

GLOBAL JOURNAL

OF HUMAN SOCIAL SCIENCES: D

History, Archaeology
& Anthropology

Rejuvenation of Pelias

Similarities between Prehispanic

Highlights

Survival of Homo Sapiens

Mesoamerica & Philosophies of Asia

Discovering Thoughts, Inventing Future

VOLUME 20

ISSUE 3

VERSION 1.0

© 2001-2020 by Global Journal of Human Social Sciences, USA



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: D
HISTORY, ANTHROPOLOGY & ARCHAEOLOGY



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: D
HISTORY, ANTHROPOLOGY & ARCHAEOLOGY

VOLUME 20 ISSUE 3 (VER. 1.0)

OPEN ASSOCIATION OF RESEARCH SOCIETY

© Global Journal of Human Social Sciences. 2020.

All rights reserved.

This is a special issue published in version 1.0 of "Global Journal of Human Social Sciences." By Global Journals Inc.

All articles are open access articles distributed under "Global Journal of Human Social Sciences"

Reading License, which permits restricted use. Entire contents are copyright by of "Global Journal of Human Social Sciences" unless otherwise noted on specific articles.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without written permission.

The opinions and statements made in this book are those of the authors concerned. Ultraculture has not verified and neither confirms nor denies any of the foregoing and no warranty or fitness is implied.

Engage with the contents herein at your own risk.

The use of this journal, and the terms and conditions for our providing information, is governed by our Disclaimer, Terms and Conditions and Privacy Policy given on our website <http://globaljournals.us/terms-and-condition/menu-id-1463/>

By referring / using / reading / any type of association / referencing this journal, this signifies and you acknowledge that you have read them and that you accept and will be bound by the terms thereof.

All information, journals, this journal, activities undertaken, materials, services and our website, terms and conditions, privacy policy, and this journal is subject to change anytime without any prior notice.

Incorporation No.: 0423089
License No.: 42125/022010/1186
Registration No.: 430374
Import-Export Code: 1109007027
Employer Identification Number (EIN):
USA Tax ID: 98-0673427

Global Journals Inc.

(A Delaware USA Incorporation with "Good Standing"; Reg. Number: 0423089)

Sponsors: Open Association of Research Society

Open Scientific Standards

Publisher's Headquarters office

Global Journals® Headquarters
945th Concord Streets,
Framingham Massachusetts Pin: 01701,
United States of America

USA Toll Free: +001-888-839-7392

USA Toll Free Fax: +001-888-839-7392

Offset Typesetting

Global Journals Incorporated
2nd, Lansdowne, Lansdowne Rd., Croydon-Surrey,
Pin: CR9 2ER, United Kingdom

Packaging & Continental Dispatching

Global Journals Pvt Ltd
E-3130 Sudama Nagar, Near Gopur Square,
Indore, M.P., Pin:452009, India

Find a correspondence nodal officer near you

To find nodal officer of your country, please
email us at local@globaljournals.org

eContacts

Press Inquiries: press@globaljournals.org
Investor Inquiries: investors@globaljournals.org
Technical Support: technology@globaljournals.org
Media & Releases: media@globaljournals.org

Pricing (Excluding Air Parcel Charges):

Yearly Subscription (Personal & Institutional)
250 USD (B/W) & 350 USD (Color)

EDITORIAL BOARD

GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE

Dr. Heying Jenny Zhan

B.A., M.A., Ph.D. Sociology, University of Kansas, USA
Department of Sociology Georgia State University,
United States

Dr. Prasad V Bidarkota

Ph.D., Department of Economics Florida International
University United States

Dr. Alis Puteh

Ph.D. (Edu.Policy) UUM Sintok, Kedah, Malaysia M.Ed
(Curr. & Inst.) University of Houston, United States

Dr. André Luiz Pinto

Doctorate in Geology, PhD in Geosciences and
Environment, Universidade Estadual Paulista Julio
de Mesquita Filho, UNESP, Sao Paulo, Brazil

Dr. Hamada Hassanein

Ph.D, MA in Linguistics, BA & Education in English,
Department of English, Faculty of Education, Mansoura
University, Mansoura, Egypt

Dr. Asuncin Lpez-Varela

BA, MA (Hons), Ph.D. (Hons) Facultad de Filología,
Universidad Complutense Madrid 29040 Madrid Spain

Dr. Faisal G. Khamis

Ph.D in Statistics, Faculty of Economics &
Administrative Sciences / AL-Zaytoonah University of
Jordan, Jordan

Dr. Adrian Armstrong

BSc Geography, LSE, 1970 Ph.D. Geography
(Geomorphology) Kings College London 1980 Ordained
Priest, Church of England 1988 Taunton, Somerset,
United Kingdom

Dr. Gisela Steins

Ph.D. Psychology, University of Bielefeld, Germany
Professor, General and Social Psychology, University of
Duisburg-Essen, Germany

Dr. Stephen E. Haggerty

Ph.D. Geology & Geophysics, University of London
Associate Professor University of Massachusetts,
United States

Dr. Helmut Digel

Ph.D. University of Tbingen, Germany Honorary President
of German Athletic Federation (DLV), Germany

Dr. Tanyawat Khampa

Ph.d in Candidate (Social Development), MA. in Social
Development, BS. in Sociology and Anthropology,
Naresuan University, Thailand

Dr. Gomez-Piqueras, Pedro

Ph.D in Sport Sciences, University Castilla La Mancha,
Spain

Dr. Mohammed Nasser Al-Suqri

Ph.D., M.S., B.A in Library and Information Management,
Sultan Qaboos University, Oman

Dr. Giaime Berti

Ph.D. School of Economics and Management University of Florence, Italy

Dr. Valerie Zawilski

Associate Professor, Ph.D., University of Toronto MA - Ontario Institute for Studies in Education, Canada

Dr. Edward C. Hoang

Ph.D., Department of Economics, University of Colorado United States

Dr. Intakhab Alam Khan

Ph.D. in Doctorate of Philosophy in Education, King Abdul Aziz University, Saudi Arabia

Dr. Kaneko Mamoru

Ph.D., Tokyo Institute of Technology Structural Engineering Faculty of Political Science and Economics, Waseda University, Tokyo, Japan

Dr. Joaquin Linne

Ph. D in Social Sciences, University of Buenos Aires, Argentina

Dr. Hugo Nami

Ph.D.in Anthropological Sciences, Universidad of Buenos Aires, Argentina, University of Buenos Aires, Argentina

Dr. Luisa dall'Acqua

Ph.D. in Sociology (Decisional Risk sector), Master MU2, College Teacher, in Philosophy (Italy), Edu-Research Group, Zrich/Lugano

Dr. Vesna Stankovic Pejnovic

Ph. D. Philosophy Zagreb, Croatia Rusveltova, Skopje Macedonia

Dr. Raymond K. H. Chan

Ph.D., Sociology, University of Essex, UK Associate Professor City University of Hong Kong, China

Dr. Tao Yang

Ohio State University M.S. Kansas State University B.E. Zhejiang University, China

Mr. Rahul Bhanubhai Chauhan

B.com., M.com., MBA, PhD (Pursuing), Assistant Professor, Parul Institute of Business Administration, Parul University, Baroda, India

Dr. Rita Mano

Ph.D. Rand Corporation and University of California, Los Angeles, USA Dep. of Human Services, University of Haifa Israel

Dr. Cosimo Magazzino

Aggregate Professor, Roma Tre University Rome, 00145, Italy

Dr. S.R. Adlin Asha Johnson

Ph.D, M. Phil., M. A., B. A in English Literature, Bharathiar University, Coimbatore, India

Dr. Thierry Feuillet

Ph.D in Geomorphology, Master's Degree in Geomorphology, University of Nantes, France

CONTENTS OF THE ISSUE

- i. Copyright Notice
- ii. Editorial Board Members
- iii. Chief Author and Dean
- iv. Contents of the Issue

- 1. Medea and the Rejuvenation of Pelias: *One Alternative Version*. **1-6**
- 2. Temperance Movement and Popular Drinking Habits in Brazil. **7-15**
- 3. Similarities between Prehispanic Wisdom in Mesoamerica and the Philosophies of Asia. **17-24**
- 4. Survival of Homo Sapiens– A Retrospect Analysis. **25-33**
- 5. Zootrophy. **35-41**

- v. Fellows
- vi. Auxiliary Memberships
- vii. Preferred Author Guidelines
- viii. Index



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: D
HISTORY, ARCHAEOLOGY & ANTHROPOLOGY
Volume 20 Issue 3 Version 1.0 Year 2020
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-460X & Print ISSN: 0975-587X

Medea and the Rejuvenation of Pelias: *One Alternative Version*

By Maria Regina Candido

Universidade do Estado do Rio de Janeiro

Abstract- The myth of Medea has become familiar in the Greek literature since Homer's time. He told the story about the trip of the Argonauts guided by Jason. The mythical narrative has different versions that survived in various informative supports such as the texts of the dramatic poets and the images of the Greek vases. In this essay, we propose to analyse the remote information and reference of the action of the myth of Medea through the Greek vases. We selected to research about the episode that has been known as Pelíades. We may infer there are two versions about Medea and Pelias, in the most remote of them the priestess of Hekate belongs to the seventh century and, in this period, Medea has the ability to cure and rejuvenate an old person. This information shows the mythological narrative of Pelias and Medea is very ancient.

Keywords: medea pelíades mythology.

GJHSS-D Classification: FOR Code: 220208p



Strictly as per the compliance and regulations of:



Medea and the Rejuvenation of Pelias: One Alternative Version

Maria Regina Candido

Abstract- The myth of Medea¹ has become familiar in the Greek literature since Homer's time. He told the story about the trip of the Argonauts guided by Jason. The mythical narrative has different versions that survived in various informative supports such as the texts of the dramatic poets and the images of the Greek vases. In this essay, we propose to analyse the remote information and reference of the action of the myth of Medea through the Greek vases. We selected to research about the episode that has been known as *Peliades*. We may infer there are two versions about Medea and Pelias, in the most remote of them the priestess of Hekate belongs to the seventh century and, in this period, Medea has the ability to cure and rejuvenate an old person. This information shows the mythological narrative of Pelias and Medea is very ancient.

Keywords: medea peliades mythology.

I. INTRODUCTION

Medea's success² began when the play was first performed in Athenian tragedy³ competition in 431 BC. We believe the theatre audience in Athens was shocked when the priestess of Hekate killed her children in revenge for Jason's betrayal. Medea's revenge provokes a radical effect of violence because she destroyed the familiar basis connection. This scene became known as Medea's Infanticide⁴ and supplanted all other versions of the story from the myth. Euripides seemed to be the first poet⁵ to represent Medea murdering her children. The episode marked the universe of artisans and painters as shown in

Author: NEA/PPGH/UERJ. e-mail: medeiacandido@gmail.com

¹ I thank Prof. Wander Stayner Barbosa Martins for reviewing and correcting the text in the English language.

² J.O.G. Hanson wrote *The Secret of Medea's Success* (1965), and he said the story of Medea is pieced together from the numerous references in both Greek and Latin literature and a most fascinating picture.

³ In 431 B.C. Euripides competed against Sophocles and Euphorion with three tragedies, *Medea*, *Philoctetes* and *Dictys*, followed by a satyr play *Theristae*, he was awarded the third prize, this information was attributed by Aristophanes of Byzantium, see: *The Medea of Euripides* by B.M.W. Knox, p.193 (Yale Classical Studies, vol. XXV: Greek Tragedy, Cambridge University Press, 1977).

⁴ Most of the scholars have discussed the problem of the relationship between the *Medea* of Neophron and Euripides. The surviving fragments of Neophron's *Medea* has language, style, and meter that belong to the fourth century. The third actor had been introduced, but *Medea* of Euripides requires two only.

⁵ There was a debate about the reputation of Euripides' great work, we have convinced the chronological priority of Euripides' *Medea* as against Neophron. Suidas confuses Neophron with Nearchos, a tragedian of the fourth century. *Neophron and Euripides' Medea* by E.A.Thompson. *The Classical Quarterly*. Vol. 38, Cambridge University Press, 1944, p.10-14

reproductions on a large number of attic vases in different museums in the world.

The Medea myth has become familiar in the Greek literature since Homer's time. He told the story about the trip of the Argonauts⁶ guided by Jason (*Odyssey*, XII:70). The mythical narrative of Argonauts and Medea has different versions that survived in various informative supports, such as the texts⁷ of the dramatic poets and the images of the Greek vases.

In this essay, we propose to analyse the remote information and reference of the action of the Medea's myth through the Greek vases. We selected to research about the episode that has been known as *Peliades*. The king Pelias was mentioned in *Iliad* (v.710-715), the epic poem which tells about his daughters, and *Odyssey* which cited that Pelias was king at the prosperous lands in Iolkus (*Odyssey*, XI, v.255-256). This information shows the mythological narrative of Pelias and Medea is very old and has different versions.

The original structure that remained is "Jason travels to Colchis and takes the Golden Fleece with the help of Medea". The Golden Fleece became the remotest trace of connectivity between Greece and Kolchis through the hero Jason. Strabo confirmed in his *Geography* (II, 39) the process of ancient contacts between the Greek colonists with the population of Kolchis began with Jason. We must say that the Greek hero Jason was not the first Hellenic to arrive to the region of Kolchis. Iamze Gagua considers that Phrixus was the first Hellenic to sail to the region of the Black Sea and settled on the land of Colchis. Phrixus' arrival in Kolchis with a golden ram, Aeetes' kindly hosting him and establishing a new alliance by offering his daughter in matrimony, reflects those ancient contacts which existed between the Greek colonist and the Kolchian population (GAGUA, 2012, p 88).

But, in classical period, Medea was famous to be a woman of cruel character and terrible nature, which was a quote by Euripides (*Medea*, v.100), and Sophocles said in his play *Kolchides*⁸ (fr. 343) that

⁶ We find the Argonautic legends pre-Homeric because the verses in the "*Odyssey*" xii. 69-70 the poet says about "moving rocks" through which Ulysses had to sail and affirm that "the only ship that ever yet passed them was the famed Argo in her voyage from King Aeetes."

⁷ Stesichoros whose poem "The Games for Pelias" (580 B.C.); the "Cyclic Nostoi" belong to about 700 B.C.

⁸ *Kolchides* or *The Women of Colchis*: Medea helps Jason win the Golden Fleece by murdering her brother.

Medea murdered her brother Apsyrtos and dismembered him to help the Argonauts to escape. Aeetes, king of Kolchis, was Medea's father and pursued Jason and her. Then, she decided to kill her brother to force her father to stop attacking them and to collect the parts of Apsyrtos' corpse. Robert L. Fowler defends that the episode of the Apsyrtos' murder, in Classical period, had been added in order to reinforce the fame of Medea as a barbarian and abominable woman (FOWLER, 2013, p.228). Euripides' *Peliades* was the poet's first⁹ play, and he participated in the contest in 455 BC. Now, it's lost, but the fragments (fr.601-16) narrate how Medea convinced the old king Pelias and his daughters to believe in her magical power using special herbs and roots and cook him in a cauldron in order to renew his youth. The other lost plot, *Rhizotomoi* by Sophocles, brings Medea as a root cutter. She was specialized in handling the spell of the roots and herbs. John Scarborough highlights Sophocles as the one who introduced the priestess of Hekate in her *real professional function* of harvesting herbs for magical purposes (SCARBOROUGH, 1991, p.144). It has been accepted that plots about Medea were considered as the magical practices and confirmed that the priestess of Hekate persuaded the daughters of Pelias to destroy their father's life through the process known as rejuvenation. This process consisted of boiling the body in a cauldron with the magical herbs, which tragically resulted in Pelias' death.

The information about Medea allows us to suppose an alternative view: the priestess of Hekate, in the antiquity, was dealt with as a deity with the expertise and knowledge about herbs and roots for magical purposes. She was a *pharmakides* who handled the plants, herbs and roots to help ease the pain in the human body, improve health and cure the diseases. The Athenian's audience of the theatre might have been familiar to the herbs to cure one's illness since all of them knew some drug seller or a root cutter who could handle special plants.

On one hand, the Greek ancient world was dominated by agriculture, when one needed to know about edible plants and picked up all the herbs to cure and keep people healthy. Macrobius wrote that Medea had the expertise to handle *the poisonous herbs with her face turned away lest she perish from the strength of their noxious aromas, then pouring the herbs' juice into bronze jars, the herbs themselves being cut with bronze sickles* (SCARBOROUGH, 1991.p.145). Medea, as a specialist in herbs, knew about the poisonous characteristic of the odours produced by dangerous plants when the roots were turned from the ground.

On the other hand, Medea belonged to the traditional family of Titans, whose father Aeetes was the

symbol of power for the kingdom of Kolchis. He is Helios' son and the Oceanid Perseis. The kingdom of Aeetes became prosperous with Phrixus' arrival with the golden ram, and as a result the young Greek remained under the protection of King Aeetes. Gagua states the relationship between the King Aeetes and Phrixus reflected the peaceful cohabitation among Greek migratory population and the local inhabitants of the territory of Kolchis (GAGUA, 2012, p 90).

Homer's *Odyssey* (X,37) told us that Circe is sister to King Aeetes and Parsiphae, the mother of the Minotaur, and both were Medea's aunts. Circe was an enchantress able to cast spells through drugs, herbs and charm singing. Circe and Medea were priestesses of Hekate, goddess of the Chthonian world who took care of the souls of the dead. That deity helped those seeking to avenge against his enemies by guiding the souls of the dead to rise when they were evoked by magic rites¹⁰.

Sophron of Siracusa told us how to organize the rite to Hekate: you need to take a lump of salt in your right hand, and laurel by your ear, and pick an axe to sacrifice a puppy to her. Finally, you evoke the deity and say: Lady, receive your feast and offerings (Sophron, fr.4A.1214). The rites in the worship of Hekate consist of the sacrifice of blood of a black dog and eggs, both used to purify the body and the soul. The black dog's blood and the eggs must be offered to Goddess Hekate on triple roads because the street was a sacred place of Hekate (CANDIDO, 2017b, p.268). Diodorus Siculus reminds us that Aeetes, Medea's father, worshipped the Goddess Hekate and he always ordered to kill all foreigners in sacrifice to her (Historical Library, IV, 46-47). The human sacrifice was a custom of the Kolchis inhabitants, and the knowledge of the ritual was widespread in the Black Sea, aiming to frighten the Hellenian sailors (GAGUA, 2012, p 91).

Hence, since antiquity Medea is known as daughter of Aeetes, niece of Circe and priestess of Hekate, confirming she was heiress to the magical practice and to all expertise in handling root, herbs and drug spells. We believe the knowledge of Medea in magical practice and her ability to handle the special plants caught the old king Pelias' eye. The episode of the rejuvenation of the king Pelias through the dismemberment in a cauldron, having Pelias' daughters as eyewitnesses and assistants, became a success among the Attic ceramists in the VI century. This can be noticed by the production from the painters' workshops

⁹ See Euripides' First Play by Herbert Edward Mierow, 1946, p.106-108.

¹⁰ Archaeology of Kerameikos, Athens found a lot of curse tablets i buried in graves or tombs. They are very thin sheets of lead with the text with evocation to Medea, Hekate and Hermes. Generally, they were often rolled, folded, or pierced with nails. Tablets were named *katadesmoi* or *defixiones* and were used to curse someone or wish death someone. There is curse tablet with small doll also pierced by nail.

in the Attica and the south of Italy, and the workshops in Kerameikos (GUIRAUD, 1996, p.209).

The remote corpus from Medea's image is part of the Attic black-figure vases group. We applied the methodological analysis by Claude Berard, named/ *conographie-iconologie-iconologique* (1983). Following the author's proposal: *The Anatomical Elements* from the image show: two young women, one standing on the left is in profile with her left hand raised and looking at the cauldron in the centre of the scene. She has her hair tied, she wears a long chiton under a himation wrapped around her waist; the other woman is standing on the right side in profile, facing left, her hair is tied, she wears a chiton with a himation wrapped, she has something in her left hand, sometimes it's one dagger. In the centre of the scene there is a ram inside a large cooking potsometimes identified as *lebes*, tripods (considered more modern styles), sometimes it shows a pot of a more rustic style or even of an ancient model (*empyribete* type), always on a burning brazier. The ram faces left with the front legs out of the cauldron.

We shared and analysed the images and realized that part of them showed the king Pelias sitting down in front of Medea, and she is giving him an evidence of her magical power by rejuvenating an old ram. The old king closely followed the process as eyewitness when he sees an old ram transformed into a lamb. Then, he decided to take part in the experiment himself. After that, Pelias decided to cooperate in this rejuvenation and persuaded his daughters to help Medea to cure him. We may deduce there are two versions of Medea and Pelias, one was the version propagated in the classic period through the playwrights of the time, like Euripides, and the most remote of them where the priestess of Hekate belongs to the seventieth century. By then, Medea has the ability to cure and rejuvenate an old person. Christine Harrauer says that Medea was firmly connected to the Argonauts' myth from the beginning, and both were the oldest narratives of the Greeks spread all over Greece (HARRAUER, 1999, p.6).

The most remote Greek literature reference about the relationship among Medea, Jason and Pelias within The Funeral Games was Stesichorus, who wrote a poem in 580 B.C., he said: *But before him (Panyassis) Stesichorus or Ibycus in the poem entitled The funeral Games [for Pelias] was the first to say that the gifts brought for the girl were "sesame cakes and groats and oil-and-honey cakes and other cakes and yellow honey"*¹¹ (Cingano, 2017, p.28). The contest happened to celebrate the decease of a Greek hero. Lynn E. Roller states that the Funeral Games¹² for Pelias was

represented in Greek art for the first time in the early sixth century, and rapidly became popular (ROLLER, 1981, p.107). We reckon the popularity and success of the poems can be justified because they reported the heroes' mythological adventures and the Argonauts' journey that sailed to the unknown world.

There are other references, such as the epic poem by Eumelus of Korinth, *Korinthiaca*, which reconstructs the past of his hometown, and the adventure of the Argonauts. According to the version chosen by Eumelus, the legend happens in Iolkus. Jason married Medea and stopped by Iolkus after the expedition from Kolchis. Stesichorus, Eumelus of Korinth and Simonides¹³ have told different versions of the mythological narrative of Medea. They depict the expertise of Medea with the herbs and roots, nonetheless there was a beneficial result from curing and rejuvenating people. This narrative became famous and popular in the Greek world because we can find a lot of painters' vases on the topic between 530 – 525 BC (DUGAS, 1944, p.06).

Dugas defended the episode of Pelíades seemed a narrative to justify Medea's action, as she ceased to be the person who healed the old age diseases to become, herself, a maleficent character (DUGAS, 1944, p.08). We have considered this narrative an ancient version, in which Medea was seen as the healer, and it belongs to the *Iolkus epic cycle*. The poems by Stesichorus, Eumelus of Korinth and Simonides said Medea and Jason came from Kolchis to Korinth, and stopped by Iolkus to participate in the funeral games for Pelias. And the kingdom of Iolkus received Medea as queen of Korinth, and Eumelus and Simonides confirmed this narrative. (frag 20/WEST, *Korinthiaca*).

This festival was an honour worthy of the king. The episode was described by Pausanias, an eyewitness to the event, and one of the scenes that he had seen portrayed was the love story between Jason and Medea, recorded on the Chest of Kypselos at Olympia, dated before the second quarter of the sixth century, and at the throne of Apollo at Amyklai (Pausanias, V.17. 9). Both are the earliest portraits of the funeral games for Pelias (ROLLER, 1981, p.116). The mythological narrative about the funeral games for Pelias tells about the couple Medea and Jason's arrival to Iolkus when king Pelias had already died. There was a version which said that the priestess of Hekate could have performed a magical ritual to bring Pelias back and make him young again. Medea's rejuvenating expertise

Panhellenic athletic festival as the Pythian Games, Isthmian and Nemean Games.

¹¹ See Richard Rawles, *Simonides the Poet*, Cambridge University Press, 2018; Edouard Will. *Korinthiaca*. de Boccard, 1955 and Ettore Cingano, *Interpreting epic and lyric fragments: Stesichorus, Simonides, Corinna, the Theban epics, the Hesiodic corpus and other epic fragments*, Adolf Hakkert Editore, 2017.

¹¹ Athenaeus (4.172EF = Simon. PMG 564 = F 273 Poltera, apud. Cinganop, 2017, p.28

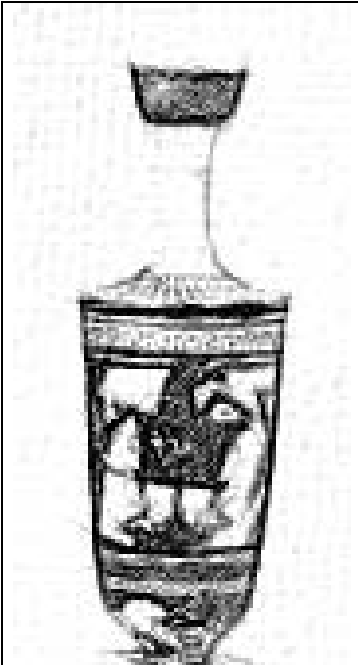
¹² The reason of success and the interest in the funeral games together the Greek myth may have been the foundation of the three

was narrated by Plautus in *Pseudolus*, he said: *Remember how Medea boiled old Pelias, in a stew of her special herbs and poisons and made him a tender and juicy young man again? What Medea did for Pelias, I'll do for you today* (PLAUTUS, *Pseudolus*, v.868-872).

Sophocles, in the *Rhizotomoi* plot fragments, showed Medea's need to care for roots, maybe to use them in Pelias' rejuvenation. The dramaturgy title suggests the association between medicinal knowledge and sorcery with the use of roots and herbs. The rejuvenation made by Medea was mentioned in *Nostoi's* fragment¹⁴, where Jason's father, Aeson, was transformed into a nice and handsome youth. Medea had stripped away his old skin by her expertise and boiling him with various *pharmaka* in her golden cauldron (West, 2003, p.158.). The Greek noun *rhizotomos* means root, and it is known as *pharmaka* that can be handled by sorceresses (*pharmakides*) and doctor (*iatros*). In the *Odyssey*, the *pharmakides* Circe enchanted Odysseus by handling the molly root into the wine (ODYSSEY, X. 302) and Theophrastus warned about some *pharmaka* that could be used as poison, making wine and honey become lethal drinks or cause some sort of illness (THEOPHRASTUS, IX,15.5-6).

We drew and present the reproduction of the model by Painter Beldam

Then, we assume that Medea was known in the antiquity as the priestess who had the expertise to handle different *pharmaka* to cure and rejuvenate old people. The archaeological material information about the ancient mythological narrative of Medea could be seen through the images on Beldam's lekythos. We catalogued almost twenty-seven Greek vases with images of Medea and Cauldron, and five Greekvases caught our eye because they are *lekythoi* vases from Athens and provided by Beldam's workshop. Beldam took over the production of this specific vase type in the 5th century BC., described as chimney *lekythoi*, named after its distinctive mouth, the curve of the body at the joint that is characteristic of the Beldam's workshop. This shape was made in the Beldam workshop and scholars have attributed chimney *lekythoi* to the hands of the Painter Beldam (ROSENBERG-DIMITRACOPOULOU, 2015, p.88). The lekythos defined as a perfume vase, was dedicated exclusively to funerary uses. It was placed near the deathbed to anoint the corpse. We chose five of the patterns of lekythoi that were used as grave offerings and they were found in the Kerameikos cemetery.

