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The Impact of Religion and Spirituality on Literature: A Systematic Review

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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Original Research Article

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ABSTRACT

The influence of religion on literature has been debated for more than a decade, and yet, there remains a lack of consensus about the nature of this relationship. In an effort to bring some clarity to this area, this study assesses the role of religion and religious faith in literature by using a methodological approach to reviewing a body of literature that is new to the social sciences—the systematic review (SR). The discussion of literature and religion is a wide-range topic, and the entrance perspective into this argument, in turn, is controversial. It has been prevalent in writings revolving around literature and religion to study the impact of religion on literature, and accordingly literature has been considered as a means of transferring religious issues.

But the influence of religion on literature is an interesting and delicate debate. Literature in a superficial division can be examined at three levels of religious literature, secular literature, and implicit literature. In the Encyclopedia of Iliad which is considered a religious encyclopedia, Antonio Cua believes that the right justification for classifying literature in religious studies is a historical justification. Because in all high-cultural systems, the literary relation has grown in close relation with ideas, institutions, practices, and religious institutions; so according to Antonio Cua, , the 25,00-year-old European literature without considering Greek myths , Hebrew precepts and Christian institutions is not cognizable.

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1. INTRODUCTION

The manifestations of religious phenomena also have certain places and times; for example, in every religion, worship takes place at a specific time and place, but these worships can be compared without considering their time and place. For example, Zeus (the sky and thunder god in ancient Greek religion, who ruled as Mount Olympus' king of gods) was worshiped by Greeks. The Greeks believed in countless gods; Zeus was the dearest and superior god, the god of heaven, appeared in different times and places, and had a wife. Zeus belonged to the Greeks, and it is not available in other nations' religions; but the "God of heaven" is not merely dedicated to the Greeks; it can be found in other religions as well. Through the examination of the heavenly God in different cultures and religions. we can find general facts. This methodology is called phenomenology by Iliad.

Eliadeh considers the Jewish-Christian tradition as the historicism of modern human. In other words, he considers Judaism and Christianity responsible for the emergence of secular philosophies. He believes, the Jewish-Christian ideas themselves led the trend of modern thought to historicity and secularism; however, Islam also specifically shares with Judaism and Christianity in this regard. Islam does not concern the sacred outside history; the sacred is considered everywhere and in all the time known. If the intention of this thought led to the emergence of secularism and historicity in the West, Why in the Islamic realm this transformation occurred the opposite? This is crystal clear that extremism, political reasons, craving for power (power hunger) and superstition are the root of all these antisecularism. No matter what kind of power hunger some extremist countries may harbor, they have paired their rupture with the West with their rupture with the political and constitutional life, to entrench their totalitarian isolation.

2. LITERARY REVIEW

Students and scholars have often indicated that a wide range of certain genres of literature, remarkably poetry and drama, may have emerged directly from religious rituals. Although such a view may not be applicable to all types of literature, the Romanian-born American religious scholar Mircea Eliade determined that the origin of some types of epic is traceable to the practice of witchcraft (shamanism). One of the most conspicuous and crucial traits of literature's relation to religion is thus that of assertion, in the sense that literature-both oral and written, functions to maintain and transmit religious concepts and actions. "Witness the detailed description of Sibylline prophecy in the Roman poet Virgil's Aeneid (6.77–102) or haruspicy (foretelling the future) in the Roman dramatist Seneca's *Oedipus* (303ff.). Occasionally and in a particular culture, as in the case of ancient India, literature may be the principal record of a religious tradition.

Albin Lesky, German scholar wrote in "A History of Greek Literature" (1966) that the "relation between gods and men is central in the world of Homer" to an even greater extent, Lesky's observation would describe a vast amount of ancient Near Eastern and Indian literature. Dubbed "une initiation manquée" by Eliade in Histoire des croyances et des idées religieuses (1976), the Epic of Gilgamesh, in its Sumerian and Old Babylonian versions, is a classic example of religious materials commingling with entertainment and adventure, the accepted hallmark of secular literature.

From the Indian tradition scholars' perspective, this point is completely proper, in fact even ordinary, to affirm that religion contributes to both form and substance for virtually all of its classical literary culture. Therefore, "indivisible are the two phenomena that in The Literatures of India: An Introduction Edward Dimock and his colleagues write that "until relatively modern times in Indiathe Indo-Pakistan meaning by India subcontinent-it is sometimes difficult to literature distinauish from reliaious documentation. This is not because there has been an imposition of a system of religious values on the society; it is rather because religion in India is so interwoven with every facet of life, including many forms of literature, that it becomes indistinguishable" (1974) [1].

