criticizes human's theoretical separation from non-human elements, emphasizing hybridity, collaboration, and the effect of their mutual interaction.

Dividing nature and culture into two distinct categories constitutes the basis of the modern sciences. Humanities and Social Sciences which possess many sub-disciplines, study the human and nature separately. This separation forms our understanding of the world and our kind of relationship with it. Many environmental scholars consider this separation as the origin of many environmental issues in today's world. These views and criticisms that have been being

developed since the late 20th century onwards consider the crises such as deforestation, global warming, and biodiversity destruction as a consequence of our definition of nature as a distinct category that is subordinate to culture in all aspects. Defined by Donna Haraway (2003), *Natureculture* links these two words via a novel attitude: "Natureculture is a synthesis of nature and culture that recognizes their inseparability in ecological relationships that are both biophysically and socially formed" (mentioned by Malone and Ovenden 2016, p. 848). There is no simple juxtaposition or mirroring between the two terms, but a combined *mesh*, an interplay, a tangle (Lovino 2016, p. 14).

The developments being made in genetic engineering indicate the emergence of a new aspect in the hybridization of the human with nature. Through a process known as xenotransplantation, tissues, organs, or animal cells can be injected into human organisms. In a project carried out by Salk institute in January 2017, the researchers injected human stem cells into pigs and created pig-human hybrid embryos (Wu 2017). The purpose of the study was to cultivate human organs within the pigs' bodies to help patients who need organ transplants. While these experiments still face many ethical and legal challenges and are at their initial stages, we wonder whether one day humans would be able to continue living with their half-animal organs²⁹.

In his famous work *The Young Family* displayed at the 5th Venice biennial, Patricia Piccinini portrayed xenotransplantation's genetic experiments (Fig 25). In this sculpture, a pig-like creature has leaned on the earth, breastfeeding its piglets who have human-like hands and legs but pig-like muzzles and ears. In this sculpture, the human and the pig are so integrated that it is hard to find a clear border between them. Consequently, they cannot be defined in any conventional category, leaving the viewers in absolute uncertainty. Piccinini also challenges uncertainty in ethics and bioethics. She states that the sculpture has been inspired by the animals cultivated for organ transplants. The face and the gesture of this human-pig, feeding her piglets, arouses sympathy and compassion in viewers. The work's moral message is clear:

-

²⁹ Sacrificing animals for the benefit of humans is still a humanistic thought that is not compatible with post-humanism. I have given xenotransplantation example here to emphasize how close humans and animals are that they can even merge.

How is it possible to cultivate such beautiful creatures and then kill them to merely transplant body organs? "However, it has another less obvious side. How would you feel if within her or her offspring grew the heart that your baby daughter needed to live? If it came down to a choice between her life or my son's it would not be a difficult decision for me to make" (Orgaz, Piccinini, 2007). These opposite reactions that may concurrently occur in the viewer's mind are also considered as her work's messages. First, she triggers the viewer's emotions through the tenderness hidden in her work. The sculpture's emotional aspect gradually directs the viewer to the rational aspect of the work, which may lead to uneasiness, hatred, or a guilty conscience. Her works of art do not seek to confirm or oppose such experiments; they only intend to open the discussion concerning the unharnessed progress of science, artificiality, animalness, and our responsibilities towards our creations in the 21st century, without providing any definite answer or solution.



Fig. 25: Patricia Piccinini, The Young Family, 2002. Revival Exhibition at National Museum of Women in the Arts, Washington.

Thomas Grünfeld' Misfits collection is among the 20th century's works of art concerning genetic engineering and biotechnology in which a mixture of taxidermized animals has been used. In making these sculptures, he has collaged different animals' taxidermized organs to create a new animal, indicating an example of what is happening in genetic labs. The familiar parts of these collaged animals and their unfamiliar totality create a paradox that challenges the concepts related to reality and imagination (Fig 26).



Fig. 26: Thomas Grünfeld, Misfit – Flamingo, 1998.

HYBRIDISATION WITH TECHNOLOGY

As put by Ayesha and Parag Khanna, the futurists of technology³⁰, we are moving from the coexistence with technology to co-evolution with technology (Khanna 2013). It means that technology is getting beyond a mere external instrument and finding its way within humans. In other words, in the near future, technology will no longer serve as a means of dominating nature; our body will embrace it like a frame and internalize it. Outside the body, human's onesided relations with technology will change, and technology will no longer be merely subservient to humans, but it will show intelligent reactions. These phenomena will lead to more developments and changes in our bodies, which could be considered as another stage in human's evolution, which, according to Robert Fogel, has been in process since the industrial revolution. Vaccination, hygiene, and suitable nutrition were all the Industrial Revolution products, which helped us outdistance not only other mammals but also homo sapiens. He considers this stage of evolution as techno-physiological evolution and defines it as "the synergism between rapid technological change and the improvement in human physiology" (Forgel 2004, p. 217). This stage of evolution, which is happening with the help of technology, has led to an increase in the human body's size and his/her longevity compared to previous centuries.

Moreover, today, considerable advances in genetics and biology have introduced new ways to fight diseases and strengthen different body organs, which could create dramatic changes in human psychology and physiology in the next decades. Together with profound social developments, these rapid transformations that are being made inside and outside the human body have put humanity on the threshold of a new age referred to as the Hybrid age by Khannes. Following four technological revolutions in different ages, including the Stone Age, the Agriculture Age, the Industrial Age, and the Information Age, this is the fifth significant technological revolution in human history; an era in which different technologies would be

-

³⁰ Futurology, in the social sciences, the study of current trends in order to forecast future developments. While the speculative and descriptive aspects of futurology are traceable to the traditions of utopian literature and science fiction, the methodology of the field originated in the "technological forecasting" developed near the end of World War II ... (O'Toole 2017).

combined with each other, and humans will be integrated into technology: It is neither the "Bio Age" nor the "Nano Age" nor the "Neuro Age," but the hybrid of all at the same time. (Khanna 2013).

In the 21st century, hybridity is emerging in many phenomena. It is predicted that in less than ten years, some digital eyeglasses will replace today's smartphones, combining what we see with the input images from the computer in such a way that we would not be able to recognize reality from imagination (Chan, 2018). In such an environment, our understanding of objects, events, and surrounding phenomena around would be reinforced by layers of data, and Sergey's prediction would be realized: "The entire world's knowledge connected directly to your mind" (mentioned by McPherson 2010, p. 73).

The new technology and modern devices will make us experience a new kind of reality called Hybrid reality, enabling us to create several virtual copies of ourselves so that each of them could act independently communicate with artificial agents. The integration of the real and virtual worlds would make a new environment in which the physical and digital events and objects coexist and interact. Therefore, a new world of relations will be established, and our understanding of the self would be changed. It would eliminate the boundaries between reality and virtuality, making the question over the reality of the individuals and objects meaningless. The prototypes of this technology have been introduced by Microsoft and Google and will be extensively used in the next few years (Haselton, 2019).

In the world of art, the first instances of the integration of human and technology could be found in futurists' works at the beginning of the 20th century. In the statue named *Unique Forms of Continuity with Space*, the human body has been combined with mechanical forms to reflect technology's spirit, i.e., movement, speed, and dynamism (Fig 27). It seems that the knight-like body of the statue which is moving against the wind does not intend to stop, preparing itself for a great encounter. This body has come out of the heart of history but wants to pass the history and even fight with it so that it could unite with its beloved, who is the future, speed, and technology. This work's post-humanist characteristics have helped it continue from its creation date up to the present when the knight appears to be wining.



Fig. 27: Umberto Boccioni, Unique Forms of Continuity in Space, 1913. The Museum of Modern Art, New York.

Sterlarc, a performance artist, uses his body as a space to show the encounter between the flesh and the skin with technology, challenging the human body's capabilities. In his works, the body is tested as a material so that its limitations be revealed. He uses the phrase "obsolete body" to describe the current human body that, in his view, is slow, inexact, and weak compared to technology. He says that it is time we ask whether this body is capable enough to deal with the quantity, complexity, and quality of the information it stores. Humankind has been defeated by the speed, precision, and power of technology, and post-evolutionary strategies³¹ should be designed for its body so that it could survive these new circumstances (Kreps 2007, p. 39-40). In numerous performances, he hung his body by several hooks thrust

³¹ Julian Savulescu Australian philosopher and bioethicist says:

Humanity until this point has been a story of evolution for the survival genes—survival and reproduction. Now we are entering a new phase of human evolution—evolution under reason—where human beings are masters of their destiny. Power has been transferred from nature to science. Science can create abominations, but it can also be the instrument of humanity. (Savulescu 2003, pp. 22-25).

into his skin. In Sterlarc's view, a body that suffers is thought-free and loses thinking power. A suffering human has been objectified, got away from his mind, and, thus, turned into a mere body. Under these circumstances, the extent of the human body's vulnerability and obsoleteness could be understood. In an interview about body and mind, Sterlarc said:

When you look at this body, this physical, phenomenological, operating, interacting body, this body is totally obsolete and empty, there is nothing inside my head I feel that it's unnecessary to construct anything that's internal. It's the interaction in personal and social spaces that constructs what it means to be human. So, we're human because of our social systems, our technologies, and our culture. We're human precisely because we have neither a mind nor a soul (Kalinowski 2013).

In another project, he implanted a cell-cultivated ear in his arm (Fig 28). According to the artist, a wireless microphone is supposed to be inserted in the ear so that other people can hear all the voices Stelarc hears via the internet. So, anyone who listens to ear would be its owner. In this project, Stelarc is the architect of his own body and implants an organ under his skin that adds new functions to his body, i.e., the connectivity, enabling him to be connected to the internet 24 hours a day without needing any other instrument. The body can now operate beyond its borders and be omnipresent at the same time. This ear can be shared among countless people and turn into a universal ear.

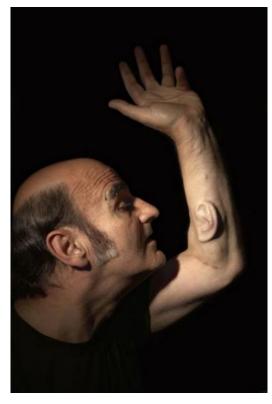


Fig. 28: Stelarc, Ear on Arm, 2007. Photo by Nina Sellars.

Eduardo Kac, a bio artist, inserted a microchip into his ankle in a public performance in November 1997. The microchip was specific to the lost animals and bore a 9-digit identification number. After the insertion, Kac registered himself in an online database specifically designed for the lost animals. It was the first time that a human being was added to this database as both a dog and the owner. This project, named *Time Capsule*, was carried out in a room where several sepia-toned photos were hanging from its walls. These photos belonged to Kac's family album taken in Warsaw in 1930. The juxtaposition of the photos as symbols of the past with the microchip as a symbol of the future creates a paradox that indicates the transformation of memory's meaning over time. The old photos hanging on the wall resemble capsules that contain the recorded memories and information of the last few decades, transferring family memories to collective memory. The capsule implanted under the Kac's skin shows how the status of the recorded information on the paper or the computer memory may change from

internal to external, being accessible to anybody via the internet. Moreover, he challenges the concepts regarding humanity and identity in the digital age.

In another project, Kac donated his blood to a robot so that it could keep a small flame burning with the oxygen that is extracted from the blood. In return, the robot gave him dextrose was entered his body via intravenous injection. The installation which was conducted at the end of the 20th century indicated the new relations between humans and machines based on mutual independence in terms of intimacy and equality instead of command and obedience. "We have always asked what can machines do for us. Now might be the right time to ask what we can do together" (Kac 1997).

GENDER HYBRIDITY

Gender transition from male to female and vice versa through surgery or hormone therapy started in post-World War II. The first avant-garde trans-genders had to tolerate sexual serotypes. To legitimize their gender transition, they had to adapt themselves to binary gender norms. However, from the 1980s on, the binary mindset started to change. This field's activists challenged the idea that every human being should be a man who has sexual desire for women or a woman who has sexual desire for men, arguing that there could be another gender called intermediate gender, which is neither entirely a man nor entirely a woman.

In her famous paper "A Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s," Haraway referred to the removal of the borders between humans and machines and between humans and animals. She also criticized the traditional notions of gender feminism, stating that the integration of women and machines may lead to freedom from essentialism and naturalism that places women and men in distinct groups. Finally, she asked all people to move toward "the utopian dream of the hope for a monstrous world without gender" (Haraway 1980, p. 181). This Manifesto helped develop new theories such as cyberfeminism³², For instance, in her book *Gender Trouble: Feminism and the Subversion of*

³² In the early 1990s, cyberfeminism surfaced as an arena for critical analyses of the inter-connections of gender and new technology especially so in the context of the internet, which was then emerging as something of a "mass-medium" (Paasonen 2011).

Identity, Judith Butler (1990) states that the feminists made a mistake in highlighting the binary of men and women: "A truly liberatory feminism would seek to deconstruct and free us from the enforced linkages between biological sex, performative gender, and heterosexual desire" (Mentioned by Hughes and Dvorsky 2008, p. 8). Moreover, the theorists of genderqueers asked for the removal of gender identification from the law and the use of neutralized pronouns in language. While most genderqueers' strategies were cultural and ideological, post-genderism and post-humanism theories predict a future in which the removal of human biological limitations by technology that will help humans transcend their body's boundaries. They believe that "gender is an arbitrary and unnecessary limitation on human potential", which causes the formation of gender roles and social classification, ending in the destruction of both individuals and society (Hughes and Dvorsky 2008, p. 2). Post-genderism proponents also argue that the technology will help a post-gender human breed with any gender and that artificial wombs will make natural wombs useless.

The gender hybridity, which has been getting strengthened since the industrial revolution, is blurring the distinctions made in agricultural societies between men and women that were dependent on men's power and women's fertility. In industrialized societies, women were able to work like men in factories and gradually acquired ownership rights and the right to vote in democratic societies. Therefore, the gender gap between men and women was reduced. However, while women have achieved total independence and equality at home and the workplace in post-industrial societies, gender stereotypes that are partly derived from historical roots and partly from the modern era have prevented gender hybridity from being fully realized in the real sense of the term. Some developed countries like Sweden are trying to compensate for the women's educational and occupational backwardness that has occurred throughout centuries and counter the stereotypes regarding childbearing and childcare by taking affirmative action in women's favour.

Darling-wolf defined gender hybridity "as a broad set of acts, behaviours, and attitudes that do not conform to the socio-culturally constructed meaning assigned to each gender in a particular

society or culture at a particular point in time" (2008, p. 66-67). Those who express gender hybridity in their talks and behaviours seek to subvert the gender structures constructed by media, school, family, language, and many other social institutions. The solution offered by gender hybridity for realizing feminist utopia is destroying the norms dictated on societies. These norms offer a fixed and specific definition of men and women and consider gender as an inborn and natural characteristic rather than something which is acquired and demonstrative.

Although many of the post-genders' promises have not come true yet, recent years' events indicate changes in human's attitudes towards gender. Today, gender variety has been recognized in many developed countries. In 2014, Facebook offered 50 gender options to its applicants and allowed them to choose the type of pronoun they wish to be addressed with: male (he/his), female (she/her), or neutral (they/their). Soon after, many websites followed Facebook in offering their applicants new options to choose their gender identity, and the recognition of the gender identity of Internet users became more extensive and formal. Transgender men's childbearing is being publicly recognized though it seemed unusual at the beginning. Some scientists predict that transgender men will be able to get pregnant and give birth to a child through a transplanted womb (Bodkin 2017). Furthermore, the first threeparent baby was born in 2016 who possessed the DNA of all three parents. The freedom in choosing gender has been recognized in many developed countries and is being entered into the public culture. For instance, the first clothes shop that removed the labels "For men" and "For Women" from its clothes opened in 2017 in the UK (Hosie 2017). There are even some parents who hide the gender identity of their child so that he/she can freely decide his/her gender identity. These events indicate that humanity is entering an age when the old versions of masculinity and femininity will be less imposed on new generations, and gender will be considered as a means of self-expression rather than something determined beforehand. Therefore, gender hybridity that seeks to eliminate the boundaries between masculinity and femininity will likely be a widespread phenomenon in the centuries to come.

With the rise of feminism at the end of the 20th century, artists paid more attention to gender and its relation with society, challenging the roles imposed on men and women and the media's

criteria for beauty and attraction through their works. Even at the beginning of the 20th century, artists such as Frida Kahlo presented a different image of women³³. In her collection of photos displayed in 1970, Laurie Simmons criticized women's traditional role at home by arranging vintage dolls in a dollhouse. Louse Bourgeois portrayed a head-less dog crouched on a stone pedestal in his famous statue work created in 1984. The dog is physically masculine, but several breasts have protruded from its body, giving a feminine style to the figure (Fig 29). In addition to being half-male and half-female, this statue, inspired by F.A. Franzoni's 18th-century work, is also half-human and half-animal, representing a vague gender identity. Bourgeois explained that the statue symbolizes the artist herself as a mother and a protector.



Fig. 29: Louse Bourgeois, Nature Study, 1984-94. Private Collection Courtesy Cheim & Read, New York.

-

³³ Mushro wrote: Frida's Self-Portrait with Cropped Hair makes a comment on the idea of performing gender and sex during her time period. At the top of the portrait she writes, (...) "Look, if I loved you, it was because of your hair. Now that you are shorthaired, I don't love you anymore" (2018, p. 71). for further reading on Frida Kahlo's gender representation see Mushro, L 2018, *Frida Kahlo and the Feminine*. Colloquium: The Political Science Journal of Boston College, 2(1).

In her collection of photos named "Girls will be Bois," Sophia Wallis (2002-2007) displays young women who defy feminine norms, wearing clothes and acting in manners that are typically masculine (Fig 30). The butches shown in this collection are doing activities such as boxing, driving a bus, and constructing buildings, calling the viewers to take a new attitude towards gender identity and stereotypes imposed by culture and society.



Fig. 30: Sophia Wallace, Photo Collection: Girls Will Be Bois, 2002-2007.

Chapter 3

HYBRIDITY IN TEXTILE LOGIC

The Essence of Hybridity

In an article published in 2012, Harvey L. Hix showed how the frequency of using the word 'hybrid' changed from 1800 to 2000, comparing it to 'metamorphosis' via Google's Ngram Viewer for more clarification. The study's findings indicated that while the word metamorphosis had increasingly been used during the 18th century, it was the word hybrid that had been used more in the 20th century, with the word being used in the year 2000 ten times more than its frequency of use in the mid-18th century. He concluded that the increased use of this word demonstrates human's new approach to the issue of transformation (L. Hix 2012, p. 272).

To better understand the concept of hybridity, it would be helpful to compare it with metamorphosis, which is another form of transformation. As inferred from the myths, the metamorphosis was one of the most prevalent metaphors in ancient literature and culture. For instance, in Greek myths, Proteus, the god of seas and rivers, has a flexible quality like water, easily changing from one form to another. Some examples of metamorphosis could also be found in modern literature. In *The Metamorphosis*, Kafka depicts a salesman's life who suddenly transforms into 'monstrous vermin'. The increasing frequency of the word hybrid since the late 20th century onwards shows that the human culture has turned towards a new form of transformation, i.e., hybridity. Although hybridity and metamorphosis are variants of transformation, they differ in some aspects. In hybridity, two forms join to create a third form, or in Bynum's words, "two-in-oneness" (Bynum 2001, p. 161). In metamorphosis, however, only two forms are involved, with one form replacing the other. Thus, it could be said that both forms undergo a change. In hybridity, the change looks like evolution, i.e., a gradual change from one form to another, while some initial physical features remain unchanged. However, in metamorphosis, one form replaces another without retaining the initial physical characteristics.