	Iconographic repertory	Peliades, rejuvenation of King Pelias
	Support	lekythos of black figures, Painter of Beldam
	Woman standing on the left	.One of King Pelias' daughters, wearing an embroidered himation, looks toward the cauldron that is in the centre of the image, carries a stick in her right hand and a kylix in her left hand
	Woman standing on the right	Medea, ministering the magic instructions with her right hand raised, seems to hold a stick in her right hand and a kylix in her left hand.
	Old Man seated/standing	absent
	Cauldron	Rustic model of the type <i>empyribete</i> tripod with a ram inside
	Phoriamos	absent
	Ram	adult animal, facing to the right with the forelegs raised
	Fire	Bonfire under the cauldron
	Side B	Image absent
	Makaira/dagger	absent
	Minimas Formal Units	adult woman tripod/ <i>empyribete</i> sheep

¹⁴ PEG F7(= F 6 D. = F 6 W.), from the hypothesis (a.). The Greek Epic Cycle and Its Ancient Reception: A Companion; The drug to anoint himself with, and the Hekate sacrifice: Pind. Pyth. 4.221-2, 233; Ap. Rhod. 3.843-68, 1029-51, 1169, 1246-8 (the scene is clearly modelled on the nekuia, consultation of the dead, in Od. 11); Apollod. 1.129-30. Eur. Med. 9-10, 486; Euripides' play Peliades dealt with this myth: TGF F601-24. Aison (Jason's father) and Jason rejuvenated: Nostoi F7 (PEG)

The five vases from the Beldam workshop have the same image: the figure of Medea, as the queen of Korinth on the right side of the picture. She wears an embroidered *peplos* and *himation* with many folds. She spreads a pinch of her magical herbs into the cauldron, and she keeps a little box in her left hand, which is named *phoriamos* (box with the poisons and magical herbs). There are other pictures where she holds a knife on the right hand. On the other side of the picture, there is a woman, we suppose she is one of Pelias' daughters. She wears the same Greek clothes as Medea, and these pieces of garment belong to the Greek fashion. That means Beldam was following the Hellenic mythology, which probably is from the oldest episode: *Iolkus epiccycle*.

The vases show the cauldron placed on the centre of the image with the fire amidst the flaming wood. We can realize that type of cauldron is very ancient, it is large and rustic, and it is known as *empyribete*. Medea shows her expertise at the specific moment when the animal is inside the cauldron in process of being rejuvenated. Crossing the information between the text and the image, we could state that the picture with Medea in these *lekythoi* vases refer to the remote characteristic of hers, and the pictures of the *lecythoi* belong to the *Iolkus epiccycle*. Medea was designed as the young wife of Jason and as a priestess of Hekate with the ability to cure from diseases and to rejuvenate the old and sick people.

As our partial conclusion, we believed in the alternative interpretation of Medea's myth: the family of the dead ordered this kind of Greek vases and the specific picture of Medea because they believed in her ability to cure the dead or relieve his pain in the world of the dead. The image of the specific Greek vases named *lecythoi* and Medea must have been reference to the traditional connection with the Greek athletic context. Maybe, the homage to the deceased could have been due to the fact he had participated in the athletic games. His relatives followed the tradition of celebrating his death with the image of Medea on the *lekythos*. We argue that, nobody would spend the money to order the funeral gift for a close deceased relative or offer the image and myth of a cruel and murderous character to him. Beldam's workshop belonged to the end of the sixth century, time when the journey to Hades had begun to be elaborated, and the painters and the families of the dead took the reference point in the context of the epic mythology. Maybe, the most popular myth, at that time, that could cure the soul of the dead and help him in the new journey to Hades...was Medea.

BIBLIOGRAPHY

1. BÉRARD, Claude. Iconographie-iconologie-iconologique, *Études de lettres*, Fasc 4, Paris: Belles Lettres, 1983. p. 5-37
2. BOARDMAN, J., *Athenian Black Figure Vases* (London, 1974): FIG.278.1, 2.
3. CANDIDO, Maria Regina. Atenas e a materialidade do ofício de aprendiz de feiticeiro/ Athènes et l'importance du métier d'apprenti sorcier. *Romanitas*. Vitória: Universidade Federal do Espírito Santo, n. 9, jun. 2017a, pp.16-26.
4. CANDIDO, Maria. Os espaços sagrados d deusa Hécate Ctônia na Atenas Classica. In: *Espaço do Sagrado na Cidade Antiga*. Vitória: GM Editora, 2017b
5. CINGANO, Ettore. Interpreting epic and lyric fragments: Stesichorus, Simonides, Corinna, the Theban epics, the Hesiodic corpus and other epic fragments. *LEXIS: Poetica, Retorica e Comunicazione nell tradizione classica*. Università Ca' Foscari Venezia. 2017 Pp.28-57 . <http://www.Lexionline.eu>. access 13/06/2019.
6. DANEK, Georg. Nostoi. Marco Fantuzzi and Christos Tsagalis, *The Greek Epic Cycle and Its Ancient Reception. A Companion*. Cambridge: Cambridge University Press, 2012, p.355 – 379.
7. DIODORUS SICULUS. *Library of History*. Book IX-XIII. Loeb Classical Library Translated by C.H. Oldfather. Cambridge: Havard University Press, 1946.
8. DUGAS, Charles. Le premier crime de Medee. *Revue des Études Ancienne*. Tome 46, n°1-2, pp.5-11, 1944. http://www.persee.fr/doc/rea_1994.
9. ESCHYLES. Fragments. *The Nurses of Dionysus*. Loeb Classical Library Translated by Alan H. Sommerstein. Cambridge: Havard University Press, 2009..
10. EUMELUS. Korinthiaca. In: WEST, Martin L. *Greek Epic Fragments from the seventh to fifth centuries B.C*. Loeb Classical Library. London: Harvard University Press. 2003.
11. FAIRBANKS, Arthur The Chthonic Gods of Greek Religion. *The American Journal of Philology*, The Johns Hopkins University Press. Vol. 21, No. 3 (1900), pp. 241-259. URL: <http://www.jstor.org/stable/287716> .access 23/03/2019.
12. FOWLER, Robert L. *Early Greek Mythology*. Vol. II. Oxford: Oxford University Press, 2013.
13. GAGUA, lamze. Aeetes in Old Greek Sources. *Journal Phasis*. Tbilisi: Tbilisi State University. vol 15, n°15, p.87-93.
14. GUIRAUD, Helene. La figure de Medee sur les vases grecs. *PALLAS*, n°45 .Toulouse: Presses Universitaires du Midi, 1996, p.207-218.
15. HARRAUER, Christine. Der korinthische Kindermord: Eumelos und die Folgen. *Wiener Studien, Austrian Academy of Sciences Press*. Vol. 112 (1999), pp. 5-28, URL: <http://www.jstor.org/stable/24750340>. access 13/06/2019.
16. HOMER. *The Iliad*. Translated by Murray, A T. Loeb Classical Library Volumes1. Cambridge, MA,

- Harvard University Press. London: William Heinemann Ltd. 1924.
17. HOMER. *The Odyssey*. Translated by Murray, A T. Loeb Classical Library Volumes. Cambridge, MA, Harvard University Press. London: William Heinemann Ltd. 1919.
18. Hordern, J. H. *Sophron's Mimes: Text, Translation, and Commentary*. Oxford: Oxford University Press, 2004.
19. NOSTOI. In: *Greek Epic Fragments*. Tradução de M. L. West. Cambridge, MA: Harvard University Press, 2003.
20. PAUSANIAS. *Descripción de Grecia I-II*, traducción Maria Cruz H. Ingelmo, Madrid: Gredos, 1994.
21. PLAUTUS. *Pseudolus*. Translated by David Christenson. Cambridge: Cambridge University Press, 2020.
22. ROLLER, Lynn E. *Funeral Games in Greek Art*. *American Journal of Archaeology*. Vol. 85, n °2, pp. 107-119.URL: <http://www.jstor.org/stable/505030>. access 20/04/2019.
23. ROSENBERG-DIMITRACOPOULOU, Angele. Funerals for Statues? The Case of Phrasikleia and her "Brother" In: *Autopsy in Athens*. Philadelphia: Oxbow Books, 2015, p. 85-99.
24. SCARBOROUGH, John. The Pharmacology of Sacred Plants, Herbs, and Roots. In: *Magika Hiera: ancient Greek magic and religion*. Edited by Christopher A. Faraone and Dirk Obbink. Oxford: Oxford University Press, 1991, p. P.138 – 174.
25. SOPHOCLES. Rhizotomoi. *The Fragments of Sophocles*. Vol.01.translated by A.C. Person. Cambridge: Cambridge University Press, 1917.
26. SOPHOCLES. *Fragments*. Vol. IV Loeb Classical Library. translated by Stefan Rodt. Cambridge: Harvard University Press, 1996.
27. STRABON. *The Geography of Strabon*. Vol.2. Loeb Classical Library Translated by Horace Leonard Jones. Cambridge: Harvard University Press, 1931.
28. THEOPHRASTUS. *Enquiry into Plants*. translation by Sir Arthur Hort. London: William Heinemann, 1911.
29. WEST, Martin L. *Greek Epic Fragments from the seventh to fifth centuries B.C*. Loeb Classical Library. London: Harvard University Press. 2003.



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: D
HISTORY, ARCHAEOLOGY & ANTHROPOLOGY
Volume 20 Issue 3 Version 1.0 Year 2020
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-460X & Print ISSN: 0975-587X

Temperance Movement and Popular Drinking Habits in Brazil

By Teresa Cristina de Novaes Marques

Universidade de Brasília

Introduction- A 2009 national survey has shown that beer represents 60 percent of all alcohol consumed regularly in Brazil. It also shows that gender, education and urbanity make little difference to determinate people's preference for beer. Its widespread consumption throughout the country permeates every social class and makes it seem "natural" choice.² Beer presence is so common in everyday life that people justify this consumption by arguing that it is not an alcoholic beverage. In fact, many think of it as a sort of refreshment, probably because it is served cold. Although physicians constantly warn about its alcoholic content, breweries lobby intensively to avoid restrictions on their propaganda message. Consequently, the consumption of beer has increased over the years.³

[This chapter analyzes the increase of beer consumption as a consequence of early twentieth-century temperance movements and industrialization.⁴ I argue that the history of the industrial production of beer and its consumption in Brazil is closely related to temperance movements in several ways. First, temperance propaganda failed to convince consumers to quit alcohol. Second, temperance messages condemning both *aguardente* consumption and those who drank it helped to create a market for beer.⁵ Third, the commercial strategies adopted by breweries were very successful.]

GJHSS-D Classification: FOR Code: 430199



Strictly as per the compliance and regulations of:



Temperance Movement and Popular Drinking Habits in Brazil

Teresa Cristina de Novaes Marques¹

I. INTRODUCTION

A 2009 national survey has shown that beer represents 60 percent of all alcohol consumed regularly in Brazil. It also shows that gender, education and urbanity make little difference to determinate people's preference for beer. Its widespread consumption throughout the country permeates every social class and makes it seem "natural" choice.² Beer presence is so common in everyday life that people justify this consumption by arguing that it is not an alcoholic beverage. In fact, many think of it as a sort of refreshment, probably because it is served cold. Although physicians constantly warn about its alcoholic content, breweries lobby intensively to avoid restrictions on their propaganda message. Consequently, the consumption of beer has increased over the years.³

[This chapter analyzes the increase of beer consumption as a consequence of early twentieth-century temperance movements and industrialization.⁴ I argue that the history of the industrial production of beer and its consumption in Brazil is closely related to temperance movements in several ways. First, temperance propaganda failed to convince consumers to quit alcohol. Second, temperance messages condemning both *aguardente* consumption and those who drank it helped to create a market for beer.⁵ Third, the commercial strategies adopted by breweries were very successful.]

I have divided this chapter in three sections. First, I analyze the temperance movement, its intellectual origins, its racial and social connotations, and its political strategies. Then examine the brewing industry reaction to the temperance movement. I close this chapter analyzing the spread of beer consumption as a consequence of this movement and modernization efforts in Brazil.

Between the 1870's and the early 1930's, alcohol consumption was targeted by severe criticism in many parts of the western world. Moreover, consumers, especially the urban masses who happened to be poor, illiterate, and marginalized in the economic activities, were the target of temperance movements. In 1919, the temperance movement in the United States, which

originated as a religious initiative, reached its peak with the legal prohibition of sale and production of alcoholic beverages. In contrast, in Brazil, the temperance campaign emerged as a lay movement and especially condemned the use of *aguardente* (sugar cane spirit).

Temperance movements around the world expressed ethnic and class tensions in their societies. In the United States, religious groups called for temperance in reaction to the supposed negative habits of new immigrants.⁶ In Mexico, temperance proposals intended to redeem both the indigenous and *mestizo* working populations by changing their drinking habits.⁷ In Brazil, the movement opened fire against the consumption habits of the poor, black, and *mestizo* population.

While in the United States and Mexico temperance efforts got adopted as state policies, in Brazil this movement never achieved full governmental support. In the U.S., the government backed up religious efforts with the law, while in Mexico, temperance campaigns became a state policy after 1910 Revolution, although there was never a national prohibition.⁸ In Brazil, despite the vociferousness of temperance activists in the 1920's, a nation-wide policy intending to control the population's drinking habits through a federal law was enacted only in 1997.⁹ Even the centralizing conservative regime of Getúlio Vargas in the 1930s did not foresee the political benefits of using the state's instruments to openly repress the people's drinking habits. For the government, the everyday control of the police forces over the urban population was enough. Besides, the federal government's repressive forces were much more concerned with opposition activists than with policing urban behavior.

The fact that the distribution of temperance propaganda was not adopted as a state policy in Brazil did not mean it had no impact on society. As I will examine in detail this propaganda further in the chapter, it is necessary to stress, in this point, that it had strong racial, social, and commercial connotations. Its strong racial messages reflected the history of racial relationships in the country. This was especially relevant in a society where explicitly segregationist policies had no legal basis, but a persistent cultural segregation that undermined the self-esteem of the poor and black people has remained.¹⁰ For this very reason, the temperance also projected the future of the nation, in

Author: Universidade de Brasília – Brazil.
e-mail: tcnovaes610@gmail.com

which industrial progress would replace the backward, slavery-based recent past. Participation in this future required abandoning of old habits, such as the drinking of *aguardente*. Those not interested or not able to change their drinking habits remained trapped in poverty and social depreciation. This discrimination had its origins in the so-called defects of skin color that were associated with moral defects. So, the persistent association of drunkenness with black people contributed to foster the social and racial gap of classes in the country.

The debate about temperance in Brazil was divided between moderate and radical activists. Most of them supported moderation of consumption and a few activists who stood for the total abolition of alcoholic beverages in the country. Being the majority, moderates regarded beer as a lesser evil in comparison to distilled beverages, due to their lesser alcohol content. For radicals, beer was also a target.

Breweries were able to easily overcome the commercial threat of temperance movements due to their political connections and their advertising strategies. Brewery advertisements insisted on the nutritional qualities of beer and its lower alcoholic content in comparison to non-fermented beverages. The same arguments were employed in many other countries, such as the United States and Mexico. Nevertheless, companies in Brazil also exploited other powerful and long-lasting ideas to ensure the legitimate presence of beer in the market. Beer was portrayed as a civilized, modern and industrial beverage, a product of technology developed in Europe. As a civilized beverage, beer shadowed *aguardente* and its social stigma.

Aguardente was regarded as the beverage of the slaves; therefore it had political, social and racial connotations.¹¹ After the abolition of slavery, in 1888, *aguardente* was also perceived as the drink of the disenfranchised, especially the poor urban *mestizo* population. It was considered a social evil and the reason for the supposed poor people degradation. Abuse of *aguardente* was one of the many reasons given to justify the social and political exclusion of the urban poor population.

Ironically, *aguardente* was also the choice of the slave-owners. Colonial inhabitants had used it profusely: as an appetizer, as medicine, and ritual beverage. It was regularly consumed during long journeys in the hinterland.¹² But, for the Brazilian elites of the 1920s, this was a distant and forgettable past; there was no space for the habits of black people in their new, modern nation.

Breweries exploited these notions in the popular mindset and adjusted their public image in response to temperance movement's attacks. They succeeded in

making consumers shift their preferences to beer as a way of crafting new identities for themselves, separating them from the urban masses.

II. TEMPERANCE AND BEER

The Brazilian temperance movement was led by physicians, lawyers, journalists, congressmen, and right-wing feminists.¹³ Each group condemned alcohol consumption from its own perspective. They represented the various ideologies supporting social control proposals debated in the political arena at large during the first decades of the twentieth century.

The temperance propaganda had its roots in an intellectual movement which emerged in the 1870's that was influenced by social Darwinism and phrenology. Such theories were used as tools to explain the behavior of individuals and to ensure the basis for public policies of intervention in the social order.¹⁴ Intervention was perceived as necessary, especially in Rio de Janeiro, where crowded, poor neighborhoods, a consequence of urban growth, created concern and uneasiness among the elites.

Although the educated elites lobbied for a larger presence of the state in the society, this desire ran up against the current liberal ideology that supported the political system, based on a non-interventionist state conception. This was one of the reasons why political proposals presented in the 1920s explicitly promoting federal anti-alcohol laws failed. Aware of this liberal bias, temperance activists turned instead to local authorities, who welcomed their arguments and took some actions restraining alcohol consumption. For instance, at the end of 1928, temperance leaders met with the President of the Republic, Washington Luís de Sousa, bringing him energetic proposals against alcohol consumption.¹⁵ They proposed him a local increase of taxes on beverages, proportional to their alcoholic contents of the products. Thus, not only the distilled beverages would be taxed in Rio de Janeiro, but also the fermented ones, such as beer, although at a lower rate.

As a result from these lobbying actions, since early 1930s the appointed mayor of Rio de Janeiro, then Federal District, raised taxes on saloons and restaurants that opened after 7 P.M., despite the owner's negative reaction.¹⁶ In São Paulo, temperance groups also requested that the regional government pushed policies of social control too.

The groups from Rio de Janeiro and São Paulo were the most active ones. However, in the early 20th Century, most political movement that started in Rio and achieved popularity had a strong impact on the rest of the country.¹⁷ Because of this impact, Rio temperance groups became the most relevant ones and thus this chapter focuses on their actions.

Two particular social groups were prominent in condemning alcoholism as a social evil of the urban masses: attorneys and physicians. Although both groups had different ways of approaching the issue, they occasionally acted in conjunction. Physicians related alcoholism to the degradation of the race. In contrast, jurists associated the consumption of alcohol and criminality and perceived the first as a substantial cause of the second. Either under the influence of the Italian school of criminology, either under the influence of the French school, lawyers and physicians disagreed about the way the state should intervene to restrain alcoholism and other social evils.

In one hand, the Italian school of criminology used anthropometry to describe individuals and their criminal inclinations and it was the main inspiration for repressive practices of Brazilian police. This school also placed the blame for criminal activities on individuals, and not on their social environment. Besides, these criminologists described some groups as potentially dangerous for social life, because of their physical appearance. Among them were blacks, the foreigners, alcoholics, epileptics, lunatics, prostitutes and drug addicts.¹⁸

On the other hand, the French School proclaimed that the collective practices, not the individuals, should be put under surveillance. It called for intervention in the social environment, such as the hygienic regulation of prostitution and drinking. It enjoyed the support of many physicians active in the temperance movement. Doctors were concerned with the social impact of miscegenation on the eugenic formation of the Brazilian people. Because of that, the people's redemption required the direct intervention of the medical knowledge. The latter would promote social selection measures allowing enhancement of the population, either by fostering immigration, and either by intervening in people private life.¹⁹

The temperance movement brought physicians once again to the public scene with a new repertoire of proposals after the high expectations many had about European immigration were frustrated by the political outcome of it.²⁰ With the years, immigrants had influenced labor union movements and spread anarchistic ideas. Then, activists pushed for bills against alcohol abuse, and promoted massive campaigns.

With these intentions, activists founded anti-alcohol civil associations. Among them were the National League against Alcoholism [*Liga Nacional contra o Alcoolismo*] and the Brazilian League of Mental Hygiene [*Liga Brasileira de Higiene Mental*].²¹ This latter was created in 1922 by a group of Rio physicians with the intention of participating in the celebrations of the Centennial of Brazilian Independence, when the Brazilian elites debated the future of the nation.²²

Along with every other action, the temperance associations targeted the educational front and promoted anti-alcohol weeks, taking the temperance message to a larger audience in the press, in workplaces, in schools, and, from the 1930s on, also in the radio. Physicians, lawyers, and feminists presented lectures in many places in the city—unions, schools, clubs, and factories. These events took place in October, around the celebration of the *Penha* festival, when the abusive consumption of alcohol was often highlighted by the press.²³ The proximity of Carnival, celebrated annually from January to February, also raised activists concern on alcohol abuse.

Lectures during the anti-alcohol weeks showed the different opinions among the activists. Speakers had divided opinions about whether prohibition should be total or partial, and what kind of beverages that should be restrained. Among the supporters of a total prohibition were the jurist and Congressman Afrânio Coutinho, and the members from the Brazilian Union for Temperance [*União Brasileira Pró- Temperança*].²⁴ In contrast, many other activists thought that the total prohibition like the American one would not be the best option for Brazil. They argued that the American Prohibition did not deliver the expected results. On the contrary, this measure was an example of a public policy with undesirable consequences because of the increase in criminality observed in the country after the establishment of the prohibition.

Likewise, among activists there was a debate about beer. Although they all condemned *aguardente*, just a few, like the physician Hermeto Lima, explicitly condemned beer as harmful as any other alcoholic beverage to the consumer's health.²⁵ In 1914, he recognized that beer was more easily accepted by the society. Sarcastically, he criticized low-alcohol beer as having "a better reputation because it does not kill so fast." In comparison, a pamphlet produced by the Department of Health of the State of São Paulo included beer in the list of alcoholic beverages. However, it strongly criticized *aguardente*, because it caused addiction.²⁶

Physicians were concerned about beer because of addiction and alcohol levels. They argued that the consumer's compulsion for alcohol was gradual; therefore beer was an initial stage of irreversible addiction. Most of them condemned high fermentation beers because they were poor quality, it was said, but most physicians were tolerant with low fermentation beer.²⁷

Few ones, like Doctor Moncorvo Filho were prominent in the fight against the popular assumptions about nutritional qualities of beer, such as the idea women should drink it to produce more milk to nurse their children. In fact, these ideas were widely disseminated by breweries in Brazil and abroad.

As a pediatrician, Moncorvo Filho strongly condemned the use of black beer by nursing mothers and wet nurses. He also stressed that women should breastfeed their own children, instead of wet nurses. If these were necessary, they should be submitted to sanitarian control by health authorities.²⁸ In other words, the offspring of the elites should be kept apart from the degraded races. The pictures illustrating Moncorvo's flier were even more eloquent. (See figure 1) It pictures a squalidly and unhealthy black woman breastfeeding a white child, while she grabs a bottle placed in front of her. The picture expresses, graphically, the concern of physicians with the proximity between children and degenerated people.

Moncorvo Filho's flier might have represented a response to an advertisement campaign of the brewery Brahma, published first in Rio press in July, 1921 and then as a flier praising the nutritional qualities of a brand of malt beer.²⁹ Several advertisements with images of white mothers and healthy babies showed that despite the severe criticism, breweries did not immediately abandon this marketing strategy.³⁰ [While beer was not unanimously condemned by temperance activists, all of them were concerned with the black population's drinking habits.

Breweries benefited from the diversity of temperance discourses and their economic and political strength. *Aguardente* producers were dispersed throughout the nation and lacked an organized political leadership.³¹ Large breweries in contrast were located in the main cities and enjoyed coordinated leadership efforts. Therefore, they could promptly counteract the temperance attacks.

Breweries took any opportunity to promote and defend their products. In 1908, the National Exhibition celebrated the 100th anniversary of the opening of Brazilian ports to friendly nations. It praised the civilized character of Brazil as a supporter of free-trade, open to new ideas coming from Europe. Brahma managed to set up an elegant bar stand in the exhibition. The brewery's participation in this exhibition represented an important advertising strategy because visitors got exposed to its products.

More importantly, Brahma's participation was a political statement. Before the First World War years, large breweries lobbied for tariff protection as they deeply depended on imported inputs such as barley and *lupulus*, as well as feared competition from Britain products. In the political front, breweries in operation in Brazil faced opposition by some politicians who perceived their trade as artificial.³² Breweries also lobbied for special fiscal treatment arguing that their products were harmless to the consumers, in contrast to *high fermentation* beer made under low hygienically standards.

Like the Mexican temperance movement and alcohol producers, both Brazilian activists and breweries employed the support of intellectuals to justify their activities. In Mexico, *pulque* production and consumption was defended as well as demonized with the help of prestigious scholars.³³ In Brazil, physicians played the role of the authoritative voices in the public debate on alcohol. That is the reason why Brahma sponsored a booklet defending the beer industry that was distributed to the 1908 exhibition visitors.³⁴ The author of the booklet was Dr. Pires de Almeida, a renowned hygienist and physician.³⁵

Dr. Almeida insisted on beer low toxicity in comparison to other beverages available in the market. He also praised beer's nutritional qualities, absent in distilled beverages, especially in *aguardente*. He argued that the eventual abuse of beer would cause just a slight and pleasant dizziness and sleepiness. In contrast, fruit liqueurs caused intense headaches; vermouth, and whiskey led to a temporary loss of memory; absinthe induced crime; and rum as well as *aguardente* produced nasty drunkenness, the loss of moral sense, and severe headaches.³⁶ In other words, the level of alcohol content had different physical and moral effects on the consumer.

Dr. Almeida praised Brahma and its hygienic concerns. Its production was based on scientific principles, in contrast with the empiric methods of high fermentation beer and traditional beverages such as sugar-cane brandy.³⁷ The author emphasized that Brahma's technology and methods came from German beer industry know-how.³⁸ In so doing, Almeida not only made Brahma an heir of the German brewery traditions, but also presented its beer as a civilized modern beverage.³⁹

Despite the breweries' efforts, the idea of beer as an inoffensive beverage was contested. Rio's police, in an attempt to decrease drunkenness and its consequences, requested in 1907 an analysis of the alcoholic content of all beverages sold in the city. Based on the results, the consumption of *aguardente*, cheap wine, and distilled beverages in general, were condemned. Instead beer was considered socially tolerable.⁴⁰ However by 1912, the issue went back to discussion. This time it was under the discussion of rules concerning business hours for alcohol sale. In November, the police chief of Rio ordered that beer could be sold only after 7 PM.⁴¹ Under the same police regulations, people could drink *aguardente* on balconies at night, and drunk individuals wandering in the streets should be arrested.

Certainly nobody thought that such measures would suppress *aguardente* consumption completely. From a practical perspective, the beverage did not require being cooled to be palatable.⁴² It could be stored

for long periods, or mixed with fruits and juices in infinitive combinations and be hidden from the police. However, 1912 regulations supplied the police with the legitimacy to hinder popular leisure, although with questionable results.

Unlike *aguardente*, low fermentation beer – Lager beer – was produced on a large scale only in a few units. Therefore beer was taxed at the factory according to daily production records, in contrast with *aguardente* producers who frequently evaded taxes. In fact, the increase in sale taxes, including beverages, started during World War I and lasted throughout the 1920s. It was not only an effort in promoting temperance, but also the result of the federal government's insufficient revenues.⁴³ Until the war, the country's budget strongly relied on taxes on imported goods, but difficulties in navigation in the Atlantic and a crisis in the exchange rate as consequences of the war, impacted negatively on the offer of imported goods, as well as tax collect. After the First World War, the domestic market kept on developing and taxes on consumer goods played more and more important role on the Union's tax revenues.⁴⁴ So, the relevant contribution of breweries to the fiscal collect was always remembered when companies lobbied for their interests, and came into play when congressmen discussed temperance bills and sale taxes.