Literary speech is the language sanctified in the Vedas (The Vedas are a large body of knowledge texts originating in the ancient Indian subcontinent), four collections of hymns with origins dating to the second millennium bce. While the presented hymns are splendid and majestic meditations on mankind's position in the universe and our bond to our other self, as well as on the superb doubts and queries of life and death, it is considered the language itself that was eminently esteemed long before the texts were transcribed. On the other hand, it is as if the serene elevation and dignity of the text, called *sruti* ("revelation" or "that which one has sacredly heard"), demands of its earthly priests a method of transmission that would defy the destructive power of time" [2].

Another example of the influence of religion on literature is the two Indian monumental epics. the Mahābhārata (compiled between the years 500 bce and 400 ce) and the Rāmāyaņa, penned by the poet Valmiki in the first century. The content and length of the former book is special in the world of literature; it is a one-hundredthousand-line poem about the prolonged "conflict between two rival brothers. Dhrtarastra and Pandu, and their descendents, the Kauravas and the Pandavas. Sometimes called "the fifth Veda." it is also a massive compendium of mythologies, folk tales. discourses, and dogmas (the Bhagavadgītā is an insertion in the sixth book of the poem) that epitomizes what scholar Northrop Frye has termed "the encyclopedic form. Unlike its companion, the Rāmāyaņa is a shorter work with a more unified perspective, a romantic tale in which the hero, Rāma, assisted by a host of magical monkeys led by Hanuman, their simian leader, routs the god Ravana, abductor of Rāma's wife" [1].

"Hadingus [3] the French scholar Georges Dumézil demonstrates in his studies the inextricable link between the gods and heroes in an epic like the Mahābhārata. These heroes replicate on earth the tripartite function of their parents: sovereignty, force, and fecundity. The eschatological conflict at the end of the world becomes the great battle of the Mahābhārata and numerous other Indo-European epics. The ancient opposition between the Sun and the Storm God in the Vedas is transplanted in the famous duel between Karna (son of the Sun) and Arjuna (son of Indra). To understand this aspect of the epic characters and their exploits is therefore to recognize "an entire archaic mythology," displaced but nonetheless intact. For this reason also, Dumézil can claim that what we know of the formation of such epics is equivalent "to the same thing in many societies, the formation of 'the history of origins'" (Du mythe aux roman, 1970)".

3. MATERIALS AND METHODS

The presented research has applied diverse methods approach combining in depth focus

group discussions (based on topics discussed in the context of society and chamber of academic gatherings) without any questionnaire since the topic seems controversial and few participants showed interest to share their view towards the given topic. Having conservative, fanatic, cautious, extremist, vague and irrational view and notion of the research participants towards the topic have limited the writer to reach to a determined and balanced census report and unique methods/techniques of data gathering.

Of these methods, focus groups were the predominant means of data collection. The reason that Focus groups were adopted was: they contribute to an appropriate forum for discovery-driven study and inquiry and great means of exploring controversial, exotic or complex issues; assisting to establish 'why' people sense the way they do about such issues and to understand more concerning how such issues are represented and become socially shared. In the presented study, the focused groups of participants provided a limited and prudent deliberative context in which the topic was considered and discussed in general, while simultaneously some of them made reference to their main academic and library scriptural teachings. Hence collecting basic demographic data was not possible in the follow-up survey: however, in the oncoming article a specific study group will be used for indicative purposes.

3.1 Participants

Muslim, Christian, Hindu and Jewish participants were chosen since members of these groups shape a significant proportion of the usual Europe, Iran, and India resident population.

It is worth to mention that Focus group participants were principally selected haphazardly from the university secular and reliaious students and casual people communities and since categorizing them into a survey group and spreading questionnaire might arise religious sensitivity of some religious countries and groups, we preferred to do the survey among diverse religious communities in Europe in the following article.

Participants were contacted in person throughout the years 2014-2016; the writers gained this experience by living in the context society of the afore-mentioned countries (Austria, Iran, India) and collected some information through related social-networking websites. Participation was compensated through a £30 payment to the secular and religious societies that the participants represented. A total of ten Protestant Christians (*Christian*), 15 Sunni Muslims (*Muslim*) and ten secular and religious students (*Secular*) agreed to take part in the survey. Out of the 35 participants who provided general (not specific and approved) demographic details, 20 stated that they were educated to bachelor degree level or above and stated that they were Persian, Indian, Turkish, Austrian, German. The average age of participants was 25 years (range: 18–51 years).