Temporality is another significant point to consider in hybridity. In its classic definition, hybridity often occurs slowly and gradually. For example, in Greek myths, the Minotaur creation does not occur overnight, but it takes some stages to come into being. Minos's wife falls in love with the white bull and prepares a well-designed plan to make love with it. She asks the famous

Greek craftsman to build a hollow wooden cow so that she can enter it and have sex with the white bull. Having had sex with the bull, she becomes pregnant and gives birth to the Minotaur after nine months. The same story happens in the creation of centaurs. They are born following intercourse between centaurus and mares; therefore, their birth requires at least a year.

Similarly, modern literature's hybrid characters are often created through a process. For instance, Victor, a character in American comic books, does not transform into a cyborg suddenly, but artificial limbs are attached to its body through a prosthetic operation, and it takes time for him to accept his new limbs. The temporality of hybridity is also considered in posthumanism. Some scholars believe that humans began to hybridize with natural and unnatural elements since their existence on Earth, and this trend lasted millions of years and will continue in the future. In his definition of posthumanism, Carry Wolfe emphasizes human decentring, noting that human is "fundamentally a prosthetic creature that has coevolved with various forms of technicity and materiality, forms that are radically 'not-human' and yet have nevertheless made the human what it is" (2010, P. xxv).

On the contrary, metamorphosis usually occurs suddenly, with all elements of one form replacing another form's elements. For instance, the transformation of Nagini into a snake in *Harry Potter* books, or the transformation of Gregor Samsa into an insect in Kafka's The *Metamorphosis*, occurred suddenly. Therefore, as mentioned by Hix, metamorphosis "is momentous: it occurs – begins and ends – at a point in time ... [Hybridity] has duration: it is ongoing, with a beginning and ending that are distant from one another, and that may appear as horizons rather than as points" (Bynum 2001, p. 275).

The Nature of Weaving (Warp and Weft)

Textile is a material created upon the interlacing of different natural or synthetic fibres. It is produced via different methods, including knitting, weaving, and felting. In each method, the elements are intertwined in a unique way to produce the final product. Weaving is the oldest textile production method, probably dating back to the Palaeolithic era (Janik and Bates 2012). In this method, longitudinal threads, i.e., warps, are crossed with lateral threads, i.e., wefts, to create an interlocked network that is durable and not easily destroyed. It has, therefore, various applications. This new piece which is called textile, while retaining the features of its basic materials, i.e., warp and weft, is a new being with new characteristics.

Warp and weft are two distinct elements. Although they may both be of the same material (e.g., cotton or wool), they play distinct roles in the textile's structure. For instance, in the process of weaving a simple piece of kilim, warps precede wefts, being stretched in the loom first. Warps in kilim are like a building structure, tolerating tension in the process of weaving. Therefore, durable materials are usually chosen for warps. The weft is the filler element, filling the voids like bricks and connecting different parts of the structure. Unlike the warp, the weft does not tolerate any tension and is, therefore, flexible and moves more easily. Weavers can vary the direction of wefts' movement as they wish, thus creating different patterns to decorate the kilim. As most hand-woven textiles are weft-faced, warps are hidden inside or behind the textile, and what we see as the textile is the surface or the wefts.

Various roles played by warp and weft in creating the textile give them different characters. The warp is often longitudinal, durable, non-decorative, uniform, low-flexible, hidden, and unchangeable. On the contrary, the weft is lateral, flexible, colourful, playful, decorative, visible, and free. The weaver's mind is usually engaged with warp in terms of durability and form, while her/his mind is engaged with the weft in terms of content. Warp is cautious, systematic, and predictable, while the weft is unpredictable and risk-taking. Cooper (1987) describes warp and weft in the *Encyclopaedia of Traditional Symbols* as follows: "The warp is the vertical plane, joining all degrees of existence; the qualitative essence of things; the immutable and unchanging; the forma; the masculine, active and direct; the light of the sun.

The weft, or woof, is the horizontal; nature in time and space; the quantitative, causal and temporal; the variable and contingent; the human state; the materia, feminine and passive; the reflected light of the moon" (p. 190).

Due to the long history of weaving in human culture and the dual nature of warp and weft as being concurrently separate and connected, various meanings have been assigned to them, and the words have long been used as metaphors in language and literature. They basically refer to the inseparable components of an object or phenomenon. Cook, the early 20th-century writer and poet, describes the world in a novel as follows: "I see the World, a vital web, self-woven, unborn, undying, with Space for warp Time for woof" (mentioned by Taliaferro 1903, p. 469). Moreover, Snyder (1983) discusses the persistent images drawn from the art of weaving in the poems of Lucretius, Roman poet and philosopher in an article and states: "Lucretius in particular, in his great epic poem De Rerum Natura, seems to have been struck by the usefulness of the warp-weighted loom — a familiar part of every Roman's daily life — as a reference point for visualizing the universe as the fabric of Nature's design, woven together from the warp and woof of the atoms" (p. 37).

Besides literature, warp and weft have been used as metaphors in other fields such as religion, history, philosophy, and science. However, they have been associated with new meanings in different ages and structures. For instance, as stated in the bible "The law and the gospel are in perfect harmony; they are interwoven as the warp and the woof" (Review and Herald, Sep 29, 1891). Here, the law and the gospel complement each other, and neither can be used without the other. In other words, according to the Bible, a Christian's faith would only be complete if he/she accepts the law and the gospel as an underlying structure based on which Christianity has been built and consider them both to be of equal value.

Similarly, in Hinduism, Brahma, the Supreme Principle is "that on which the worlds are woven as warp and weft" (C. Cooper, 1987, p. 190). Warp and weft have also been extensively used in language-related topics. Juan Tubert-Oklander considers text as a combination of words woven like the warp and weft of fabric to create a "meaningful whole" (Oklander 2012, p. 164). These two words are also used in science. For instance, The *Holographic Universe* which views the

world as a holographic phenomenon partly created by the human mind, reads as follows: "If our universe is only a pale shadow of a deeper order, what else lies hidden, enfolded in our warp and weft?" (Talbot 1992, p. 51).

In ancient myths, warp and weft were used to convey concepts that represented mainly the human perception of the universe. A perfect example of warp and weft's metaphorical use could be found in an old Roman legend in which Geia, a good-hearted orphan, meets an old woman called Nuntia who teaches her how to weave on her magical loom. Before her death, the old woman advises Geia not to give the loom to anyone. However, Geia is deceived and loses the loom. She then becomes destitute and has to live in an abandoned hut in the woods. One day, she helps a wounded old woman, who is Nuntia, in the woods. Nuntia returns the magical loom to her once more and says: "I have returned to recover thy loom. For this loom was made by Virgilius (ancient Roman poet), after the plan of the Great Loom of his mother Maia (Magia Pollia). On her Loom Maia weaves the tapestry of the world, for Her name is Magic (Magia) and she weaves together the warp and woof of reality and illusion, thus creating the world ..." (Piñon Jr 2014, p. 10). In this myth, the world is likened to a tapestry whose warp is reality, and its weft is illusion. This simile was intended to help humans better understand the mechanism of the world in that era.

In its general sense, reality refers to something which exists and is experienced through seeing, hearing, touching, smelling, or tasting, or cannot be understood at all. Nevertheless, illusion is the opposite of reality, referring to human's distorted understanding of reality: when senses trick the mind. These two words have widely been defined scientifically and philosophically, some of which are in total contrast with each other.

While reality and illusion are both experienced via mind processing, humans attempt to put mental filters such as language and culture aside so that they can get closer to the reality of objects and phenomena and understand the nature of reality. However, in illusion, the mind is deceived by filters through which data pass to enter the brain, and, therefore, perception of

reality is disrupted. Based on Realism³⁴, the existence of reality does not depend on the existence of humans. Objects, phenomena, and events exist independent of humans (Hale 2017), but illusion entirely depends on humans because it occurs only in the human mind. In other words, reality also goes on outside our minds, but illusion only exists in our minds. Upon the comparison of the world with a tapestry whose warp is reality and weft is illusion, one concludes that, in that myth, humans view the world as a combination of these two: a phenomenon with the characteristics of the warp, being deterministic, immutable, and systematic, and a phenomenon with the characteristics of the weft, being flexible, casual, and variable.

As reality primarily emphasizes objectivity, actuality, and truth, and illusion refers to imagination, subjectivity, and fantasy, reality (warp) and illusion (weft) could be compared to context and text. Jacques Derrida views the text as a "fabric of traces referring endlessly to something other than itself" (1989, p. 9). By extending the concept of text from writing to any sign and effect left on a surface, he considers all human activities as a sub-category of text. Therefore, all phenomena resulting from human thought and imagination, such as language, literature, music, science, and technology, are text. Context, however, is something that surrounds the text. The text originates from the context and refers to it. "The context is thus a frame that surrounds the event being examined and provides resources for its appropriate interpretation" (Goodwin and Duranti, 1992, p. 3). Consequently, the world and all the natural elements created without human's interference can be viewed as the context.

Derrida argues that text and context are not separate categories, but they are interlocked and interwoven like warp and weft, being constantly in exchange. Deconstructionism or poststructuralism that were introduced by Derrida and philosophers such as Roland Barthes in the mid-20th century criticize binary oppositions as the main components of structuralism. Derrida says that in binary opposition, "we are not dealing with the peaceful coexistence of a vis-à-vis,

³⁴ I consider reality here from the viewpoint of Realism.

but rather with a violent hierarchy. One of the two terms govern the other (axiologically, logically, etc.), or has the upper hand" (Derrida 1981, p. 41).

In Western philosophy, we are faced with oppositions such as male/female, light/dark, warp/weft, and nature/culture. Some of them have conceptual and cultural precedence over the other; one is primary, and the other is secondary; one is positive, and the other is negative. Regarding the deconstruction philosophy, Derrida says: "What has happened, if it has happened, is a sort of overrun [débordement] that spoils all these boundaries and divisions and forces us to extend the accredited concept ..." (Derrida 1979, p. 83-84). specially rejecting the traditional text and context opposition, he believes that it is impossible to discern where the text ends and where the context begins: "A *text* that is henceforth no longer a finished corpus of writing, some content enclosed in a book or its margins, but a differential network, a fabric of traces referring endlessly to something other than itself, to other differential traces" (Derrida 1979, p. 83-84). In his view, to overcome these oppositions, one must first "overrun the hierarchy at a given moment" and then "mark the interval between inversion, which brings low what was high" (Derrida 1981, p. 42).

Just like deconstructionism, where the boundaries between binary oppositions such as text and context are removed for the creation of "new concepts" (Derrida 1982, p. 41-42), in posthumanism discussed in the previous chapter, we observe the breaking of the boundaries and hybridization with otherness, leading to the creation of a third fluent posthuman entity. In posthumanism, humans are hybridized with technology or nature to create a hybrid being, referred to by Derrida as a monster: "This graft, the hybridization, this composition that puts heterogeneous bodies together may be called a monster" (Smith 2005, p. 2).

The same story holds true for warp and weft. Taking warp as a metaphor for reality, objectivity, and context, and weft as a metaphor for illusion, subjectivity, and text, we find that warp and weft also denote different binary oppositions: reality versus illusion, objectivity versus subjectivity, and text versus context. However, I imagine the process of weaving may distance itself from its traditional structure and, like the deconstruction process, remove the boundaries between these oppositions, thereby creating a "new concept" in Derrida's words, which I call it

a Deconstructed Textile here. In a deconstructed textile, the warp can turn into the weft, move limitlessly and freely, become flexible, and create motifs. On the other hand, the weft can play the warp's role and become durable, tolerate tension, and be non-decorative. Therefore, in a deconstructed textile, warps and wefts can sometimes serve as a warp and sometimes as a weft, sometimes both, and sometimes neither.

Furthermore, the textile produced by weaving may approach the concept of hybridity in its production process. Hybridity was defined at the beginning of this chapter as follows: "In hybridity, two forms join to create a third form; it is, in Bynum's words, "two-in-oneness" (Bynum 2001, p. 161). In the weaving process, two forms, i.e., warps and wefts, are intertwined to create a third form, i.e., textile. Similar to hybridization, in producing a textile, some physical features of its componential elements are retained. In other words, warps and wefts and their interweaving process could easily be distinguished in a textile, as the componential parts of a Minotaur' body and their attachment could be observed. The hybridity's temporality is also a significant matter: "In its classic definition, hybridity often occurs slowly and gradually" (Bynum 2001, p. 275). The weaving of a piece of textile, e.g., a kilim, takes time and does not happen suddenly. The interweaving of warps and wefts can be viewed as an evolutionary process during which a creature transforms into another being over time and under the effect of environmental factors while retaining many of its initial characteristics. Without passing this temporal process, the final product, which is a textile here, cannot be obtained.

The interweaving of warps and wefts, which is considered here to be the same as the concept of hybridity, differs in some aspects from the hybridity in ancient classic arts and posthumanism. Nevertheless, if the hybridization process is viewed with the textile logic, It could be found that many posthuman poststructuralist phenomena are the same as the interweaving of warps and wefts. For instance, the hybridization of human with technology can be compared to weaving warps and wefts, as technology gradually entered the human's inner world, hybridized with human's mind, psyche, and body, and affected the human's evolutionary process. Similarly, the same is true for attempts to destroy the structures related to the male/female binary in the contemporary world which could be interwoven inside human like a

textile's warps and wefts. Although there is a boundary between the warp and the weft, as long as they are not interwoven, a textile, as a metaphor for a posthuman, would not be created.

Chapter 4

DESIGN

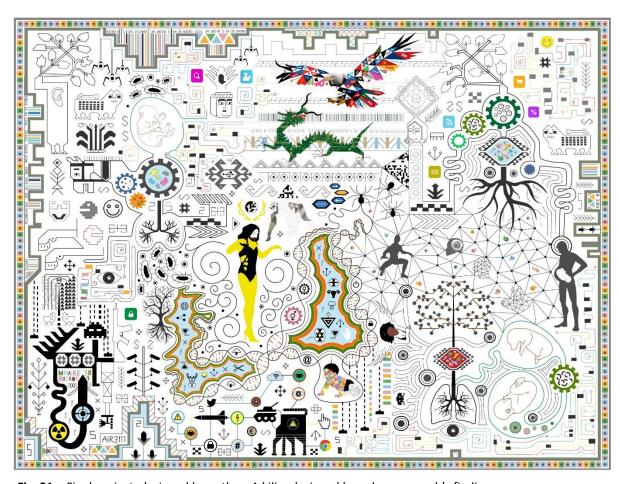
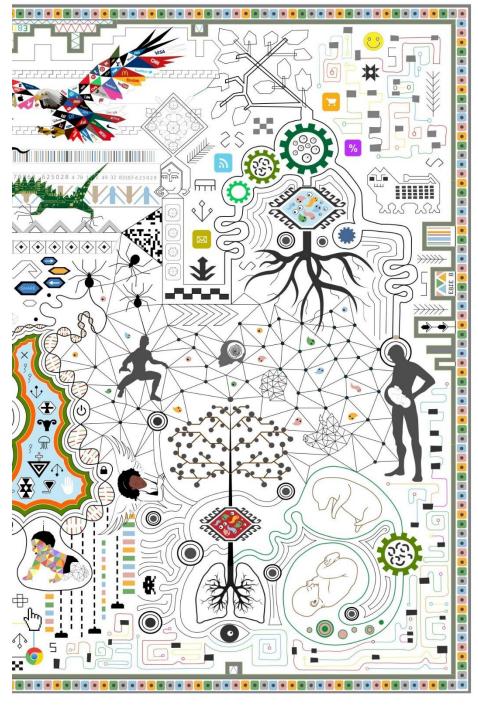


Fig. 31a: Final project, designed by author. A kilim designed based on research's findings.



(Left Half)



(Right Half)

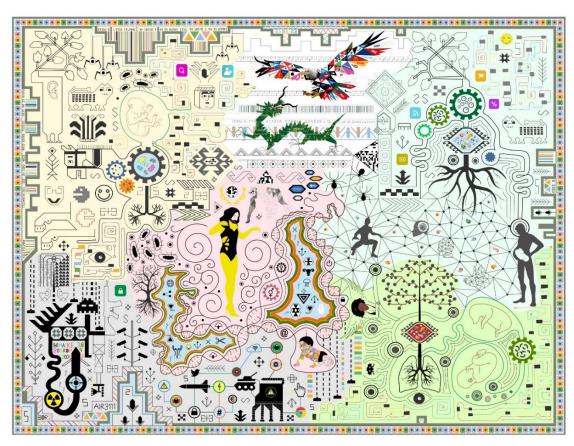


Fig. 31b: The kilim in this illustrated version is divided into six parts, each of which is shown in a different color; (Part 1) Pale turquoise; (Part 2) Pale green; (Part 3) Pink; (Part 4) Cream; (Part 5) White; (Part 6) Pale gray.

Design Preliminaries

As discussed in the introduction, this thesis was primarily inspired by a hybrid creature's photo on a Shahsavan Soumak. Then, the investigation over the nature of hybridity and the meanings conveyed through hybrids such as Griffin and Minotaur began. Next, the concept of hybridity in the modern world was explored, and it was found that the concept had not been left behind in the past. In fact, according to Khannas (2013), we are living in the "hybrid age", and our bodies are willingly or unwillingly moving toward more hybridization with our surrounding materials. Finally, the study's findings are reflected on a piece of kilim (Fig 31a) to express the concept of hybridity in the present time as the Shahsavan hybrid creatures reflected the hybridity spirit of thousands years ago. While a variety of techniques have been used to weave this kilim, most of it is woven with the same techniques used several millennia ago to demonstrate how old forms could include new concepts whose cores were formed in a distant past, but they are still applicable in new forms in the contemporary era. This kilim is the redefinition of an original and ancient content in the 21st century.

Hybridity and removal of boundaries are the main concepts of this project. To begin the design process, I had to find or create an image or a symbol for each element that is hybridized in the hybrid age. Since the materials used for designing this kilim are entirely research based, I decided not to rely merely on artistic inspirations derived from the artist's unconscious³⁵. Therefore, the basic requirements for designing the kilim were set based on the research findings. There are some keywords in the second chapter, including hybridity, nature, human, power, technology, and gender (Fig 32). These concepts had to be placed in a proper form and then hybridized. These forms could be conventional symbols that denoted some relatively similar meanings, or they could be the forms and motifs created by the artist herself which allow the viewers have their own interpretation. I decided to merge the conventional symbols and familiar signs and motifs in such a way that the blend figures represent my understanding of hybridity. This way, the final design would be something between common concepts and

_

³⁵ To study the relationship between art and the unconscious, see: Le, Duy 2015, *Art in relationships with human consciousness and the unconscious*.

personal impressions which helps the hybridity to be perceived both collectively and individually. For instance, the gear could individually symbolize technology, industry, and cooperation, but when it merges with a tree or is filled with bacteria or viruses, it offers some novel and fluid meanings that differ for each viewer.