An example of the position of breweries versus the political support to temperance campaign offered by congressmen were the bills presented by Juvenal Lamartine, who represented Rio Grande do Norte in the Chamber of Deputies. In October 1917, Lamartine presented a bill intending to repress alcohol consumption by increasing taxes to alcoholic beverages.⁴⁵ Important newspapers supported the deputy's initiative. *O País* pointed out that the bill had its goal to combat "the dreadful social plague which poisons and consumes human vitality, destroying energy, morality and intelligence." The journalist lamented the bill limited chances of being passed. A similar bill, presented the previous year by Senator Eloy de Souza had ended up being filed away. The journalist argued that in the Senate and the Chamber of Deputies congressmen connected to sugarcane trade resisted to bills as such.⁴⁶

Lamartine did not include all kinds of drinks in his bill. Low fermentation beers, such as Brahma's were left out. He targeted high fermentation beers, ordinary wines, and *aguardente*; which were perceived as more damaging. To reinforce his arguments, he included in his speech the opinion of three distinguished politically prominent physicians.⁴⁷ They unanimously confirmed the damaging effects of alcohol on consumer's offspring, such as high infant mortality and congenital problems. Despite its arguments and reception in the press, Lamartine's bill did not pass into a law.

In July 1920, Juvenal Lamartine came back with a more radical bill including measures limiting alcohol and consumption.⁴⁸ The bill proposed doubling taxes on imported beverages. It also would forbid the importation and manufacture of beverages with more than 2% alcohol in the entire national territory. Consumption taxes would double on low fermentation beers, such as Brahma, and would triple on high fermentation beers, national wines, and *aguardente*. Most beer brands would be affected. Severe punishments were proposed for consumers with no distinction between occasional and constant drinkers.⁴⁹ According to the bill, anyone caught drunk would be arrested for ten days, besides being charged in 200\$000. Recidivists would pay double. A government employee caught in *flagrante* would be dismissed "for the good of public morality", and unable to work for the state for ten years.⁵⁰

The day after the bill was submitted, *O País* celebrated its perfect timing.⁵¹ The United States and Argentina had just passed alcohol legislation. In the U.S., the legislation was prohibitive, whereas in Argentina it was restrictive.⁵² *O País* called on legislators to follow the international examples. Despite the press' efforts, Lamartine's 1920 bill was rejected as had happened in 1917. In fact, neither one was even studied by the Committee of Justice, the first step in the Chamber of Deputies.⁵³ Nevertheless, in 1922, the congressman succeeded in passing a bill declaring the *Liga Nacional contra o Alcoolismo* [National League against Alcoholism] an institution of public utility and assigning it fiscal privileges.⁵⁴

Although both of his bills were rejected, Lamartine's political efforts to hinder alcohol consumption in Brazil did not remain fruitless; they got the public attention to the anti-alcohol cause. The political system did not encompass the idea of openly repress alcohol consumption, but it accepted imposing increasing taxes on beverages. If we examine the Budget Laws of those years, we consistently observe this trend. In 1917, for example per liter, high fermentation beers were taxed at \$180 réis, low fermentation beers had a tax of \$150 réis, and national *aguardente* had a tax of \$120 réis.⁵⁵ In 1919, the federal budget revenues proposed to charge a liter of high fermentation beer at \$300 réis, and low fermentation beer and *aguardente* at \$240 réis.⁵⁶ In 1922, the Federal Budget law increased *aguardente* at \$480 réis a liter.⁵⁷ For the rest of the decade, there was a systematic increase of taxes.

However, low fermentation beer producers managed to stabilize the taxes on their products.⁵⁸ How so?

Realizing that raising taxes on consumer goods were inevitable, the low fermentation beer companies strongly influenced the congressional negotiations on the federal budget to defend a special fiscal treatment.

They constantly emphasized the low toxicity of their products and their significance in tax collection and public finances.⁵⁹ Breweries lobbied in favor of its interests, low tariffs on their imported inputs and lower taxes on their products, with the argument that beer was a socially accepted beverage.⁶⁰ Large sugar cane producers had an important economic and political power too. Although they were able to block parliamentary initiatives seeking to discourage *aguardente* consumption, they were not able to favorably depict their product. Due to its heterogeneous network, *aguardente* producers could not challenge the minor, but constant increases in consumption taxes. Even so it was more expensive each day, *aguardente* remained popular.

To keep their profits despite the taxes and enlarge its market, the brewing companies adapted their advertising companies to current trends. They abandoned the focus on promoting beers with high alcohol contents, advertised as prime quality. Instead, they shifted the emphasis to the so-called second quality beers. Actually, the international market since the beginning of World War I favored Pilsner types, which were lighter, cheaper and had less alcohol.

Breweries also sponsored cultural productions as another strategy to keep consumers attention on their products, and, as doing so, counteract pro-temperance propaganda. Brahma funded carnival groups all around the city, funded night-clubs, and sponsored musical plays. Thus, through lobbying, sponsoring cultural events, and advertising, breweries responded to the threat of temperance movements. Their efforts consolidated beer's presence in Brazilian daily life by the early twentieth century.

These actions showed that politicians supported temperance ideas and preferred the consumption of less toxic beverages, like beer. They also showed that politicians were sensitive to the arguments the brewing industry lobby sustained.

Although the temperance campaign was directed to the whole population, its main target was the black population, seen by temperance activists as immoderate consumers. Drunkenness, lack of hygiene, and the high incidence of diseases were perceived as examples of the degeneration of non-white groups rather than a consequence of their poverty. People of either indigenous or African background suffered the shame of being poor and other negative connotations related to their marginal living conditions. This stigmatization led the leaders of the incipient black community to take on the white elite's normative discourse. Black leaders started condemning, in their press, drunkenness and gambling as the cause of their social underdevelopment.^{61]}

This chapter aimed to show that by the early twentieth century, beer was incorporated to the daily life

of Brazilian society. The efforts of the temperance movements and breweries had diverted results. The first ones had only been able to demonize backward beverages with a dark past and made urban masses to shift from their traditional sugarcane *aguardente* to other beverages, if their prices were attractive. The second ones had legitimized their product and repositioned it in the market. Beer had become an industrial, light, and nourishing beverage proper enough of a modern social life, without the violent impulses provoked by *aguardente*. Brazilian society had been receptive to the appeal of a civilized industrial nation.

Decades ahead, part of the black people managed to escape poverty and can take part of the consumption society. For *samba* organizations nowadays, beer is an irreplaceable fuel of sociability, and a torment for the remaining temperance activists in Brazil.

¹ An enlarged version of subject is explored in the book *A cerveja e a cidade do Rio de Janeiro, 1888-1933*, (Brasília: EdUnB, 2014).

² Ronaldo Laranjeira, et.al.. 2009. "Padrão de uso de álcool em brasileiros adultos." *Revista Brasileira de Psiquiatria* (November), <http://www.scielo.br/>

³ See the website of *Associação Brasileira de Estudo de Alcool e outras Drogas* for posts condemning Brazilian consumers' attitude towards beer. Access: www.abead.com.br There are no reliable statistic of *per capita* consumption of alcohol in Brazil. Breweries' websites inform that the *per capita* consumption of beer is 12.41 gallons/year; while websites of the sugar cane spirit industry inform that Brazilians consume 2.9 gallons/year of their products.

⁴ A history of the beer industry in Brazil is explored in: T. C. N. Marques, "Capital, Cerveja e Consumo de Massa: a Trajetória da Brahma, 1888-1933" (Doctorate diss., Universidade de Brasília, 2003).

⁵ There are infinite names for sugar cane brandy in popular culture. Here the old word *aguardente* was chosen, for this is how Brazilian fiscal authorities named the product, but I could also name it *cachaça*, *pinga*, *marvada*, and so on. See: Luís da Câmara Cascudo, *Prelúdio da Cachaça. Etnografia, História e Sociologia da aguardente no Brasil* (Rio de Janeiro: Instituto do Açúcar e do Alcool, 1968).

For an insightful study of alcohol consumption during colonial times, see: L. E. B. Avelar, "A moderação em excesso: estudo sobre a história das bebidas na sociedade colonial" (Ms. diss., Universidade de São Paulo, 2010).

⁶ A. Criblez, "Beer Gardens and a Bloody Forth: Drinking and Ethnic Violence in Mid-Nineteenth Century Columbus, Ohio" (Paper presented at the International Workshop Alcohol in the Atlantic World: Historical and Contemporary Perspectives, Toronto, Canada, at York University, October, 2007). For the relationship between the temperance movement and Protestant religion in United States, see: J. Warner, "Temperance, Alcohol, and the American Evangelical: a Reassessment." *Addiction* 104 (2009): 1075-1084.

⁷ Gretchen Kristine Pierce "Sobering the Revolution: Mexico's Anti-Alcohol Campaigns and the Process of State Building, 1910-1940" (Phd Diss., University of Arizona, 2008).

⁸ (Pierce 2008).

⁹ Law no. 9,503 of September 23, 1997, the *Código de Trânsito Brasileiro* [Brazilian Traffic Code], turned the act of driving under the effect of alcohol or drugs into a felony.

¹⁰ By poor people in the 1920s, we mean persons of African descendents and European immigrants. See: J. Hahner, *Poverty and Politics: the Urban Poor in Brazil, 1870-1920* (Albuquerque: University of New Mexico Press, 1986).

¹¹ Throughout the Americas, Brazil received the larger quantity of African slaves during the three hundred years of legal Atlantic slave trade. See: L. Florentino, *Em costas negras: uma história do tráfico de escravos entre a África e o Rio de Janeiro* (São Paulo: Companhia das Letras, 2002). See also: J. Miller, *Way of Death* (Madison: University of Wisconsin Press, 1997).

¹² See: S. B. de Holanda, *Caminhos e Fronteiras* (Rio de Janeiro: José Olympio, 1957). See also the Ernani Silva Bruno collection database, available at *Museu da Casa Brasileira*. Access: www.mcb.sp.gov.br/ernMain.asp

¹³ União Brasileira pró-Temperança, *Seleção de Contribuições Anti-alcoólicas, 1925-1950*. (Rio de Janeiro: Rodrigues & Cia., 1954).

¹⁴ L. M. Schwarcz, *O Espetáculo das Raças: Cientistas, Instituições e Questão Racial no Brasil, 1870-1930* (São Paulo: Companhia das Letras, 1993).

¹⁵ *O Imparcial* and *A Noite*, December 24, 1928.

¹⁶ *Correio da Manhã*, January 14, 1933.

¹⁷ Because state newspapers republished articles from Rio de Janeiro's press.

¹⁸ E. Cancelli, *A cultura do crime e da lei, 1889-1930* (Brasília: Universidade de Brasília, 2001).

¹⁹ This subject is developed by Schwarcz (1993).

²⁰ The first voices defending the mass immigration of European people to Brazil were heard in the 1870s, but only after the abolition of slavery in 1888 the movement of Italian, Portuguese, and German immigrants became demographic relevant.

²¹ Bill number 120/1920, offered by Congressman Juvenal Lamartine on August, 14, 1922, aimed at converting the *Liga Nacional contra o Alcoolismo* into a civil association of public utility; resulted in Decree no. 4,665 of January 24, 1923. *Câmara dos Deputados. Sinopse dos Trabalhos da Câmara dos Senhores Deputados Relativos ao Ano de 1922* (Rio de Janeiro: Imprensa Nacional, 1923).

²² The Independence from Portugal was proclaimed in September 7, 1822. About the temperance entity, see: Schwarcz 1993, 268, note 26. About the political debate surrounding the Centennial celebration, see: M. Motta, *A nação faz cem anos* (Rio de Janeiro: Fundação Getúlio Vargas, 1992).

²³ The *Penha* festival was a religious and popular celebration that took place on Rio's suburbia district of the same name every weekend of October. Building a sanctuary in hills, such as the *Penha* hill, was a tradition in Portugal that Portuguese immigrants preserved while living in Brazil. Local people rushed to the festival in large numbers, searching either for religious comfort or amusements with food and drinks sold at the place, as well as to hear musicians' performances.

²⁴ União Brasileira pró-Temperança (1954).

²⁵ H. Lima, *O alcoolismo no Rio de Janeiro*. (Rio de Janeiro: Imprensa Nacional, 1914), 83.

²⁶ It is said that "*aguardente*, also called *pinga*, which is so familiar to us and so largely consumed, deserves a more careful consideration under the alcoholism point of view (...)". Estado de São Paulo. Departamento de Saúde. Seção de Propaganda e Educação Sanitária. *O que se deve saber sobre o alcoolismo*. (São Paulo, no date, pamphlet).

²⁷ High fermentation beer resembles Ale beer and was produced by small entrepreneurs all around the town; mostly the factory owners were born in Portugal. Low fermentation beer, instead, was produced by industrial entities that required heavy financial investment in equipments. There were only three companies of this sort in Rio then. As the German capital had an important share in Brahma's capital, until First World War the propaganda of the company insisted on claiming that its products resulted from rigid German beer production standards. See: T.C.N. Marques, "Bancos e desenvolvimento industrial. Uma revisão das teses de Gerschenkron à luz da história da Cervejaria Brahma, 1888/1917" *História e Economia, Revista Interdisciplinar*. (2005) <http://www.bbs.edu.br/geral/geral/07Teresa%20Marques.pdf>

²⁸ Artur Moncorvo Filho, *Alcoolismo infantil; (lecture given October 18, 1927, at the Liga de Higiene Mental, Rio de Janeiro: Pongetti, 1928)*

²⁹ Ambev Inc. has not allowed us to reproduce the Malzbier flier in this book. Brahma brewing was founded

in 1888. Nowadays, it is a trademark that is part of the national holding named Ambev, which makes up Inbev Inc., owner of breweries in many countries in Latin America, Europe, and United States. Ambev has image rights on the iconography I researched in Brahma historical archives in Rio. These archives were closed to researchers in 1999, and its holdings were moved to somewhere in the State of São Paulo.

³⁰ Such as: Cervejaria Hanseática, *Cerveja e saúde: da cerveja dos egípcios à Maltina da Hanseática*. Rio de Janeiro, 1938. Flier. [Original at Brahma's Historical Archive]

³¹ Szmerecsányi mentioned that the 1919/1920 National Census listed the existence of 8,514 units of production of sugar cane spirit in the whole country. Of this total, 3,081 units of production were located in Minas Gerais State. The same source registered 58,858 small units of sugar production which could potentially produce sugar cane spirits as a byproduct and if they did, the actual number of sugar cane producers would multiply. For the sugar industry at the time, see: Tamás Szmerecsányi. "1914-1939 Crescimento e Crise da Agroindústria Açucareira do Brasil" *Revista Brasileira de Ciências Sociais*, 5 (1988), 7. For the persistence of an archaic way to produce sugar cane in Minas Gerais, in family properties, see: Marcelo M. Godoy, "No país das minas de ouro a paisagem vertia engenhos de cana e casas de negócio. Um estudo das atividades agroaçucareiras tradicionais, entre o setecentos e o novecentos, e do complexo mercantil da província de Minas Gerais" (Phd diss., Universidade de São Paulo, 2004).

³² This is an aspect of the history of Brazilian industrialization. The so called artificial industries were the branches of industry that did not process national agricultural products. The best work on the issue is still the book: Nícia Villela Luz, *A luta pela industrialização no Brasil*. (São Paulo: Alfa Omega, 1978).

³³ Pierce, "Sobering the Revolution,"

³⁴ Dr. Pires de Almeida, *A Companhia Cervejaria Brahma perante a indústria, o comércio e a hygiene*. (Rio de Janeiro: Canton & Beyer, w/d). The book does not show the date of edition. However, there are enough elements to affirm that it was edited for the Exhibition of 1908, such as a list of the products of Brahma Company at the time.

³⁵ Almeida mentions the Liga anti-Alcoolica [Anti-Alcohol League], that had just been founded, he wrote. This League represents the oldest mention to a temperance civil organization found during this research.

³⁶ Almeida, "A Companhia Cervejaria Brahma", 49.

³⁷ In 1920, there were 683 rural establishments that were formally built to produce alcohol and *aguardente* in Rio de Janeiro State. The 1920s census organizers admitted not having investigated all small rural establishments.

Those domestic producers evaded the Census and were surely beyond the reach of the sales tax inspectors. Brasil. Recenseamento Geral do Brasil. January 9, 1920. *Agricultura e Indústrias – Distrito Federal*. Vol. III, 3rd part. (Rio de Janeiro: Tipografia da Estatística, 1927).

³⁸ Almeida, "A Companhia Cervejaria Brahma", 10.

³⁹ At this point, a parallel with the United States is irresistible. In Brazil, the Lager process of producing beer – that is, the storage under low temperatures – was seen as representing the arrival of the country at industrial modernity, while in the United States, historians argue that Lager represented the opposite. About this, Criblez wrote: "In fact, lager beer became an important symbol of German resistance to assimilation and was appropriated by the forces of temperance as a symbol of Old World decadence, corruption, and foreignness".

⁴⁰ *O País*, August 4, 1907.

⁴¹ *Jornal do Brasil*, "A cerveja é bebida privilegiada", August 11, 1912.

⁴² That is a remarkable aspect of the good, since no domestic refrigeration was available at the time.

⁴³ See: Nícia Vilela Luz 1978, 152. See: Pedro Orlando, *Consolidação do Imposto de consumo*. (São Paulo: n.p., 1926).

⁴⁴ By 1929, taxes on beverages corresponded to 32% of all consumption taxes, followed by tobacco. BRASIL. Ministério do Trabalho, da Indústria e do Comércio. Departamento Nacional de Estatística. *Estatísticas da Produção Industrial do Brasil, 1915-1929*. (Rio de Janeiro: Imprensa Nacional, 1933) p. XVI.

⁴⁵ Bill n. 296/1917. *Anais da Câmara dos Deputados* [Annals of the Chamber of Deputies], October 22, 1917. Lamartine was an experienced politician. He had successive turns in the Chamber of Deputies from 1906 to 1926. The following year, he was elected to the Senate. *Câmara dos Deputados, Deputados Brasileiros, 1826-1976* (Brasília: Gráfica do Senado Federal, 1976).

⁴⁶ *O País*, October 23, 1917. There is no historical study of the political representation of sugar cane industry in the Brazilian Congress. However, it is well known that in the first three decades of the 20th century, drastic changes were in store, such as the marginalization of Northeast producers from the larger consuming markets – Rio de Janeiro and São Paulo. At the same time, there was a persistent growth in the production of Minas Gerais, a state that borders Rio, on a low technological basis. For the overall picture of sugar cane production in Brazil, see: Szmerecsányi (1988).

⁴⁷ One of the physicians was Dr. Moncorvo Filho.

⁴⁸ Bill no. 86/1920. *Anais da Câmara dos Deputados* [Annals of the Chamber of Deputies], July 6, 1920.

⁴⁹ Contrary to what the jurist Evaristo de Moraes argued in his book: Evaristo de Moraes, *Ensaio de Patologia Social* (Rio de Janeiro: Leite Ribeiro & Maurillo, 1921).

⁵⁰ *Diário do Congresso Nacional*, June 7, 1920.

⁵¹ *Jornal do Brasil*, July 7, 1920. *O País*, July 7, 1920.

⁵² *O País*, July 7, 1920.

⁵³ Câmara dos Deputados, *Sinopse dos trabalhos da Câmara dos senhores deputados relativos ao ano de 1917*. (Rio de Janeiro: Imprensa Nacional, 1918). The same source was researched for parliamentary activities from 1918 to 1922. In no year Lamartine's bills were considered by the Committee of Justice and sent to the floor for discussion.

⁵⁴ Bill no. 120/1922. Câmara dos Deputados, *Sinopse dos trabalhos. 1922*. (Rio de Janeiro: Imprensa Nacional, 1923).

⁵⁵ Decree no. 12.351, January 6, 1917.

⁵⁶ Bill no. 260/1919: proposal of general revenues of the Republic for the budget law of 1920. Câmara dos Deputados, *Sinopse dos trabalhos da Câmara dos Senhores Deputados relativos ao ano de 1919* (Rio de Janeiro: Imprensa Nacional, 1920).

⁵⁷ Law no. 4,625, December 31, 1922.

⁵⁸ By the 1922 Budget Law, low fermentation beer was taxed on \$300 réis/liter; the 1932 Law informed the same value.

⁵⁹ For the peculiar process of entrepreneurial lobbying at the time, see: Angela de Castro Gomes, "A República não oligárquica e o liberalismo dos empresários" in, S. Silva, and T. Szmrecsanyi, (ed.) *História econômica da Primeira República* (São Paulo: Hucitec, 2002).

⁶⁰ The breweries also mentioned the beneficial effects of their activities on the productive chain, as a result of the acquisition of raw material and manufactured products such as wood, bottles, sugar from national producers. Furthermore, they highlighted the amount of jobs they generated. Declaration of the Antártica Paulista Inc. to the Chamber of Deputies. [*Diário do Congresso Nacional*, July 21, 1920.] Another declaration of Breweries Companies was sent to the Chamber of Deputies in the 1922 legislative session. Câmara dos Deputados, *Sinopse dos trabalhos da Câmara dos Senhores Deputados relativos ao ano de 1922* (Rio de Janeiro: Imprensa Nacional, 1923).

⁶¹ George Reid Andrews calls the attention to the regularity with which articles condemning addictions such as alcohol and gambling were written in the black press of São Paulo. G. R. Andrews, *Blacks and whites in São Paulo, 1888-1988* (Madison: The University of Wisconsin Press, 1991) 78.



This page is intentionally left blank



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: D
HISTORY, ARCHAEOLOGY & ANTHROPOLOGY
Volume 20 Issue 3 Version 1.0 Year 2020
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-460X & Print ISSN: 0975-587X

Similarities between Prehispanic Wisdom in Mesoamerica and the Philosophies of Asia

By Víctor Kerber

University of Guadalajara

Summary- The territory that stretches from central Mexico to Central America is known as Mesoamerica. Such was the location of great civilizations like the Olmec, Mayan, Teotihuacan and Toltec. The Aztecs, one of the Nahua tribes that populated the plateau till its conquest by Hernán Cortes in 1521, were the last to establish there. Anthropologists have studied their thoughts and beliefs; however, few people have compared the wisdom of the peoples of Mesoamerica with the ancient philosophies of Asia. Our conclusion is that some concepts bear remarkable similarities.

Keywords: *pre-hispanics, aztec calendar, i-ching, sunyata, zen buddhism, Quetzalcoatl.*

GJHSS-D Classification: *FOR Code: 210399*



Strictly as per the compliance and regulations of:



Similarities between Prehispanic Wisdom in Mesoamerica and the Philosophies of Asia

Víctor Kerber

Special gratitude to Alejandra Peraza for the spelling adjustments to this text.

Summary- The territory that stretches from central Mexico to Central America is known as Mesoamerica. Such was the location of great civilizations like the Olmec, Mayan, Teotihuacan and Toltec. The Aztecs, one of the Nahuatl tribes that populated the plateau till its conquest by Hernán Cortés in 1521, were the last to establish there. Anthropologists have studied their thoughts and beliefs; however, few people have compared the wisdom of the peoples of Mesoamerica with the ancient philosophies of Asia. Our conclusion is that some concepts bear remarkable similarities.

Keywords: pre-hispanics, aztec calendar, i-ching, sunyata, zen buddhism, Quetzalcoatl.

I. INTRODUCTION

It is probable that in ancient times, even before Columbus could see the light of the New World, there was contact between the civilizations of all five continents. There are fantastic legends about the Vikings who crossed Greenland towards Newfoundland, and Polynesians in Easter Island, Chile. There is also a theory that the Olmec civilization came from the African Nile, although archaeologist Ann Cyphers rejects such

speculation. Professor Paul Shao of Iowa State University has implied that perhaps certain Chinese expeditions could have arrived in Mesoamerica, given the artistic analogies in jade and obsidian carvings (Shao, 1976). Additionally, the smiling faces of the Totonacs, with their horizontal eyes, scarcely leave any doubt that some Orientals may have been ancestors of the Mexican peoples (FIGURE 1).

It is beyond my reach to demonstrate that there were indeed historical contacts between the Chinese and the ancient Mexicans. However, it is verifiable that the pre-Hispanic cultures did elaborate thoughtful insights about the being and its existential becoming that keep equivalents with the schools of thought in Asia. In this essay my purpose is to highlight some metaphysical similarities between the Asian and Mesoamerican worlds. Possibly a former correspondent for *The New York Times* in Mexico was right when he expounded as a revelation that “[Mexico] has the only political system that must be understood in a pre-Hispanic context; and its inhabitants alone are still more Oriental than Western.” (Riding, 1984)



Figure 1: Totonac statuette with oriental eyes

II. MESOAMERICA

Mesoamerica is a term conceived by anthropologist Paul Kirchhoff. It includes the cultural

region of the American continent that goes from the southern half of Mexico down to Costa Rica. The great Olmec, Mayan, Toltec and Aztec civilizations developed there as we can see on the map.

Miguel León-Portilla, a renowned historian, wondered if there was any kind of philosophical

Author: Ph.D, Center for Japanese Studies, University of Guadalajara.
e-mail: betoker57@hotmail.com

knowledge among the Nahuas, the name given to the settlers of Central Mexico from where the Aztecs arose. The Nahuas considered themselves the heirs of a history that began with the Olmecs (1500 B.C. to 500 A.D.), went through the civilizations of the Mexican plains in the classical period (Teotihuacans and Toltecs), and ended with the Aztecs in Tenochtitlan, the original name of Mexico City. His response was supportive. Yes, we can infer ideas of the philosophical order from the Nahuatl poetry and the legacy inscribed in the ancient *codices*. The art historian Justino Fernández

had already found in the monolith of the goddess Coatlicue, the representation of a cosmos in which the created is a result of an eternal struggle between two opposite forces. Likewise, Laurette Séjourné referred to the *Quetzalcoatlían doctrine*, an allusion to the cult of a mythical being called Topiltzin Quetzalcoatl who came from nowhere, preached among mortals, and returned to the infinity of the universe in the form of the star of the morning (Venus). (Séjourné, 1957)



Recovered from <https://www.lifeder.com/caracteristicas-de-mesoamerica/>

Map 1: Mesoamerica

III. THE TAO OF NAHUI-OLLIN

For this portion of the essay, there are at least two relevant ideas that I would like to present: First, the notion that everything in the pre-Hispanic time and space was comprehended under eternal mutation, in a perennial and constant movement called *ollin* by the Aztecs. Secondly, the pre-Hispanics believed that such drive followed a cyclical chain, equivalent to the circle of Dharma in the Hindu-Buddhist tradition. Everything moves, the whole Universe keeps moving by the contraposition of two opposite forces as in the yin and yang of the Chinese *I-Ching*, the Book of Changes.

The Aztec Calendar is somehow the monument that best encompasses the abstract conception of cyclical movement in the Universe; the Chinese used to call this conception Tao, the totality, a "whole in a hole" (Capra, F., 1976, p.125). In its center, we find the sun with its dynamics: the *Nahui-Ollin*. Four directions of the universe depart from this center toward the four cardinal points (FIGURE 2). It also represents the meeting point between heaven and Earth that the Nahuas (People of the Sun) felt compelled to preserve through offerings of

human hearts. The so-called "Fifth Sun," according to this mythology, would correspond to the current era that has been preceded by four previous ones: those of water, earth, fire, and air. The Nahui-Ollin will surely perish with time, as observed by previous epochs.

The ideas of cyclical movement and permanent change are included in both the I-Ching and the accumulated wisdom of the native peoples of Mesoamerica. This analogy is a topic that Korean professor Joung Kwon Tae has previously explored. Joung asserts that the thoughts contained in the I-Ching transcend to the greatest exponents of contemporary Mexican literature, such as Octavio Paz. However, renowned sinologist Flora Botton Beja discards such influence: "[Paz's] successes in his remarks on Chinese thought are due more to intuition than to scholarship," says she (Botton, F., 2011, p.270). León-Portilla refers to this accumulation of wisdom among the pre-Hispanics as *toltequidad* or Toltec insight (León-Portilla, 1980, p.207).