In terms of Sampling Strategy, I would have to say a purposeful sampling strategy was applied to choose diverse participants. Purposeful sampling is considered a qualitative method where the researcher picks a specific number of participants on the basis of their special attributes and ability to inform an understanding of the research question. However, in this case the associated participants were picked on the basis of their cultural and social heritage and religious beliefs.

Poetry and plays are directly based on religious ceremonies; accordingly, the role of literature is transferring thoughts and religious practices. Of course, I can cite my reasoning and evidence to prove this theory through examining some parts of English and German literature that I have worked on- apart from the lack of knowledge about other countries' literary works. I believe that Homer and Hazi, who lived 800 years before the birth of Christ, have recorded the names of gods and their titles, occupations and powers. In particular, Homer in Iliad and Odyssey basically mentions the hierarchy of gods. This issue is accepted to such an extent that poets such as Virgil, Dante and Milton were influenced by these works.

Of course, Christianity's influence on Western literature specifically English has also been wider since, as we know English literature has two main sources: one of which is the "Bible" and the other is Shakespeare's work. According to Christian's historians, Christ is the only God whose story is described by a scroll of books. Admittedly, with this difference that the Greek works originated from a unique culture, yet the Christianity is influenced by Jewish, Greek and Roman culture.

The language, style, and diverse literary and rhetorical approaches to genre of the Bible can be seen in the works before the New Testament.

That is, most of the literary genres in the New Testament were rooted in the past. Of course, the same is true in terms of the Qur'an. From Augustine onwards - which played a significant role in literary writing of Western language and literature - the literary and artistic aspects of the language of Christianity are being updated day by day, as far as this issue reaches its peak in the poetry of Spencer, Dante, Milton. Even in Islamic culture, the solid influence of the Qur'an on the new literature is crystal clear. Of course, apart from the positive effects of the relationship between religion and literature, Islam religion has also had a deterrent effect. As an example, in the "Sufat" sura (verse), God disputes the sense that the Prophet is a poet and the Qur'an is also known as poetry. Also, in verse 224, sura "Shoarah" or in verse 68 of "Yasin" sura, God does not consider reciting a poem deserving for the Prophet (God considers reading a poem under the dignity of prophet) [4,5].

Therefore, here we witness a deterrent effect of religion towards literature. The oppression of poetry cannot be denied among some jurists and clerics in some Islamic countries. For example, Hosseini Tehrani (Iranian contemporary scholar and mystic) in one of his interviews says: "When the (late) Mirza Mehdi Ashtiani (Iranian Shiite philosopher and jurisprudent) died, some of the (clergymen) did not attend his funeral because he had recited the collection of Quatrains poems (Ru'ba'iat) Omar Khavvam (Persian mathematician, astronomer, and poet) on the pulpit before his audiences and followers. Even the late Allameh Tabatabai (commonly known as Allameh Tabataba'i, one of the Iranian most of prominent thinkers philosophy and contemporary Shia Islam who is famous for Tafsir al-Mizan, a twenty-volume work of Quranic exegesis, which he worked on from 1954 until 1972) prevented reading poetry in his speeches among people. It has been quoted that he has even burned some of his poems" [4,5].

4. RESULTS

Nevertheless, I believe that religious theology is the religion itself, because in a place where the word is created, a new creation is developed. That is, as soon as we want to create something, it must be named, because creation without name is impossible; so when the name is said, the object is also created. Even in the Gospel of John, it is stated that "In the beginning was the Word, and the Word was with God, and the Word was God (John 1:1). Therefore, here the connection of the religious word with the religion itself will be too close and clear; hence the tie between the word of revelation and literature increases more than before. The word of poets is in the same width and varying degrees with prophets' and revelations'.

According to some new philosophers, the word turns to a practical plan / the word gets an action state. In some religions like Islam and Judaism, reciting the holy book (the Quran, Torah (Pentateuch) respectively) is considered a religious practice, because the vast variety of Qur'anic and Torah's verses consist of religious points and mere whispering of these hymns is considered a religious experience. The Hebrew Scriptures, referred to by Christians as the Old Testament, are called the TANAKH, which is the Hebrew acronym for the three different parts:

- 1. The Torah which consists of the first five books of the Old Testament or the Pentateuch;
- 2. The Nevi'im which are the books of the prophets; and
- 3. Ketuvim which are the remaining writings.