- · Hybridity
- · Nature
- Human
- · Power
- · Technology
- · Gender

Fig. 32: Keywords extracted from second chapter for kilim design purpose.

Each keyword of the thesis, i.e., hybridity, nature, human, power, technology, and gender, could carry extensive meanings. For instance, nature comprises plants, animals, and the entirety of the physical world, including humans and human activities (Ducarme and Couvet 2020). However, in this design, animals, plants, viruses, and bacteria particularly represent the concept of nature. These categorizations have been done to display the separation and connectivity of the species concurrently. Therefore, for each keyword, some illustrations were produced or selected that are explained in the following.

Nature (plants and animals): As one of the most ancient vegetation species on Earth, trees characteristically symbolize plants in this design. Trees have a special place in Persian culture and arts, and, thus, whenever I wanted to offer a symbol from nature, tree images commonly represented on Persian carpets were used (Fig 33). Four types of trees are seen in this composite kilim: two of them have been adapted from Bakhtiari rugs (Figs 34a & 34b), one of

them is the tree of life (Fig 34c), and the other one is a skeleton tree (Fig 34d). In this kilim, they are combined with other elements of the environment to provide new meanings related to hybridity.



Fig. 33: Bakhtiari rug from Iran, 20th century; in a New Jersey private collection.

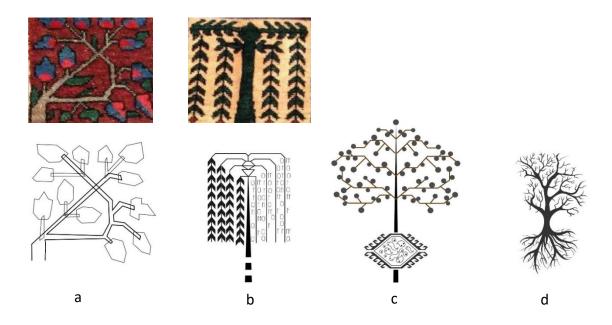


Fig. 34: Tree motifs on the kilim: (a & b) trees' images adapted from Bakhtiari rugs (above tiles); (c) a tree of life; (d) a skeleton tree.

The images of most of the animals in this kilim are adapted from Persian nomad and rural rugs and soumaks in their original form, or they are a part of a mythical creature illustrated in combination with new components (Fig 35). They also include the primary species on Earth, from trilobites and jellyfish to domestic animals such as horses (Fig 36). Their figures are not necessarily symbols of animals, and in some cases, they symbolize power or wars.

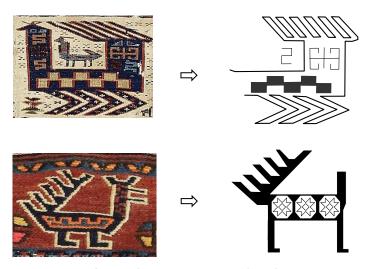


Fig. 35: Parts of animal's body on the kilim (right) that are adapted from figures on shahsavan soumaks (left).

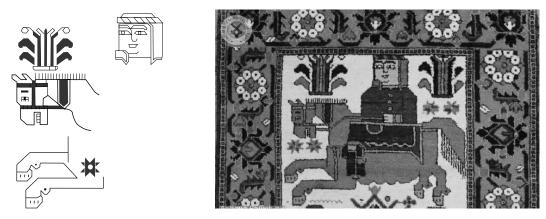


Fig. 36: The illustration of a horse and its rider adapted from a Baluch rug.

Human: In this design, parts of the body such as the hand or head and organs such as lung and kidney are symbols of human (Figs 37 & 38). They are combined with other elements such as tree trunks and gears to demonstrate the human body's fusion and hybridity with other materials on Earth. Figures of adult humans do not have a pure and absolute form, and each is in combination with others. The mythical woman, a pregnant man, a Spiderman, a crawling baby, and an angel are all hybridized. For example, the central figure is a combination of a woman, a man, and an animal (fig 31b, pink part). Moreover, two fetuses and a baby are seen on the kilim, indicating the future generation of the human (fig 31b, pale green and pink parts).









Fig. 37: Images of human organs on the kilim.

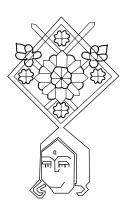




Figure 38: Image of a woman head with ornaments, adapted form a Baluch rug.

Power: Animal figures have been used to demonstrate political and religious power from ancient times. The figures of eagles, lions, snakes, and other powerful animals are noticeable on the flags of many countries. Moreover, there are figures of hybrid animals on the walls of some palaces and churches. As hybrid animals represented several concepts in one figure, they could point out religious concepts, the power of the kingdom, the political power, and the cultural power of a country simultaneously. Similarly, in this kilim, hybrid animals which are extracted from Persian soumaks and carpets are used in order to portray cultural power and military power. For example, in figure 39a, the body of a mythical creature is combined with a gun, nuclear energy, and rockets, all of which symbolize hard power³⁷. On the opposite side (Fig 39b), the figure of a lion adapted from a Baluch rug (Fig 39c) is combined with a tank. Furthermore, its body is connected to a network of signs to show other dimensions of its power.

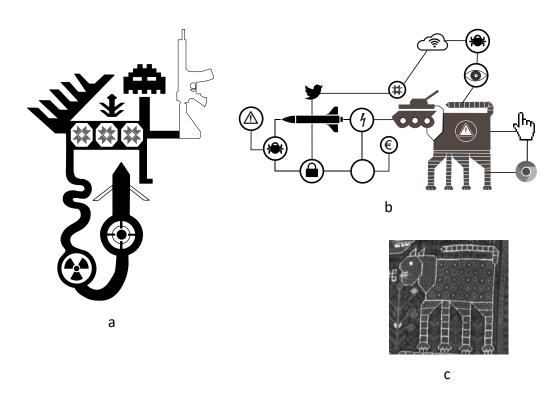


Fig. 39: (a&b) Animals' figures hybridized with different network and military signs to illustrate a state's power; (c) part of a Baluch rug.

-

³⁷ Hard power is specifically the outcome of a country's economic and military abilities (Nye 2009). Soft power and hard power will be discussed in the next chapter.

Technology: Gears, electrical circuits, and cell phone applications are used in this design to symbolize technology (Fig 40). These signs are combined with symbols of the human and nature, putting a set-in motion (like gears), freely moving in the empty spaces like waves, surrounding the animate and inanimate materials (like electrical circuits) or penetrating into them (Fig 31b, pale green and cream parts). They display the dynamicity and infinity of technology in the contemporary world and uncover technology's ability to make its way through borders.

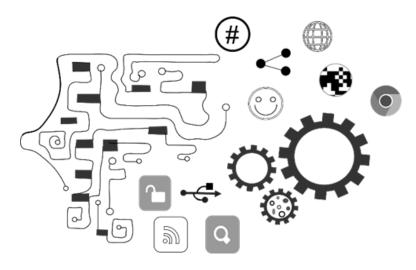


Fig. 40: Signs of the technology and communication on the final kilim.

Gender: In this kilim, the male and female genders have been hybridized in figures of a pregnant man and Conchita Wurst⁴⁰ (Fig 41). Although the body of one seems masculine and the other feminine at first glance, the presence of a fetus in the abdomen of the right figure and the beard on the face of the left figure challenges the initial perception of the figures' gender and raises doubts in the viewer. These figures seek to suggest uncertainty regarding the contemporary definition of gender.

⁴⁰ Thomas Neuwirth is an Austrian gay singer, who is known for his stage persona in Eurovision Song Contest 2014 Conchita Wurst.

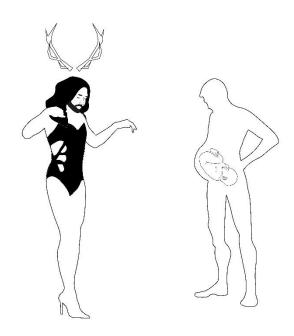


Fig. 41: Figures of the Conchita Wurst and a pregnant man on the final kilim.

Design Structure

Having studied classical Iranian carpet design at BA level, I intentionally used some principles of traditional Persian design in this kilim to refer to my cultural identity and combine the poststructuralist approach with principles and rules of Persian carpet design so that I can get closer to the central concept of this thesis, i.e., hybridity. I have also attempted to maintain the aesthetics of Persian carpets and kilims in my work. For instance, by repeating the patterns, I prevented them from being too diverse. Moreover, I filled empty spaces with the same logic. The mechanism for the arrangement of the motifs in this kilim would be explained in the following, revealing the logic behind its design and its links with Persian carpets and kilims.

Expandable Motifs: as facial and bodily imagery is haram (religiously forbidden) in Islam, following the Arab Invasion to Persia and converting to Islam, Persian designers began decorating the surfaces with abstract flora patterns which were later developed and categorized into *Arabesque* and *Khataei* (Isfahani and Safaee 2016, p. 33). Persian urban rugs are designed based on these two motifs that have similar characteristics, including circular

arches that could be repeated symmetrically or move in different directions freely like plants to fill the space. These two motifs are like bricks in a building and fill the empty spaces according to the carpet's overall design. In my work, I also needed expandable motifs with no definite beginning and end that could move freely on the surface. Therefore, inspired by Arabesque in Persian carpets, I used electrical circuits (Fig 42), DNAs, and Low Poly networks (Fig 31b, turquoise, green and pink parts), as these motifs are expandable and easily fill the empty spaces between the principal figures or merge with them.

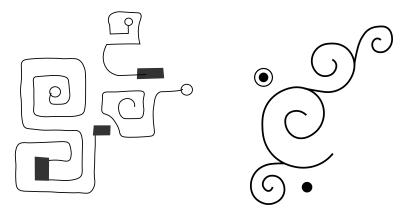


Fig. 42: Illustration of Electrical circuits inspired by Arabesque in Persian carpets.

Medallions: The basic structure of Persian carpets or kilims is comprised of a medallion at the centre or multiple medallions on the vertical axis (Fig 43a). Many researchers believe that classic Persian carpets are inspired by the Persian Gardens⁴², where the margins represent the walls of the garden and medallions represent the Howz⁴⁴ and fountains of the garden (Shahcheraghi 2008, p. 63) (Fig 43b). The Persian Garden image on the Persian carpets does not have any perspective and is completely stylized. In my design, the gears and the frames

⁴² Persian gardens Always divided into four sectors, with water playing an important role for both irrigation and ornamentation, the Persian garden was conceived to symbolize Eden and the four Zoroastrian elements of sky, earth, water and plants. These gardens, dating back to different periods since the 6th century BC, also feature buildings, pavilions and walls, as well as sophisticated irrigation systems. They have influenced the art of garden design as far as India and Spain (unesco 2011).

⁴⁴ All Persian houses up to not very long age have a courtyard pool, or in Persian *howz*, which is not usually for swimming. A *howz* often has goldfish in it, and until not long ago it was used for many households water need, including washing dishes and clothing (Ghanoonparvar 2001, p. 37).

containing sperms and eggs are inspired by such medallions, dispersed on three sides of a rectangle (Fig 43c). Like the traditional Persian carpets, the medallions are placed at the centre of each figure, and other components are added to them to form three episodes on three corners of the kilim (31a). The sperms and eggs inside the medallions resemble the goldfish in the Howz (pool), making the diamond seem something between a sperm container in a lab and a Howz in Persian Gardens (Figs 43c and 43d). Moreover, two DNA strings have joined to create two blue pieces at the bottom, symbolizing a middle medallion of a carpet that has been deformed and taken a new shape on a modern kilim. I call it a deconstructed medallion (Fig 31b, pink part).

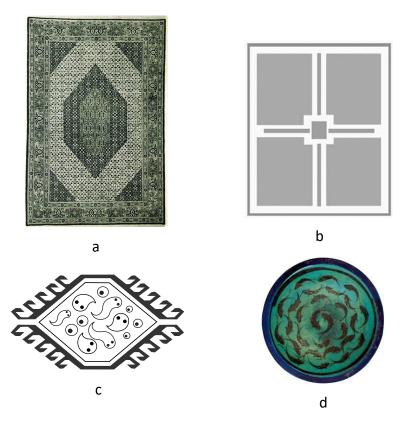


Figure 43: (a) Large size medallion on the Persian Sene rug, Yassavoli, 1991; (b) Persian gardens' pattern, Shahcheraghi, 2008; (c) sample of a medallion on the final kilim; (d) Persian bowl with howz and goldfish design, 14th century, Art Gallery of South Australia.

Recurring Motifs: Almost all motifs in urban and rural Persian carpets are recurring, and this recurrence is sometimes symmetrical and sometimes freely chosen by the weaver. For example, in Bakhtiari carpets, which is also an allegory for Persian Garden, several kinds of trees recur in the entire carpet (Fig 33). Accordingly, I have used the recurrence principle in this kilim. For instance, the tree on the right side with a lion that could be considered as its guardian is symmetrically repeated on the left side (Fig 31b, cream and turquoise parts). Gears, fetuses, barcodes, apps, sperms, and eggs are some other recurring patterns combined in a new order in each instance.

Space Fillers: There is almost no empty space in Persian kilims and soumaks. Most of the surface is covered with large primary figures, and the space between them is filled with secondary motifs. For example, figure 44 shows a soumak in which the surface surrounding the figure is filled with tiny patterns that are repeated in most Iranian kilims and soumaks. This technique goes back to traditional Eastern aesthetics and is particularly more common in the soumak technique. Similarly, I have used many recurring tiny patterns in empty spaces that may not convey specific meanings individually, but they could take on particular meanings according to the positions they are placed in. For instance, Pac-Man⁴⁶ video game icons, traditional soumak motifs, mobile phone apps, smileys, and the sperms around the main figures of the kilim, fill the empty spaces and add new meanings to them (Fig 45).



Fig. 44: Part of a Baluch rug that presents different kinds of primary and secondary motifs and figures.

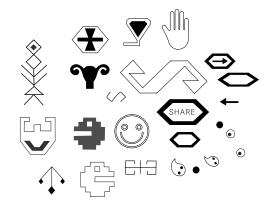


Fig. 45: Space filler or secondary motifs on the final kilim.

⁴⁶ An American video game, released in 1982 by Atari, inc.

Design Process

In the process of designing this kilim, numerous motifs and hybrids were created, each of which represented an aspect of hybridity in my view. Although some of those motifs were put aside, they helped me better understand the function of images, signs, and symbols in conveying concepts. These combinations show my attempts to comprehend and portray hybridity, and they are, therefore, regarded as part of the final kilim's design process. In addition to elaborating the design process, samples of the initial designs would be presented in the following to reveal my mental process from the beginning to the end of the design.

Binary compositions: Having found or created the intended designs to frame the concepts, I began to combine the main keywords two by two to create binary hybrids (Fig 46). Initially, I intended to design the kilim in tile format according to Shahsavan soumaks called Khesht in Iran. The basis of such a design is the application of various frames containing separate figures that could be recurring or unique (Fig 47). However, I finally decided to push the motifs out of the frames' confines so that they can move fluidly on the kilim surface. However, the figures and hybrids produced during the tile designing were very helpful in designing the final work. While each of these tiles looks distinct and helps define boundaries (in humanism), the threads crossing the boundaries, indicate how fragile and permeable the boundaries are.

- · human-plant
- · human-animal
- · human-technology
- · plant-animal
- nature-technology
- · male-female

Fig. 46: Binary hybrids of the main keywords.



Fig. 47: Format of a Shahsavan tile soumak.

For the human-plant hybrid, human organs such as the heart, lung, and kidney were hybridized with several types of trees adapted from Bakhtiari carpets (Fig 48). In these hybrids, the veins inside the organs look like tree roots, displaying a deep and mutual relationship between humans and plants.

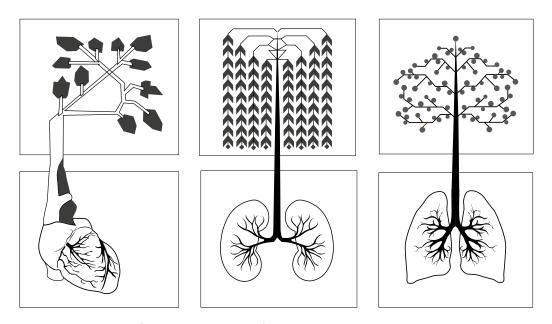


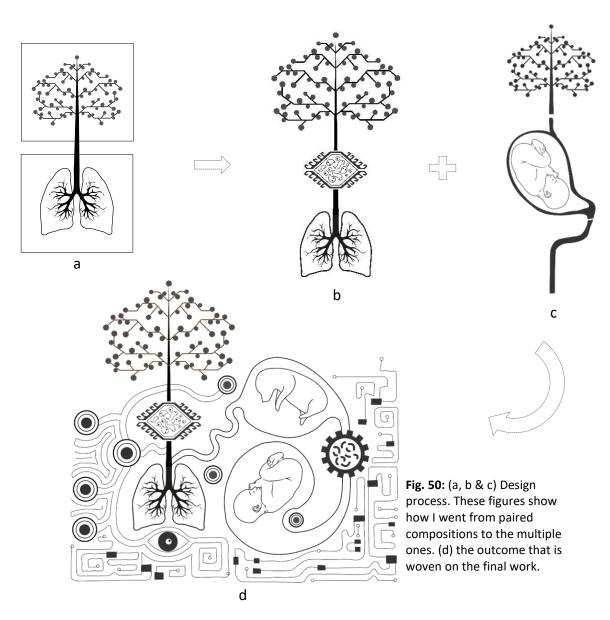
Fig. 48: Initial designs for the binary hybrid of human-plant.

Likewise, the hybrid of fetus and tree was used in this concept. The womb with the fetus inside feeds from a tree in another tile (Fig 49). It is as if the tree is the mother from whom the fetus receives the necessary food for its development. On the other hand, the tree has a growing quality, and instead of roots, it reaches a womb that feeds the tree like a tuber in the roots. The tree needs the fetus as much as the fetus needs the tree. The human uses the trees' fruit and oxygen, and the trees feed on human and other animal corpses. This is the circle of life that binds physical materials together in the world.



Fig. 49: Initial design for the binary composition of human-plant.

Multiple Hybrids: I moved from binary hybrids that indicated the hybridity of two elements, towards triple hybrids. For instance, in figure 50, a medallion containing sperms and eggs was attached to the tree trunk to add the concept of reproduction (Fig 50 a, b, c & d). As I learned more about hybridity, I could see it more comprehensively and found that it is not limited to a few phenomenon or materials, but it binds all elements of life together. Therefore, I decided to display the concept of hybridity via multiple-elements figures instead of binary ones. So the new figures created from the hybridization of binary and triple combinations represent an account of hybridity rather than directly referring to it. The way these combinations were linked expresses my inner insight regarding the concept of hybridity.



Prior to the creation of other episodes, many binary or triple hybrids were created. For example, to show the human-animal hybrid, a woman's head adapted from a Baluch carpet was combined with a mythical creature's body extracted from a soumak (Fig 51a). In another hybrid, a human's head was hybridized with gear, a medallion full of sperms and eggs, and the root of a tree to portray the human-technology-nature hybrid (Fig 51b). The top right part of the kilim shows the result of these two figures' hybridization with a Bakhtiari tree and a lion which are adapted from a Baluch carpet (Fig 51c). They have been linked freely and present new meanings concerning hybridity.