The combinations of female and male, receptive energy and creative energy, yin and yang in the I-Ching, give rise to eight trigrams that correspond to the

mutations of the Universe. When the sky overflows on Earth in the form of rain, the water emerges. When the sky gives way to the burning sun, fire arises. When the Earth predominates, the wind blows and food sprouts, and when all are in perfect harmony the mountain appears and the lake quiets down. From the I-Ching we

can derive teachings applicable to meditation, fortunetelling, time scheduling, and medication. Each element determines a cardinal point, and surprisingly, its use and symbols correspond to those traced in the Aztec Calendar.



Figure 2: Nahui Ollin in the Aztec Calendar

IV. TOLTEC ZEN

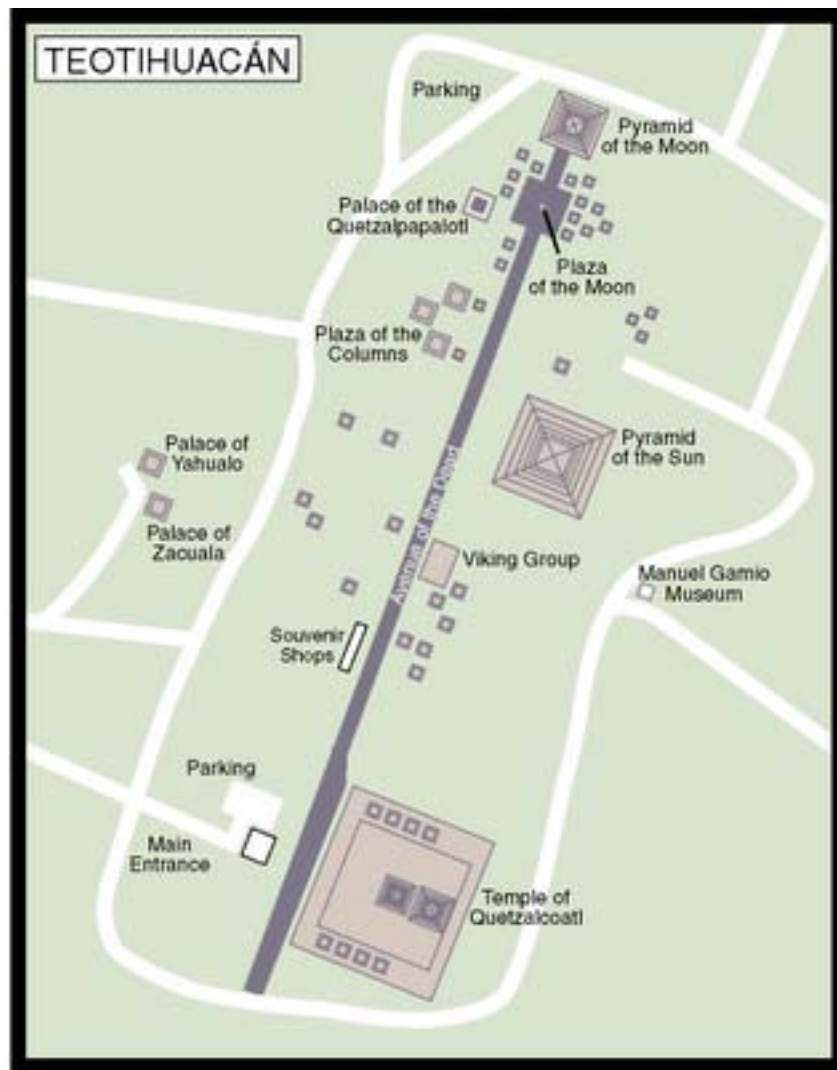
The pre-Hispanic view assumed the existence of a world above, an underworld, and in between, the terrestrial world. It was up to humans to act as regulators or harmonizers of the universe. The world above included heaven with its sun, moon, and constellations. The Mayas and Olmecs studied the sky so meticulously, that contemporary scientists still recognize their contributions to astronomical knowledge. The underworld (Mictlan), on the other hand, mostly captured the attention of the Aztecs, the last of the Nahua tribes that arrived at the Mesoamerican plateau. Hurricanes, earthquakes, floods, and droughts were expressions of divine anger that could only be appeased with blood, preferably human blood. It was up to the priests (tlamacaxtles) to interpret the signals transmitted by the divinities and to obtain solutions.

In Teotihuacán, northeast of Mexico City, the Pyramid of the Sun stands majestic, and a few meters away, the Pyramid of the Moon (MAP 2). The Avenue of the Dead (Miccaotli) connects these two figures. There is also a large temple dedicated to Quetzalcoatl, the serpent with feathers. Tlaloc, the divinity of rain, accompanies each feathered serpent. There are also vestiges of shrines for Ehecatl, the wind; Huehuetotl, the fire, and Tlaltecuhli, the earth. In the Teotihuacan worldview, there was a world above and an underworld, and the sun, moon, water, earth, and fire, were all parts of an indivisible unit.

The Toltecs, who settled a few kilometers from Teotihuacan (although years after the Teotihuacan decline occurred in the year A.D. 630), took up the concept of totality and developed a holistic philosophy that, as previously stated, thoroughly matches the vision

contained in the Chinese I-Ching. Such was the admiration that the Aztecs professed toward this civilization, that a *toltecayotl* was a sage. A mythical figure named Topiltzin-Quetzalcoatl transmitted the Toltec wisdom in the 10th Century; the *Matritense Codex* collected his teachings: "God is one," he said, "Quetzalcoatl is his name. Ask for nothing, only snakes and butterflies you will offer" (Séjourné, pp.43-59). Six centuries later, Catholic missionaries decided to replace the concept of totality with Christian deism.

The aforementioned professor Joung appoints that the ancient Chinese wrote the I-Ching in pursuit of essentially the same purpose as the Mesoamericans: to harmonize the relationship between heaven, earth, and men. For the Aztec people, Omteotl was the God of duality, equivalent to the Chinese Tao. Omteotl was the universal support that contained everything; only he was able to stand by himself (León-Portilla, 2017, p.142). He was composed of feminine energy called Omecíhuatl (yin) and masculine energy called Ometecuhtli (yang). One could not be understood without the other, as we can not understand night without day, nor above without below, nor woman without man (Joung, pp.56-59).



Source: Textbook. Universidad Interamericana para el Desarrollo

Map 2: Temples of Teotihuacan

The representation of movement out of two opposite forces that complement each other can also be seen in the symbolization of Quetzalcoatl, a fusion of a serpent (land animal) with a bird (animal of the air). FIGURE 3 shows this dialectical order in an effigy found in the Temple of Kukulcan (the name that Mayans gave to Quetzalcoatl) in Chichen Itza. Additionally, the mythical eagle that devours a serpent perched on a prickly pear cactus, a distinctive symbol of the Mexican nation, is also a transfiguration of the dialectical order that governs the universe. In the state of Oaxaca, the site of the Mixtec and Zapotec civilizations, one can appreciate the concept of unity of two opposites through a chain of endless frets in which one generates two, and two generates three. That is how the inhabitants of Mitla and Monte Alban represented the infinite motion of nature (FIGURE 4). The Aztecs used to call this phenomenon *ollin-yolitzli*.

Now, if the notion of universal unity (one) was already prodigious in itself, the Mayans conceived yet

another concept of profound meaning: Zero, the graphic representation of nothingness (FIGURE 5). Like other peoples, the Mayans believed in the world above, the underworld, and the harmonization of the two in one. They were extraordinary sky watchers who developed a 365-day calendar and a numerical system that allowed them to calculate almost everything, so to achieve the symbolization of nonexistence, emptiness, nothingness, the absolute with its infinity, denotes an astonishing capacity for abstraction.

The Mayan zero is equivalent to the sunyata of Hindus and Buddhists in the Indian cultural tradition. In the Genesis of the Popol Vuh, we can find the Mayan equivalence with the sunyata in the following assertion: "All was in suspense, all calm, in silence; all motionless, still, and the expanse of the sky was empty" (Popol Vuh, 1954, p.3). This excerpt means that the universal totality is such an overwhelming concept that it is only captured either by way of spiritual awakening or by intuitive perception, not necessarily through reasoning. All

evidence suggests that this state of mind that Buddhists describe as "enlightenment" (*Erleuchtung* in German; *satori* in Japanese) was already a widespread practice

among the Mayans, Toltecs, and Nahuas; if not, how else could we interpret the poetry of the enlightened king Nezahualcoyotl?



Figure 3: Quetzalcoatl as two opposites that converge

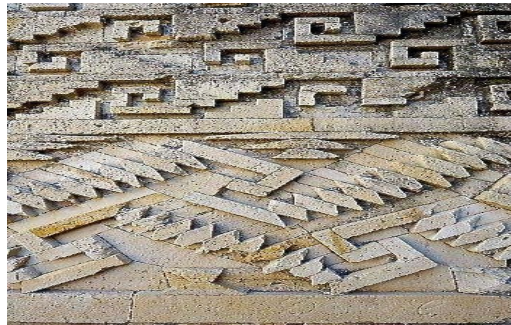


Figure 4: Endless frets featuring the movement of Nature in Mitla

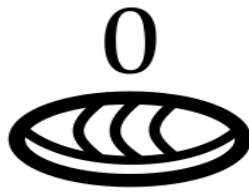


Figure 5: The Mayan Zero

The Mictlan formed a threshold of non-beings whose skeletons continued to be. The safeguarding of human remains is the origin of the cult of death that Mexicans continue to celebrate even today. It can be fascinating to see our dead as non-beings that continue to be, despite it may sound horrifying for the Western understanding. Before life crumbles and sinks into nothingness, it shapes and returns immutable, says Octavio Paz in *The Labyrinth of Solitude*. "We will no longer change but to disappear. Our death illuminates our life" (Paz, O., 1985, p.59).

How can a non-being continue to be? We can place such paradox within what French philosopher Jacques Derrida defined as *indécidabilité* (the sphere of the impossible to decide). Simply put, before being conceived, we were all zero; that is, nothing. We live our lives as one, and when we die, we return to zero; the Mayan zero represented the fullness that we achieve

with death. Even though our skull is physical, our being is still there, *being*.

Next, I will refer to Japanese Zen and its analogies with the Aztec perception of impermanence.

V. ECKHART, ZEN AND THE *TLAMACAXTLI*

In the early sixth century, a legendary Persian-born Buddhist monk named Da Mo (Daruma in Japanese) entered China and settled in a cave located in the remote central mountains of the Middle Empire. This was the site that Da Mo chose to propagate his doctrine. His strange figure and unique way of preaching, based on silent meditation, caught the attention of the Taoist monks of a Shaolin monastery nearby. Da Mo's Buddhism thus merged with Taoism, and became a strand that the Chinese came to call *Chan*.

Chan Buddhism preserved Buddhist principles such as the circle of Dharma, detachment from the material, cultivation of silence, and, of course, sunyata nothingness. From the Tao, the Chan incorporated concepts such as naturalness, spontaneity, vital energy based on the dialectics of yin and yang, and relativism. Both currents shared meditation as a formula of awakening to enlightenment; however, the great revelation of Chan Buddhism consisted of the preaching

of illumination as a mental state accessible to everybody at all earthly times.

In the year 607, corresponding to the heyday of Teotihuacan, the Japanese prince Shōtoku, renowned as wise and visionary, dispatched a special mission to China to bring back the most outstanding teachings of the culture; thus, Chan Buddhism came into Japan. By mixing with the local Shintō beliefs –especially with the aesthetic values of Shintō– Japanese Zen was shaped; more than a religious cult, Zen Buddhism became a way of daily living for all Japanese people.



Figure 6: Da Mo or Daruma

a) *Instants: just a little here*

One of the most notable exponents of Japanese Zen was Master Eihei Dōgen (1200-1253). Dōgen's philosophy contains notoriously current aspects; I will focus on two that bear similarities with the essence of pre-Hispanic thought: firstly, the Dogenian concept of instant (瞬間/shunkan), which fascinated German philosopher Friedrich Nietzsche as well as Keiji Nishitani, a member of the Kyoto philosophical school; and secondly, the notion that all material things are transient.

Each instant, said Dōgen, constitutes in itself an existence. There is not a single existence for each being, but as many instants as there can be throughout a life (Heisig, et al., 2016, pp.168-174). Furthermore, we share certain existential moments with the group of beings whose lives throb at this very same time. Since these instants are fleeting, ethereal and ungraspable, the best thing is to take our minds off everything that happened or may happen and to focus on what is happening right now. This instant is a unique and unrepeatable timeless moment, something that the Nahua king Nezahualcoyotl (1429–1472) also suggested through the following poem:

I Nezahualcoyotl ask it:

Do we live with roots in the ground?

Not forever on earth:

just a little here.

Even if it's jade, it breaks.

Even if it's gold, it breaks.

Even if it's the plumage of a quetzal, it tears.

Not forever on earth:

just a little here.

We live. We exist. Not forever on earth because we are fragile and transient beings; we are "just a little here." This same idea has prevailed in Japanese Zen by teaching that everything vanishes. The concept of *mono no aware* (translated as "the pathos of things," or the "sensitivity towards ephemera") induces us to not only appreciate the impermanence of all that surrounds us, but also to appreciate the feeling of inner joy toward the beauty and finitude of things. The evanescence of cherry blossoms (*sakura*) is an example. Cherries bloom, and their splendor last for just few days, after which they succumb without remedy. *Mono no aware* is perhaps one of the most beautiful concepts of Japanese aesthetics, very close to the "just a little here" in the native language of Nezahualcoyotl.

b) *Nothing as the non-being*

Dōgen passed away in 1253. Seven years later, Eckhart of Hochheim was born, a German Dominican monk who graduated with a Bachelor in Theology from the University of Paris. Within the framework of his Christian faith, Eckhart preached a doctrine that bore striking similarities to the thinking of the old Zen master. Like Dōgen, Eckhart also used to transmit his teachings through paradoxes (*kōans* for Japanese Zen Buddhists). He offered sermons about the "ethics of being" as the best way to access God, and referred to the intertextuality of the Gospels and to deconstruction as a method to interpret the parables of Jesus Christ. He additionally stated that since God is a pure being, God is, to make it short, an absolute *nothing* (Colledge and McGinn, 1981).

From his faith, Master Eckhart addressed the same dilemma as the Aztec priests Tlamacaxque when they debated the non-being with the Franciscan friars. The Tlamacaxque used to derive their ideas from the teachings transmitted by Quetzalcoatl; Bernardino de Sahagún (1499-1590) recorded the dialogue between Aztec priests and Catholic friars. Sahagún says that the indigenous priests considered themselves heirs of the doctrine transmitted by the enlightened figure of Topiltzin Quetzalcoatl, who preached social harmony and contemplation as standards of perfection between the years of 923 and 947 (León-Portilla, 2002).

The thoughts of Eckhart did not escape the virulence of the Inquisition, nor did the Tlamacaxques escape denigration by the Catholic Church. Like Dōgen, the German theologian gained interest among beatniks and the European existentialists of the 1950s and 60s. Erich Fromm considered him "a scholarly theologian and the greatest representative and deepest and most radical thinker of German mysticism" (Fromm, 1976). Shizuteru Ueda, a disciple of Nishitani, held that his ideas about soul detachment and oneness with God (the God-nothing) constituted an eminently Zen thought

(Ueda, 2004, pp.51-134). Eckhart died in 1328, only three years after the establishing of the majestic City of Mexico-Tenochtitlan.

c) *Pure experience*

Dr. Agustín Jacinto, a Purepecha Indian who teaches at El Colegio de Michoacan, discovered through Master Eckhart the main reason to enter the ecclesial seminary during his adolescence; from there, Jacinto jumped into the embracement of Zen philosophy. In his book *Zen and Personality*, he states that although the proclamation of John the Evangelist that "God is love" seemed powerful enough for him, more powerful became Eckhart's inverted equation: "Love is God". "Love and the structuring of personality occur within the framework of pure experience", says he, "where we see the strong influence of Zen Buddhism in the writings of the philosopher Nishida Kitaro" (Jacinto, 1984, p.12).

In short, pure experience refers to that instant of illumination in which the subject realizes that he exists and discovers "a deeper self within himself." It is necessary to eradicate the substantive form of being and admit that one originates from nothing, in order to understand this idea. When the self becomes aware of its insignificance, *nothing* becomes the humble being that detaches itself from earthly bonds and becomes one with Nature; is this not the same deduction of the pre-Hispanic sages regarding death? Jacinto added his ancestral indigenous legacy to the concept of pure experience, stating that "we must forget ourselves and become one with Heaven and Earth." Once that stage is reached, "everything becomes present (and) everything becomes a pure experience" (Ibid, p.21). In other words, everything becomes fullness as in the Toltec wisdom.

VI. CONCLUSION

Principles so profound and so fascinating like those that filled Mesoamerican civilizations, regrettably suffered the contempt (or even worse, the suppression) by the Catholic clergy that joined the Conquest of Mexico. For the sake of saving the souls of the indigenous peoples, they destroyed much of their wisdom. Despite this, the codices and stories such as those collected by Fray Bernardino de Sahagún, contain elements to infer that there was certainly a philosophical heritage profound enough so as to be considered universal.

The cyclical movement in nature, the substantial void based on the non-being that still *is* (different from the hollow and insubstantial void of some human brains); the opposition of complementary forces that form a unity, and the intensity of being "just a little here." These are only some of the concepts that were deeply rooted in Mesoamerica as well as in Asia. We can argue that those philosophies can be found in other cultures too, such as the Greek and the Egyptian; however, I

concentrated on showing that, at least from a metaphysical point of view, the beliefs of the ancient Mexicans did have similarities with the Chinese I-Ching and Japanese Zen Buddhism.

We already saw that during the Middle Ages in Europe, a theologian as phenomenal as Master Eckhart was thrown into the well of contempt for daring to think like Master Dōgen and the Mayans who developed the concept of zero. Curiously enough, the Jesuits led by Matteo Ricci (1552-1610) in China did assimilate the most outstanding currents of Tao and Confucianism. In contrast, the Franciscan friars who spoke with the Tlamacastle priests wrongly took the non-being of the underworld as an invocation of the demon.

Fortunately, scholars such as Miguel León Portilla, Ángel María Garibay, Jacques Soustelle, Rubén Bonifaz Nuño, Eduardo Matos and Laurette Séjourné, among others, dedicated efforts to the rescue and interpretation of the texts of the ancient Mexicans, highlighting that their content goes a long way beyond the worldliness that is usually thought of when we refer to the pre-Hispanic indigenous peoples.

BIBLIOGRAPHY

1. Botton, F. (2011). Octavio Paz y la poesía china: las trampas de la traducción. In *Revista de Asia y África*. 46/2 (145) (May-Aug.) (pp.269-286).
2. Capra, F. (1976). *The Tao of Physics: An Exploration of the Parallels Between Modern Physics and Eastern Mysticism*. London: Harper.
3. Colledge, E. and McGinn, B. (1981). *Meister Eckhart. The Essential Sermons, Commentaries, Treatises, and Defense*. Mahwah, NJ: Paulist Press.
4. Díaz, F. (2002). *The Gospel of the Toltecs: The Life and Teachings of Quetzalcoatl*. Rochester, VT: Bear & Co.
5. Fernández, J. (1954). *Coatlicue: estética del arte indígena antiguo*. México: Centro de Estudios Filosóficos, Instituto de Investigaciones Estéticas.
6. Fromm, E. (1976) *To Have or to Be*. NY: Open Road.
7. Heisig, J. (2001) *Philosophers of Nothingness. An Essay on the Kyoto School*. Honolulu: University of Hawai'i Press.
8. Heisig, J., Kasulis, Th., Marando, J. y Bouso, R. (eds.) (2016). *La filosofía japonesa en sus textos*. Madrid. Herder.
9. Jacinto, A. (1984). *Zen y personalidad*. Zamora, Mich.: El Colegio de Michoacan.
10. Joung, T.T. (1998). *La presencia del I-Ching en la obra de Octavio Paz, Salvador Elizondo y José Agustín*. Guadalajara, Jal.: Universidad de Guadalajara.
11. Keen, B. (1971). *The Aztec Image in Western Thought*. New Brunswick, NJ: Rutgers University Press.

12. León-Portilla, M. (1980). *Native Mesoamerican Spirituality. Ancient Myths, Discourses, Stories, Doctrines, Hymns, Poems from the Aztec, Yucatec, Quiche-Maya and Other Sacred Traditions.* Mahwah, NJ: Paulist Press.
13. _____. (2002). Bernardino de Sahagún. *First Anthropologist.* Tr. Mauricio J. Mixco. Okla: University of Oklahoma Press.
14. _____. (2017). *La filosofía náhuatl estudiada en sus fuentes.* México: Instituto de Investigaciones Históricas, UNAM. www.historicas.unam.mx/publicaciones/publicadigital/libros/filosofia/nahuatl.html Recovered 20 June 2020
15. Paz, O. (1985). *The Labyrinth of Solitude.* Tr. Kemp, Milos, and Phillips Bellash. NY: Grove Press. □
16. Popol Vuh (1954). Tr. Delia Goetz and Sylvanus Griswold Morley; LA: Plantin Press. <https://holybooks-lichtenbergpress.netdna-ssl.com/wp-content/uploads/POPUL-VUH-The-Book-of-the-People-Translated-by-Delia-Goetz-and-Sylvanus-Griswold-Morley.pdf> Recovered 29 June 2020
17. Riding, A. (1984). *Distant Neighbors. A Portrait of the Mexicans.* NY: Vintage Books.
18. Séjourné, L. (1957). *Burning Water: Thought and Religion in Ancient Mexico.* London-NY: Thames and Hudson.
19. Shao, P. (1976). *Asiatic influences in Pre-Columbian American Art.* Ames, Iowa: Iowa State University Press.
20. Ueda, Sh. (2004). *Zen y Filosofía.* México: Herder.
21. _____. (2004). "Nothingness" in Meister Eckhart and Zen Buddhism with Particular Reference to the Borderlands of Philosophy and Theology". In Franck, F. *The Buddha Eye. An Anthology of the Kyoto School and Its Contemporaries.* Bloomington, IND: World Wisdom. (157-169).
22. Wilhelm, R. and Baynes, C. (1989). *I Ching, Or, Book of Changes.* London: Penguin.

Dr. Víctor Kerber (b.1957, Mexico City) is a distinguished Mexican specialist in Asian Studies. He served in Osaka, Japan, as Consul General, from 1993 to 1996, and obtained a Ph.D in Development Studies at the University of Sophia in 1988. He got a second doctoral degree in History by El Colegio de Michoacán in 2016. Kerber has lectured and published extensively about Japan and Asia, and collaborated for Mexican journals. He is currently Associated Researcher of the Center of Japanese Studies of the University of Guadalajara. Fluent in English and Japanese, Kerber practices Zen meditation. He has three sons: Victor, Mario and Guillermo. Married to Alicia Vratny (second wife).



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: D
HISTORY, ARCHAEOLOGY & ANTHROPOLOGY
Volume 20 Issue 3 Version 1.0 Year 2020
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-460X & Print ISSN: 0975-587X

Survival of Homo Sapiens- A Retrospect Analysis

By Harashawaradhana and Reya Santra

Abstract- Our understanding of human evolution is in the form of evidence of available fossil remains based on discoveries made in the last two hundred years. Most of these discoveries are incidental in nature and they do not have the correct serialization and this evidence is not documented in the true sense. In the context of human evolution we discuss the processes under which a pre-human species with a large brain evolved into modern human. In this context, we must pay attention to the known early forms of human beings. Most of them are now extinct and are known only by their fossil remains and material culture. Now, the question arises in front of us whether all humans were direct ancestors of same species or were their sub-sections or sub branching of the lineage in human evolution? Based on the fossil material presently available, we can say that some of them are from the human lineage of evolution. If they were related, then there are some forms of species that existed before hybridization. Genetic groups found today are formed by hybridizing of genetic traits. Homo sapiens were the only ones who have been transformed into modern humans through the process of evolution. Why the species which became extinct despite being homo genus is a question in itself.

Keywords: *homo, evolution, fossils remains, prehistoric environment.*

GJHSS-D Classification: *FOR Code: 160199*



Strictly as per the compliance and regulations of:



Survival of Homo Sapiens– A Retrospect Analysis

Harashawaradhana ^α and Reya Santra ^σ

Abstract- Our understanding of human evolution is in the form of evidence of available fossil remains based on discoveries made in the last two hundred years. Most of these discoveries are incidental in nature and they do not have the correct serialization and this evidence is not documented in the true sense. In the context of human evolution we discuss the processes under which a pre-human species with a large brain evolved into modern human. In this context, we must pay attention to the known early forms of human beings. Most of them are now extinct and are known only by their fossil remains and material culture. Now, the question arises in front of us whether all humans were direct ancestors of same species or were their sub-sections or sub branching of the lineage in human evolution? Based on the fossil material presently available, we can say that some of them are from the human lineage of evolution. If they were related, then there are some forms of species that existed before hybridization. Genetic groups found today are formed by hybridizing of genetic traits. Homo sapiens were the only ones who have been transformed into modern humans through the process of evolution. Why the species which became extinct despite being homo genus is a question in itself. Even today there are different opinions among the different scholars related to it. It cannot be said that no common theory exist which has been accepted by all the scholars in the field. It is believed that only after the arrival of the genus Homo, the existence of human must be a product of evolutionary forces acting upon the genus Homo; which has evolved into modern humans. This article aims to discuss on the above said question by various secondary sources evidences and the focus of the discussion is why Homo sapiens is the only one facing the various environmental problems and has its existence in the present, while other human species became extinct.

Keywords: homo, evolution, fossils remains, prehistoric environment.

I. INTRODUCTION

Advances in the field of palaeoanthropology in the last one decade have been outstanding in terms of discoveries and shedding new light on the slow but gradual process of evolution which happened over a prolonged period. Traditionally, the earlier endeavors to understand the drive behind human evolution especially the theories and interpretations were restricted to bipedalism, opposable thumb, stereoscopic vision, an enlarged brain. The study of palaeoanthropology is characterized by its multi-disciplinarity. Therefore, understanding the process of evolution has now gone to

molecular levels. Following the increased theoretical complexity, the number of key questions has multiplied and now involves a thorough interdisciplinary understanding of the evolution and functions of adaptation, behavior, bipedalism, brain size, chronology, climate, common descent, evolutionary constraints, culture, dispersal and migration, diet, diversity, ecosystems, extinction, genetics, geography, language, lineage, morphology, ontogeny, phylogeny, species concept, technology, and variation. The answer to these questions includes several theoretical assumptions about time, selection pressures and mechanisms, inheritance, speciation, convergence, continuity, and discontinuity. Earlier it was proposed that the earliest stone tools were made and used around 2.6 mya, but a study conducted in Lomekwi, Kenya in dates back to 3.3 mya for the usage of stone tools which were comparatively simple. The stone tools were recovered from Pliocene environmental fossil deposits. Furthermore, a tooth found in Denisova Cave in Siberia carries a mitochondrial genome. The team suggested that this tooth shares no derived morphological features with Neanderthals or modern humans, indicating that Denisovans have an evolutionary history distinct from Neanderthals and modern humans. Most importantly, the discovery of *Homo naledi*, a previously unknown hominin species with comparatively recent dates of 236,000 to 335,000 years in South Africa has put forward a whole new scenario. A 3.8-million-year-old fossil from Afar region of Ethiopia was discovered. Among the most important findings was the team's conclusion that *Australopithecus anamensis* and its descendant species, the well-known *Australopithecus afarensis*, coexisted for at least 100,000 years. This finding contradicts the long-held notion of an anagenetic relationship between these two taxa, instead of supporting a branching pattern of evolution. The emergence of the modern *Homo sapiens* was considered to be around 200 thousand years ago (ka) among earlier representatives of *H. sapiens*. If not can be also said that it evolved gradually over the last 400 thousand years. But newly found human fossils from Morocco with an age of 315 ± 34 thousand years has been found, re-establishing our age in the history of evolution. This evidence makes the oldest and richest African Middle Stone Age hominin site that documented early stages of the *Homo sapiens* clade in which key features of modern morphology were established.