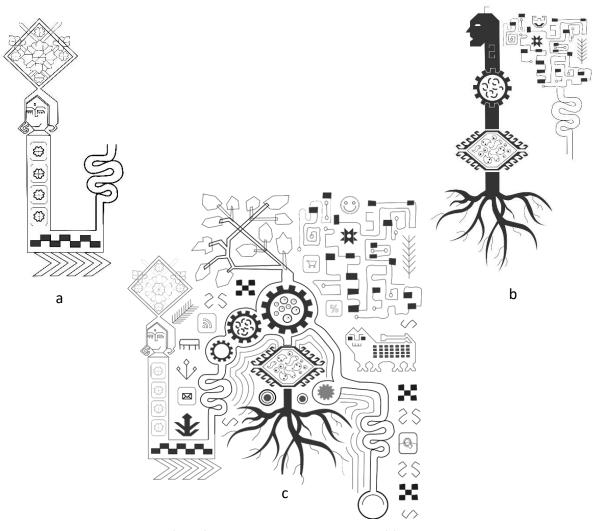


Fig. 51: (a & b) Initial binary and triple designs; (c) multiple hybrids resulting from linking designs a & b.

Low Poly Mesh: Two Episodes were created as described above, and now they had to be connected cohesively. I filled the empty spaces between them with triangles made by the low poly technique (Fig 31b, turquoise part). As these triangles are expandable, they can easily link several figures or go beyond the limits of the form they create and produce another form on another side. The triangles made this way are like the pieces of a puzzle that form the components of the elements and species. Moreover, as they are the same in all forms that they create, they indicate the unity of all species' components. For instance, in figure 52a, the low poly technique has been used to illustrate the human-animal hybridity and connectivity. The triangles forming a baby's body have crossed her body's border and shaped the tree's trunk. This conversion or connectivity is also visible in figures 52b and 52c. Although these figures were not exactly used in the final design, each of them is independently seen in parts of the final design. Placed within the space between episodes 1 and 2, these triangles suggested the cobwebs that connect things and phenomena together. Therefore, Spiderman that is also a modern hybrid, was added to this network (Fig 31b, turquoise part).

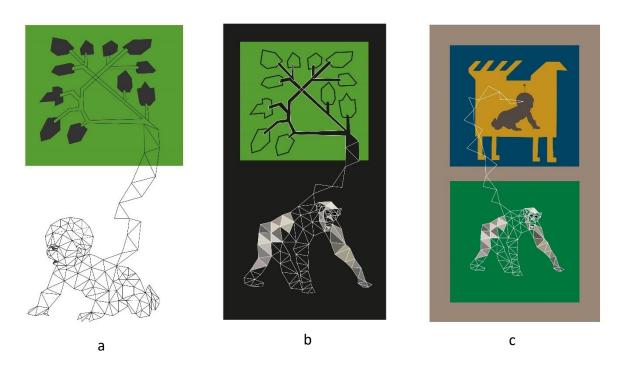


Fig. 52: (a to c) Low poly mesh exhibits human-plant and animal-plant and human-animal hybridity.

The low poly technique has also been used to display cultural power or soft power. This eagle is made of a mixture of many triangles (Fig 53). Each triangle bears the label of a company, product, app, restaurant chain, store, or TV channel. In this part of the kilim, the eagle, historically a symbol of power, attacks a dragon that symbolizes another economic and political power (Fig 31b, white part).



Fig. 53: An eagle on the final kilim, designed by low poly technique to represent the concept of power.

Conchita Wurst: Because of the relationship between hybridity and post-humanism, the figure of Conchita Wurst was selected as a hybrid of human-nature-technology and male-female. In this kilim, Conchita Wurst's figure was created from the combination of his/her two pictures released in 2014 (Figs 54 & 55). The first photo shows Conchita with raising hands that correspond to the song's name that won the Eurovision Contest 2014, "Rise Like a Phoenix". In the second picture, Conchita is standing on the stairs in a white dress, wearing antlers. The animal character represented in him/her through these horns supplement Conchita's identity as a post-human. Most of the concepts discussed in this thesis are summarized in this figure, giving it a special place in the final design. Its horns symbolize nature, its body is a combination of female and male, and there is a QR code globe between its horns that is a symbol of her/his digital identity in the age of communication and technology. He/she has also been surrounded by spirals and the DNA chains (Fig 31b, pink part). Prior to its inclusion in the final composition, many designs of his/her figures were made, some of which acted as a guide on how to include Conchita in the final design. In figure 56, we see Conchita standing on a narrow line at the

centre, surrounded by a baby, spider, heart, chemical bonds, google chrome ball, two gorillas and a chimpanzee, a tree, earth globe, a pig's head, the male-female sign, and the gears containing bacteria and viruses. These figures and signs are connected to each other through narrow lines. Conchita, standing at the centre, seems to be the result of all its surrounding concepts. These concepts include the main keywords of this thesis, i.e., the human, nature, and technology. While this is a preliminary design, it has some connections with the final kilim (Fig 31b, pink part). The centrality of Conchita and the surrounding chimpanzee, the tree, the baby, the google chrome ball, and the gears containing male/female symbols are connected to this initial design.

Inspired by a Baluch carpet, Conchita is designed as a stylized figure in other works (Fig 57). Figure 58 shows how new human-nature and nature-technology hybrids are created based on the Baluch figure and mythical creatures as sources of inspiration. Although Conchita was finally omitted from this figure, the composition of the tree, the ear, and the Baluch figure was retained in the final design (Figs 59 & Fig 31b, cream part). This tree displays the hybridity of human and nature.



Fig. 54: Conchita Wurst performing at 2014 Eurovision contest, Daylimail .



Fig. 55: Conchita Wurst in white dress and antlers on head, Daylimail.

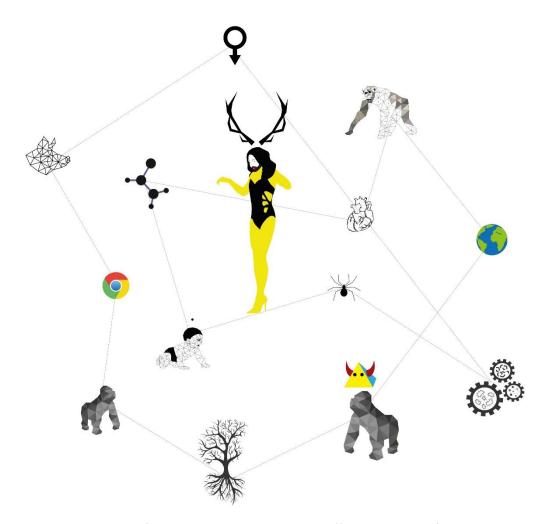


Fig. 56: Initial design of Conchita Wurst, surrounded by different elements of nature, technology, and gender.



Fig. 57: Stylized figure of Conchita Wurst portrayed on a Baluch rug.

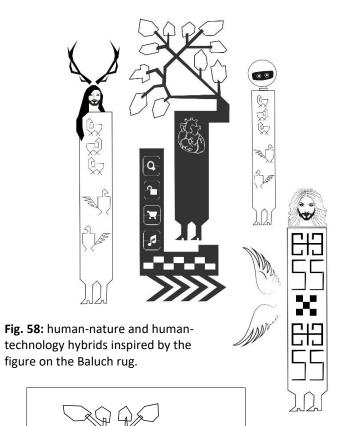


Fig. 59: Hybridity of human and nature, displayed on the final kilim.

DNA Chain: The DNA chain, with Conchita standing at its intersection, appeared in a stylized form in a mythical creature's figure before moving curvedly at the bottom of the kilim. In this figure, DNAs have been considered a bridge between human and animal, each placed on a separate tile (Fig 60a). Ultimately, it was decided that the DNAs spread more freely across the work and that their empty spaces be filled with random motifs from Persian kilims and communication and reproduction signs (Fig 60b and 31b, pink part). Here, the DNAs are considered as a bridge between all species, i.e., humans, animals, and plants. The technology symbols seen in some DNA circles indicate that technology has entered the domain of DNA. The spiral form of DNA is inspired by Arabesque in Persian carpets.

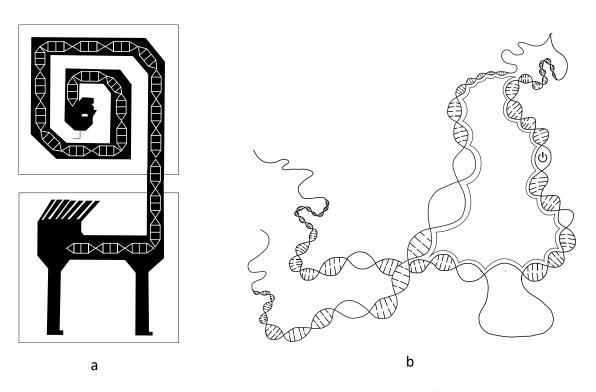


Fig. 60: (a) DNA chain connecting human to animal; (b) DNA string in curved form, inspired by Persian traditional design.

Chapter 5

SYMBOLS, SIGNS and NOTIONS

Symbols have always been used in arts, and it could be argued that any artistic or literary work could be interpreted symbolically in any period. According to Tillich (1964), the creation of a work of art is the creation of a symbol: "Every symbol opens up a level of reality for which non-symbolic speaking is inadequate. Let us interpret this, or explain this, in terms of artistic symbols. The more we try to enter into the meaning of symbols, the more we become aware that it is a function of art to open up levels of reality in poetry, in visual art, and in music, levels of reality are opened up which can be opened up in no other way. Now if this is the function of art, then certainly artistic creations have symbolic character" (Tillich 1959, p. 56-57).

A symbol is primarily a reflection of an idea or thought that forms the basis of any work of art or literature. However, the formation of symbols is not a conscious process; it is first produced within the unconscious and is then exported consciously. People add not only new interpretations to symbols but also create personal symbols which show their perception of the world around them. This is what Clift (1992) calls a "core image" and believes that it can be used in psychoanalysis (p. 16-17). Feinstein (1982) claims that "the symbol-making function is one of man's primary activities . . . it is the fundamental process of his mind and goes on all the time" (p. 45). Creating symbols is related to people's inner psychological and mental world. Therefore, art can be considered a sub-category of symbolizing.

Using symbols for self-expression requires the artist to find a relationship between the intended concept and image while inviting the viewer to communication and meaning creation. By making personal symbols from concepts, artists "objectify subjective reality, feelings, and affects by giving them concrete form, making them conceivable and understandable emotionally as well as intellectually" (Anderson & Milbrandt 2005, p. 48). However, making a connection between the content and the form to create a symbol in an artistic work is not an easy task. The artist needs to consider his thoughts, emotions, and values concerning different issues in the context of the collective beliefs and ideals and create an appropriate form with regard to the intended idea by artistic inquiry so that, as Jaffe (1964) puts it, he can be "the instrument and spokesman of the spirit of his age" (p. 285).

In this kilim, symbols and signs play an essential role in conveying concepts. Although the entire design is an interconnected and integrated set, I attempted to include figures combined from motifs, signs, and symbols that individually represent hybridity in the modern world. As mentioned before, each image in this kilim is a symbol of human, nature, technology, power, or gender. These images include conventional symbols that evoke common meanings, motifs adapted from oriental rugs and kilims, or familiar images of stylized environmental elements.

I merged all these familiar images, symbols, and motifs in a way that the final figures and hybrids reflect my personal perception of hybridity. Thus, the final design is an interface between common concepts and personal impressions, which helps concurrently perceive the concept of hybridity both collectively and individually. For example, a gear could symbolize technology, industry, and cooperation. However, when combined with a tree or when bacteria and viruses are placed inside it, the gear offers new dynamic concepts that could be interpreted differently by each viewer. To discuss the implied meanings of the design, I have divided it into several parts that would be elaborated as follows.

Part 1: Reproduction

The first episode of this design, located on the upper right-hand side, shows a tree containing three gears and a diamond full of sperms and egg cells (Fig 31b, turquoise part). There are some pipes on both sides of this tree that end in a man and a woman. In designing this figure, I have tried to illustrate a lively and dynamic set that is based on reproduction. The woman and the man send their sperms and eggs towards these gears without having direct sexual contact, and fertilization occurs inside the gears and the diamond space under the gears instead of the woman's womb.

This figure refers to the fertilization of the reproductive cells of a woman and a man outside their bodies. This process has been made possible with the help of technology and is a salient example of the integration of human with technology which has assumed new forms in recent years. In this method called IVF, the egg cells are fertilized by sperms in a laboratory setting. This method has mostly been used by infertile and homosexual couples. However, with the advent of new methods for filtering diseases known as PGD, it seems that IVF would be used more extensively⁴⁸.

In an interview with Telegraph in 2014, Professor Carl Djerassi, an Austrian-American chemist and author who is one of the main producers of contraceptive pills, said that in the future, couples would give their sperms and eggs to sperm banks and will render themselves infertile voluntarily. He added that by 2050, most women and men would have sex only for pleasure, and reproduction would be done through IVF (Knapton 2014). On the other hand, scientists are trying to replace the natural human womb with an artificial one to prevent the death of immature infants (Partridge 2017).

Therefore, if IVF develops with the same speed and artificial wombs develop in parallel to natural wombs, we would mix with technology even more than before for fertilization and having healthy children. It is as if an organ of our body exists outside the body. Is it not the

⁴⁸ In this method, the embryo is genetically tested and, if it is free from genetic diseases, it is implanted inside the womb (HFEA 2020).

same as breaking the boundaries and hybridization with something outside the body? This is the definition of the future human proposed by post-humanism: a creature who does not have specific boundaries and constantly exchanges and mixes with the environment.

On the right, there is the figure of a pregnant man whose head seems to be inside a test tube (Fig 31b, turquoise part). This silhouette belongs to Thomas Beatie (Fig 61), the first transgender man who was impregnated in 2007 with artificial insemination. While retaining his reproductive organs, he was able to have a child by suspending his testosterone hormone treatment and receiving a donated sperm. As a transman, he lives legally and socially with the body and identity of a man but can access the physiology of both sexes. He does not regard the desire to have a child as a feminine desire and believes that reproduction should exit the female body's ownership and become public (Pillai 2019). Some⁴⁹ argue that Beatie's masculinity is more social than biological, and his image as a pregnant man is more the product of the media and television than the truth.

However, considering the advancement of science and technology in sex change, is it a far-fetched conjecture that many sexual boundaries between men and women will be removed culturally, biologically, and physically over time? If reproductive organs such as the womb are not restricted to women and technology provides men with the ability to bear a child, how much will men and women approach each other sexually? This is a question whose answer would only be found over time. Tom's figure in this kilim has been used as a symbol of male-female hybridity. Moreover, the relationship between this figure and the gears which are made through the pipes shows the extent to which this gender hybridization depends on technology.

_

⁴⁹ see Verlinden, J 2012, *Transgender Bodies and Male Pregnancy: The Ethics of Radical Self-Refashioning*.



Fig. 61: A photograph of Thomas Beatie, world's first pregnant transgender man (2008), L-FRII.

At the other end of the pipe on the left, there is a hybrid woman composed of a mythical animal's body and a woman's head with a cover and ancient eastern ornaments (Fig 31b, turquoise part). Her figure is in contrast with that of the man. The woman is abstract and subjective, but the man is concrete and actual. The woman belongs to the past, but the man belongs to the present. The woman is covered, but the man is naked. The woman based on her clothes is Eastern, but the man based on his nudity⁵⁰ is Western. Despite all these contrasts, they are connected by the pipes and gears and are in a constant relationship. Their sperms and eggs are mixed inside the gears and create the next generation; one does not know whether this generation will grow inside a woman's womb or in an artificial womb in a laboratory. The mixing of these two figures' sperms and egg cells is like the interweaving of reality and illusion, objectivity and subjectivity, or warp and weft in textile, as discussed in Chapter 3. They are also a symbol of the West and East's cultural and biological hybridity, a hybridization that has been facilitated with the help of technology.

A web at the bottom of the figure connects it to the following figure, originating from the well-known Spiderman of American fiction and Hollywood movies and animations (Fig 31b,

⁵⁰ Many figures in Greek and Roman art are naked, sometimes giving them heroic features. See Hallett, Ch 2005, *The Roman Nude: Heroic Portrait Statuary 200 BC - AD 300*, Oxford University Press.

turquoise part). Here, the figure's hybrid aspect is noted; a modern hybrid that can simultaneously be a man and a spider. Similar fictional superheroes are Batman and cyborg⁵¹, the latter being directly related to the post-humanistic philosophy. Contemporary superheroes can be considered the equivalent of mythical figures such as Minotaur (the hybrid of a human and a bull), Heracles (a demigod, the mixture of a human being and a god), and Hanuman (the mixture of a human being and a monkey) that have assumed new forms in the present era due to social and cultural changes. An interesting point to consider regarding the past and present superheroes is their hybrid nature. Such a hybridization with animals, gods, or technology indicates that human beings have always regarded hybridity as a tool for achieving superhuman power, and this belief has remained unchanged over time.

Here, Spiderman is connected to a man on one side and to some spiders on the other. He is placed somewhere between these threads and is connected to them to emphasize the "inbetween space". There are some heads with unknown identities that are trapped in Spiderman's webs. They are vague, indistinct, and undefined, with no specific character, somehow showing the status of contemporary human in the transition period: "The concept of hybridity thus allows us to find an in-between space, where the ambiguous and undecided aspects of identities become visible and where the process of creating and stabilizing dichotomies is still at work" (Bhabha 1994, p. 47).

⁵¹ Haraway wrote his manifesto in 1985 based on cyborg. In this manifesto, he criticizes the rigid boundaries drawn between human, animal, and machine. See Haraway, D 1991, *A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century*, Routledge, New York, pp.149-181.

Part 2: The Tree of Life

In this figure, the tree has been designed considerably large and conspicuous (Fig 31b, green part). The tree pattern has been repeated in some other parts of this kilim. These trees have been adapted from Iranian kilims and carpets. Trees, groves, and forests have always been sacred for primitive human beings, and their roots and branches have represented the connection between the Earth and the sky (Green 1994). Moreover, trees have a special place in Iranian culture and arts, and I have used the images of holy Iranian trees whenever I intended to use a symbol of nature. According to ancient Iranian manuscripts, Simorgh⁵² lives on the All-seeds Tree that contains all plants' seeds, out of which all kinds of plants grow (Zabeti Jahromi 2010, p. 239). In the myth of Gilgamesh, the protagonist has to find the Tree of Life to have eternal life. A symmetrical tree surrounded on both sides by two monks or two mythical creatures symbolizes the Tree of Life in Iranian and Mesopotamian art (Fig 62). The Tree of Life connects various forms of life: The tree [of life] is planted at the centre of the world and is protected by supernatural guardians. It is the source of terrestrial fertility and life. Human life is descended from it; its fruit confers everlasting life; and if it were cut down, all fecundity would cease (Britannica 2020, World tree entry).



Fig. 62: The image of two animals guarding tree of life (Opie, 1992, 145).

⁵² Simorgh is a fabulous, mythical bird in Iranian and literature (Schmidt 2020).

The tree displayed here has been inspired by the Tree of Life, which is rooted in human lungs and refers to human-plants hybridity (Fig 31b, green part). On the trunk of the tree, there exists a diamond that contains sperms and egg cells similar to the previous one. This diamond, along with its sperms and eggs, has been inspired by the tree of *Hameh Tokhmeh*⁵³ (all-seeds) in Iranian mythology that contains the seeds of all plants (Zabeti Jahromi 2010, p. 239). however, in this figure, the diamond symbolizes a container containing all creatures' seeds, including plants, animals, and humans. Two wombs that are stuck out of the trunk contain a human fetus and a pig fetus.

The attachment of humans, plants, and animals in this figure represents the life cycle on Earth and the fact that human beings are not detached from the rest of the species, and all forms of life are connected in a chain-like manner. There is also a gear in this cycle that is in symbiosis with the other species, i.e., plants, humans, and animals. The bacteria inside the gear are shared in all three forms of life. These bacteria are placed inside the gear to show the dependence of contemporary human on technology and the fact that humans have been able to discover the bacteria and viruses inside their own body and that of other species via technology and know their close ties with other forms of life on Earth. This gear also symbolizes cooperation and integration between different Earth species, stressing that different species can survive only by connection and continuity.

Electrical circuits surrounding these two fetuses indicate the extension of the information age. The circuits have reached the outside wall of the womb and may even find their way inside it in the near future. The eye between the circuits has been inspired by an ancient belief called the evil eye⁵⁴, according to which a malevolent glare coming from an evil person can cause misfortune or damage to a person. Weavers in Iran, Azerbaijan, and Turkey use eye-like images on kilims, carpets, and other handicrafts to protect themselves from the evil eye (Fig 63). In this

_

⁵³ The "hameh tokhmeh tree" (all-seed) grew on the earth for the first time, and then, two birds took all its seeds around the world to scatter them so that gardens and farms come into existence. This way, a celebration was held to praise God for creation of plants (Bundahishn 1880).

⁵⁴ Evil eye, glance believed to have the ability to cause injury or death to those on whom it falls; pregnant women, children, and animals are thought to be particularly susceptible (*Britannica 2020*, Evil eye entry).

kilim, I used eyes in different parts as an ancient motif that has lost its old meaning and gained new meanings in a new context.

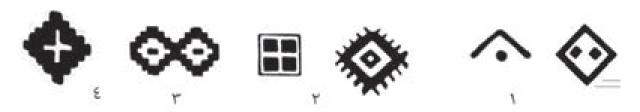


Fig. 63: Eye motifs woven in Turkish kilims and carpets to ward off the evil eye. These eyes are abstract and are usually depicted as a dot inside a diamond, (ATES, 1997).

In an essay entitled The Missing and the Mutilated Eye in Contemporary Art, Gerald Eager (1961) writes: "Physiologically the eye has a double purpose: it looks and sees. This double purpose is reflected in art ... A "seer" is a prophet, one who has divine insight. The eye then is both a sending and receiving agent. The sending power of the eye can be passive or active. It can be used simply to examine, or it can be used to influence" (p. 49). In works of art, glaring eyes focusing on a particular point are effective ones. They actively emit their power and dominate the recipient. In these works, eyes are often placed in the centre and are separated from their surroundings by distinctive lines. They are larger than the normal size and directly gaze at the viewer. Eager mentions the 12-century Spanish frescoes in which Jesus' eyes are placed in the centre of the image and are evidently independent of the head and the rest of the body (Fig 64). The lines around the eyes are thick, and the white of the eyes is larger than the typical size. These specifications have turned Jesus' eyes into two dominant eyes on the viewers, effectively gazing into their eyes (p. 53)



Fig. 64: Apse Fresco Painting of Christ from the Church of Esterri de Cardos, 12^t century, (Eager 1961, p. 53).

The eyes seen on the left and right circuit boards of the kilim are somehow placed in the centre: one under the lungs along the tree trunk axis and the other at the centre of the electrical circuit board (Fig 65 and 31a). Based on the characteristics proposed by Eager about eyes in works of art, these eyes could be classified as active and influential. Their design is simple: two crescent-shaped lines are connected to each other to keep a black circle in the middle. What gives them meaning and distinguishes them from Jesus' eyes is a gleam in the eye which changes them from dominating eyes into mysterious ones. A gleam in the eye indicates knowledge of a secret (Cambridge Dictionary 2020, a gleam in eye entry). Being placed in between the circuit boards, the eyes grab the viewers' attention at first but then allow them to examine the eyes' surroundings and discover their secret based on the context. With their surrounding circuits, these two powerful eyes act as the eyes of a superhuman who speaks of the future.

Nevertheless, their prediction power does not come from metaphysics; instead, it is science and technology that give them power and knowledge. Like the eyes woven in Iranian kilims, they can break any magic or spell. They attract our attention towards the present's physical reality or materiality by breaking the past's magic, spell, or spirituality.

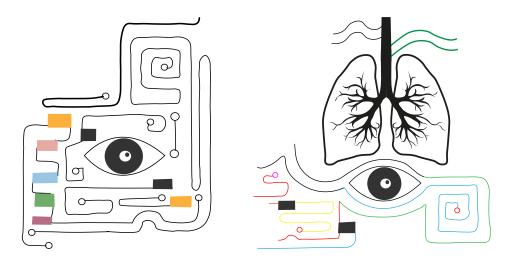


Fig. 65: Eyes among the electrical circuits, parts of the final kilim design.

The inanimate electrical circuits around the eye on the right are connected to semi-animate curves that are convoluted and layered like the fallopian tube and internal organs (Fig 31b, green part). The figure sought to remove the boundary between the animate and inanimate concepts to reflect the words of Hyles (1999): Industrial societies are experiencing a new phase of humanity in which there is no difference between "bodily existence and computer simulation" (Hayles 2008, p. 3).

Among these convoluted tubes, there are some nazars⁵⁵ included to accompany the eye below the lung. These tubes reach a winged woman's figure on the left that could be an angel because of its wings. Angels are inherently hybrid, a hybrid of human beings and birds. In Abrahamic religions, angels are innocent creatures that connect God to human beings or the heavens to Earth. In visual arts, angels are usually visualized as winged creatures. In other words, to create a supernatural being with powers beyond those of human beings, artists have combined the human figure with the wings of birds, as birds were traditionally the only creature that could fly and access a space inaccessible to humans: "Scholastic theologians teach that angels are able to reason instantly and to move instantly. They also teach that angels are intermediaries to some forces that would otherwise be natural forces of the universe, such as the rotation of planets

⁵⁵ Nazar is an eye-like symbol which is believed protect its possessor from evil eye.

and the motion of stars. Angels possess the beatific vision, or the unencumbered understanding of God" (ReligionFacts 2016). Most of these features are related to high-speed flight and access to the skies, a feature that used to be the monopoly of birds. As mentioned in Chapter 1, human beings used parts of the animal body to own unique features outside the realm of human capabilities. This figure can reflect the studies in Chapter 1 of this thesis that mainly discussed concepts regarding the hybridization of human and animal in ancient cultures.

However, it seems that something prevents this figure from being an angel and makes it terrestrial. This could be the colour of her face's skin that makes one wonder whether she is an angel or just a black woman because angles are white always⁵⁶. This figure with a white-winged body and coloured face leaves the viewer in uncertainty. Is it an angel or a human being? Is it white or black?

This figure indicates racial and cultural hybridity that has happened throughout human life. However, in different historical periods, especially in the 19th century when the colonialist ideas were raised, this kind of hybridity was deemed negative. Nevertheless, from the late 20th century and with the development of post-colonial studies and increased awareness of global cultural flows and interdependences, a new view that regarded hybridity not as a "badge of failure or denigration, but as a part of the weave of cultures" was formed (Mudrooroo 1990, p. 24).

Bhabha argues that these colonial – and postcolonial – cultural systems and statements are constructed in a "liminal space": the "Third Space of Enunciation". His argument aims to deconstruct the colonizers' (and more generally Western and modern) essentialist claims of culture's inherent purity (mentioned by Sayegh 2008). Therefore, it could be said that this figure tries to represent such a "third space" according to Homi Bhabha's definition: that space

attended a Catholic primary school. When I began going to church, God was white, and the Devil was black. This changed with time but not completely. The angels of God are still white to this day, we do not have black angels

yet" (Wieser 2019).

⁵⁶ Generally white is a metaphor for all good things and black is the opposite. Mozambican writer Paulina Chiziane says in a 2019 interview, "These are the four images that my contemporaries and older people are familiar with. I

where oppressed and oppressor are able to come together, free (maybe only momentarily) of oppression itself, embodied in their particularity (Bhabha 1994).

Part 3: Dual Identity

In this part, the figure of Conchita Wurst has been placed at the centre (Fig 31b, pink part). Thomas Neuwirth is a gay Austrian singer who gained fame in 2014 with the title Conchita Wurst and won the Eurovision Song Contest⁵⁷ with "Rise Like a Phoenix". What mostly gained the media and the public attention was the contrast between her bearded face and her feminine attire and make-up that made her known as the Bearded Lady. Conchita has the conventional features of a woman: long hair and eyelashes and red lips that are in sharp contrast to her masculinity and bearded face. This contrast poses problems for defining her face as feminine or masculine and keeps the viewer in uncertainty. This dual identity he/she has in his/her body as a man and a woman with no specific boundary is close to the post-humanistic definition of gender. For instance, in her A Cyborg Manifesto, Donna Haraway invites everyone to liberation from gender limitations (Haraway 1980). Thus, one can regard Conchita as the media manifestation of post-humanism. The popularity of Eurovision and Conchita's championship in the contest with the majority of votes could indicate global public acceptance, tolerance, and understanding of ambiguous and inexact concepts of the post-structuralist posthuman world. As Manea (2018) puts it, "The meaning of this TV event and its large audience for the posthumanist debate is that we seem to be getting more and more tolerant towards marginal or seemingly abnormal forms of humanity".

Two photos taken of Conchita Wurst in 2014 were combined to create her figure in this kilim design (Figs 54 & 55). Here, Conchita looks ascending with her/his arms raised, which is compatible with her 2014 Eurovision-winning song, i.e., *Rise Like a Phoenix*. Phoenix is a mythical bird with a long life. When its death approaches, it goes to the nest, burns in a fire of collected aromatics, and another phoenix rises from the ashes (Van den Broek 1972, p. 11). It

⁵⁷ The Eurovision Song Contest is organized yearly by the European Broadcasting Union (EBU), together with the Host Broadcaster and some 40 Participating Broadcasters (Eurovision 2020).

seems the lyrics of this song have been inspired by this ancient myth, especially in the following lines:

Rise like a phoenix

Out of the ashes

Seeking rather than vengeance

Retribution

You were warned

Once I'm transformed

Once I'm reborn

You know I will rise like a phoenix

But you're my flame (EUROVSIONWORLD 2014)

In the general sense of the term, to "rise from the ashes" means "to emerge renewed, revitalized, or reborn as something different following some total destruction or ruin" (Farlex Dictionary of Idioms 2020, rise from the ashes entry), which may imply that this new creature born from the ashes is more powerful than before. Tom writes in a letter to Conchita: "You'll open up a new reality to an insecure young boy and empower him to lead a life in which he can be what he wants to be and be who he really is" (Wurst 2016). It seems that, in this song, Conchita has been likened to a phoenix that rises from Tom's ashes. Tom has become more powerful in his new skin, that is Conchita, and freely reveals his sexual identity. However, Tom is not completely destroyed, and his beard would remain as his symbol on Conchita's face. She keeps Tom as a "further ego" so that, according to her, they can "endure each other's company for a good while" (Wurst 2016). The lyrics of this song and Tom's make-up and attire in this contest show that he intends to challenge the boundaries and classifications of gender identity. In this song, the phoenix symbolizes crossing the boundaries, not the boundary of life and

death, but the boundary of gender norms, to define a new identity that can simultaneously contain female and male sexual stereotypes.

Moreover, Conchita has two antlers on her head that have been inspired by her photograph on the steps (Fig 55) In nature, antlers usually belong to the male, giving male stags a defensive tool and a sexual attraction (Hall 2005, p. 103). Therefore, it could be argued that antlers accompany the beard in this figure to complete Conchita's masculinity, but they also have a symbolic aspect. Like the phoenix, antlers are part of the life and death cycles. Every year they are shed, and new antlers grow in their place. Like a phoenix, they represent the concept of regeneration and rebirth and, here, this means the birth of a new gender from the previous one. Here, antlers are placed on Conchita's head like a gold tiara to complete this ascending figure's supernatural aspect. The antlers serve as bridging the heavens to the earth and give Conchita an extra-terrestrial quality. Spirals surrounding the figure also have a growing and evolutionary quality.

There are some DNA strands around the spirals, in the middle of which Conchita stands. The DNAs originate from the end of a spider's body, exiting its body like webs and reaching the trilobites on the left. These DNA strands, which connect different forms of life from the past to the present, together with the tree and the chimpanzee who gazes at Conchita, demonstrate the evolutionary process of life on Earth, indicating dependence, and connectedness of different forms of life that have reached Conchita in a process that took millions of years. Furthermore, Conchita who stands in the middle suggests the current status of human beings. Inside the DNA strands, icons of download, lock, upload, power on/off button, and gears could be seen, indicating the gene delivery⁵⁸ of living creatures discussed in Chapter 2, and how technology enters the boundaries of nature and creates a new generation of human beings, plants, and animals. Moreover, the child in one loop of the DNA shows future generations who will probably experience this genetic delivery.

_

⁵⁸ Gene delivery is a process by which foreign DNA is transferred to host cells for applications such as genetic research or gene therapy. Gene delivery methods can be mechanical, chemical or biological (Nature 2020).

Part 4: Life Circle

Similar to Part 1, in this part, some figures and organs are combined whose driving force is three gears located at the centre (Fig 31b, cream part). The line surrounding this hybrid figure is not entirely closed. It opens to the environment and mixes with it in different parts, including the womb, the horse's legs, and the circuit board. The horse's head and legs on the left and the rear half of the mythical creature's body on the right are inspired by local Iranian handwoven rugs.

These components demonstrate an essential part of nature, i.e., animals, which have traditionally been a source of power and life for human beings who have used them in one way or another for their survival. They also help humans know themselves better because, as mentioned at the beginning of Chapter 1, they symbolize the animal part of human beings that has been forgotten or neglected in the labyrinth of civilization. Animals have profound and fundamental similarities to human beings. Bacteria and viruses which are shown inside the gear, including the Coronavirus⁵⁹ (that showed how vastly and amazingly humans may be affected by animals) are shared by human beings and animals.

As a symbol of science, technology, and industry, gear is repeated in different parts of this kilim. It has also been utilized as a symbol of cohesion, cooperation, and unity that suggest the reasons behind the continuity of life on Earth. The gears are placed inside the hybrid creatures and end in a living creature, such as a plant, animal, or human being, on each side. These gears serve as the driving force for these creatures. Here, gears replace flesh or vessel organs, acting as the centre of these hybrid creatures, providing the necessities of life, connecting them to each other, and setting them in motion. In real life, gears are parts of a piece of machinery that set it in motion Imperceptibly. They are placed under the external skin of the machinery and what we see is the result of their work, that is, motion. Therefore, gears can symbolize the interiors of any dynamic creature and show its mechanism.

_

⁵⁹ Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. This virus has zoonotic origin and closely related to several bat coronaviruses (Perlman 2020, p. 760–762).

This design seeks to represent the underlying layer of the life circle and show how different forms of life are interconnected and cohesive, neither of which can survive without the others, while their external skin shows them as distinctive and independent. Gears are the most dynamic symbols in this design, inculcating a sense of rotation in the viewer. They symbolize anything that spins, including the Earth that orbits around the Sun, electrons that revolve around the nucleus, or blood that circulates within the human heart⁶⁰. Gears in this kilim remind us that any part belongs to a whole and cannot live without connection to and harmony with the whole.

In the upper part of this figure, a monkey fetus has been placed inside a womb which is connected to the electrical circuits on one side and the gears on the bottom. Here, the emphasis is again on the fact that the future generations of animals and humans would be surrounded by waves, information, and in general, technology. The womb lines on the right are open, indicating the opening of natural elements' boundaries to artificial elements. A man's head, inspired by old Iranian carpets, is seen between electrical circuits. He is gazing at the mythical face of the woman on the right. Above his head, icons of *add as friend* and *search* are placed, showing his desire to become acquainted with her.

Generally, this head and its surrounding icons seek to show the nature of relationships in the information and communication age and illustrate how technology and modern device can transform the creation and expression of friendship and love. The man and the woman possess old faces and clothes as if they belong to the past but communicate with each other at present through the cyberspace provided by the Internet. The figure of this head and the icons above it ironically display the hybridization of the real and the virtual, made possible by technology, especially the Internet. The head and the icons refer to the fact that the Internet and the World Wide Web are no longer mere tools, but they direct or alter the most profound human feelings such as love, hate, curiosity, and pleasure.

-

⁶⁰ It seems there is a pattern of rotation in many phenomena in the universe. It is even said that *Sama* dance, which is based on rotation, is an attempt to harmonize with the world. Attila Osman Baran, the head of the Rumi Mevlevi ensemble says, "The dance's movements seek to unite humans with nature, rotation is so important to nature and so to worship, we use this rotating dance" (Jones 2007).

Parts 5 and 6: Hybridity and Power

White part shows an eagle composed of dozens of pieces, on each of which the logo of an economic product, a news agency, or a cultural event is imprinted (Fig 31b). This eagle is attacking a dragon whose body is covered by electronic circuits who is also attacking the eagle. While the eagle displays its cultural power, the dragon shows off its technological power. The figure of the fighting eagle and dragon was designed when the only hypothesis of this thesis was that the hybridization of animals and human beings sought merely to achieve more power, and the images of hybrid figures of the past cultures could be interpreted only in terms of power.

While discovering other aspects of hybridity helped develop this thesis to include more factors than power alone, the relationship between hybridity and power is still significant. Therefore, Parts 5 and 6 of the final kilim (white & gray parts) were dedicated to this topic. The examples presented in chapter one showed that human beings used images of hybrid animals to communicate complex concepts at the onset of civilization, including political power. Thus, such figures could be found in abundance on the walls of palaces, centres of political power, or the attire and jewellery of kings and other influential people. To design a part inspired by the relationship between power and hybridity, the meaning of political power in today's world was also investigated so that I could illustrate the 21st-century political powers through animals' figures based on the modern definition of power.

To design these two parts, studies were conducted in this regard, some of which would be presented as follows. In new political discussions, novel terms have been raised, including hard power and soft power that parts 5 and 6 in this kilim are designed based on these concepts (Fig 31b, white & gray parts). In the following, these two terms would be briefly introduced, followed by the researcher's own viewpoint in this regard.

SOFT POWER

In the world of politics and, especially international politics, soft power refers to the ability to attract other nations and governments' cooperation without coercion. In other words, soft power shapes the interests and priorities of other nations with their own desire and consent: "this second aspect of power—which occurs when one country gets other countries to want what it wants—might be called co-optive or soft power in contrast whit the hard or command power of ordering others to do what it wants" (Nye 1990: 166). In other words, "... hard power relies on coercion, usually through military force, or inducement, usually through payment" but soft power relies on the attractiveness of one's culture and values (Lai 2012: 5).