Author ^α: Anthropological Survey of India, North West Regional centre, Dehradun. e-mail: waradhana@gmail.com

II. HOMININ EVOLUTION

About 30 million years ago, we shared our common ancestor with the Old World monkeys. With the gradual process of evolution, approximately 5 million years ago, the humans and African great apes last shared a common ancestor. It has already been established that humans are more closely related to chimpanzees than gorillas, the parsimonies being limited tool use, broad diet, and cooperative group living. The earliest possible hominin to date is *Sahelanthropus tchadensis* from sub-Saharan Africa, which has tentatively been dated 6 to 7 million years old (Brunet, 2002). Although the fossil remains found suggested the mosaic ape and hominin features, the lack of postcranial skeletal material makes it difficult to suggest whether it was bipedal. Speaking of bipeds, *Orrorin tugenensis* is considered to be the earliest hominin biped because of its human-like femur. Fossil remains of *Orrorin tugenensis* were found discovered from Tugen hills of Kenya, dated to 6 million year's age (Senut et al.2001). Another example of bipedalism can be comprehended from the fossil remains of *Ardipithecus ramidus*, recovered from the Aramis, Ethiopia (Klein, 1999). The forwardly placed foramen magnum and comparatively free upper arms featured from the fossil remains from the site of Aramis point towards bipedalism. It suggests the species was either close or might share the ancestor of humans and modern chimpanzees. *Ardipithecus ramidus* is also considered to be a gracile Australopith. The Australopiths, are considered to the direct ancestors of humans, as their skeletal remains show features of bipedalism. The Robust australopiths remain show comparatively larger brain size than that of the gracile ones, which is around 400 to 500 cc. The robust variety also had a large bony chest and jaw muscle attachments. Comprehensive phylogenetic analyses typically position *Australopithecus africanus* basal to a clade that unites *Homo* and robust australopiths (Paranthropus). South African *Australopithecus sediba* (approx. 2.0 Ma) has also been claimed to have a direct ancestor to *Homo*, possibly even to *Homo erectus*, but is more plausibly considered a close relative of *Australopithecus africanus* (transition ref). The archaic humans from Africa between 2.4 to 1.5 mya are considered as *Homo*, with smaller teeth and jaws than the Australopiths and comparatively taller. The appearance of the large-brained later *Homo* happened around 100,000 years ago. Although the evidence of early entry of people in parts of Europe, in an intermediate form between *Homo erectus* and *Homo heidelbergensis* was discovered as *Homo antecessor*, around 700,000 and 600,000 years ago. Again from most of Europe (excluding Scandinavia) and southwestern and western Asia, pieces of evidence of another later *Homo* was discovered, the *Homo*

neanderthalensis, around 250,000 and 29,000 years old. The analysis of mitochondrial DNA (mtDNA) recovered from Neanderthal bones and compared to mtDNA of living *Homo sapiens* supports the conclusion that *Homo neanderthalensis* was a distinct species from modern humans (Krings et al., 1997; Ovchinnikov et al, 2000).

About 2.5 million years ago, when large parts of the Earth were covered with snow due to polar glaciers, the climate and vegetation conditions changed drastically. The forests were reduced and the initial forms of *Australopithecus* used to live in the forests were lost and in their place, another species emerged which included the oldest representatives of *Homo*. This period can now be considered to be about 20 lac years old fossils remains that have been obtained from sites, do not appear to be more than eight million years old. Thus it is clear that the evolution of the early humans occurred in the midst of a difficult climate with unprecedented fluctuations in the ice age. The genus *Homo* may have many species, but the particular species *sapiens* is the wisest form of human species. There are other species of *Homo* genus that are also extinct. All those pre human species were very similar to humans, so they were kept in *Homo*. But there are some morphological and cultural difference in humans due to which they are different from other human species. Some remains of human, who looked very much like monkey, is called Java Man or *Homo erectus javanensis*, and Heidelberg man. The remains of the first species were found in Asia, while the remains of the second were obtained from Europe. Therefore, it is difficult to tell where the evolution of human took place. Although, the evolution of the genus of humans had been done long ago, modern humans probably evolved from Neanderthal man because this species is most closely related to modern humans. Human evolution is possible from Neanderthals; it was probably from Heidelberg that the branch of development started. *Eonthropus* and Neanderthal fossils are believed to have existed on Earth as late as about 50 thousand years ago, there were other possible humans species coexisting at the same time, but after that the earth became cold due to the Ice Age and Neanderthal lived in caves and began to receive heat from fire but other human species probably could not tolerate the environmental constraints that arises with severe cold. However these constraints did end with the development of *Homo sapiens*, Neanderthal, Denisovans, *Homo floresiensis*, and modern humans on Earth, was the genus of *Homo*, and these subgroup had better survival than other human species. *Homo* genus have different species which have been classified in different ways on the basis of their origin and proximity to modern humans, but with a broad consensus Chris Stringer, in his article published in Nature (2012), divided the total of the genus *Homo* into eight ethnic categories in his hypothesis.

Homo genus

- ♣ *Homo habilis*
- ♣ *Homo erectus*
- ♣ *Homo naledi*
- ♣ *Homo sapiens neanderthalensis*
- ♣ *Homo rudolfensis*
- ♣ *Denisovans*
- ♣ *Homo floresiensis*
- ♣ *Homo sapiens*

In modern taxonomy, *Homo sapiens* are the only living species of its genus. However, the genesis of *Homo sapiens* is in progress, studies have shown that there were other *Homo* species, all of which are now extinct. Although some of these other species may have been ancestors of *Homo sapiens*, many were cousins, presuming to be far from our ancestral line. There is not yet a common consensus as to which of these groups should be counted as separate species and which other species as subspecies. In some cases, this is due to the lack of fossils; In other cases, *Homo sapiens* is due to the slight differences used to classify species in the genus. First of all we will discuss about these other species of *Homo* genus.

Homo habilis: *Homo habilis*, derived from the Latin words "homo" (man) and "habilis" (skilled), was a hominid ancestor of *Homo sapiens*. It is popularly known as the "Handy man ". This species of humans has its origins in Africa, where it lived from about 2.6 million years to 1.6 million years ago. At the time of its discovery, *Homo habilis* was the first known species of the genus *Homo*. The explorers of the first remains of *Homo habilis* were the British paleontologist Louis Leakey and his wife, Mary Leakey. When Leakey made his campaign, it was thought that the line of development towards human development was very simple. Thus, it begins with *Australopithecus* and reflects *Homo erectus* and later, Neanderthals and finally, *Homo sapiens* with an equivalent. Researchers concluded that the remains found belonged to a new species in the genus "Homo", as this species has some characteristics that were concurrent to modern humans. However, it differed with its later species because of its cranial capacity as it was very small. It was believed that *Homo habilis* and *erectus* came from each other. However, the findings in 2007 have opened up debate on the subject. Interestingly, the authors of the new discovery were Louis and Mary Leakey who indicates that *Homo habilis* lived longer than before. This means that, for about 500,000 years, this species coexisted with *Homo erectus*. This, for some scientists, raised doubts about the fragmentation between the two species. However, others want to maintain that *Homo erectus* came after *Homo habilis*. It is generally mentioned in the context of their extinction that *Homo*

erectus was in a mutual battle of resources and that it replaced *Homo habilis* and brought itself into existence. The main comparative feature of *Homo habilis* has been that its increase in cranial capacity and skull size as well as the decrease in number of its teeth has been observed which seems to be similar to modern humans.

These fossils have been said in the science journal *Nature* that this upper jaw part and the connected brain are of like -human beings. It has been believed that human development has been previously known from *Homo habilis* (human beings) to *Homo erectus* (upright walking posture) has evolved which made humans today. But with new fossils, it seems that *Homo erectus* and *Homo habilis* were at the same time, so it is clear that *Homo erectus* did not develop from *Homo habilis*, which is quite contrary to the common concept. Professor Mary Leakey of the Koobi Fora Research Project, associated with the study of new fossils, says the jaw appears to be of *Homo habilis* while the brain appears to be of *Homo erectus*. But both fossils appear to be of the same time. These fossils have been found in the Turkana Basin region of Kenya. On the basis of new fossils, scientists say that in the coming days it may be clear that *Homo sapiens* means that today humans have evolved from *Homo erectus* and these *Homo erectus* may have must have lived with *Homo habilis* and not evolved from *Homo habilis*.

Homo ergaster: It was a hominid that appeared in the African continent about 2 million years ago. Since the discovery of the first fossil there has been a major controversy among experts. Some believe that *ergaster* and *Homo erectus* are actually the same species, while others claim they are different. The currently prevalent theory is that *Homo Ergaster* was the direct predecessor of *Homo erectus*. Since it is believed to be the first hominid to leave Africa, *Homo ergaster* and *Homo erectus* have been named for their descendants in other regions of the planet. The anatomy of *Homo ergaster* represents an evolutionary process over previous species. Studies from the remains of *Homo Ergaster* are considered by the experts to be the successors of *Homo habilis*. On the other hand, many authors describe it as the ancestor of *Homo erectus*. So far, there is no consensus on this matter, as many paleontologists believe that both must have been the same species. The first conclusion of *Homo ergaster* was obtained in 1975 from Koobi Fora (Kenya). One expedition found two skulls, one possibly female, KNM-ER3733, and another male, KNM-ER3883. The dating of the remains revealed that they were 1.75 million years old. However, the most significant discovery was in 1984 in Lake Turkana, Kenya where the skeleton of a boy around 11 years of age was discovered. Known as "Turkana Child", it allowed a detailed study of the anatomy of this species. *Homo ergaster* inhabited the earth during the Middle Pleistocene, between 1.9 and

1.4 million years ago. The deposits so far suggest that they were inhabiting areas of Ethiopia, Kenya, Tanzania and Eritrea.

In that region, the climate at that time was very dry, in which there was a drought for nearly one lakh years. Scholars also believed that drying out may have been the main reason for their extinction. *Homo ergaster* was marked by an elevated nose, similar to sapiens. While the jaw and teeth were smaller than those of *Homo habilis*, which gives it a more present appearance of human beings.

Homo erectus: *Homo erectus* means 'straight man', an extinct species of hominid that existed during most of the Pleistocene geological era. The earliest fossil evidence of this is found 19 million years ago and the most recent 70,000 years ago. *Homo erectus* is generally believed to have originated in Africa and they are migrating across Eurasia to remote Georgia, India, Sri Lanka, China, and Indonesia. Its discovery and laziness behind the disappearance is quite interesting. Anthropologists believe that they were very familiar with use of fire and were socially more modern than their former species. However, even today its genesis lineage related to this species, their development and extinction Research is going on.

A recent study in Melbourne has revealed that the extinct human species *Homo erectus* ceased to exist due to laziness and not being able to adapt to the changing climate. It has been claimed in a study. During archaeological excavations conducted to collect information on ancient human populations in the Arabian Peninsula during the Paleolithic period, it was found that *Homo erectus* adopted "very little effort" in making tools and gathering resources. Carrie Shippton of the Australian National University (ANU) said, "It seems that he was not a hard worker." Shippton said, "I don't think he'll be too much of an explorer. He did not have the sense to wonder what we have."

Homo rudolfensis: Samples from Olduvai Gorge, East Lake Turkana, and Lake Malawi were included in this study. The East Lake Turkana fossils available prior to 2010 were examined first-hand, while for the Olduvai and Lake Malawi fossils and KNM-ER 60000, 62000, and 62003 we relied on original observations on fossils and casts as well as published reports (Schrenk et al., 1993; Blumenschine et al., 2003; Leakey et al., 2012). We do recognize that KNM-ER 60000 and KNM-ER 1802 present some conflicting anatomy that some authors have argued precludes them as conspecific specimens (Leakey et al., 2012); by considering both, we aim to be conservative as they encompass more variation within *H. rudolfensis*.

Homo sapiens neanderthalensis: Neanderthal is an extinct member of the *Homo* Genus. It is classified as a subspecies of humans. In 1856, a human fossil was found in a place called Johanne Karle Fuhlrotee, named

Neanderthal Human. About 100 such fossils were later found in other parts of the world (France, Belgium, Italy, Rhodesia, Central Asia, China and Japan), it is believed that it lived about 1, 60,000 years ago. Although there is no longer any doubt about Neanderthal being human, as some of the characteristics of this species are such that the jaws and eyebrows were raised (though the teeth are almost human alike) and lacked chin. It also had some qualities which are not found by the present man, such as 1,600 cubic cm of the volume of cranial capacity. (Greater than humans) and the dental cavity is very large. Not only this, its limb bones were thick, crooked and unformed, which makes it feel like stuttering. Therefore, on one hand, while there were many human qualities in it, but on the other hand there were many big differences. Therefore, Neanderthal can be considered a human being only an ardent subdivision of the main branch of human development. The non-discovery of the remains of this human in the last ice age indicates that they were either destroyed on the arrival of humans, or merged into their family by hybridization.

They found that the species went extinct because their eyes were larger than those of existing humans. These eyes were adapted to look far in the long black nights of Europe, but they to pay the price of these big eyes by abandoning the high level thoughtful mind. On the other hand, the human species *Homo sapiens* had a better and bigger brain, with the help of which they made warm clothes and formed societies with which they could survive in the ice age of Europe. A study published in the Royal Society of Journal about this study mentions that Neanderthal was a very similar species to humans that lived in Europe around 2,50,000 years ago, our species of man and Neanderthal was once in Europe where they living and getting to know each other, they are almost 28,000 years ago, this species became extinct due to the ice age. Researchers have traditionally believed that Neanderthal's ancestors came from Africa and their eyes grew larger to see Europe's long black nights and misty days, and the part of the brain that controls vision would be large. The various Researchers also believe that their ancestors were living in Africa, they were enjoying the sailboat days there through the light and they did not need big eyes. The same humans living in Africa were also our ancestors and their minds developed. And only then did they spread all over the world.

Aylina Pierce found that the Neanderthal eye was quite large, about 6 mm in height. For a long time, this length does not seem to be very large, but because of this Neanderthal was able to better assess the visible scene. Due to his mind being visual based, his body must have been under control, and he could understand the things he saw well. But because of that, some parts of his brain could not develop and give better thinking. Doing similar research at the Natural History Museum in

London. Chris, Stringer, on Ayline Pierce's gives consensus to it. It is said that we can feel that Neanderthals might have been reduced due to the small part of the brain's thinking parts, as well as they would not have been able to form big groups because a settled mind is necessary to do all this.

Archaeological evidence suggests that Homo sapiens living with Neanderthals had needles from which they were sewing clothes. Stringer says that Homo sapiens remained because of such small things. In many Hollywood films, Neanderthal has been described as very animalistic and cruel. Doctor Robin Denver, associated with this study, said "Neanderthal was not so bad just he was not as intelligent as Homo sapiens". The difference was that he was just against them in the ice age. The research done on monkeys suggests that the size of the eyes is equal to the portion of the brain that is used to assess things. Researchers are assuming that this will be true even in the case of Neanderthal.

Denisovans: In 2010, scientists announced the discovery of a bone fragment of a teenage woman found in Denisova cave in the Altai Mountains of Siberia, since its discovery that it was believed that the Neanderthal and modern humans may have settled in one place. The link of this species exhibits mitochondrial DNA differences derived from modern humans and Neanderthal as well as from their bones. The DNA genome of this specimen suggests that the Denisovans shared a common origin with the Neanderthals, that they range from Siberia to Southeast Asia, and that they lived among the ancestors of some modern humans. This cave was originally discovered in the 1970s by the Russian paleontologist Nikolai Ovodov.

Homo floresiensis: News of the discovery by archaeologists on the world sensation Indonesian was spread in the island of Flores in 2003. The fossil was named Celiang Bua was first found in this natural cave, which came to be known as the ancient dwarf species. This new type of species has since come to be known as *Homo floresiensis*. Researchers have here obtained the skeleton of a woman whose facial texture was much smaller than other body parts. According to experts, the possible age of this woman was considered to be eighteen thousand years. A new step in this direction was taken in 2012 in the cave of Liang-Bois. Dr. Syuzen Heyz, an Australian scholar, attempted to reconstruct the face from fragments from the skeletons of this species using a method applied in forensic medicine but they failed, but after research done by a team of researchers from New York, after analyzing the skull of this species with the help of computer, a general conclusion was reached. Floresiensis was an off shoot of Homo sapiens, In reference to their extinction, anthropologists are arguing that the hobbits, these *Homo floresiensis*, are our ancestors, or that they were

another small species of people living on our planet. Or if they are normal prehistoric people, suffering from a disease that does not allow them to grow up? For example, microcephaly, a disease in which the brain remains small and underdeveloped. *Homo floresiensis*, a friable form of primitive mankind was discovered from the Island of Flores. But due to the rise of sea level there, a shortage of food resources caused their dwarfness and extinction.

Homo naledi: Fossil hominins were first recognized in the Dinaledi Chamber in the Rising Star cave system in October 2013. The fossil assemblage attributed to Homo naledi from the Rising Star Cave in the Cradle of Humankind, UNESCO World Heritage Area, South Africa (CoH) (Berger et al., 2015), represents one of the richest and most unusual taphonomic assemblages yet discovered in the hominin fossil record (Dirks et al., 2015). The remains are exceptionally well preserved and represent the largest collection of fossils from a single primitive hominin species ever discovered in Africa. Although it contains an unprecedented wealth of anatomical information, the Dinaledi deposit remains undated (Dirks et al., 2015). Considering that H. naledi is a morphologically primitive species within our genus, an age may help elucidate the ecological circumstances within which Homo arose and diversified. If the fossils prove to be substantially older than 2 million years, H. naledi would be the earliest example of our genus that is more than a single isolated fragment. The sample would illustrate a model for the relation of adaptive features of the cranium, dentition and post cranium during a critical time interval that is underrepresented by fossil evidence of comparable completeness. A date younger than 1 million years ago would demonstrate the coexistence of multiple Homo morphs in Africa, including this small-brained form, into the later periods of human evolution.

The fossil record of early Homo and Homo-like australopiths has rapidly increased during the last 15 years, and this accumulating evidence has changed our perspective on the rise of our genus. Many skeletal and behavioral features observed to separate later Homo from earlier hominins were formerly argued to have arisen as a single adaptive package, including increased brain size, tool manipulation, increased body size, smaller dentition, and greater commitment to terrestrial long-distance walking or running (Wood and Collard, 1999; Hawks et al., 2000). But we now recognize that such features appeared in different combinations in different fossil samples (Anton et al., 2014). The Dmanisi postcranial sample (Lordkipanidze et al., 2007) and additional cranial remains of H. erectus from Dmanisi (Gabunia et al., 2000; Vekua et al., 2002; Lordkipanidze et al., 2013) and East Africa (Spoor et al., 2007; Leakey et al., 2012), demonstrate that larger brain size and body size did not arise synchronously with improved locomotor efficiency and adaptations to long-

distance walking or running in *H. erectus* (Holliday, 2012; Anton et al., 2014').

Recently Antoine Balzeau from the National Natural History Museum in Paris, together with Philip Charlier of the University of Paleontologist Paris Descartes, re-examined the Hobbit skull, carefully studied high-resolution bone tissue and connecting *Homo flapiensis* with *Homo sapiens* but similarities were found among them. Scientists have also not found traces of genetic diseases that will cause pathological low growth. So, according to Balzou and Charlie, hobbits are not humans, nor animals. So who are they? According to current researchers, the "half-ears" are descendants of *Homo erectus*, which have diminished greatly during the island's habitat. There is a mutual disagreement about this species, on which research work is still going on.

Homo genus has been the highest species in the genus *Homo* which has survived through adaptation with the natural selection better than other species of the genus *Homo*. Anthropologists have come to the conclusion that different forms of humans must have evolved in different parts of the world, but the constant movement has united the entire human race in many parts. The oldest humans have evolved in modern East and Southern Africa by one estimate. This is because one of the oldest fossils of humans (fossils) has been found in Ethiopia. These anthropologists have named it as *Australopithecus* and *Homo sapiens* is said to be evolved from this particular species. Modern human beings had some qualities or traits, due to which, by defeating the other species they advanced themselves into the mainstream of progressive development. The persistence of such a species like *Homo naledi* with clear adaptations for manipulation and grip, alongside humans or perhaps even alongside modern humans, would challenge many assumptions about the development of the archaeological record in Africa. The depth of evidence of *Homo naledi* may provide a perspective on the variation to be expected within fossil hominin taxa (Lordkipanidze et al., 2013; Bermudez de Castro et al., 2014).

Resolving the phylogenetic placement of *Homo naledi* will require both postcranial and craniodental evidence to be integrated together. Such integration poses a challenge because of the poor representation of several key species both within and outside of *Homo*, most notably *H. habilis*, for which postcranial evidence is slight, and *Homo rudolfensis* for which no associated postcranial remains are known. We propose the testable hypothesis that the common ancestor of *Homo naledi*, *Homo erectus*, and *Homo sapiens* shared humanlike manipulatory capabilities and terrestrial bipedality, with hands and feet like *Homo naledi*, an australopith-like pelvis and the *H. erectus* like aspects of cranial morphology that are found in *Homo naledi*. Enlarged brain size was evidently not a necessary prerequisite for

the generally human-like aspects of manipulatory, locomotor, and masticatory morphology of *Homo naledi* (Berger R L. et.al, 2015).

The special qualities which encouraged the development of man are the following;

Developed brain: In the journey from *Homo sapiens* to modern humans, the size of the human brain has reduced by about 10 percent. That is, the size of the mind of 1500 cubic centimeters has now reduced to 1359 cubic centimeters. The brain of women is smaller than that of men and the size of their brain has decreased as well. Scientists have come to this conclusion after investigating the remains of human skulls found in Europe, the Middle East and Asia. However, other scientists do not consider the shrinking of the brain as more surprising. According to them, the bigger and stronger we are, the more brains will be needed to control our body. Whereas the human being before the modern man i.e., Neanderthal man died about 30 thousand years ago due to unknown reasons. Neanderthal humans were much larger in size than modern humans and their brains were also larger. About 17000 years ago, the species of human was known as Cro Magnon who made paintings of great animals in the caves and his mind was the largest of all species of *Homo sapiens*. Cro Magnon was also more powerful than his later generation. David Geyer, a professor of psychology at the University of Missouri, says that these characteristics were necessary to protect him against environmental hazards. They have studied the development in the skulls of a human from 19 lakh years to 10 thousand years old. Everyone knows that our ancestors had to live in a very complex social environment. Geyer and his colleagues noticed during their research that as the population increased, the size of the brain decreased. "With the emergence of a complex society, the size of the mind of the human being became smaller because then the person did not need to struggle much for life and he had learned to live," says Professor Geyer. However, according to scientists, this development does not mean that man has become stupid but he has learned easy ways to live by developing intelligence. Professor Brian Hare of Duke University explained, "Even chimpanzees had larger brains, similarly dogs have smaller brains than wolves but are smarter, flexible, and smarter, clearly indicates that brain sizes does not Prudence decide."

Standing and walking: Although some large people also often stand up, but by nature it is only human to stand up. As a result of this quality, human hands become free for other tasks. The structure and position of his bones changed in the position of internal organs for standing and walking. Significant changes occurred in the bones of the foot. The thumb came in line with the other fingers and the legs arched and gained special ability to walk and run on the ground. These qualities proved to be

particularly helpful in man's safety and ability to find food.

Stereoscopic Vision: The movement of the eyes like old monkeys on the face to the front had started like Tarsier, but it was fully developed in humans. By this, they can not only see same image of both the eyes by focusing on the same object, but can also discuss its three dimensional view. Through this special vision, they are able to estimate the distance and size of the object and can see to a greater distance and size of the object and he can see even more far.

Opposable Thumb: Opposable thumb means to bring the thumb in the unfavorable position of other fingers. In this case, the thumb is able to come in front of other fingers and hold it together in objects. This quality started in the animal group only in the primates, by bringing the mouth of the objects to test and it developed so much in humans that today man's hand has become a very sensitive device. With the help of such a hand, man has been able to work his mental powers to become the most talented creature of the universe. To say that only the front limb has contributed to the enrichment of the human mind, exaggeration will occur.

In this way, the first change in the direction of development was made in human beings to stand upright on the first legs and to hold things well with the second hands. The change in hand may have encouraged him to make tools, and the tools may have instilled in him the sense of attacking, or protecting himself. The achievement of the external means of attack would have resulted in the degeneration of its invading organs (teeth, jaws, and the associated facial or neck muscles) and features in the hands themselves. When the hand is more functional, brain augmentation must have occurred naturally. In short, there would have been four main steps in human development: first brain development, second legs, third hands and fourth stereoscopic vision.

Extinction of the genus homo: In this context, Darwin's interpretation of the principle of natural selection becomes important. In which it has been said that the creature which adapts itself to its environmental conditions will exist on earth and the creature which cannot achieve this adaptation becomes non-existent. This theory provides the outline of the theory of development and provides an opportunity to understand the development of any creature. Environmental factors were also helpful in the extinction of the genus Homo. It has also been confirmed that the environmental factor is responsible for the development of Homo sapiens to some extent and the extinction of other species of the genus Homo. Which were caused by extinction of other species of the genus Homo?

Environmental Factors: Most scholars agreed that the main cause of extinction of the genus Homo was the

change in physical traits along with environmental changes. The fluctuations of the seasons affected the genus Homo. The ice age and drought and lack of resources have caused the most of the damage. In this context, it is said that in the savanna it was said that the hominids living in the savanna used to live on the trees first, but as soon as the land changed from forest to savanna (ground part of the grass), it descended from the tree and started walking on the ground. Now the hominid who was able to walk remained in existence and the creature which could not establish adaptation accordingly died. Genetic diseases caused by some species found in some species were also caused by their decline, which has been mentioned above.

Studies in cognitive anthropology suggests that early-emerging cooperative communicative skills are responsible for unique features of human cognition and that our psychology evolved in large part due to selection for prosociality (i.e., positive but potentially selfishly motivated acts as opposed to antisocial interactions; Eisenberg et al. 1983). Comparisons of mentalizing skills between apes reveal that among apes, only human infants develop cooperative communicative skills that facilitate human forms of cultural cognition; however, domestic dogs possess some social skills that resemble those seen in human infants. Research with experimentally domesticated foxes and bonobos shows how selection for prosociality can lead to increases in the cooperative-communicative flexibility observed in dogs and infants. This comparative developmental work provides the basis for the self-domestication hypothesis, which proposes that unique human psychology evolved as part of a larger domestication syndrome that converges with other domesticated animals. Researchers have frequently made use of the concept of domestication in explaining human evolution (Boas 1911, Gould 1977, Leach 2003, Wrangham 2014). Darwin (1859) began *On the Origin of Species* with a discussion of domestication through artificial selection and spent decades collecting examples of natural variation produced through domestication (Darwin 1868). Domestication was crucial to Darwin's case for evolution through natural selection and led him to consider the possibility of human domestication (Darwin 1871). Considering the contemporary humans and their response to the experience of natural selection, Byars (2009) is of the opinion that selection varied in intensity, becoming generally less intense over time, but not in direction, and it has only operated consistently over the entire period to reduce age at first birth. Predictions for one generation are fairly reliable, but whether selection will be consistent and sustained enough to bring about significant genetic change can only be answered with longer periods of observation of more traits relevant to human health. These results suggest slow evolutionary change. Because fertility is the driving force behind evolution in modern populations, we might have found

larger effects of evolution on the levels of sex hormones and related traits had they been measured. The impact of fertility on selection could prove especially important now that many couples that would otherwise remain childless can produce offspring with medical assistance.