From among the three key components of soft power suggested by Nye (2004), i.e., culture, political values, and foreign policy, cultural power is the main component. The reason is, firstly, that a country's foreign policy is not independent from its hard power (in the case of military intervention or sanction), and that the attractiveness of the style of a country's foreign policy is not adequate for achieving favourable outcomes in foreign relations.

Second, a nation's personal, social, and political values are bound together and are considered part of its culture. Therefore, they cannot be regarded as a source of power separate from culture. So, the only factor that facilitates the understanding of soft power is cultural power which will be explained below.

CULTURAL POWER AND THE ROLE OF MEDIA

In the age of Information, media is an essential subtle tool for culture transition to increase one's influence on other nations. Media can converse potential cultural resources of a nation in terms of soft power by creating attractiveness through displaying national values and interests abroad.

Many experts distinguish between high culture and popular culture. High culture refers to elites' mannerisms, beliefs, tastes, and preferences, while popular culture is a collection of thoughts, attitudes, and perspectives preferred by the mainstream population. Whereas high culture is associated with universities, operas, museums, and theatres, popular culture is

strongly tied to the mass media. Media had a significant role in the emergence of the late 20th and early 21st-century global popular culture. This mainstream, which is heavily influenced by western culture, is partly rooted in capitalist economies' commercial interests that seek broader markets in foreign countries. Hence many intellectuals criticize its crude commercialism and regard it as sheer entertainment rather than information. However, Nye argues that "The line between information and entertainment has never been as sharp as some intellectuals imagine, and it is becoming increasingly blurred in a world of mass media ...

Pictures often convey values more powerfully than words, and Hollywood is the world's greatest promoter and exporter of visual symbols (Nye 2004, p. 47)".

The role of media in creating a nation's superiority over others can be found in "cultural imperialism". In his 1976 book "Communication and Cultural Domination", Herbert Schiller proposed the term cultural imperialism to explain how large multinational corporations, including the media of developed countries, dominated developing countries (p. 3). Although the theory of cultural imperialism has been used to explain the phenomena in other fields such as education, history, literature, and sports, the main focus of the theory remained on media, with some theorists consider "cultural imperialism" synonymous with "media imperialism" (Tomlinson 1991:22). Today media is developing continuously with the rapid development of technology. It has spread all over the world, playing an essential role in modern western capitalism. As Sarikakis (2005) asserts, colonial control through the military and economic dominance diminished after the independence of the former world colonies. It was replaced by subtler tools such as media and cultural products that reproduce the domination process in today's world (p. 81).

Western media corporations succeeded in setting foot on the global frontier by establishing capitalistic hegemonic ideology. The United States influenced the world as a pioneer by creating global appeal for American lifestyle, values, and norms. Through this attraction that is mainly produced by mass media, the USA has established its global brands such as Microsoft and NIKE, gaining huge profits from selling these products. It can be said that mass media is the primary

source of wealth and power for the western countries through which they reinforce their cultural hegemony around the world, gaining political power and substantial economic profits.

HARD POWER

Political power may benefit from diverse resources, such as geography, territory, natural resources, population, and culture, but hard power comes specifically from a country's economic and military capabilities. While power generally means the ability to influence others to obtain the intended results, hard power is obtained as a "coercive power" by motivating or threatening others (Nye 2009). Today, due to the nature of political relations in the 21st century, it seems that governments are mainly investing in soft power rather than hard power.

Governments can achieve their short-term goals through military or economic power, but such achievements may not last long. On the other hand, the outcomes achieved through attraction and persuasion will have lasting effects, although obtained in the long term. In the first case, a person or group accepts changes involuntarily, but in the second case, changes occur voluntarily. Coercion leads to conflict, while voluntariness leads to satisfaction, and that is why soft power offers more permanent solutions than hard power (Nye 2009). however, researchers have recently concluded that the combination of hard and soft power, known as smart power, is the most effective strategy in today's world and that the use of each alone would not suffice (Doug 2012): "Smart power is defined as the ability to combine hard- and soft-power resources into effective strategies" (Nye 2013). Therefore, it could be argued that in the 21st century, power is moving towards hybridization of anything that counts as a source of power, leading to attraction, fear, or encouragement.

Part 6 (Fig 31b) displays this combination of power. Here, two mythical figures are facing each other as if they are fighting. The figure on the right is associated with some cultural elements such as Twitter and Yin-Yang icons that count as sources of soft power. Moreover, a lion's body is combined with a tank that is connected to a missile, showing that it is equipped with smart power. However, the left figure is just combined with sources of hard power, such as a rifle and atomic weapons. Part 6 also demonstrates a type of warfare known as hybrid warfare, in which a wide range of tools such as conventional and unconventional weapons and cyber-warfare

tools are used. Hybrid warfare weapons include cyber-attacks, interference in elections, psychological warfare, and terror (Iqbal 2018, p. 6).

The purpose of designing this section was to refer to the multiple identities of power in the 21st century. Hybrid figures designed here point to new sources of power that are partly different from the old ones. This new face of power was presented on the kilim, has similarities and differences with the ancient examples on the walls of palaces and still refers to the multiple, complex and ambiguous essences of power over the millennia.

Chapter 6

PRODUCTION OF THE FINAL KILIM

Pre-weaving Arrangements

CONVERTING THE KILIM DESIGN INTO DOTS

Pixelating and colouring are considered the first steps in preparing a Kilim design for weaving. While this was traditionally performed manually in Iran, it is typically carried out today via computer systems, using Photoshop software (Figs 66 & 67). To this end, the intended kilim design is scanned and inserted into the software environment, followed by pixelating, and colouring the intended pixels; a process called "colour and dot" in Persian, i.e., to convert lines into dots. During the weaving phase, each of such dots will be converted into knots and lines. Figure 67 shows some part of a kilim design that is being converted into dots.



Fig. 66: Dotting and colouring a carpet design by hand. Photo taken by Saba shouli.

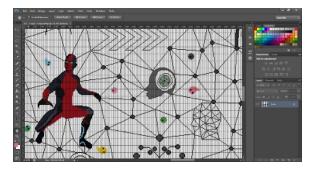


Fig. 67: Dotting and colouring a part of the final kilim design by photoshop software.

DYING THE YARNS

Following the pixelation and colouring of the kilim design, the required number of knots in the final design of the kilim or carpet is determined. For instance, it becomes clear how many red or yellow knots need to be weaved within the carpet. Once the exact number of knots is known, the amount of yarn required for different colours could easily be estimated. Figure 68 shows the sample of colours used in this kilim, the number of knots, and the amount of required yarn based on grams. The warps and wefts of this kilim are made of cotton and wool, respectively. The yarns which were used to weave the kilim was sent to the carpet dyeing company to be dyed via natural colours (Fig 69). Dyeing is one of the most important phases in the process of

carpet or kilim production which is performed through natural or artificial colours in dyeing workshops. Natural colours are of plant, animal, and mineral origin.

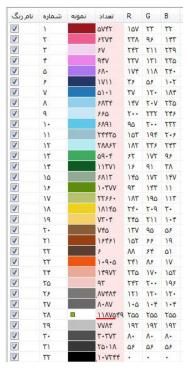


Fig. 68: The table provided by the dyeing company shows the number of knots and the amount of yarn are used for final kilim.



Fig. 69: The final kilim's dyed yarns by the natural colours.

BUILDING THE LOOM AND WARPING

While the threads were being dyed, necessary arrangements for building the loom were made. Kilim loom is usually built from wood or metal, being used both vertically and horizontally. Nomads usually use a horizontal wooden loom to weave carpets or kilims, which is easier to move and re-install. However, in today's Iranian cities, vertical metal looms are mainly used for carpet and kilim weaving, because there is no need to be moved and they are easier to weave on. For producing the final kilim, a vertical metal loom with 200 cm width and 320 cm length was ordered to be built.

To start warping, some 1124 knots were determined to be weaved on the width of the kilim, according to which the width of the loom was divided into certain parts, and the warping began with cotton threads. In Iran, the warp is usually made of cotton, and its colour is white. In some parts of Iran, especially in nomadic areas, the warp is also made of wool. However, cotton—made warps are more robust in terms of resisting tensions. During warping, one person passes the yarn's balls under and over the horizontal and vertical beams while sitting at the bottom of the loom, and another person does the same while standing at the top of the loom (Fig 70 and 71). After finishing the warping, the weaving shuffle is placed between the lower threads and the upper threads. Its function is to intensify the zigzagging of the fibres to facilitate putting the wefts.





Fig. 70: Warping the loom.

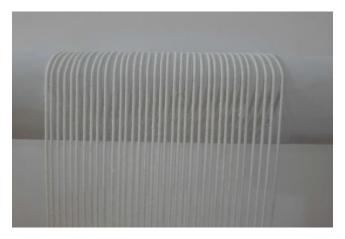


Fig. 71: Equal distances between the warps on the loom.

TOOLS

The tools used to produce this kilim are listed in the table below and a brief description is given for each one.

Polish scissors: used to shear and cut the carpet pile and extra yarns.



Table 1: Tools used for weaving the final kilim.

Comb: a tool used for beating the woven rows in kilims and carpets, with the rows getting placed on top of each other so that they are well-knitted in a unified form. In carpet weaving, the comb is also used for pounding each waft that passes through the threads when each row is woven.



Hook: The head part of this tool is used to grab the up and down threads to knit the carpet knots, and its knife-like part is used to cut the extra yarns of the knot knitted in carpets and kilims.



Needle-threader: used for passing the thread through the punch needle.

Punch needle: a tool with a metal tip to pierce the fabric, exactly like a regular needle. It also has a hole or channel through which thread runs and a handle to make holding it easier. The needle comes in different sizes to accommodate different thicknesses of embroidery threads, from thin to bulky.



Rest of table 1: Tools used for weaving the final kilim.

Weaving Techniques

Once warping is finished, the first thing to do is weft chaining, which makes the carpet or kilim become more robust and durable at the beginning and the end. To perform weft chaining, some small loops are made at the width of carpet or kilim by a long thread, which is usually woven in two rows and continues to the end like a chain (Fig 72). Then, 5cm simple kilim is woven on the chain, which is repeated at the end of the kilim the same as weft chaining.



Fig. 72: The weaver is doing weft chaining at the beginning.

To weave the main part of the kilim, the design needs to be printed and hung over the loom so that the weavers can weave the carpet or kilim according to the design. To this end, the kilim design was printed on 200 sheets of paper and glued together (Fig 73). considering the fact that the kilim is woven section by section and step by step, the design was divided into eight rolls, each of which was hung over the loom in the relevant section to be woven (Fig 74). Considering the central theme of this dissertation, i.e., hybridity, I decided, contrary to what is normal, apply a combination of methods for weaving this kilim, including soumak, knotting, plain weave and embroidery, each of which was selected based on the designs' features. In the following, each of these methods is described.

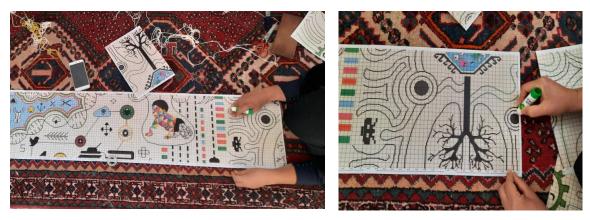


Fig. 73: The kilim design printed on the sheets and glued together.



Fig. 74: Each roll is hung over the loom and weavers weave the relevant section.

SOUMAK (SHIRIKIPICH)

In this kilim, an old method called shirikipich or soumak was used to weave some parts, as it suits figures the most and displays details very well. In older sumaks, this method was also used to weave figures of hybrid animals (Fig 1). In the soumak method, coloured threads are wrapped around the warps to create the desired pattern. This technique falls between kilim and rug, whose difference with the rug is that in the soumak, the knots' tops are not seen, but they are wrapped around the warps and taken to the back of the work and left there (Fig 75). This weaving method is more time-consuming than other methods and is more suitable for geometric and diagonal designs, and that is why the figures and angular patterns were woven in this kilim via this method. Below you can see the parts of the kilim that are woven in the soumak style (Fig 76).

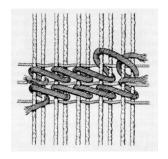


Fig. 75: In soumak technique yarns warps around the warps to create the patterns (Sherrill 1990).











Fig. 76: Parts of the final kilim woven in the soumak method.

KNOTTED-PILE CARPET

A knotted-pile carpet has a projected edge which is made by cutting the knots wrapped around the warps. This technique is described by Ittig (1990) in this way: "In pile rugs, supplementary weft yarns or "knots" (keft, gereh, gond), are wrapped around the warps between the foundation wefts, then cut; the cut ends project on the surface to form the pile and create the design. Knots are generally tied to pairs of warps".

Different knotting techniques could be found in different geographical areas. However, the two main knotting techniques are symmetrical and asymmetrical knotting, which are also known as Turkish knot and Persian knot (Fig 77). In those parts of this composite kilim woven through the knotted-pile carpet, Turkish or symmetrical knots were used. In the Turkish knot, the yarn passes through two adjacent threads, forming a tight loop around it, and then comes out of the yarns and gets tightened by the hook.

In the lower half of this kilim, there are two large blue spots woven with this technique that are more projected than the rest of the kilim. These parts, which are like a deformed medallions create visual diversity to the kilim by making non-level surfaces on the one hand and turning in to the focal point of the kilim to direct attention to the yellow figure on the other hand. (Fig 78).

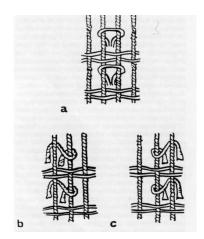


Fig. 77: Knots: (a) symmetrical knots; (b) asymmetrical knots, open right; (c) asymmetrical knots, open left. (Ittig 1990).



Fig. 78: Two blue pools in the final kilim woven by Turkish knot technique.

PLAIN WEAVE

Within the spaces of the kilim woven through the soumak or knotting techniques, a plain-weave kilim is used, over which some other designs were later woven via embroidery. This is the simplest method of engaging the warps and wefts, which is done by the successive passage of warps under and over the wefts (Fig 79). "If the warps and wefts are equally spaced and of virtually the same thickness and flexibility, the structure is called balanced plain weave" (Sherrill 1990). What follows displays some samples of the plain weave in the final kilim (Fig 80).

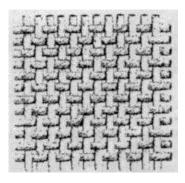


Fig. 79: Balanced plain weave. (Sherrill 1990).





Fig. 80: Plain weave technique applied in distances between the motifs and under the embroidered designs.

EMBROIDERY

Some parts of the kilim design had curved lines that were difficult or impossible to weave through the soumak method. Therefore, I decided to embroider such designs with a punch needle on the plain kilim. In this method, the weaver holds the punch needle on the kilim's surface and inserts the yarn back and forth into the kilim. As a result, a large number of loops are formed that either form lines or fill surfaces (Fig 81). It should be noted that a video projector was used to implement the designs on the kilim.



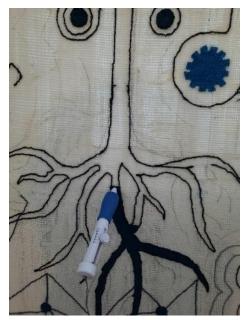
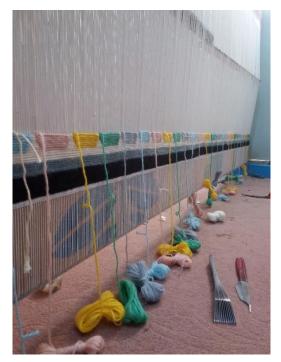


Fig. 81: Weavers are filling the motifs by punch needle.

Photo Shoot: Weaving the Final Kilim



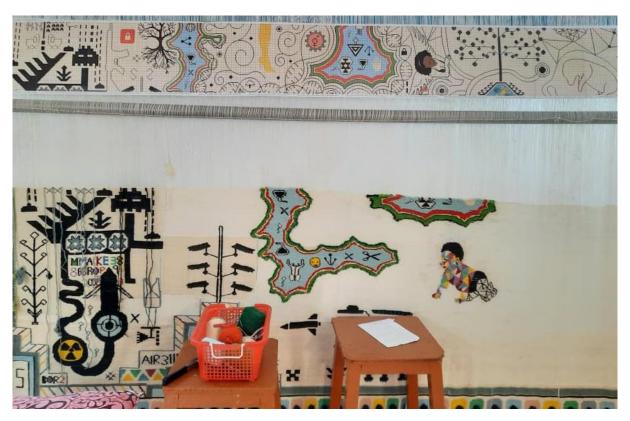
FIRST ROWS







LEFT CORNER (DOWN)









RIGHT CORNER (DOWN)

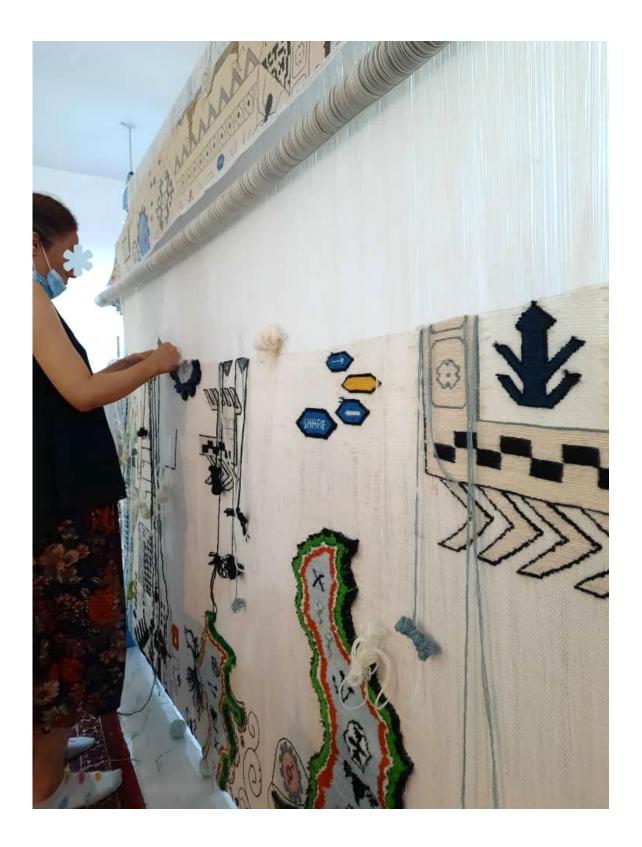








WEAVING IN KNOTTING TECHNIQUE



MIDDLE PART







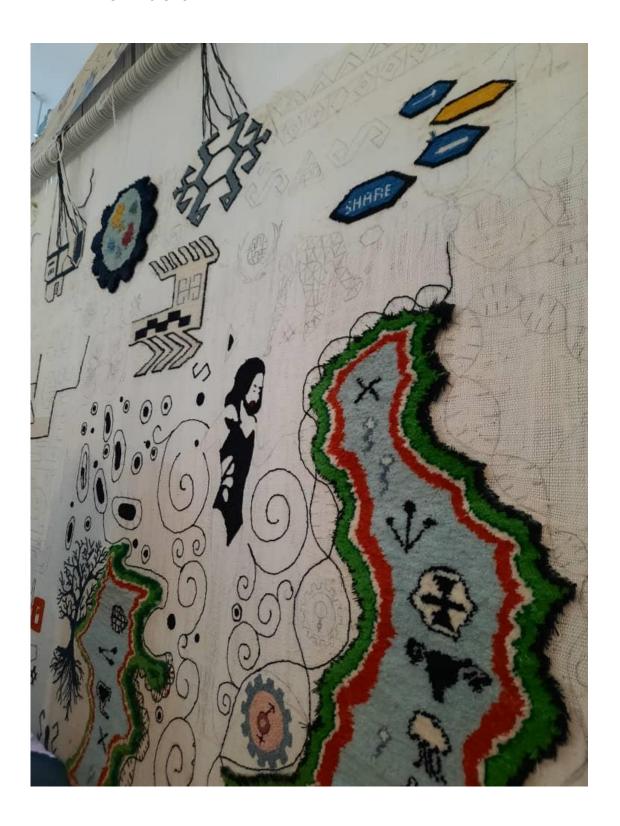




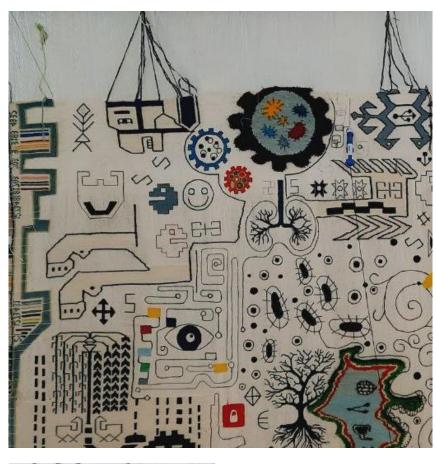




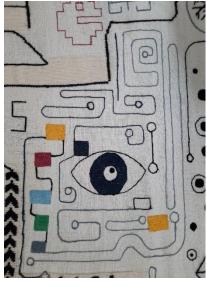
PRE-WEAVE PENCIL DESIGNS



LEFT SIDE







THE FINAL ROLL













LEFT CORNER (UP)







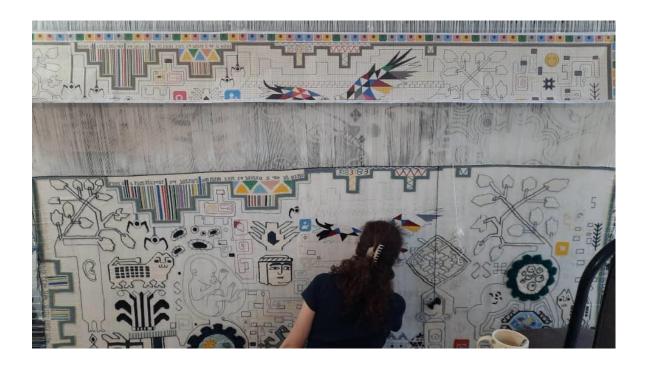




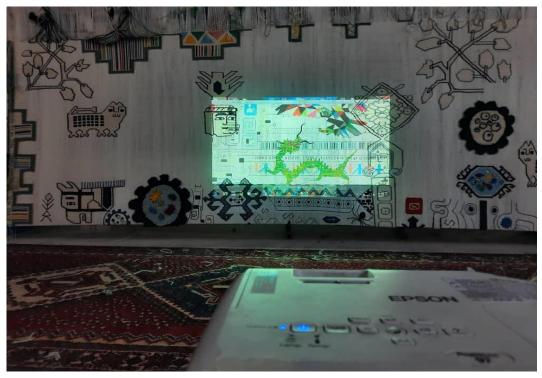




WEAVING IN EMBROIDERY TECHNIQUE



THE EAGLE AND DRAGON













CONCLUSION

Having studied cultural, artistic, and technological manifestations of hybridity in varying time intervals, this thesis found that the idea of hybridization with the surrounding environment is not limited to a specific time and culture, and it can be spotted in different periods of human's social life. In different sections of the current thesis, we read how humans employ hybridity as a means of overcoming fears, displaying power, knowing oneself, and dealing with natural hazards, while in some cases, in order to oppose it, he stands on the Peak of Anthropocentrism Mountain, singing the song of victory and conquest. However, it can be concluded from this study that humans define themselves in one way or another regarding hybridity and that they have benefitted from this idea for survival on this planet.

The first chapter of this thesis indicates how, with the emergence of urbanization and the complication of societies and human relations, hybrid figures of human and animal gradually emerged in different cultures to emphasize social classes and reflect new intricacies resulting from the new situation. Figures such as bull-man in Mesopotamia show the novel status of the newly civilized humans who live in cities, but their lives are dependent upon herding and agriculture. They merge into a cow in reliefs and, while emphasizing their human wisdom, benefit from a cow's power as a useful and sacred element in human life. We can also see that different animal parts are combined in artistic and literary works to reflect the chaos before the urbanization order through such monstrous figures. In Greece, figures such as Centaur and Minotaur emerged due to inappropriate sex, i.e., violation of rules and norms. In addition to demonstrating disorder, they also reflect the mental challenges of a society that fights against both external and internal challenges.

Moreover, the use of compound figures to display governmental power and symbolic cultural concepts is explained by analysing Achaemenid griffins. Overall, the first chapter shows that the newly civilized human who has created new structures such as politics, economics, law, and religion, is facing dualities such as human/nature, wild/tamed, authority/subordination, and

order/chaos, and that he/she creates composite figures to identify and analyse such concepts, paving the way for passing through social and psychological crises.

The second chapter elaborates on a new understanding of hybridity in the 21st century and criticizes humanism which emerged out of the Enlightenment Era. At the beginning of the chapter, we read how Darwin's theory of evolution at the end of the 19th century became a starting point for criticizing humanism-driven anthropocentrism and introduced a new perspective to understand human's position in nature: the humans whose ancestors were animals who transformed into modern homo sapient some fifty thousand years ago. Then, we read that despite these findings, the philosophy of humanism was still advancing in the 20th century and became one of the causes of the reduction of land resources and vast environmental pollution. By the end of the 20th century, the post-structuralism philosophy prepared the ground for the emergence of post-humanism, which offers a new definition of human in relation to his/her surrounding environment. In this new definition, human is defined in combination with his/her surrounding environment and has no specific boundaries. He/she needs to start a conversation with nonhuman otherness, and, therefore, the border between human and nonhuman is eliminated. Post humanism considers integration with the environment, including nature and technology, as an inevitable solution. It also includes otherness-related topics, and some other issues such as race, class, gender, or sexual orientation. In such discussions, the human body is described as a flexible shell that can release itself from natural restrictions by means of technology and sciences, and, therefore, "violate the integrity of the body, community and kinship" (Haraway 1997). While writing this chapter, I tried to clarify how the idea of hybridity was developed in the 21st century and investigate it as a solution for problems such as racism, gender inequality, and environmental crises and put its findings as the basis of designing the second phase of my thesis.

The thesis found that humankind has never been pure from the very beginning of his/her life; nature has been a part of him/her, and he/she has been part of nature. He/she managed to stand on their both feet with the help of tools and then got out of their primary residence and conquered the continents. What we know today as the superiority of one gender over another

or one race over the other has a long history. However, technology that has made vast cultural connections and gender equality possible, may foster great developments in this area in a near future. In this process, technology and tools would turn into an internal factor for humans that significantly affect their lifestyle and their understanding of phenomena.

Before starting the practical part of this project, I tried to connect the discussion on hybridity with the notion of textile. For an artist who deals with weaving, warp and wept are not merely the components of a rug, kilim or other woven materials; they are elements expressing their inner selves with their own language. An artist sees, hears, and feels them and links them with his/her other experiences in the universe. Not for me in the 21st century, but for a long time, warp and wept have been a metaphor for describing the world complexities; the two strands that, when woven together, form a coherent whole which is used for describing inseparable phenomena whose existence depend on each other and no one is superior over the other, like what Jack Derrida says about text and context: "the peaceful coexistence of a vis-à-vis" (Derrida 1981, p. 41). In chapter three, textile has been studied from hybridity perspectives to demonstrate how the constituting elements of textile, i.e., warp and wept, can help us understand the topic of this thesis. In this discussion, the link between human and the surrounding environment is like weaving of the warp and weft, and this understanding can make him/her a post-human.

The practical part of this thesis was developed based on the findings of chapter two. The format used to represent these findings was kilim so that, in a deliberate paradox, this old form can display new meanings with respect to hybridity. To design this kilim, the keywords obtained from the investigation of hybridity in the 21st century were converted into images and motifs, and then they were combined to represent the image of hybridity in the contemporary world.

In chapter four, we see how binary compounds, in search of new methods, turned into ternary compounds and then became free and fluid so that they weave a narrative of hybridity instead of direct reference to it. Although in this composite kilim the selection and arrangement of motifs, symbols, and signs do not conform to traditional principles of Iranian design, its underlying basis subtly comprises of many major Iranian carpet structures including medallions

and expandable and recurring motifs, offering a new perspective toward flatweave rug design and the Iranian carpet.

Symbols and signs played a significant role in communicating the concept in this composite kilim. While they are conventional symbols or the ones adopted from Iranian rugs and carpets, I linked them in a new way to convey the intended meanings. Although this design is integrated and coherent, every part of it carries special concepts which were discussed in chapter four. The concepts included the childbearing of man and woman outside the body, combining two genders in one figure, "in between space", chain link of human-animal-plant-tools, being surrounded by waves, blurring of the boundaries between animate and inanimate, cultural hybridity, an abnormal form of humanity, opening the boundaries of natural elements to artificial elements, and power in today's world. Designing the kilim based on the research findings enabled me to go through the pattern collection and selection process logically and purposefully. When combining and putting together the patterns, I acted freely and let the images and motifs determine the design direction. Therefore, I had a limitation which was an outcome of theoretical argument and freedom that the nature of art and creation bring about.

I consider this composite kilim as a means of communication through the language of symbols and signs. Using this friendly and intimate language, I tried to encourage the audience to contemplate and express diverse views on hybridity. In other words, the practical part of this thesis is a visual metaphor for hybridity, which may be understood personally or socially based on context.

In this thesis, I managed to study hybridity not as a newfound theory but as a rooted idea. These kinds of studies help contemporary humans define their relationship with the surrounding environment through a new perspective, which may equip them to confront the contemporary crises mentioned earlier. Considering the scholars' opinions on hybridity, the current thesis investigated hybridity in several specific categories including culture, nature, technology and gender to offer a comprehensive multidimensional view regarding hybridity in the contemporary world which explores the extent of this idea's influence in our surrounding environment. The findings of such investigations contrast hybridization and separation,

impurity and purity, and contamination against cleanness to confirm the lack of lineage superiority.

Power and its reflection in today's world was another notion which was discussed from the hybridity perspective in this thesis as an attempt to understand the multidimensionality of power in the 21st century. The kilim's figures symbolizing power at present demonstrate how power has repeated itself in some aspects as it was in the past and how new cultural and media dimensions have been added to the notion of power. The outcome is new hybrid figures which include diverse symbols of power.

While this thesis attempted to explore various aspects of hybridity and offer its special viewpoint in this regard by designing and weaving a composite kilim, every individual topic of the thesis, i.e., human-nature, human-technology, and male-female hybridization may be the topic of independent researches for producing new works of art based on a scientific view. This may help bring together science and art which are traditionally assumed to be separate. It also helps hybridity to be used for creating novel artistic works based on scientific materials. Moreover, for a better understanding of the issues discussed regarding hybridity, it is required that studies be conducted on the relationship between humans and their surrounding environment in primitive tribes. Accordingly, the variables which help humans better understand themselves and their surroundings in the 20th and 21st centuries can be assessed more accurately, and new perspectives can be presented.

BIBLIOGRAPHY

Acquisitions, N., 1981. Acquisitions 1980-1981. The Metropolitan Museum of Art (New York 1981), 11.

Adams, J.L., Yates, W. and Warren, R.P. eds. (1997). *The grotesque in art and literature: theological reflections*. Wm. B. Eerdmans Publishing.

Andersen, K. and Bochicchio, L. (2012). The Presence of animals in contemporary art. *Forma: revista d'estudis comparatius. Art, literatura, pensament*, (06), pp. 12-23.

Anderson, T. and Milbrandt, M. K. (2005). *Art for life: Authentic instruction in art*. New York: McGraw-Hill.

Arnold, B. and Counts, D.B. (2010). Prolegomenon: the many masks of the Master of Animals. *The Master of Animals in old world iconography. Budapest: Archaeolingua*, pp. 9-24.

Ashcroft, B., Griffiths, G. and Tiffin, H. (2013). Post-colonial studies: The key concepts. Routledge.

Ates Mehmet. (1997). Turkish carpets. yeni alas matbaast.

Bennett, J. (2010). Vibrant matter: A political ecology of things. Duke University Press.

Bentham, J. (1789). An introduction to the principles of morals. London: Athlone.

Berger, J. (2011). About looking. Knopf Doubleday Publishing Group.

Bhabha, H.K. (1994). The location of culture. Routledge.

Bianchi, R.S. (2004). The Greek Reception and Transformation of Ancient Near Eastern Composite Beasts. In Goodnick Westenholz, J. (ed.). *Dragons, Monsters and Fabulous Beasts*, 16-20. Jerusalem: Bible Lands Museum.

Bodkin, H. (2017). Sex-change men 'will soon be able to have babies'. *The Telegraph* [online]. Available at: https://www.telegraph.co.uk/news/2017/11/04/babies-born-transgender-mothers-could-happen-tomorrow-fertility/ [Accessed 16 December 2019].

Broek, R. (1972). The myth of the Phoenix, according to classical and early Christian traditions. Brill.

Butler, J. (1990). Gender Trouble: Feminism and the Subversion of Identity. Routledge

Bynum, C. W. (2001). Metamorphosis and Identity. Zone Books.

Causey, R.M. (2014). Nietzsche's Hyperanthropos-Centrism. Trumpeter, 30(1), pp. 33-48.

Clift, J. D. (1992). Core Images of the Self: A Symbolic Approach to Healing and Wholeness. Crossroad.

Colburn, H. (2014). Art of the Achaemenid Empire and Art in the Achaemenid Empire. *Critical Approaches to Ancient Near Eastern Art*, pp. 773-800.

Cook, G. C. (1903). *Roderick Taliaferro: A Story of Maximilian's Empire*. New York: The Macmillan Company.

Cooper, J. C. (1987). Illustrated Encyclopaedia of Traditional Symbols. Thames & Hudson.

Costello, S.K. (2010). The Mesopotamian 'nude hero': context and interpretations. *The Master of Animals in Old World Iconography*, pp. 25-35.

Counts, D.B. (2010). Divine symbols and royal aspirations: The Master of Animals in Iron Age Cypriote religion. *The Master of Animals in Old World Iconography*, pp. 135-40.

Darling-Wolf, F. (2008). Chapter Four. Disturbingly hybrid or distressingly patriarchal? Gender hybridity in a global environment. In *Hybrid identities* (pp. 63-79). BRILL.

Darmesteter, J. and Mills, L.H. eds. (1895). *The Zend-Avesta: The Vendîdâd, translated by James Darmesteter*. Clarendon Press.

Deleuze, G. (2003). Francis Bacon: the logic of sensation (DW Smith, Trans.). London: continuum.

Derrida, J. (1979). Living on. In: Bloom, H. *Deconstruction and Criticism,* trans. J Hulbert. Seabury Press, pp. 75-176.

Derrida, J. (1982). Positions. University of Chicago Press.

Derrida, J. (1998). The Derrida Reader: Writing Performances. University of Nebraska Press.

Diamond, S.A. (2009). Why Myths Still Matter, *Psychology Today*. [online] Available at: https://www.psychologytoday.com/us/blog/evil-deeds/200912/why-myths-still-matter-part-four-facing-your-inner-minotaur-and-following [Accessed 15 December 2019].

Ducarme, F, Couvet, D. (2020). What does 'nature' mean? Palgrave Commun, 6(1).

Dvorsky, G. and Hughes, J. (2008). Postgenderism: Beyond the gender binary. *Institute for Ethics and Emerging Technologies*, 20, pp. 44-57.

DW (2007). *Turkey: Discovering Spirituality with The Whirling Dervishes*. Gene delivery. [online]. Available at: https://www.dw.com/en/turkey-discovering-spirituality-with-the-whirling-dervishes/a-2798133 (Accessed: 20 October 2020).

Eager, G. (1961). The Missing and the Mutilated Eye in Contemporary Art. *The Journal of Aesthetics and Art Criticism*, 20(1), pp. 49-59.

Edith, P. (1965). *The art of ancient Iran: Pre-Islamic cultures*. Crown Publishers.

Editors (2013). evil eye. In: *Encyclopedia Britannica*. [online]. Available at: https://www.britannica.com/topic/evil-eye (Accessed: 20 November 2021).

Eecs.utk.edu. (1996). *Tela Incantata*. [online] Available at: http://web.eecs.utk.edu/~bmaclenn/BA/AV/tela.html [Accessed 24 Jan. 2021].

Fathi, L., Farbod, F. (2010). The evolution of bird and mythological winged creatures' motifs in Buyid and Seljuk textiles. Negareh Journal, Vol.4, No.12: 41-52.

Feinstein, H. (1982). Meaning and visual metaphor. Studies in Art Education, 23(2), pp. 45-55.

Fernandez Orgaz, L. and Piccinini, P. (2007). The naturally artificial world. *Originally published:(tender) creatures, exhibition catalogue*. *Artium*. [online]. Available at: http://www.patriciapiccinini.net/writing/29/22/73# [Accessed 16 December 2019].

Ferrando, F. (2014). Is the post-human a post-woman? Cyborgs, robots, artificial intelligence and the futures of gender: a case study. *European Journal of Futures Research*. 2(43).

Fogel, R.W. (2004). Technophysio evolution and the measurement of economic growth. *Journal of Evolutionary Economics*, 14(2), p. 217.

Freud, S. (2001). Complete psychological works of Sigmund Freud (Vol. 19). Vintage Books.

Gantz, T. (1996). Early Greek Myth. Vol.1. London: The Johns Hopkins Press.

George, A. ed. (2002). The epic of Gilgamesh: the Babylonian epic poem and other texts in Akkadian and Sumerian. Penguin.

George, A.R. (2000) The Epic of Gilgamesh: The Babylonian Epic Poem and Other Texts in Akkadian and Sumerian. Penguin Books.

Ghaem Maghami, J. (1996). شير و نقش آن در معتقدات آرياييها. [online] Available at: http://m-hosseini.ir/mad-hakha/articles-2/157.pdf [Accessed 16 December 2019].

Goldenberg, R. et al. (2002). 'Dynamism of a Dog on a Leash' or Behavior Classification by Eigen-Decomposition of Periodic Motions. *Computer Vision* — *ECCV*. [online]. Available at: https://link.springer.com/chapter/10.1007%2F3-540-47969-4_31#citeas (Accessed: 20 November 2021).

Gooding-Williams, R. (2001). Zarathustra's Dionysian modernism. Stanford University Press.

Goodwin, Ch. and Duranti, A. (1992). Rethinking context: an introduction. In: Goodwin, Ch. And Duranti, A, ed., *Rethinking Context: Language as an Interactive Phenomenon*. Cambridge University Press, pp. 1-42.