In conclusion, it can be said that Homo sapiens of the genus Homo was the only species that could contend with nature and fight for its survival, only two possibilities are there for their death of other species of human. one that at that time some pandemic disease spread over their area so they all other diminish another reason may be that some asteroid might has hit the earth which may cause earthquake in their area so that all that dead . Out of these nature calamities only Homo sapiens survived because they are best fit in these conditions with their structure and way of living. It is belief that overall seen this possibilities first one is more suitable reason for extinction of other species and As they do not come in contact of virus or disease by virtue of their fate or having to understand better way of their life because if some steroid shot hit the earth than all species has to die simultaneously with but only survivor is homo Sapiens as well as some physical symptoms that caused any kind of blocking of the developmental process did not happen however, there are still ongoing researches on the extinction of genus species, their forests, development and expansion.

REFERENCES RÉFÉRENCES REFERENCIAS

- Alles, D. L., & Stevenson, J. C. (2003). A Review of Current Research on Human Evolution. *Sithitbacid*, 65(5), 333–339. http://www.sith.itb.ac.id/publikasi-ia/Evolusi-2010/Human_Evolution.pdf
- Anto' n SC, Potts R, Aiello LC. 2014. Human evolution. Evolution of early Homo: an integrated biological perspective. *Science* 345:1236828. doi: 10.1126/science.1236828.
- Berger LR, de Ruiter DJ, Churchill SE, Schmid P, Carlson KJ, Dirks PH, Kibii JM. 2010. Australopithecus sediba: a new species of Homo-like australopith from South Africa. *Science* 328:195–204. doi: 10.1126/science.1184944.
- Berger, L. R., Hawks, J., de Ruiter, D. J., Churchill, S. E., Schmid, P., Delezene, L. K., ... Zipfel, B. (2015). Homo naledi, a new species of the genus Homo from the Dinaledi Chamber, South Africa. *ELife*, 4 (September 2015). <https://doi.org/10.7554/eLife.09560>.
- Bermu' dez de Castro JM, Martino' n-Torres M, Sier MJ, Mart' in-France' s L. 2014. On the variability of the Dmanisi mandibles. *PLOS ONE* 9:e88212. doi: 10.1371/journal.pone.0088212.
- Blumenschine RJ, Peters CR, Masao FT, Clarke RJ, Deino AL, Hay RL, Swisher CC, Stanistreet IG, Ashley GM, McHenry LJ, Sikes NE, Van Der Merwe NJ, Tactikos JC, Cushing AE, Deocampo DM, Njau JK, Ebert JI. 2003. Late Pliocene Homo and hominid land use from western Olduvai Gorge, Tanzania. *Science* 299:1217–1221. doi:10.1126/science.1075374.
- Boaz NT, Howell FC. 1977. A gracile hominid cranium from upper member G of the Shungura formation, Ethiopia. *American Journal of Physical Anthropology* 46:93–108. doi:10.1002/ajpa.1330460113.
- Buck, Laura T.; Stringer, Chris B. (2014-03-17). "Homo heidelbergensis". *Current Biology*. 24 (6): R214 – R215. doi: 10.1016 / j.cub.2013.12.048. ISSN 0960-9822. PMID 24650901.
- Byars, S. G., Ewbank, D., Govindaraju, D. R., & Stearns, S. C. (2010). Natural selection in a contemporary human population. *Proceedings of the National Academy of Sciences of the United States of America*, 107(SUPPL. 1), 1787–1792. <https://doi.org/10.1073/pnas.0906199106>.
- Dirks PHGM, Berger LR, Roberts EM, Kramers JD, Hawks J, Randolph-Quinney PS, Elliott M, Musiba CM, Churchill SE, de Ruiter DJ, Schmid P, Backwell LR, Belyanin GA, Boshoff P, Hunter KL, Feuerriegel EM, Gurtov A, du G Harrison J, Hunter R, Kruger A, Morris H, Makhubela TV, Peixotto B, Tucker S. 2015. Geological and taphonomic evidence for deliberate body disposal by the primitive hominin species Homo naledi from the Dinaledi Chamber, South Africa. *eLife* 4:e09651. doi: 10.7554/eLife.09561.
- Dirks, P. H. G. M., Roberts, E. M., Hilbert-Wolf, H., Kramers, J. D., Hawks, J., Dosseto, A., Berger, L. R. (2017). The age of homo naledi and associated sediments in the rising star cave, South Africa. *ELife*, 6(May). <https://doi.org/10.7554/eLife.24231>
- Douglas, Matthew M; Douglas, Jonathan M. (2016). *Exploring Human Biology in the Laboratory*. Morton Publishing Company. p. 324. ISBN 9781617313905.
- Dusseldorp, Gerrit Leendert (2009). *A View to a Kill: Investigating Middle Palaeolithic Subsistence Using an Optimal Foraging Perspective*. Sidestone Press. p. 14. ISBN 978-90-8890-020-4. Retrieved 7 February 2018.
- Hare, B. (2017). Survival of the Friendliest: Homo sapiens Evolved via Selection for Prosociality. *Annual Review of Psychology*, 68(1), 155–186.
- Holliday TW. 2012. Body size, body shape, and the circumscription of the genus Homo. *Current Anthropology* 53:S330–S345. doi: 10.1086/667360.
- Hawks J, Hunley K, Lee SH, Wolpoff M. 2000. Population bottlenecks and Pleistocene human evolution. *Molecular Biology and Evolution* 17:2–22. doi: 10.1093/oxfordjournals.molbev.a026233.
- Hazarika, M. (2007). Homo erectus/ergaster and Out of Africa: Recent Developments in Paleoanthropology and Prehistoric Archeology.

- European Anthropological Association Summer School eBook 1: 35–41. Retrieved January 22, 2014.
18. Hublin, J.-J. (2013), "The Middle Pleistocene Record. On the Origin of Neandertals, Modern Humans and Others" in: R. David Begun (ed.), *A Companion to Paleoanthropology*, John Wiley, pp. 517–537 (summary 529–531). (p. 532).
 19. Gabunia L, Vekua A, Lordkipanidze D, Swisher CC III, Ferring R, Justus A, Nioradze M, Tvalchrelidze M, Anto' n SC, Bosinski G, Joris O, Lumley MA, Majsuradze G, Mouskhelishvili A. 2000. Earliest Pleistocene hominid cranial remains from Dmanisi, Republic of Georgia: taxonomy, geological setting and age. *Science* 288:1019–1025.
 20. Kaszycka, K. A. (2017). The Australopithecines – An Extinct Group of Human Ancestors: My Scientific Interest in South Africa. *Werkwinkel*, 12(1), 7–17. <https://doi.org/10.1515/werk-2017-0001>
 21. Krause, Johannes; Fu, Qiaomei; Good, Jeffrey M.; Viola, Bence; Shunkov, Michael V.; Derevianko, Anatoli P. & Pääbo, Svante (2010), "The complete mitochondrial DNA genome of an unknown hominin from southern Siberia", *Nature*, 464 (7290): 894–97,
 22. Kjærsgaard, Peter C. (2014-04-29). "Inventing Homo gardarensis: Prestige, Pressure, and Human Evolution in Interwar Scandinavia". *Science in Context*. 27 (2): 359–383. doi: 10.1017/s0269889714000106. ISSN 0269-8897.
 23. Lenton, Tim; Watson, Andrew J. (20 January 2011). *Revolutions that Made the Earth*. Oxford University Press. p. 364. ISBN 978-0-19-958704-9. Retrieved 7 February 2018.
 24. Leveille D(2012). "Scientists Map An Extinct Denisovan Girl's Genome". *PRI's The World*. Retrieved 31 August 2012.
 25. Lordkipanidze D, Ponce de Leo' n MS, Margvelashvili A, Rak Y, Rightmire GP, Vekua A, Zollikofer CP. 2013. A complete skull from Dmanisi, Georgia, and the evolutionary biology of early Homo. *Science* 342:326–331.
 26. Maslin, M. A., Shultz, S., & Trauth, M. H. (2015). A synthesis of the theories and concepts of early human evolution. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 370(1663). <https://doi.org/10.1098/rstb.2014.0064>
 27. Minelli, Alessandro; Contrafatto, Giancarlo (10 November 2009). *Biological science fundamentals and systematics - volume iv*. Eolss Publications. p. 248. ISBN 978-1-84826-189-1. Retrieved 7 February 2018.
 28. Potts, R. (2012). Evolution and Environmental Change in Early Human Prehistory. *Annual Review of Anthropology*, 41(1), 151–167. <https://doi.org/10.1146/annurev-anthro-092611-145754>
 29. Reich, David (2018). *Who We Are and How We Got Here*. Oxford University Press. P. 53. ISBN 978-0-19-882125-0.
 30. Schrenk F, Bromage TG, Betzler CG, Ring U, Juwayeyi YM. 1993. Oldest Homo and Pliocene biogeography of the Malawi rift. *Nature* 365:833–836. doi: 10.1038/365833a0.
 31. Spoor F, LeakeyMG, Gathogo PN, Brown FH, Anto' n SC, McDougall I, Kiarie C, Manthi FK, Leakey LN. 2007. Implications of new early Homo fossils from Ileret, east of Lake Turkana, Kenya. *Nature* 448:688–691. doi: 10.1038/nature05986.
 32. Stringer, Chris. (2012). Evolution: What makes a modern human. *Nature* 485 (7396): 33-35
 33. Wood BA, Collard M. 1999. The human genus. *Science* 284: 65–71. doi:10.1126/science.284.5411.65
 34. Zimmer C (2010). "Denisovans Were Neanderthals' Cousins, DNA Analysis Reveals". *NYTimes.com*. Retrieved 22 December 2010.
 35. <https://en.thpanorama.com/articles/historia/homo-habilis-origen-caracteristicas-alimentacin.html>
 36. https://prehistorico.fandom.com/es/wiki/Wiki_Prehist%C3%B3rico
 37. <http://humanorigins.si.edu/evidence/human-fossils/species>
 38. <https://www.britannica.com/topic/Homo-habilis>
 39. <https://en.wikipedia.org/wiki/Macroevolution>
 40. <http://archaeologyinfo.com/human-evolution/>
 41. <http://archaeologyinfo.com/homo-habilis/>
 42. <https://www.elpopular.pe/buscador>
 43. <http://www.portalciencia.net/antroevoerga.html>
 44. <https://courses.lumenlearning.com/suny-history-of-our-tribe/chapter/28-homo-ergaster/>
 45. <http://www.newworldencyclopedia.org>
 46. <https://courses.lumenlearning.com/suny-hccc-world-history/chapter/the-evolution-of-humans/>
 47. <https://en.suenec.cz/hobiti-z-ostrova-flores-nejsou-nasi-pribuzni/>
 48. <https://courses.lumenlearning.com/suny-hccc-world-history/chapter/the-evolution-of-humans/>
 49. https://en.wikipedia.org/wiki/Homo_ergaster
 50. <https://www.punjabkesari.in/international/news/lazin-ess-led-to-extinction-of-homo-erectus-860866>
 51. <https://www.forwardpress.in/2019/04/arrival-human-earth-hindi/>
 52. https://www.bbc.com/hindi/science/story/2007/08/070808_human_origin.shtml

This page is intentionally left blank



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: D
HISTORY, ARCHAEOLOGY & ANTHROPOLOGY
Volume 20 Issue 3 Version 1.0 Year 2020
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-460X & Print ISSN: 0975-587X

Zootrophy

By Roberto Marchesini

Abstract- The human interest in other animals has been incontrovertibly confirmed by anthropology and psychology: think of the animalist art of the Paleolithic age or the Neolithic artifacts, the processes of domestication or the first forms of religious expression, the cross-cultural tendency to have domestic animals or today's beneficial animal-assisted activities. The evidence and proofs of this fact are such as to justify both a descriptive research on objectively assessable signs, and an explanatory research on their possible causes. The following essay aims to analyze the most obvious evidence of the human orientation towards other species, comparing the different theories that have tried to explain this phenomenon. Furthermore, I also want to propose a new explanatory hypothesis based on a variety of motivational orientations and able to produce some flywheel effects.

Keywords: zoophilia, biophilia, zoomorphism, theriomorphic gestalt, domestication, epimelesis.

GJHSS-D Classification: FOR Code: 060899



Strictly as per the compliance and regulations of:



Abstract- The human interest in other animals has been incontrovertibly confirmed by anthropology and psychology: think of the animalist art of the Paleolithic age or the Neolithic artifacts, the processes of domestication or the first forms of religious expression, the cross-cultural tendency to have domestic animals or today's beneficial animal-assisted activities. The evidence and proofs of this fact are such as to justify both a descriptive research on objectively assessable signs, and an explanatory research on their possible causes. The following essay aims to analyze the most obvious evidence of the human orientation towards other species, comparing the different theories that have tried to explain this phenomenon. Furthermore, I also want to propose a new explanatory hypothesis based on a variety of motivational orientations and able to produce some flywheel effects.

Keywords: zoophilia, biophilia, zoomorphism, theriomorphic gestalt, domestication, epimelesis.

I. OBJECTIVE PROOFS OF THE HUMAN INTEREST IN OTHER SPECIES

The human being's orientation towards the animal target is confirmed by an indefinite number of proofs that are not always reliable and do not always have a positive emotional connotation – consider the several acts of animal sadism or the traditions justifying animal pain and torment, or again people's annoyance, disgust and fear of animals (Herzog, 2010). For these reasons, when I speak of interest/susceptibility to the zoomorphic element, I particularly refer to:

- i. Its extractive importance, that is, its sensory emergence in the perceived horizon;
- ii. Its emotional relevance, that is, its ability to directly arouse different emotions;
- iii. Its elicitive relevance, that is, its ability to arouse different motivational behaviors.

It would therefore be incorrect to mistake animal orientation - which I here want to investigate - for zoophilia, although the latter is obviously only one of the possible expressions of this orientation. In my opinion, the incontrovertible fact is the emergence of zoomorphy: due to its phenomonic importance, its exemplifying and representational nature, the emotions and the motivational involvement it can arouse, zoomorphy is more likely to emerge than any other element within one's perceived horizon.

It is no coincidence that we give children animal-shaped toys and we tell them fairy tales in which

animals are the main characters. Similarly, it is also interesting to notice that we give theriomorphic names to constellations (hence the term *zodiac*), geographical references, the first divinities, mythological creatures, aliens, fictional superheroes, the icons of most writing symbols - including our alphabet, albeit stylized – as well as heraldic, physiognomic, religious, or metaphorical symbols (xxx, 2014; 2014b). If one then considers the first representational expressions of the Paleolithic period and the shapes of Neolithic artifacts - be them trinkets, furnishing material, instruments of various kinds – one will always find an animal shape defining not only the ornament but also the intended use of the artifact itself. Animal loans can also be found throughout the anthropological scenario in dance choreograms, different forms of cosmetics (such as body painting, tattoos, neck rings, labial discs, and quills), hats and, more generally, traditional dresses in different cultures, totemism and cosmological structures, music (related to harmonics, rhythm and the construction of instruments) and, lastly, several technopoietic expressions¹.

All this evidence, however, needs to be further analysed to understand whether the zoomorphic target is indeed more relevant than any other stimulating entity. Paul Shepard's experiment "find the hidden object" (1997) aimed to do exactly this. People were given different figures in which the target was encrypted by other elements. The result was that people showed greater detection skills in a predetermined amount of time and took less time in the indefinite-time detection task, whenever the target was an animal rather than another subject. As we shall see, Shepard traced this greater salience of zoomorphy back to the human being's venatic nature. Without devaluing Shepard's work, however, further research would be useful to determine: i) whether other similar analyses conducted with different methods would confirm this test; ii)

¹ The anthropologist Sabrina Tonutti described the ethnographic signs as «poor in describing the scopes of the human-animal relationship (in view of a high degree of animal "interactions" in all cultural contexts, both factual-imaginative and relational-utilitarian). If analysed in this perspective, some of these essays show an almost desertified view of the animal presence» (Tonutti, in XXX, Tonutti, 2007, pp. 11-12). The anthropologist Tim Ingold also highlighted this concept: «I have long been dissatisfied with the anthropological tendency to treat animals merely as the symbolic objects of an exclusively human discourse. It was clear to me that animals were sentient beings with whom we humans relate socially, just as we do with one another» (2004, p. 45).

whether this outcome should be attributed to an effective prototypicality of the zoomorphic target or to other intervening factors². To verify these results, our institute has performed more tests – whose configuration is slightly different from Shepard's – on both primary school children and adults. These tests were based on the following evidence: i) the Gestalt reconstructions of uncertain figures, both with and without zoomorphic features; ii) the constant focus on animal targets and other subjects; iii) tachistoscope tests verifying the emergence of an element rather than others – that is, when the image showed an animal rather than other shapes. Although the results of these tests are still being elaborated, Shepard's hypothesis of a prototypical nature of zoomorphy would seem to be confirmed. However, it is still necessary to clarify whether this salience should be traced back to an innate or to a learned feature. In order to do this, one would have to work with children who have not yet been affected by the cultural stress on animal-themed objects. Finally, one should also take into consideration the absolute difference between the identification of a salience – be it a real zoomorphic Gestalt, such that one would not only discover the animal form more easily, but would also tend to see animals even where there are not any – and Shepard's explanation that traces it back to hunting.

Since the mid- 1980s, I have carried out another project involving about 30,000 children in primary schools all over Italy. Working on this project, I noticed the strongly emotional nature of any activity involving the animal theme³. As one can imagine, to get feedback on

the emotions aroused by the animal target during an educational activity was not an easy task. One of the reasons is that although the emotional tone had clearly increased, it was impossible to find a typological homogeneity in terms of the evoked emotion, as all children and animals are unique. We thus focused on the quantitative aspect of the arousal, which had always been important. Even in this case, however, some more detailed analyses would be necessary to avoid variables such as: the novelty of the didactic activity, the laboratory nature of these projects, an operator's specific approach, the operator's very novelty, the child's biographical involvement, and so on. One could certainly affirm that these projects arouse a strong motivational involvement in children, increasing participation in the didactic activity and improving the class' integration, diligence and responsibility at all stages, as well as focus on tasks and learning results.

I will not dwell on the other evidence that, since Boris Levinson's research (1962), has given rise to the vast chapter of "Animal-assisted interventions" in the field of co-therapy, assistance, support and care⁴. These researches – though sometimes approximate with regards to both the internal validation processes (for example, the exclusion of third variables) and the sampling and control processes – are nowadays a rich literature that cannot be ignored when dealing with the involvement resulting from the animal encounter and the human-animal relationship. Although I think some more thorough validations would be necessary to claim there is scientific evidence of the benefits of this encounter, the human interest and strong involvement in the heterospecific remains clear. This is particularly relevant in children – hence the fortune of zoos, didactic farms and even animal circus.

As always, these outcomes could be traced back to a cultural character due to the representational theriomorphism that – from Grandville to Disney – has been influencing children's imagination in Western culture. Although this cultural character certainly has its importance, I am more inclined to consider it a recursion rather than an actual incipit or flywheel. The fortune of these representations is more likely to derive from their

² In *The Others* (1996), Paul Shepard highlights the priority of animal forms in the human perceptive- interpretative system. As some tests demonstrated, the human brain would in fact have a proclivity for zoomorphy. In 90% of the cases, the subjects could correctly identify the hidden shape whenever the encrypted image was an animal. However, the percentage of correct answers drop down to 50% with the shapes of other subjects. According to Shepard, this tendency to recognise animal shapes has an evolutionary reason as our forefathers, who lived with the constant risk of being prey to other animals, developed an excellent ability to detect animal forms even when these were hidden among the vegetation. Furthermore, Shepard noticed that the venatic and therefore hunting/eluding relationship between the prehistoric men and the great mammals of the savannah has been particularly important in refining the human ability to detect animal forms in difficult environmental contexts. (p. 17)

³ Together with Siua (Scuola di Interazione Uomo-Animale), I have organized courses of zooanthropological education for Italian schools since 1994. Over the last twenty years, we have reached out to about 30.000 children in primary school with different projects concerning caring, social behaviour, the meaning of diversity, games, and so on. The surveys gathered during the preliminary phase of the project show that about 89% of children had the opportunity to have a small domestic animal. Specifically, about a fifth (16,5%) of children owned either dogs or cats. These results are in line with the more recent data showing about 60 million pets in Italy and 14 million dogs and cats in about 17 million of Italian families. The results of this project were shown during the

14th IAHAI International Conference "Unveiling a new Paradigm: hai in the Mainstream". See Marchesini, R., Adorni, E. (2016), "Pet as Safe Base New Research in the child's experiential enrichment", Paris, July 13, 2016.

⁴ Boris Levinson is a pioneer in the study of the benefits resulting from the presence of a non-human animal to cure specific disturbs such as handicaps, autism, and emotional distress. He surprisingly noticed how – during a therapeutic session – the mere presence of a dog allowed the autistic child to actively react to certain stimuli. This experience – quoted in the essay «The dog as "co-therapist" » (1962) – marks the beginning of pet-therapy (the term first appeared in Levinson's essay), as a therapeutic methodology carried out with a pet, highlighting the social and rehabilitative benefits that the heterospecific can have for humans.

consistency with the child's tendencies. A similar argument could be made for fairytales writers and the shape of toys: although the adult is the one who assembles the material, the child is the actual selector who rewards the representations that satisfy his/her cognitive palate and expectations.

Among the great achievements of humanity, one should not forget the domestication process that - according to Marvin Harris (2011) and Jared Diamond (2013) - is the foundation of the entire technological and cultural evolution of our species. If the human being had not been interested in the non-human, this process - started in the Paleolithic age - would have probably never begun. After all, even the actual presence of a multitude of domestic varieties and, within these, of races can be considered an indirect proof of the human interest in other species.

II. POSSIBLE EXPLANATIONS FOR THE HUMAN INTEREST IN OTHER SPECIES

The human interest in animals has found various explanations throughout history:

- i. Paul Shepard's proposal of a "zoomorphic gestalt", linked to the venatic behaviour of our species;
- ii. James Serpell's idea of a "parental deception" (1986) developed by the domestic species;
- iii. Edward Wilson's idea of an innate natural aesthetics (1985) of all natural forms defined as "Biophilia";
- iv. Jean-Pierre Digard's idea of a cultural "archetypal operator" (1990).

I recognize the heuristic value of these theories, as each one considers a particular aspect of the orientation, and draw on their investigative nature - that is, their ability to bring out orientational elements. However, I disagree with these theories for two reasons:

- i. Because they seem to consider their identified explanatory factor as comprehensive
- ii. Because of the explanatory character itself or the character of the adduced causal relationship I will start from the latter.

Although it needs to be further analysed, Shepard's thesis seems to stand the tests of my laboratory. However, I think that the zoomorphic gestalt is not just a salience and has much more complex features such as pregnancy. Nevertheless, the connection between this prototypicality and the venatic character does not add up. In fact, if this were the case: i) it should elicit predatory behaviours, while instead it creates other motivational tendencies; ii) it should be related to the movement and the processes of elongation compared to the background, while instead it is stronger when the figure is still. If we must follow Shepard's theory on the predicate's usefulness or specificity, which raises many doubts for me, it is far more sensible to consider such monitoring as attention

to a risk - that is, a predator rather than a prey. In my opinion, however, this explanation is only partial because different animal images produce different motivational effects that cannot be traced back to a single elicitive element.

James Serpell's theory of the parental factor is also interesting as it would explain many parenting attitudes towards domestic animals - such as the animal's transformation into a child - as well as the adoptive processes themselves, confirmed by our affection to puppies. As known, the parental behavior is based on a specific motivational dialectics:

- i. On the one hand, there is a puppy showing pedomorphic universals - as Konrad Lorenz already claimed - and demanding care or et-epimeletic behaviours⁵;
- ii. On the other hand, there is a susceptible adult driven by an epimeletic motivation, who responds to those requests with nurturing, protection and so on. If Serpell's idea of a mimetic evolution of domestic animals were correct, however, there would be no explanation for: i) how this process started, as the evolution of parental parasitism requires an adoptive beginning; ii) why even wild animals - a fox cub, for example - produce the same elicitive effect of tenderness and adoptive desire in human beings.

Although Serpell correctly focuses on the parental affiliation, I think he makes two mistakes, when claiming:

- i. The uniqueness or completeness of this causal factor.
- ii. The very development of the causal link.

It makes more sense to hypothesize a strong epimeletic development in the human being that, in turn, caused a side effect (epiphenomenon) of increased susceptibility towards the other pedomorphic universals of the heterospecifics. Why do I claim a tendential increment of the human being's epimeletic motivation? The answer could be linked to some factors of adaptive relevance:

⁵ Konrad Lorenz (1980) has spoken about "Kindchenschema" (baby schema) to highlight the neotenic morphological characteristics of mammals (i.e.: big eyes, round face, prominent forehead, puffy cheeks) able to stimulate interspecific epimeletic instincts. The American ethologist James Serpell, in line with this interpretation, developed his own theory of domestication, defined in terms of "parental deception". This highlights how, throughout the evolutionary process, animals plot a real trap for humans (as it were a host/parasite relationship), thus using to their own advantage the human natural predisposition toward the animal's neotenic features. According to Serpell (1986), certain species were therefore able to strengthen some neotenic inclinations by currying favour and creating a sort of interspecific mothering with humans. The biologist Stephen J. Gould (1979), instead, noticed how Walt Disney used this schema to create their characters and fascinate a public inclined to childlike animal forms.

i) the immaturity of the newborn human is much more significant than the immaturity of the anthropomorphic species and requires a strong parental attention and dedication; ii) the developmental age of our species, in line with the timing of primates' development, but even more emphasized. Domestic animals did not develop forms of parental parasitism. On the contrary, humans developed a heightened epimeletic motivation in response to their puppy's growing needs and became very susceptible to pedomorphies, including those expressed by heterospecifics. For this reason, transspecific adoption - rarely present in nature - is institutionalized in the human being. Wilson's theory of biophilia could be considered somehow specular to Digard's cultural theory: the former believes in an innate aesthetics towards natural forms; the latter considers the cultural factor as the very origin of our orientation toward other species. Wilson certainly re-elaborates and broadens the traditional ethological theory of the founding fathers, tracing the a-priori back to the species' heritage - that is, considering them as phylogenetic a-posteriori. Although I could agree with such an approach, it still does not explain our particular interest in animals. Furthermore, I do not think that this tendency towards the zoomorphies must necessarily refer to the condition of beauty or expectation, as this is a bucolic vision unconfirmed by the facts. Yes, some animal expressions may appear beautiful to us - like the sinuous movement of a feline or a bird's singing - but to extend this answer to all animal referents would be absolutely wrong. Nevertheless, even when the animal causes discomfort, disgust, alert or fear, what one notices is pure and simple orientation.

Similarly, the cultural dimension has used the animal predicates as colours on the palette of its representational inspiration. However, the reasons for this are unknown: why did the human being, among all the available references, chose to focus on the zoomorphic target? If we admit a primary orientation towards the zoomorpheme, then we can presume these signs could become categorical operators. Digard's hypothesis could help one understand the transition from a first to a second degree of orientation by introducing it as a recursive factor. It is far more likely that the human being first addressed the animal counterpart - through an orientational and identifying projection - then elected it as source of inspiration and, lastly, used it as exemplifying reference. I will explain myself better:

- i. First comes the wonder for the flight of birds;
- ii. Then comes the revelation that it is possible to fly - that is, that an existential dimension exists;
- iii. Then, and only then, comes the exemplifying research - that is, an attempt to learn the secrets of flight or to structure some categorizations of worlds.

Wilson's and Degard's theories also focus on some interesting aspects of the human-animal relationship - and I am sure there might be many more. However, they ultimately miss their target for three reasons:

- 1) They seek an idiofunctional causal factor specifically developed on the basis of that function;
- 2) They claim that the causal factor could exhaustively explain the orientation towards other animals;
- 3) They do not consider the recursive nature of the relationship between the human being and the heterospecifics.

Starting exactly from these three points, I will present my theory of zootrophy as the human being's orientation toward and involvement with whatever is animal-shaped or animal-themed.

III. THE THEORY OF ZOOTROPHY

I propose a theory of orientation able to explain the multifaceted human interest in other species - that is, the various forms and ways in which it manifests itself. Furthermore, in this theory the attraction to and appeal of the zoomorphic target - as well as the human sensitivity towards it - are not broken into several separated, non-convergent and somehow unconnected pieces. In fact, the orientation has multiple manifestations - some prefer an aesthetic perspective, some an epistemic or epimeletic one - but also presents homogeneity. This is just one more reason why I believe the word zootrophy to be correct - from "zoo" = animal, and trope = "turn towards". In this perspective, zootrophy thus takes on three basic values:

- i. The prototypical character of the zoomorpheme;
- ii. The emotive nature of the animal phenomenology;
- iii. The elicitive or productive character of the human-animal interaction. The orientational meaning can therefore be attributed to different qualities of the zoomorpheme such as salience, pregnancy, emergence and, in particular, the emotional and elicitive value. I believe this orientational significance - that is, the attractiveness of the zoomorpheme - should be attributed to the overall significance of the animal target rather than others. In fact, the animal target is mobile (unlike everything else), has a binding interveniency in the dialectics of risks/opportunities, and is probably not a human specificity.

The zoomorpheme is perhaps more likely to emerge in the human being because of the strongly empathic and projective endowments of our species, which are translated into an actively identifying tendency. Although anthropomorphism is not a cultural deviation, it might become one because of its non-cultural foundation. This is exactly what happened with fairy tales and animal-themed toys. On the other hand,

however, I am mostly interested in the proactive outcome of the orientation - that is, the tendency to translate this first appeal/involvement into a real behaviour. This specific point is what distinguishes my theory from the others, as I believe that:

- 1) Once the human being's attention has been drawn, the orientation determines a motivational elicitation that depends on the human's characteristics, which are obviously different from one person to another
- 2) This elicitation is not specific - which would lead one to hypothesize a "zoophile motivation" conflicting with Darwin's theory - but rather an epiphenomenon, that is, a collateral effect of motivational overabundances.

The motivational overabundance arises when:

- i. The species develop a strong inclination (i.e.: cats' predatory nature) in which all the members of a species may be susceptible to similar targets (which is why cats chase balls and wires);
- ii. The subjects of a certain species, bearer of specific motivations, are in a condition by which the need is fulfilled in another way - i.e.: since the bowl is already full, the cat uses the predatory motivation within a ludic frame strongly brought to generalism, fiction, free expression.

Therefore, the epiphenomenon is more likely to arise whenever there is a condition of motivational overabundance in one of the two cases above. Now, epimelesis arose in accordance with Darwin's laws of fitness, in the sense of bringing a replicative advantage and, in this specific case, taking care of one's own children. However, a motivational directive such as epimelesis then gave rise to behaviors that appear to be in contrast with these laws - for example, to adopt and take care of puppies of another species. To understand how this was possible, it is fundamental to resort to motivational characteristics.

The motivational tendencies are:

- 1) Specific orientations and sensitivity to certain stimuli, such as movement in the predatory directionality
- 2) Inclinations to implement certain behaviors, such as chasing and grabbing in the predatory case. These species were particularly prone to these dispositions because of their replicative advantage (fitness) compared to other parameters of adaptive configuration. Therefore, the predatory motivation (to orient oneself and run toward what is moving) is the correlated need in species strongly dependent on meat, such as felines. Similarly, the epimeletic motivation - that is, the benevolent disposition to pedomorphies and the tendency to express care behaviors - will be an essential prerequisite in case their offspring presents a severe functional immaturity at birth.

The orientation and elicitive sensitivity toward some signs of the world caused a motivation to conjugate the individual and the external reality based on the eligibility of the connection. At the same time, this motivation makes the subject vulnerable, prey to Gestalt entities-events or prototypical predicates able to act as a key-signals. However, it is also clear that the motivations - which are tendencies or proactive dispositions - define some "languor of doing" that is not the mere outcome of an elicitive action. Indeed, they also create a sense of restlessness and frustration unless an expressive agibility related to subject's motivational structure arises. The motivations' languor thus depends on some physiological internal variables and some elicitive external factors, a state of activation that fulfills itself in the expression, defined in this case as "behavioral consummation". Driven by an expressive languor, the motivated individual goes in search of a specific target. At the same time, however, he is susceptible to other targets with similar characteristics and finds it rewarding and fulfilling to express the action on the surrogate.

As I have already argued in other essays, the human being seems to be predisposed to a transpecific relationship because of some motivational tendencies:

- i. The epimeletic motivation, particularly emphasized, leads her to adopt cubs of other species, not only because they can be identified as cubs but also because they can satisfy her strong parental desire;
- ii. The mimic motivation leads her to observe and imitate other species, learning from other animals but, more importantly, letting her existential dimension be hybridized;
- iii. The competitive motivation transforms her into a great emulator prompted to confront herself with the performativity of the animal world;
- iv. The projective motivation makes her inclined to identification and incorporation, by externalizing her functions through instruments and introjecting what surrounds her;
- v. The collecting motivation - typical of gatherers - leads her to acquire and collect anything, to be fascinated by diversity and, consequently, to classify and catalog the biodiversity;
- vi. The collaborative motivation facilitates the construction of partnerships and tends to create alliances and pacts beyond the infrahuman relationship;
- vii. The exploratory motivation leads her to the pleasure of knowing and to the aesthetic taste;
- viii. The social motivation supports different areas of affiliation - including conviviality, affectivity, ludism and the feeling of the cosmos.

These motivations - which orient our gaze toward other species, sometimes individually but more often together - produce a proactive approach towards the animal as collateral process, that is, as

epiphenomenon. This approach is not only attention to the zoomorpheme but results in a multiplicity of animal-related behaviours able to transform the animal into a motivational target that gives rise to:

- i. Events of gratification - that is, fruition-related pleasure of the target, even if only affiliative;
- ii. Processes of fulfillment, as it allows one to express and therefore curb the motivational languor.
- iii. Three key aspects of zootrophy can therefore be delineated:
- iv. The epiphenomenal character, that is, the non-explicability in terms of specificity;
- v. The causal and therefore expressive multiformity;
- vi. The dynamism or recursiveness of this tendency, which can be attributed to the gratification and fulfillment or, more specifically, to the shifts produced by the relationship with other species.

The human being's tendency to orient himself toward animal forms leads him to consider animal otherness as his "main reference" in the world - a sort of compass, epiphany, or medium that allows him to face reality through other species. The referential nature of the animal otherness can express itself in different ways, serving as:

- i. "threshold", to understand the external phenomena affecting his interiority;
- ii. "epiphany", annunciation of other possible existential dimensions available to the human being;
- iii. "example", conveying new life strategies, expressive styles, and models of interaction;
- iv. "archetype" or conceptual operator to create classifications, examples, metaphors and symbolisms;
- v. "dimension" of fulfillment and motivational gratification.

Because of its proactivity, therefore, the motivational orientation does not only create distance and subrogation, but also projects the human being into the animal otherness or some sort of bodily possession of the latter. Because of the strongly identifying character, the human being - by watching the flight of a bird - is or imagines to be catapulted into the bird's body and thus experiences that existential dimension.

The animal is therefore transformed from "other-than-self" to "other-in-self". I refer to this transformation as referential shift: the human being not only learns from her conspecifics but also assigns a masterful role - I would say even "inspiring" and "annunciating" - to other species. Therefore the human goes from an identifying development strongly connected to the species tradition (ontogenesis) to a development that is freer, hybridized with loans from other species and therefore not fully comparable with the phylogenetic identity (ontopoiesis). Most of the cultural dimension is nothing more than an ontological shift from the dimension of species - a

reinterpretation of the connotations of ontogenetic translation. Consider the movement and organization of physicality in other choreograms in dance; the transformation of the somatic phenomenology in tattoos, the incorporation of objects; the use of skins; the assimilation of non-human vocalizations in prosody, the construction of bird-calls or whistles; or again, the assimilation of Epimetheus' virtues through the Promethean *techne*.

In my opinion, the recursive development of the zootrophistic orientation does not allow one to analyse it only as "causal predisposition and verifiable effect". The projection into animals and the technological development have the same effect: they change the human being's perception of the self, of development, of social constitution and performative horizon. Borrowing Baron Jakob von Uexküll's concept (2010), one could say that this reference changes the *umwelt* of one's species. If the elicitive or implementive aspect of behaviours directed to the zoomorphic target is associated with the perceptive and emotional orientation, the existential horizon is inevitably transformed. One could evaluate this process synchronously, by referring exclusively to the ethological outcome of the human being. In my opinion, however, this approach would be wrong, as this process is both recursive and diachronic.

When one talks of orientation towards other species, one must not and cannot forget that a large part of our cultural references - which we have had since prehistoric times - is based on the zoomorpheme and the outcomes of this process are strongly hybridized with animal otherness - that is, they are teriomorphemes able to reorient or reactivate the process. When I say that we must consider zootrophy also as a historical process, I am particularly referring to the process of domestication, a prime example of the recursive nature of zootrophy. Domestication must not be explained in a performative sense - since the performance cannot precede the domesticating act itself - but rather in an orientational sense. Moreover, the domestication implements subsequent orientation processes by creating proximity, affiliation and referential loans. The most striking example is probably the alliance between human beings and dogs as outcome of zootrophy but also as a driving force of the zootrophistic orientation.

Dog domestication - an ancient practice able to influence one's entire life - has been of paramount importance in the history of humanity and created the anthropological dimensions of breeding that started during or after the Neolithic revolution. In my opinion, this event is as important as the evolution of the chopper, the conquest of fire, the structuring of language and writing. Because of some sort of anthropocentric chauvinism, however, it has been largely ignored. The domestication of wolves that began

about 40,000 years ago - the first remains date back to 33,000 years ago – was undoubtedly encouraged by an ecological coexistence (sinanthropy) and a parental adoption (epimelesis). Later, however, it became a mutual socialization and caused an ontogenetic shift in those humans growing in a society of both people and wolves. The close and intimate partnership-such as to make the wolf-dog a safe base and proximal growth zone - has undoubtedly transferred the behavioral models and non-human experiential spaces within anthropo-poiesis.

According to the theory of zootrophy, human beings and the other species would therefore be strongly linked to each other. This connection, however, is not based on an ancestral membership or homology – that is, the forefathers' common heritage – but rather lies in the cultural dimension. To quote Helmuth Plessner (1928), once an animal has been elected as inspiring and masterful reference - that is, once it can create new ontogenetic directions and new desirable existential dimensions – an eccentric path characterizing the human condition opens up. In this sense, the cultural dimension should not be understood as element of disjunction between human beings and other species, but rather as the result of a conjugating and hybridizing process: the different expressions of human culture could be referential loans that the human being borrows from species. Hence, the recursive nature of the orientation. In fact, the human being mainly connects with the animal otherness in this cultural dimension and takes on existential dimensions that are not strictly human (in the sense of phylogenetic heritage). By doing so, however, he also becomes increasingly dependent on these contributions to fully achieve his anthropo-poietic dimension.

IV. CONCLUSIONS

The theory of zootrophy is characterized by the following assumptions: i) the currently available findings predict a sort of prototypicality of the zoomorpheme - which is salient compared to the other targets, rich in Gestalt capacity or reconstruction skills, and able to become an emotional stimulus; ii) the zoomorphic sign is also able to act as elicitive element for several motivational tendencies, transforming the orientation into a translation of behaviors directed to the animal target; iii) these motivational structures should not be explained as the outcome of natural selection with the specific purpose of enhancing zoophilia, since their productive nature must be considered an epiphenomenon; iv) the motivational dimension of animal-directed behaviors is based on a plurality of motivational elements such that the interaction is always multiform; v) the encounter with animals causes some shifts on the human being that strengthen his/her need to turn to animal otherness, and therefore takes on a recursive character.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Diamond, J. M. (2013), *Guns, Germs And Steel. A Short History of Everybody For The Last 13,000 Years*, Random House, New York.
2. Digard, J.P. (1990), *L'homme et les animaux domestiques. Anthropologie d'une passion*, Fayard, Paris.
3. Gould, S.J. (1979), "Mickey Mouse Meets Konrad Lorenz", in *Natural History*, 88, n° 5, pp. 30-36.
4. Harris, M. (2011), *Cannibals and Kings. Origins of Cultures*, Vintage, New York.
5. Herzog, H. (2010), *Some We Love, Some We Hate, Some We Eat. Why It's So Hard To Think Straight About Animals*, HarperCollins, New York.
6. Ingold, T. (2004), *Ecologia della cultura*, Meltemi, Roma.
7. Levinson, B. (1962), «The dog as a "co-therapist"», *Mental Hygiene*, Jan. 46, pp. 59-65.
8. Lorenz, K. (1980), *L'etologia. Fondamenti e metodi*, Bollati Boringhieri, Torino.
9. Marchesini R., (2016), *Il bambino e l'animale. Fondamenti per una pedagogia zooantropologica*, Anicia, Roma.
10. Marchesini R., (2014), *Fondamenti di zooantropologia. La zooantropologia teorica*, Apeiron, Bologna.
11. Marchesini R., (2014b), *Epifania animale. L'oltreuomo come rivelazione*, Mimesis, Milano.
12. Marchesini R., Tonutti S. (2007), *Manuale di zooantropologia*, Meltemi, Roma.
13. Plessner, H. (1928), *Die Stufen des Organischen und der Mensch: Einleitung in die philosophische Anthropologie*, Walter de Gruyter & Co, Berlin.
14. Serpell, J. (1986), *In the Company of Animals*, Basil Blackwell, Oxford.
15. Shepard, P. (1997), *The Others. How Animals Made Us Human*, Washington, Shearwater books.
16. Wilson, E. (2003), *Biophilia*, Harvard University Press, Cambridge.
17. Von Uexküll, J. (2010), *Foray into the Worlds of Animals and Humans: With A Theory of Meaning*, University of Minnesota Press.

GLOBAL JOURNALS GUIDELINES HANDBOOK 2020

WWW.GLOBALJOURNALS.ORG

MEMBERSHIPS

FELLOWS/ASSOCIATES OF SOCIAL SCIENCE RESEARCH COUNCIL

FSSRC/ASSRC MEMBERSHIPS

INTRODUCTION



FSSRC/ASSRC is the most prestigious membership of Global Journals accredited by Open Association of Research Society, U.S.A (OARS). The credentials of Fellow and Associate designations signify that the researcher has gained the knowledge of the fundamental and high-level concepts, and is a subject matter expert, proficient in an expertise course covering the professional code of conduct, and follows recognized standards of practice. The credentials are designated only to the researchers, scientists, and professionals that have been selected by a rigorous process by our Editorial Board and Management Board.

Associates of FSSRC/ASSRC are scientists and researchers from around the world are working on projects/researches that have huge potentials. Members support Global Journals' mission to advance technology for humanity and the profession.

FSSRC

FELLOW OF SOCIAL SCIENCE RESEARCH COUNCIL

FELLOW OF SOCIAL SCIENCE RESEARCH COUNCIL is the most prestigious membership of Global Journals. It is an award and membership granted to individuals that the Open Association of Research Society judges to have made a 'substantial contribution to the improvement of computer science, technology, and electronics engineering.

The primary objective is to recognize the leaders in research and scientific fields of the current era with a global perspective and to create a channel between them and other researchers for better exposure and knowledge sharing. Members are most eminent scientists, engineers, and technologists from all across the world. Fellows are elected for life through a peer review process on the basis of excellence in the respective domain. There is no limit on the number of new nominations made in any year. Each year, the Open Association of Research Society elect up to 12 new Fellow Members.



BENEFIT

TO THE INSTITUTION

GET LETTER OF APPRECIATION

Global Journals sends a letter of appreciation of author to the Dean or CEO of the University or Company of which author is a part, signed by editor in chief or chief author.



EXCLUSIVE NETWORK

GET ACCESS TO A CLOSED NETWORK

A FSSRC member gets access to a closed network of Tier 1 researchers and scientists with direct communication channel through our website. Fellows can reach out to other members or researchers directly. They should also be open to reaching out by other.

Career

Credibility

Exclusive

Reputation



CERTIFICATE

CERTIFICATE, LOR AND LASER-MOMENTO

Fellows receive a printed copy of a certificate signed by our Chief Author that may be used for academic purposes and a personal recommendation letter to the dean of member's university.

Career

Credibility

Exclusive

Reputation



DESIGNATION

GET HONORED TITLE OF MEMBERSHIP

Fellows can use the honored title of membership. The "FSSRC" is an honored title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., FSSRC or William Walldroff, M.S., FSSRC.

Career

Credibility

Exclusive

Reputation

RECOGNITION ON THE PLATFORM

BETTER VISIBILITY AND CITATION

All the Fellow members of FSSRC get a badge of "Leading Member of Global Journals" on the Research Community that distinguishes them from others. Additionally, the profile is also partially maintained by our team for better visibility and citation. All fellows get a dedicated page on the website with their biography.

Career

Credibility

Reputation

FUTURE WORK

GET DISCOUNTS ON THE FUTURE PUBLICATIONS

Fellows receive discounts on future publications with Global Journals up to 60%. Through our recommendation programs, members also receive discounts on publications made with OARS affiliated organizations.

Career

Financial



GJ ACCOUNT

UNLIMITED FORWARD OF EMAILS

Fellows get secure and fast GJ work emails with unlimited forward of emails that they may use them as their primary email. For example, john [AT] globaljournals [DOT] org.

Career

Credibility

Reputation



PREMIUM TOOLS

ACCESS TO ALL THE PREMIUM TOOLS

To take future researches to the zenith, fellows receive access to all the premium tools that Global Journals have to offer along with the partnership with some of the best marketing leading tools out there.

Financial

CONFERENCES & EVENTS

ORGANIZE SEMINAR/CONFERENCE

Fellows are authorized to organize symposium/seminar/conference on behalf of Global Journal Incorporation (USA). They can also participate in the same organized by another institution as representative of Global Journal. In both the cases, it is mandatory for him to discuss with us and obtain our consent. Additionally, they get free research conferences (and others) alerts.

Career

Credibility

Financial

EARLY INVITATIONS

EARLY INVITATIONS TO ALL THE SYMPOSIUMS, SEMINARS, CONFERENCES

All fellows receive the early invitations to all the symposiums, seminars, conferences and webinars hosted by Global Journals in their subject.

Exclusive



PUBLISHING ARTICLES & BOOKS

EARN 60% OF SALES PROCEEDS

To take future researches to the zenith, fellows receive access to all the premium tools that Global Journals have to offer along with the partnership with some of the best marketing leading tools out there.

Exclusive

Financial

REVIEWERS

GET A REMUNERATION OF 15% OF AUTHOR FEES

Fellow members are eligible to join as a paid peer reviewer at Global Journals Incorporation (USA) and can get a remuneration of 15% of author fees, taken from the author of a respective paper.

Financial

ACCESS TO EDITORIAL BOARD

BECOME A MEMBER OF THE EDITORIAL BOARD

Fellows may join as a member of the Editorial Board of Global Journals Incorporation (USA) after successful completion of three years as Fellow and as Peer Reviewer. Additionally, Fellows get a chance to nominate other members for Editorial Board.

Career

Credibility

Exclusive

Reputation

AND MUCH MORE

GET ACCESS TO SCIENTIFIC MUSEUMS AND OBSERVATORIES ACROSS THE GLOBE

All members get access to 5 selected scientific museums and observatories across the globe. All researches published with Global Journals will be kept under deep archival facilities across regions for future protections and disaster recovery. They get 10 GB free secure cloud access for storing research files.

ASSOCIATE OF SOCIAL SCIENCE RESEARCH COUNCIL

ASSOCIATE OF SOCIAL SCIENCE RESEARCH COUNCIL is the membership of Global Journals awarded to individuals that the Open Association of Research Society judges to have made a 'substantial contribution to the improvement of computer science, technology, and electronics engineering.

The primary objective is to recognize the leaders in research and scientific fields of the current era with a global perspective and to create a channel between them and other researchers for better exposure and knowledge sharing. Members are most eminent scientists, engineers, and technologists from all across the world. Associate membership can later be promoted to Fellow Membership. Associates are elected for life through a peer review process on the basis of excellence in the respective domain. There is no limit on the number of new nominations made in any year. Each year, the Open Association of Research Society elect up to 12 new Associate Members.



BENEFIT

TO THE INSTITUTION

GET LETTER OF APPRECIATION

Global Journals sends a letter of appreciation of author to the Dean or CEO of the University or Company of which author is a part, signed by editor in chief or chief author.



EXCLUSIVE NETWORK

GET ACCESS TO A CLOSED NETWORK

A ASSRC member gets access to a closed network of Tier 2 researchers and scientists with direct communication channel through our website. Associates can reach out to other members or researchers directly. They should also be open to reaching out by other.

Career

Credibility

Exclusive

Reputation



CERTIFICATE

CERTIFICATE, LOR AND LASER-MOMENTO

Associates receive a printed copy of a certificate signed by our Chief Author that may be used for academic purposes and a personal recommendation letter to the dean of member's university.

Career

Credibility

Exclusive

Reputation



DESIGNATION

GET HONORED TITLE OF MEMBERSHIP

Associates can use the honored title of membership. The "ASSRC" is an honored title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., ASSRC or William Walldroff, M.S., ASSRC.

Career

Credibility

Exclusive

Reputation

RECOGNITION ON THE PLATFORM

BETTER VISIBILITY AND CITATION

All the Associate members of ASSRC get a badge of "Leading Member of Global Journals" on the Research Community that distinguishes them from others. Additionally, the profile is also partially maintained by our team for better visibility and citation.

Career

Credibility

Reputation

FUTURE WORK

GET DISCOUNTS ON THE FUTURE PUBLICATIONS

Associates receive discounts on future publications with Global Journals up to 30%. Through our recommendation programs, members also receive discounts on publications made with OARS affiliated organizations.

Career

Financial



GJ ACCOUNT

UNLIMITED FORWARD OF EMAILS

Associates get secure and fast GJ work emails with 5GB forward of emails that they may use them as their primary email. For example, john [AT] globaljournals [DOT] org.

Career

Credibility

Reputation



PREMIUM TOOLS

ACCESS TO ALL THE PREMIUM TOOLS

To take future researches to the zenith, fellows receive access to almost all the premium tools that Global Journals have to offer along with the partnership with some of the best marketing leading tools out there.

Financial

CONFERENCES & EVENTS

ORGANIZE SEMINAR/CONFERENCE

Associates are authorized to organize symposium/seminar/conference on behalf of Global Journal Incorporation (USA). They can also participate in the same organized by another institution as representative of Global Journal. In both the cases, it is mandatory for him to discuss with us and obtain our consent. Additionally, they get free research conferences (and others) alerts.

Career

Credibility

Financial

EARLY INVITATIONS

EARLY INVITATIONS TO ALL THE SYMPOSIUMS, SEMINARS, CONFERENCES

All associates receive the early invitations to all the symposiums, seminars, conferences and webinars hosted by Global Journals in their subject.

Exclusive



PUBLISHING ARTICLES & BOOKS

EARN 60% OF SALES PROCEEDS

Associates can publish articles (limited) without any fees. Also, they can earn up to 30-40% of sales proceeds from the sale of reference/review books/literature/publishing of research paper.

Exclusive

Financial

REVIEWERS

GET A REMUNERATION OF 15% OF AUTHOR FEES

Associate members are eligible to join as a paid peer reviewer at Global Journals Incorporation (USA) and can get a remuneration of 15% of author fees, taken from the author of a respective paper.

Financial

AND MUCH MORE

GET ACCESS TO SCIENTIFIC MUSEUMS AND OBSERVATORIES ACROSS THE GLOBE

All members get access to 2 selected scientific museums and observatories across the globe. All researches published with Global Journals will be kept under deep archival facilities across regions for future protections and disaster recovery. They get 5 GB free secure cloud access for storing research files.



ASSOCIATE	FELLOW	RESEARCH GROUP	BASIC
\$4800 lifetime designation	\$6800 lifetime designation	\$12500.00 organizational	APC per article
Certificate , LoR and Momento 2 discounted publishing/year Gradation of Research 10 research contacts/day 1 GB Cloud Storage GJ Community Access	Certificate , LoR and Momento Unlimited discounted publishing/year Gradation of Research Unlimited research contacts/day 5 GB Cloud Storage Online Presense Assistance GJ Community Access	Certificates , LoRs and Momentos Unlimited free publishing/year Gradation of Research Unlimited research contacts/day Unlimited Cloud Storage Online Presense Assistance GJ Community Access	GJ Community Access



PREFERRED AUTHOR GUIDELINES

We accept the manuscript submissions in any standard (generic) format.

We typeset manuscripts using advanced typesetting tools like Adobe In Design, CorelDraw, TeXnicCenter, and TeXStudio. We usually recommend authors submit their research using any standard format they are comfortable with, and let Global Journals do the rest.

Alternatively, you can download our basic template from <https://globaljournals.org/Template.zip>

Authors should submit their complete paper/article, including text illustrations, graphics, conclusions, artwork, and tables. Authors who are not able to submit manuscript using the form above can email the manuscript department at submit@globaljournals.org or get in touch with chiefeditor@globaljournals.org if they wish to send the abstract before submission.

BEFORE AND DURING SUBMISSION

Authors must ensure the information provided during the submission of a paper is authentic. Please go through the following checklist before submitting:

1. Authors must go through the complete author guideline and understand and *agree to Global Journals' ethics and code of conduct*, along with author responsibilities.
2. Authors must accept the privacy policy, terms, and conditions of Global Journals.
3. Ensure corresponding author's email address and postal address are accurate and reachable.
4. Manuscript to be submitted must include keywords, an abstract, a paper title, co-author(s) names and details (email address, name, phone number, and institution), figures and illustrations in vector format including appropriate captions, tables, including titles and footnotes, a conclusion, results, acknowledgments and references.
5. Authors should submit paper in a ZIP archive if any supplementary files are required along with the paper.
6. Proper permissions must be acquired for the use of any copyrighted material.
7. Manuscript submitted *must not have been submitted or published elsewhere* and all authors must be aware of the submission.

Declaration of Conflicts of Interest

It is required for authors to declare all financial, institutional, and personal relationships with other individuals and organizations that could influence (bias) their research.

POLICY ON PLAGIARISM

Plagiarism is not acceptable in Global Journals submissions at all.

Plagiarized content will not be considered for publication. We reserve the right to inform authors' institutions about plagiarism detected either before or after publication. If plagiarism is identified, we will follow COPE guidelines:

Authors are solely responsible for all the plagiarism that is found. The author must not fabricate, falsify or plagiarize existing research data. The following, if copied, will be considered plagiarism:

- Words (language)
- Ideas
- Findings
- Writings
- Diagrams
- Graphs
- Illustrations
- Lectures



- Printed material
- Graphic representations
- Computer programs
- Electronic material
- Any other original work

AUTHORSHIP POLICIES

Global Journals follows the definition of authorship set up by the Open Association of Research Society, USA. According to its guidelines, authorship criteria must be based on:

1. Substantial contributions to the conception and acquisition of data, analysis, and interpretation of findings.
2. Drafting the paper and revising it critically regarding important academic content.
3. Final approval of the version of the paper to be published.