Gournelos, T. and Gunkel, D. (2011). *Transgression 2.0: Media, Culture, and the Politics of a Digital Age*. A&C Black.

Green, M. J. (1994). Celtic Myths. University of Texas Press.

Hale, B. (2017). Realism and its Oppositions. In: Hale, B. and Wright, C, ed. *A Companion to the Philosophy of Language*. Wiley-Blackwell, pp. 491-531.

Hall, J. (1994). *Illustrated Dictionary of Symbols*. London: Murray.

Hallett, C. H. (2005). The Roman Nude: Heroic Portrait Statuary 200 BC - AD 300. Oxford University Press.

Haraway Donna, J. (1997). *Modest_Witness@ Second_Millennium. FemaleMan_Meets_OncoMouse: Feminism and Technoscience*. Routledge.

Haraway, D. (1991). A Cyborg Manifesto: Science, technology, and Socialist-Feminism in the Late Twentieth Century, ed., *Simians, Cyborgs, and Women: The Reinvention of Nature*, New York: Routledge, pp. 149-181.

Haraway, D. (1991). Simians, cyborgs, and women: the reinvention of nature. Routledge.

Haraway, D.J. (2003). *The companion species manifesto: Dogs, people, and significant otherness* (Vol. 1, pp. 3-17). Chicago: Prickly Paradigm Press.

Harrison, T.B. (2010). Brooklyn-based artist Kate Clark explores the nature of humanity . . . and vice versa. *Alabama* [online]. Available at: https://www.al.com/entertainment-press-register/2010/05/brooklyn-based_artist_kate_cla.html [Accessed 16 December 2019].

Hayles, N.K. (2008). *How we became posthuman: Virtual bodies in cybernetics, literature, and informatics.* University of Chicago Press.

Hegel, G.W.F. (2002). Philosophy of Nature. Reprint. Psychology Press.

Hix, L. (2012). Hybridity Is the New Metamorphosis. Comparative Critical Studies, 9.3, pp. 271-283.

Hong Le, D. T. (2015). Art in relationships with human consciousness and the unconscious. *Conference: Art Therapy in Preschool Education*. [online]. Available at:

https://www.researchgate.net/publication/303460045_Art_in_relationships_with_human_consciousne ss_and_the_unconscious (Accessed: 20 November 2021).

Hosie, R. (2017). John Lewis get rids of boys' and girls' labels in children clothing. *Independent* [online]. Available at: https://www.independent.co.uk/life-style/john-lewis-boys-girls-clothing-labels-gender-neutral-unisex-children-a7925336.html [Accessed 16 December 2019].

Humphreys, j. (2021). Aristotle. In: *Internet Encyclopedia of Philosophy*. [online]. Available at: https://iep.utm.edu/aristotl/ (Accessed: 20 November 2021).

Iovino, S. (2016). Posthumanism in Literature and Ecocriticism. *Relations. Beyond Anthropocentrism*, *4*(1), pp. 11-20.

Isaac, B. (2004). The invention of racism in classical antiquity. Princeton University Press.

Isfahani, A. and Safaee, N. (2016). The Genesis of Plant Artifacts in the Art of Islam. *Negarineh Islamic Art*, in Persian, 3(10), pp. 32-40.

Ittig, A. (1990). CARPETS iii. Knotted-pile carpets: Techniques and structures. In: *Encyclopedia Iranica* [online]. Available at: https://iranicaonline.org/articles/carpets-iii#prettyPhoto (Accessed: 20 October 2020).

Jaffe, A. (1964). Symbolism in the visual arts. In: Jung, C. G. ed. *Man and his symbols*. New York: Dell Publishing. pp. 255-323.

Janik, L. and Bates, J. (2012). *The Origins of Weaving Project.* [online] University of Cambridge. Available at: https://www.arch.cam.ac.uk/research/projects/archived-projects/origins-weaving-project [Accessed 24 Jan. 2021].

John, B. (1980). About Looking. New York: Vintage International.

Kac, E. (1997). Art at the biobotic frontier. *KAC* [online]. Available at: http://www.ekac.org/apositive.html [Accessed 16 December 2019].

Kalinowski, F. (2013). Phantom Flesh: Extreme Performance Artist Stelarc Interviewed. *The quietus* [online]. Available at: https://thequietus.com/articles/11469-stelarc-interview [Accessed 16 December 2019].

Kalof, L. (2007). Looking at animals in human history. Reaktion Books.

Kennedy, M. (2012). *British Museum puts Picasso's Vollard Suite on display*. [online]. Available at: https://www.theguardian.com/artanddesign/2012/may/01/british-museum-picasso-vollard-suite (Accessed: 20 November 2021).

Khanna, A. (2012). From the Information Age to the Hybrid Age. *Institute for Ethics and Emerging Technologies* [online]. Available at: https://ieet.org/index.php/IEET2/more/khanna20120915 [Accessed 16 December 2019].

Khanna, A. (2013). Hybrid reality: Thriving in the emerging human-technology civilization. TED conferences.

Knapton, S. (2016). Sex will soon be just for fun not babies, says father of the pill. *The Telegraph*, [online] Available at: https://www.telegraph.co.uk/news/health/news/11217750/Sex-will-soon-be-just-for-fun-not-babies-says-father-of-the-Pill.html [Accessed 30 Jan. 2021].

Kraidy, M.M. (2002). Hybridity in Cultural Globalization. *Communication Theory*, 12 (3), 316-339. Available at: < https://doi.org/10.1111/j.1468-2885.2002.tb00272.x> [Accessed 16 December 2019].

Kreps, D. (2007). Cyborgism: Cyborgs, Performance and Society. Lulu. com.

Kuhrt, A. (2001). The Achaemenid Persian empire (c. 550–c. 330 BC): Continuities, adaptations, transformations. *Empires: perspectives from archaeology and history*, 122, p. 93.

Kuldasli, R. (2014). *NIETZSCHE'S OVERCOMING OF HUMANISM: THE DEANTHROPOMORPHIZATION OF NATURE ANDTHE RENATURALIZATION OF HUMAN BEING.* Graduate School of Social Sciences of Middle East Technical University.

Lutz, H.F. (1927). The Sumerian and anthropology. American Anthropologist, 29(2), pp. 202-209.

Malone, N. and Ovenden, K. (2016). Natureculture. *The International Encyclopedia of Primatology*, pp. 1-2.

Manea, T. (2015). Our Posthuman Skin Condition, ed., *The Palgrave Handbook of Posthumanism in Film and Television*, London: Palgrave Macmillan, pp. 289-300.

Marchesini, R. (2007). Ruolo delle alterità nella definizione dei predicati umani. *Apocalisse e post-umano. Il crepuscolo della modernità. Bari, Dedalo*, pp. 33-56.

Mark, J. J. (2020). Shahnameh. In: *worldhistory Encyclopedia*. [online]. Available at: https://www.worldhistory.org/shahnameh/ (Accessed: 20 November 2021).

Mayr, E. (2000). Darwin's influence on modern thought. Scientific American, 283(1), pp. 78-83.

McPherson, S.S. (2010). Sergey Brin and Larry Page: Founders of Google. Twenty-First Century Books.

Misiano, V. (2008). Oleg Kulik's Animality. Antennae, Volume 2 (Issue 8/ Winter 2008). pp. 25-40

Morris, K. L. (2015). Women, objects, and animals: Differentiating between sex- and beauty-based objectification. *International Review of Social Psychology*. [online]. Available at: https://www.researchgate.net/publication/281714377_Women_objects_and_animals_Differentiating_between_sex-_and_beauty-based_objectification (Accessed: 20 November 2021).

Mudrooroo, N. (1990). Writing from the Fringe: A Study of Modern Aboriginal Literature. Melbourne: Hyland.

Multiple Authors. (2008). JAMŠID. In: *Encyclopedia Iranica* [online]. Available at: https://iranicaonline.org/articles/jamsid (Accessed: 20 November 2021).

Mushro, L. (2018). Frida Kahlo and the Feminine. *Colloquium: The Political Science Journal of Boston College*, 2(1), p. 71.

Nature (2020). *Gene delivery*. [online]. Available at: https://www.nature.com/subjects/gene-delivery (Accessed: 20 October 2020).

Nietzsche, F. (2001). Nietzsche: *The Gay Science: With a Prelude in German Rhymes and an Appendix of Songs (Cambridge Texts in the History of Philosophy)* (B. Williams, Ed.; J. Nauckhoff & A. Del Caro, Trans.). Cambridge: Cambridge University Press. P. 109.

Noack, B., et al. (1993). Schahsavan sumakh Taschen. Verlag Bertram Frauenknecht.

Oklander, J. T. (2013). Field, Process and Metaphor. In: Katz, M. ed. *Metaphor and Fields: Common Ground, Common Language, and the Future of Psychoanalysis*. Routledge, pp. 163-181.

Oliver, K. (2016). Womanizing Nietzsche: Philosophy's Relation to the "Feminine". Routledge.

Opie, J. (1987). Bird Rugs of South Persia. Oriental Rug Review, 8(1).

Opie, J. (1992). Tribal Rugs. Laurence King.

Opie, J. (1998). Tribal rugs: A complete quide to nomadic and village carpets. Bulfinch Press.

O'Toole, J. J. (2017). Futurology. In: *Britannica*. [online]. Available at: https://www.britannica.com/topic/futurology (Accessed: 20 November 2021).

Oxfordreference (2021). Mithra. [online]. Available at:

https://www.oxfordreference.com/view/10.1093/oi/authority.20110803100202618 (Accessed: 20 November 2021).

Paasonen, S. (2011). Revisiting cyberfeminism. Communications. 36(3).

Partridge, E., Davey, M., Hornick, M. et al (2017). An extra-uterine system to physiologically support the extreme premature lamb. *Nature communications* 8, 15112, [online] Available at: https://www.nature.com/articles/ncomms15112 [Accessed 30 Jan. 2021].

Peoples, J. and Bailey, G. (2008). *Humanity: An introduction to cultural anthropology*. Cengage Learning.

Perlman, S. (2020). Another Decade, Another Coronavirus. In: N Engl J Med, 382(8): 760–762.

Pieterse, J. N. (2015). Globalization and Culture (Third ed.). Lanham, Maryland: Rowman & Littlefield.

Pillai, L. (2019). Towards a Posthuman Future: Androgyny, Transhumanism and Culture. *Alteritas: EFL-U Journal of Literary Inquiry*, 1(1), pp. 55-66.

Pinon Jr, R. (2014). *Fiction and Fantasy: Opening Pandora's Box*. Strategic Book Publishing & Rights Agency.

Platte, R.C. (2017). Equine Poetics. Centre for Hellenic Studies.

Pope, A. U. and Ackerman, Ph. (1981). Survey Persian Art Prehistoric Times. SOPA, ASHIYA.

Porada, E. (1984). The art of ancient Iran. Crown Publishers.

Porada, E. (1993). CYLINDER SEALS. In: *Encyclopedia Iranica* [online]. Available at: https://iranicaonline.org/articles/cylinder-seals (Accessed 16 December 2019).

Posener, G. (1936). *La première domination perse en Egypte: recueil d'inscriptions hiéroglyphiques*. Imprimerie de l'Institut français d'archéologie orientale.

Posthumus, L. (2011). *Hybrid monsters in the Classical World: the nature and function of hybrid monsters in Greek mythology, literature and art* (Doctoral dissertation, Stellenbosch: University of Stellenbosch).

Reimer-Walsted, R. (2016). Hybridity is The New Metamorphosis. *Posthuman Aesthetics* [online]. Available at: https://open-tdm.au.dk/ph/2016/11/hybridity-is-the-new-metamorphosis/ [Accessed 16 December 2019].

ReligionFacts.com, (2015). *angels (Christianity)*. [online]. Available at: https://religionfacts.com/christianity/angels [Accessed 30 Jan. 2021].

Rise from the ashes. (n.d.) In: *Farlex Dictionary of Idioms* [online]. Available at: https://idioms.thefreedictionary.com/rise+from+the+ashes [Accessed 30 Jan. 2021].

Ritzer, G. (2018). The McDonaldization of Society into the Digital Age. 9th ed. SAGE Publications.

Root, M.C. (1979). The king and kingship in Achaemenia art: essays on the creation of an iconography of empire (No. 19). Diffusion, EJ Brill.

Root, M.C. (2000). Imperial ideology in Achaemenid Persian art: transforming the Mesopotamian legacy. *Bulletin of the Canadian Society for Mesopotamian Studies*, *35*, pp. 19-27.

Root, M.C. (2002). Animals in the art of ancient Iran. In A History of the Animal World in the Ancient Near East (pp. 169-209). Brill.

Rostovtzeff, M.I. (1922). Iranians & Greeks in South Russia. The Clarendon Press.

Rubinson, K.S. (1990). CARPETS vi. Pre-Islamic Carpets. In: *Encyclopedia Iranica [online]*, IV/8, pp. 858-861. Available at: http://www.iranicaonline.org/articles/carpets-vi [Accessed 16 December 2019].

Rudenko, S.I. (1970). Frozen tombs of Siberia: The Pazyryk burials of Iron Age horsemen. Univ of California Press.

Savulescu, J. (2003). Human-Animal Transgenesis and Chimeras Might Be an Expression of Our Humanity. *The American Journal of Bioethics*. Volume 3(3), pp. 22-25.

Sayegh, P. (2008). *Cultural Hybridity and Modern Binaries: Overcoming the Opposition Between Identity and Otherness?* [online]. Available at: https://halshs.archives-ouvertes.fr/halshs-00610753/document [Accessed 30 Jan. 2021].

Schmidt, E.F. (1939). The Treasury of Persepolis and other Discoveries in the Homeland of the Achaemenians (No. 21). University of Chicago.

Schmidt, H. P. (2002). SIMORG. In: *Encyclopedia Iranica* [online]. Available at: https://iranicaonline.org/articles/simorg (Accessed: 20 November 2021).

Schmitt, R. and Stronach, D. (1987). Apadana. Encyclopedia Iranica, 2, p. 145.

Schwabe, C.W. (2002). Animals in the ancient world. In *Animals and human society* (pp. 48-70). Routledge.

Shahbazi, A. S. (1994). DERAFŠ. In: *Encyclopedia Iranica* [online]. Available at: https://iranicaonline.org/articles/derafs (Accessed: 20 November 2021).

Shahbazi, A.S. (1974). An Achaemenid Symbol I: A Farewell to 'Fravahr' and 'Ahuramazda.'. *Archäologische Mitteilungen aus Iran*, 7, pp. 135-144.

Shahcheraghi, A. and Islami S. G. (2008). Rethinking of Persian Garden Architectural Order in Persian Garden – Carpet with Emphasis on the Environmental Ecological Perception Theory. *Goljaam*, in Persian, 4(9), pp. 63-86.

Sherrill, S. B. (1990). CARPETS v. Flat-woven carpets: Techniques and structures. In: *Encyclopedia Iranica* [online]. Available at: https://iranicaonline.org/articles/carpets-v#prettyPhoto (Accessed: 20 October 2020).

Shinha, A., et al. (2019). 'Role of climate in the rise and fall of the Neo-Assyrian Empire', *Science Advances*, 5(11) [online]. Available at: https://www.science.org/doi/10.1126/sciadv.aax6656 (Accessed: 20 November 2021).

Smith, J.K. (2005). Jacques Derrida: live theory. A&C Black.

Snyder, J. M. (1983). The Warp and Woof of the Universe in Lucretius' "De Rerum Natura". *Illinois Classical Studies*, 8(1), pp. 37-43.

Soudavar, A. (2003). The Aura of Kings: Legitimacy and Divine Sanction in Iranian Kingship. Mazda Pub.

Soudavar, A. (2010). The formation of Achaemenid imperial ideology and its impact on the Avesta. *The World of Achaemenid Persia: History, Art and Society in Iran and the Ancient Near East/Eds. J. Curtis, St. J. Simpson. L.: IB Tauris.*

Spar, I. (2009). *Mesopotamian Creation Myths* [online]. Available at: https://www.metmuseum.org/toah/hd/epic/hd_epic.htm (Accessed: 20 November 2021).

Sussman, M. (2019). *The "Miscegenation" Troll*. [online]. Available at: https://daily.jstor.org/the-miscegenation-troll/ (Accessed: 20 November 2021).

Sylvester, D. (1993). Interviews with Francis Bacon: The Brutality of Fact. Thames & Hudson.

Talbot, M, (1992). The Holographic Universe. New York: Harper Perennial.

Tapper, R. (2012). MOGĀN. In: *Encyclopedia Iranica* [online]. Available at: < http://www.iranicaonline.org/articles/mogan-parent-i-ii> [Accessed 16 December 2019].

Thompson, G. (1965). Iranian Dress in the Achaemenian Period: Problems concerning the Kandys and other garments. *Iran*, 3(1), pp. 121-126.

Tillich, P. (1959). Theology of Culture. Oxford University Press.

Unesco (2019). *Babylon*. [online]. Available at: https://whc.unesco.org/en/list/278/ (Accessed: 20 November 2021).

Verlinden, J., et al. ed., (2012). Transgender Bodies and Male Pregnancy: The Ethics of Radical Self-Refashioning. In: *Machine: Bodies, Genders, Technologies*. Germany: Universitaetsverlag Winter, pp. 107-136.

Walker, L.L. and Martens, E.A. (2017). Isaiah, Jeremiah, Lamentations (Vol. 8). Tyndale House.

Weingarten, J. (2011). A review on "The Master of Animals in Old World Iconography". In: Bryn Mawr Classical Review [online]. Available at: http://bmcr.brynmawr.edu/2011/2011-09-53.html [Accessed 16 December 2019].

Weiser, D. (2019). The angels of God are white to this day, interview with Paulina Chiziane. [online]. Available at: https://www.buala.org/en/face-to-face/the-angels-of-god-are-white-to-this-day-interview-with-paulina-chiziane (Accessed: 20 November 2021).

Wengrow, D. (2013). *The Origins of Monsters: Image and cognition in the first age of mechanical reproduction* (Vol. 2). Princeton University Press.

West, E. W. (1880). The Bundahish. Trans. Oxford University Press, p. 48.

White, E. G. (1891). Missionary Work. Advent Review and Sabbath Herald.

White, E. G. (2013). Ellen G. White Review & Herald Articles. Createspace Independent Pub.

Wittkower, R. (1939). Eagle and serpent. A study in the migration of symbols. *Journal of the Warburg Institute*, *2*(4), pp. 293-325.

Wolfe, C. (2003). *Animal rites: American culture, the discourse of species, and posthumanist theory*. University of Chicago Press.

Wolfe, C. (2010). What is Posthumanism?. University of Minnesota Press.

Wu, J., et. al. (2017). Interspecies chimerism with mammalian pluripotent stem cells. *Cell*, *168*(3), pp. 473-486.

Yassavoli, J. (1991). An Introduction to Persian Carpets: a Survey of the Carpet - Weaving Industry of Persia. Tehran: Pandar (Text in Persian).

Zabeti Jahromi, A. (2010). Pazhouheshhayi Dar Shenakhte Honare Iran, (in Persian). Nashreney.



CC BY-NC-ND 4.0 International Namensnennung - Nicht-kommerziell - Keine Bearbeitung 4.0 International