Changes in Authorship

The corresponding author should mention the name and complete details of all co-authors during submission and in manuscript. We support addition, rearrangement, manipulation, and deletions in authors list till the early view publication of the journal. We expect that corresponding author will notify all co-authors of submission. We follow COPE guidelines for changes in authorship.

Copyright

During submission of the manuscript, the author is confirming an exclusive license agreement with Global Journals which gives Global Journals the authority to reproduce, reuse, and republish authors' research. We also believe in flexible copyright terms where copyright may remain with authors/employers/institutions as well. Contact your editor after acceptance to choose your copyright policy. You may follow this form for copyright transfers.

Appealing Decisions

Unless specified in the notification, the Editorial Board's decision on publication of the paper is final and cannot be appealed before making the major change in the manuscript.

Acknowledgments

Contributors to the research other than authors credited should be mentioned in Acknowledgments. The source of funding for the research can be included. Suppliers of resources may be mentioned along with their addresses.

Declaration of funding sources

Global Journals is in partnership with various universities, laboratories, and other institutions worldwide in the research domain. Authors are requested to disclose their source of funding during every stage of their research, such as making analysis, performing laboratory operations, computing data, and using institutional resources, from writing an article to its submission. This will also help authors to get reimbursements by requesting an open access publication letter from Global Journals and submitting to the respective funding source.

PREPARING YOUR MANUSCRIPT

Authors can submit papers and articles in an acceptable file format: MS Word (doc, docx), LaTeX (.tex, .zip or .rar including all of your files), Adobe PDF (.pdf), rich text format (.rtf), simple text document (.txt), Open Document Text (.odt), and Apple Pages (.pages). Our professional layout editors will format the entire paper according to our official guidelines. This is one of the highlights of publishing with Global Journals—authors should not be concerned about the formatting of their paper. Global Journals accepts articles and manuscripts in every major language, be it Spanish, Chinese, Japanese, Portuguese, Russian, French, German, Dutch, Italian, Greek, or any other national language, but the title, subtitle, and abstract should be in English. This will facilitate indexing and the pre-peer review process.

The following is the official style and template developed for publication of a research paper. Authors are not required to follow this style during the submission of the paper. It is just for reference purposes.



Manuscript Style Instruction (Optional)

- Microsoft Word Document Setting Instructions.
- Font type of all text should be Swis721 Lt BT.
- Page size: 8.27" x 11", left margin: 0.65, right margin: 0.65, bottom margin: 0.75.
- Paper title should be in one column of font size 24.
- Author name in font size of 11 in one column.
- Abstract: font size 9 with the word "Abstract" in bold italics.
- Main text: font size 10 with two justified columns.
- Two columns with equal column width of 3.38 and spacing of 0.2.
- First character must be three lines drop-capped.
- The paragraph before spacing of 1 pt and after of 0 pt.
- Line spacing of 1 pt.
- Large images must be in one column.
- The names of first main headings (Heading 1) must be in Roman font, capital letters, and font size of 10.
- The names of second main headings (Heading 2) must not include numbers and must be in italics with a font size of 10.

Structure and Format of Manuscript

The recommended size of an original research paper is under 15,000 words and review papers under 7,000 words. Research articles should be less than 10,000 words. Research papers are usually longer than review papers. Review papers are reports of significant research (typically less than 7,000 words, including tables, figures, and references)

A research paper must include:

- a) A title which should be relevant to the theme of the paper.
- b) A summary, known as an abstract (less than 150 words), containing the major results and conclusions.
- c) Up to 10 keywords that precisely identify the paper's subject, purpose, and focus.
- d) An introduction, giving fundamental background objectives.
- e) Resources and techniques with sufficient complete experimental details (wherever possible by reference) to permit repetition, sources of information must be given, and numerical methods must be specified by reference.
- f) Results which should be presented concisely by well-designed tables and figures.
- g) Suitable statistical data should also be given.
- h) All data must have been gathered with attention to numerical detail in the planning stage.

Design has been recognized to be essential to experiments for a considerable time, and the editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned unrefereed.

- i) Discussion should cover implications and consequences and not just recapitulate the results; conclusions should also be summarized.
- j) There should be brief acknowledgments.
- k) There ought to be references in the conventional format. Global Journals recommends APA format.

Authors should carefully consider the preparation of papers to ensure that they communicate effectively. Papers are much more likely to be accepted if they are carefully designed and laid out, contain few or no errors, are summarizing, and follow instructions. They will also be published with much fewer delays than those that require much technical and editorial correction.

The Editorial Board reserves the right to make literary corrections and suggestions to improve brevity.



FORMAT STRUCTURE

It is necessary that authors take care in submitting a manuscript that is written in simple language and adheres to published guidelines.

All manuscripts submitted to Global Journals should include:

Title

The title page must carry an informative title that reflects the content, a running title (less than 45 characters together with spaces), names of the authors and co-authors, and the place(s) where the work was carried out.

Author details

The full postal address of any related author(s) must be specified.

Abstract

The abstract is the foundation of the research paper. It should be clear and concise and must contain the objective of the paper and inferences drawn. It is advised to not include big mathematical equations or complicated jargon.

Many researchers searching for information online will use search engines such as Google, Yahoo or others. By optimizing your paper for search engines, you will amplify the chance of someone finding it. In turn, this will make it more likely to be viewed and cited in further works. Global Journals has compiled these guidelines to facilitate you to maximize the web-friendliness of the most public part of your paper.

Keywords

A major lynchpin of research work for the writing of research papers is the keyword search, which one will employ to find both library and internet resources. Up to eleven keywords or very brief phrases have to be given to help data retrieval, mining, and indexing.

One must be persistent and creative in using keywords. An effective keyword search requires a strategy: planning of a list of possible keywords and phrases to try.

Choice of the main keywords is the first tool of writing a research paper. Research paper writing is an art. Keyword search should be as strategic as possible.

One should start brainstorming lists of potential keywords before even beginning searching. Think about the most important concepts related to research work. Ask, "What words would a source have to include to be truly valuable in a research paper?" Then consider synonyms for the important words.

It may take the discovery of only one important paper to steer in the right keyword direction because, in most databases, the keywords under which a research paper is abstracted are listed with the paper.

Numerical Methods

Numerical methods used should be transparent and, where appropriate, supported by references.

Abbreviations

Authors must list all the abbreviations used in the paper at the end of the paper or in a separate table before using them.

Formulas and equations

Authors are advised to submit any mathematical equation using either MathJax, KaTeX, or LaTeX, or in a very high-quality image.

Tables, Figures, and Figure Legends

Tables: Tables should be cautiously designed, uncrowned, and include only essential data. Each must have an Arabic number, e.g., Table 4, a self-explanatory caption, and be on a separate sheet. Authors must submit tables in an editable format and not as images. References to these tables (if any) must be mentioned accurately.



Figures

Figures are supposed to be submitted as separate files. Always include a citation in the text for each figure using Arabic numbers, e.g., Fig. 4. Artwork must be submitted online in vector electronic form or by emailing it.

PREPARATION OF ELETRONIC FIGURES FOR PUBLICATION

Although low-quality images are sufficient for review purposes, print publication requires high-quality images to prevent the final product being blurred or fuzzy. Submit (possibly by e-mail) EPS (line art) or TIFF (halftone/ photographs) files only. MS PowerPoint and Word Graphics are unsuitable for printed pictures. Avoid using pixel-oriented software. Scans (TIFF only) should have a resolution of at least 350 dpi (halftone) or 700 to 1100 dpi (line drawings). Please give the data for figures in black and white or submit a Color Work Agreement form. EPS files must be saved with fonts embedded (and with a TIFF preview, if possible).

For scanned images, the scanning resolution at final image size ought to be as follows to ensure good reproduction: line art: >650 dpi; halftones (including gel photographs): >350 dpi; figures containing both halftone and line images: >650 dpi.

Color charges: Authors are advised to pay the full cost for the reproduction of their color artwork. Hence, please note that if there is color artwork in your manuscript when it is accepted for publication, we would require you to complete and return a Color Work Agreement form before your paper can be published. Also, you can email your editor to remove the color fee after acceptance of the paper.

TIPS FOR WRITING A GOOD QUALITY SOCIAL SCIENCE RESEARCH PAPER

Techniques for writing a good quality homan social science research paper:

1. Choosing the topic: In most cases, the topic is selected by the interests of the author, but it can also be suggested by the guides. You can have several topics, and then judge which you are most comfortable with. This may be done by asking several questions of yourself, like "Will I be able to carry out a search in this area? Will I find all necessary resources to accomplish the search? Will I be able to find all information in this field area?" If the answer to this type of question is "yes," then you ought to choose that topic. In most cases, you may have to conduct surveys and visit several places. Also, you might have to do a lot of work to find all the rises and falls of the various data on that subject. Sometimes, detailed information plays a vital role, instead of short information. Evaluators are human: The first thing to remember is that evaluators are also human beings. They are not only meant for rejecting a paper. They are here to evaluate your paper. So present your best aspect.

2. Think like evaluators: If you are in confusion or getting demotivated because your paper may not be accepted by the evaluators, then think, and try to evaluate your paper like an evaluator. Try to understand what an evaluator wants in your research paper, and you will automatically have your answer. Make blueprints of paper: The outline is the plan or framework that will help you to arrange your thoughts. It will make your paper logical. But remember that all points of your outline must be related to the topic you have chosen.

3. Ask your guides: If you are having any difficulty with your research, then do not hesitate to share your difficulty with your guide (if you have one). They will surely help you out and resolve your doubts. If you can't clarify what exactly you require for your work, then ask your supervisor to help you with an alternative. He or she might also provide you with a list of essential readings.

4. Use of computer is recommended: As you are doing research in the field of homan social science then this point is quite obvious. Use right software: Always use good quality software packages. If you are not capable of judging good software, then you can lose the quality of your paper unknowingly. There are various programs available to help you which you can get through the internet.

5. Use the internet for help: An excellent start for your paper is using Google. It is a wondrous search engine, where you can have your doubts resolved. You may also read some answers for the frequent question of how to write your research paper or find a model research paper. You can download books from the internet. If you have all the required books, place importance on reading, selecting, and analyzing the specified information. Then sketch out your research paper. Use big pictures: You may use encyclopedias like Wikipedia to get pictures with the best resolution. At Global Journals, you should strictly follow [here](#).



6. Bookmarks are useful: When you read any book or magazine, you generally use bookmarks, right? It is a good habit which helps to not lose your continuity. You should always use bookmarks while searching on the internet also, which will make your search easier.

7. Revise what you wrote: When you write anything, always read it, summarize it, and then finalize it.

8. Make every effort: Make every effort to mention what you are going to write in your paper. That means always have a good start. Try to mention everything in the introduction—what is the need for a particular research paper. Polish your work with good writing skills and always give an evaluator what he wants. Make backups: When you are going to do any important thing like making a research paper, you should always have backup copies of it either on your computer or on paper. This protects you from losing any portion of your important data.

9. Produce good diagrams of your own: Always try to include good charts or diagrams in your paper to improve quality. Using several unnecessary diagrams will degrade the quality of your paper by creating a hodgepodge. So always try to include diagrams which were made by you to improve the readability of your paper. Use of direct quotes: When you do research relevant to literature, history, or current affairs, then use of quotes becomes essential, but if the study is relevant to science, use of quotes is not preferable.

10. Use proper verb tense: Use proper verb tenses in your paper. Use past tense to present those events that have happened. Use present tense to indicate events that are going on. Use future tense to indicate events that will happen in the future. Use of wrong tenses will confuse the evaluator. Avoid sentences that are incomplete.

11. Pick a good study spot: Always try to pick a spot for your research which is quiet. Not every spot is good for studying.

12. Know what you know: Always try to know what you know by making objectives, otherwise you will be confused and unable to achieve your target.

13. Use good grammar: Always use good grammar and words that will have a positive impact on the evaluator; use of good vocabulary does not mean using tough words which the evaluator has to find in a dictionary. Do not fragment sentences. Eliminate one-word sentences. Do not ever use a big word when a smaller one would suffice.

Verbs have to be in agreement with their subjects. In a research paper, do not start sentences with conjunctions or finish them with prepositions. When writing formally, it is advisable to never split an infinitive because someone will (wrongly) complain. Avoid clichés like a disease. Always shun irritating alliteration. Use language which is simple and straightforward. Put together a neat summary.

14. Arrangement of information: Each section of the main body should start with an opening sentence, and there should be a changeover at the end of the section. Give only valid and powerful arguments for your topic. You may also maintain your arguments with records.

15. Never start at the last minute: Always allow enough time for research work. Leaving everything to the last minute will degrade your paper and spoil your work.

16. Multitasking in research is not good: Doing several things at the same time is a bad habit in the case of research activity. Research is an area where everything has a particular time slot. Divide your research work into parts, and do a particular part in a particular time slot.

17. Never copy others' work: Never copy others' work and give it your name because if the evaluator has seen it anywhere, you will be in trouble. Take proper rest and food: No matter how many hours you spend on your research activity, if you are not taking care of your health, then all your efforts will have been in vain. For quality research, take proper rest and food.

18. Go to seminars: Attend seminars if the topic is relevant to your research area. Utilize all your resources.

Refresh your mind after intervals: Try to give your mind a rest by listening to soft music or sleeping in intervals. This will also improve your memory. Acquire colleagues: Always try to acquire colleagues. No matter how sharp you are, if you acquire colleagues, they can give you ideas which will be helpful to your research.

19. Think technically: Always think technically. If anything happens, search for its reasons, benefits, and demerits. Think and then print: When you go to print your paper, check that tables are not split, headings are not detached from their descriptions, and page sequence is maintained.



20. Adding unnecessary information: Do not add unnecessary information like "I have used MS Excel to draw graphs." Irrelevant and inappropriate material is superfluous. Foreign terminology and phrases are not apropos. One should never take a broad view. Analogy is like feathers on a snake. Use words properly, regardless of how others use them. Remove quotations. Puns are for kids, not grunt readers. Never oversimplify: When adding material to your research paper, never go for oversimplification; this will definitely irritate the evaluator. Be specific. Never use rhythmic redundancies. Contractions shouldn't be used in a research paper. Comparisons are as terrible as clichés. Give up ampersands, abbreviations, and so on. Remove commas that are not necessary. Parenthetical words should be between brackets or commas. Understatement is always the best way to put forward earth-shaking thoughts. Give a detailed literary review.

21. Report concluded results: Use concluded results. From raw data, filter the results, and then conclude your studies based on measurements and observations taken. An appropriate number of decimal places should be used. Parenthetical remarks are prohibited here. Proofread carefully at the final stage. At the end, give an outline to your arguments. Spot perspectives of further study of the subject. Justify your conclusion at the bottom sufficiently, which will probably include examples.

22. Upon conclusion: Once you have concluded your research, the next most important step is to present your findings. Presentation is extremely important as it is the definite medium through which your research is going to be in print for the rest of the crowd. Care should be taken to categorize your thoughts well and present them in a logical and neat manner. A good quality research paper format is essential because it serves to highlight your research paper and bring to light all necessary aspects of your research.

INFORMAL GUIDELINES OF RESEARCH PAPER WRITING

Key points to remember:

- Submit all work in its final form.
- Write your paper in the form which is presented in the guidelines using the template.
- Please note the criteria peer reviewers will use for grading the final paper.

Final points:

One purpose of organizing a research paper is to let people interpret your efforts selectively. The journal requires the following sections, submitted in the order listed, with each section starting on a new page:

The introduction: This will be compiled from reference matter and reflect the design processes or outline of basis that directed you to make a study. As you carry out the process of study, the method and process section will be constructed like that. The results segment will show related statistics in nearly sequential order and direct reviewers to similar intellectual paths throughout the data that you gathered to carry out your study.

The discussion section:

This will provide understanding of the data and projections as to the implications of the results. The use of good quality references throughout the paper will give the effort trustworthiness by representing an alertness to prior workings.

Writing a research paper is not an easy job, no matter how trouble-free the actual research or concept. Practice, excellent preparation, and controlled record-keeping are the only means to make straightforward progression.

General style:

Specific editorial column necessities for compliance of a manuscript will always take over from directions in these general guidelines.

To make a paper clear: Adhere to recommended page limits.



Mistakes to avoid:

- Insertion of a title at the foot of a page with subsequent text on the next page.
- Separating a table, chart, or figure—confine each to a single page.
- Submitting a manuscript with pages out of sequence.
- In every section of your document, use standard writing style, including articles ("a" and "the").
- Keep paying attention to the topic of the paper.
- Use paragraphs to split each significant point (excluding the abstract).
- Align the primary line of each section.
- Present your points in sound order.
- Use present tense to report well-accepted matters.
- Use past tense to describe specific results.
- Do not use familiar wording; don't address the reviewer directly. Don't use slang or superlatives.
- Avoid use of extra pictures—include only those figures essential to presenting results.

Title page:

Choose a revealing title. It should be short and include the name(s) and address(es) of all authors. It should not have acronyms or abbreviations or exceed two printed lines.

Abstract: This summary should be two hundred words or less. It should clearly and briefly explain the key findings reported in the manuscript and must have precise statistics. It should not have acronyms or abbreviations. It should be logical in itself. Do not cite references at this point.

An abstract is a brief, distinct paragraph summary of finished work or work in development. In a minute or less, a reviewer can be taught the foundation behind the study, common approaches to the problem, relevant results, and significant conclusions or new questions.

Write your summary when your paper is completed because how can you write the summary of anything which is not yet written? Wealth of terminology is very essential in abstract. Use comprehensive sentences, and do not sacrifice readability for brevity; you can maintain it succinctly by phrasing sentences so that they provide more than a lone rationale. The author can at this moment go straight to shortening the outcome. Sum up the study with the subsequent elements in any summary. Try to limit the initial two items to no more than one line each.

Reason for writing the article—theory, overall issue, purpose.

- Fundamental goal.
- To-the-point depiction of the research.
- Consequences, including definite statistics—if the consequences are quantitative in nature, account for this; results of any numerical analysis should be reported. Significant conclusions or questions that emerge from the research.

Approach:

- Single section and succinct.
- An outline of the job done is always written in past tense.
- Concentrate on shortening results—limit background information to a verdict or two.
- Exact spelling, clarity of sentences and phrases, and appropriate reporting of quantities (proper units, important statistics) are just as significant in an abstract as they are anywhere else.

Introduction:

The introduction should "introduce" the manuscript. The reviewer should be presented with sufficient background information to be capable of comprehending and calculating the purpose of your study without having to refer to other works. The basis for the study should be offered. Give the most important references, but avoid making a comprehensive appraisal of the topic. Describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will give no attention to your results. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here.



The following approach can create a valuable beginning:

- Explain the value (significance) of the study.
- Defend the model—why did you employ this particular system or method? What is its compensation? Remark upon its appropriateness from an abstract point of view as well as pointing out sensible reasons for using it.
- Present a justification. State your particular theory(-ies) or aim(s), and describe the logic that led you to choose them.
- Briefly explain the study's tentative purpose and how it meets the declared objectives.

Approach:

Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done. Sort out your thoughts; manufacture one key point for every section. If you make the four points listed above, you will need at least four paragraphs. Present surrounding information only when it is necessary to support a situation. The reviewer does not desire to read everything you know about a topic. Shape the theory specifically—do not take a broad view.

As always, give awareness to spelling, simplicity, and correctness of sentences and phrases.

Procedures (methods and materials):

This part is supposed to be the easiest to carve if you have good skills. A soundly written procedures segment allows a capable scientist to replicate your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order, but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt to give the least amount of information that would permit another capable scientist to replicate your outcome, but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section.

When a technique is used that has been well-described in another section, mention the specific item describing the way, but draw the basic principle while stating the situation. The purpose is to show all particular resources and broad procedures so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step-by-step report of the whole thing you did, nor is a methods section a set of orders.

Materials:

Materials may be reported in part of a section or else they may be recognized along with your measures.

Methods:

- Report the method and not the particulars of each process that engaged the same methodology.
- Describe the method entirely.
- To be succinct, present methods under headings dedicated to specific dealings or groups of measures.
- Simplify—detail how procedures were completed, not how they were performed on a particular day.
- If well-known procedures were used, account for the procedure by name, possibly with a reference, and that's all.

Approach:

It is embarrassing to use vigorous voice when documenting methods without using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result, when writing up the methods, most authors use third person passive voice.

Use standard style in this and every other part of the paper—avoid familiar lists, and use full sentences.

What to keep away from:

- Resources and methods are not a set of information.
- Skip all descriptive information and surroundings—save it for the argument.
- Leave out information that is immaterial to a third party.



Results:

The principle of a results segment is to present and demonstrate your conclusion. Create this part as entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Use statistics and tables, if suitable, to present consequences most efficiently.

You must clearly differentiate material which would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matters should not be submitted at all except if requested by the instructor.

Content:

- Sum up your conclusions in text and demonstrate them, if suitable, with figures and tables.
- In the manuscript, explain each of your consequences, and point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation of an exacting study.
- Explain results of control experiments and give remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or manuscript.

What to stay away from:

- Do not discuss or infer your outcome, report surrounding information, or try to explain anything.
- Do not include raw data or intermediate calculations in a research manuscript.
- Do not present similar data more than once.
- A manuscript should complement any figures or tables, not duplicate information.
- Never confuse figures with tables—there is a difference.

Approach:

As always, use past tense when you submit your results, and put the whole thing in a reasonable order.

Put figures and tables, appropriately numbered, in order at the end of the report.

If you desire, you may place your figures and tables properly within the text of your results section.

Figures and tables:

If you put figures and tables at the end of some details, make certain that they are visibly distinguished from any attached appendix materials, such as raw facts. Whatever the position, each table must be titled, numbered one after the other, and include a heading. All figures and tables must be divided from the text.

Discussion:

The discussion is expected to be the trickiest segment to write. A lot of papers submitted to the journal are discarded based on problems with the discussion. There is no rule for how long an argument should be.

Position your understanding of the outcome visibly to lead the reviewer through your conclusions, and then finish the paper with a summing up of the implications of the study. The purpose here is to offer an understanding of your results and support all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of results should be fully described.

Infer your data in the conversation in suitable depth. This means that when you clarify an observable fact, you must explain mechanisms that may account for the observation. If your results vary from your prospect, make clear why that may have happened. If your results agree, then explain the theory that the proof supported. It is never suitable to just state that the data approved the prospect, and let it drop at that. Make a decision as to whether each premise is supported or discarded or if you cannot make a conclusion with assurance. Do not just dismiss a study or part of a study as "uncertain."



Research papers are not acknowledged if the work is imperfect. Draw what conclusions you can based upon the results that you have, and take care of the study as a finished work.

- You may propose future guidelines, such as how an experiment might be personalized to accomplish a new idea.
- Give details of all of your remarks as much as possible, focusing on mechanisms.
- Make a decision as to whether the tentative design sufficiently addressed the theory and whether or not it was correctly restricted. Try to present substitute explanations if they are sensible alternatives.
- One piece of research will not counter an overall question, so maintain the large picture in mind. Where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.

Approach:

When you refer to information, differentiate data generated by your own studies from other available information. Present work done by specific persons (including you) in past tense.

Describe generally acknowledged facts and main beliefs in present tense.

THE ADMINISTRATION RULES

Administration Rules to Be Strictly Followed before Submitting Your Research Paper to Global Journals Inc.

Please read the following rules and regulations carefully before submitting your research paper to Global Journals Inc. to avoid rejection.

Segment draft and final research paper: You have to strictly follow the template of a research paper, failing which your paper may get rejected. You are expected to write each part of the paper wholly on your own. The peer reviewers need to identify your own perspective of the concepts in your own terms. Please do not extract straight from any other source, and do not rephrase someone else's analysis. Do not allow anyone else to proofread your manuscript.

Written material: You may discuss this with your guides and key sources. Do not copy anyone else's paper, even if this is only imitation, otherwise it will be rejected on the grounds of plagiarism, which is illegal. Various methods to avoid plagiarism are strictly applied by us to every paper, and, if found guilty, you may be blacklisted, which could affect your career adversely. To guard yourself and others from possible illegal use, please do not permit anyone to use or even read your paper and file.



CRITERION FOR GRADING A RESEARCH PAPER (COMPILATION)
BY GLOBAL JOURNALS

Please note that following table is only a Grading of "Paper Compilation" and not on "Performed/Stated Research" whose grading solely depends on Individual Assigned Peer Reviewer and Editorial Board Member. These can be available only on request and after decision of Paper. This report will be the property of Global Journals

Topics	Grades		
	A-B	C-D	E-F
Abstract	Clear and concise with appropriate content, Correct format. 200 words or below	Unclear summary and no specific data, Incorrect form Above 200 words	No specific data with ambiguous information Above 250 words
Introduction	Containing all background details with clear goal and appropriate details, flow specification, no grammar and spelling mistake, well organized sentence and paragraph, reference cited	Unclear and confusing data, appropriate format, grammar and spelling errors with unorganized matter	Out of place depth and content, hazy format
Methods and Procedures	Clear and to the point with well arranged paragraph, precision and accuracy of facts and figures, well organized subheads	Difficult to comprehend with embarrassed text, too much explanation but completed	Incorrect and unorganized structure with hazy meaning
Result	Well organized, Clear and specific, Correct units with precision, correct data, well structuring of paragraph, no grammar and spelling mistake	Complete and embarrassed text, difficult to comprehend	Irregular format with wrong facts and figures
Discussion	Well organized, meaningful specification, sound conclusion, logical and concise explanation, highly structured paragraph reference cited	Wordy, unclear conclusion, spurious	Conclusion is not cited, unorganized, difficult to comprehend
References	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring



INDEX

A

Abominable · 2
Alliance · 1, 41
Ancestors · 17, 25, 26, 27, 29, 31
Annoyance · 35
Antiquity · 2, 3, 4
Arouse · 35, 36

C

Comprehended · 18, 26
Conjunction · 9
Consequence · 7, 8, 13
Consumption · 7, 8, 9, 10, 11, 12, 13, 16
Cranial · 27, 28, 30, 33

D

Decade · 12, 25
Deity · 2
Diligence · 36
Distinctive · 4, 20

E

Eloquent · 10
Embroidered · 5
Enacted · 7
Evoke · 2
Extinct · 25, 26, 27, 28

I

Immaturity · 38, 39
Immigrants · 7, 9, 14
Indigenous · 7, 13, 22, 23
Inevitable · 12
Interpretations · 25
Intervene · 9

L

Lobbying · 9, 12, 16

M

Maleficent · 3
Massive · 9
Migratory · 2
Multitude · 37

P

Palatable · 11
Perennial · 18
Persistent · 8, 16
Plausibly · 26
Preached · 18, 22
Prevailed · 22
Priestess · 1, 2, 3, 4, 5
Prodigious · 20
Prohibition · 7, 10
Prolonged · 25

R

Radical · 1, 8, 12, 23
Recursion · 37
Rejuvenation · 2, 3, 4, 5
Renowned · 11, 17, 18, 22
Restrained · 10
Revenge · 1

S

Segregation · 8
Surveillance · 9
Survived · 1, 30, 32

T

Tentatively · 26
Terrestrial · 19, 30
Traits · 25, 30, 31, 32

U

Urbanity · 7



save our planet



Global Journal of Human Social Science

Visit us on the Web at www.GlobalJournals.org | www.SocialScienceResearch.org
or email us at helpdesk@globaljournals.org



ISSN 975587

© Global Journals