As an example, some verses have the characteristics of a poem and at the same time are at the border of meaning; in other words, no story is told in some verses, and the preceding and subsequent verses do not determine any specific subject.

The small little love stories in the Torah are the median (at the border) between history and poetry. In the world of Prosaism (prose writing), there is no writing as close to perfect as the Ruth story. The stories of Isaac and Rebecca, Jacob and Rachel, Josef and Benjamin, Samson and Delilah, Esther, Daniel are categorized the second rate. The poetic-Literature of the Torah begins with "Song of Moses" (Exodus 15) and "Deborah" (Book of Jurors, 5), and reaches to its climax end at the end of the Psalms" [6].

In the Jewish religion, there are 10 "special and famous" hymns; 9 songs out of which have been said from the beginning of creation and the tenth will be written on the emergence of the savior of the universe (Christ):

1. The first anthem was said by Adam after the repentance from his sin

- 2. Second: was said by (Prophet Musa) and the Israelites after crossing the Red Sea
- 3. Third: was said by Miriam (the Prophet Mary) and Jewish women after crossing the sea.
- 4. Fourth: A song entitled "Well" was said while finding water after Miriam's death in the desert
- 5. Fifth: was said by Yehoshua after the war with 31 Sultanate in Gaydon.
- 6. Sixth: was said by Deborah and Barak after the victory over Sisera.
- Seventh: was said by Hannah, when she gave birth to a son (Samuel) as a gift by God.
- 8. Eighth: was said by David (Prophet Dawood) after being released from the enemies and Sha'ul.
- 9. Ninth: was said by (Solomon) which is (Song of Songs) or Shir ha Shirim.

Rhythmic words and poetry in the Torah and the books of the Prophets of the Jews are usually associated with prophecies or sparks of the Holy Spirit. (The "Spirit of Hercules") or the Holy Spirit is sometimes placed (descended) on a man by God so that a message or prediction is made known; for examples, "Lekha's words" to his wives or the blessings of the fathers of the Jews to their children.

Although poetry including Ghazal (Sonnet), Ruba'l (Quatrain), Masnavi (Couplet:Rumi), Qaside (Ode/Balladry), different types of Razmi (Heroic verse: Epic), Mystical, Religious, Romantic, Elegy, etc. has a broad concept for a Persian or English language reader, what is seen in Hebrew poetry is different in terms of meter, rhymes, monorhym from either Persian or English poetry. Dr. Ali Shariati (an Iranian revolutionary and sociologist who focused on the sociology of religion held as one of the most influential Iranian intellectuals of the 20th century) writes in his book "Descent in the Desert": "Any writing that affects the human's soul is poetry, and perhaps there are some poems, despite having the form of poetry, do not have poetic effect" [4,5]. Below is a sample of a Jewish poetry by Franz Kafka (a Germanlanguage novelist and short story writer, widely regarded as one of the major figures of 20thcentury literature, born into a middle-class, German-speaking Jewish family in Prague) which justifies the same point:

"He told me:

At the beginning of the world, before the heavens were steadfast and the roar of the thunders

Before the light and paradise and the beauty of the flowers

Before the power of the earthquake and the group of angels

Before the high clouds and mountains, before the devil and Samaritans (benefactors)

I knew everything; I created all from myself out of nothing

The Hereafter will be approaching just from me and no one else" [7].

Jewish poets of Spain mostly wrote religious lyrics while most of the Jews in other countries (Byzantine Italy, Babylon or current Iraq, Palestine, etc.) would sing non-religious poems (poems with social issues and daily themes); although prayer "Nishmat" (considered one of the masterpieces of Jewish liturgy and seen as a journey of self-discovery, describing God as a source of prayer), which is one of the most important Jewish Saturday prayers, has been recited in this period in Europe.

5. DISCUSSION

Other commonalities (common aspects) of literature and sacred books are the use of myths and stories. The concise artistic expression and metaphorical language are the characteristic of sacred books. Apart from this issue, "form" also plays an important role as an intellectual element in artistic cognition, since an individual with religious experience has a state of mind which makes him different from a poet. However, the type and style of expression is a rational matter related to religious experience. Interestingly, the difference between non-native (English (Christians)/Arab (Muslims) people's approach with the native (English/Arabs) ones is rooted in the way they deal with their holy books (the Bible and Qur'an respectively). The non-native people's approach to either English or Arabic religious texts is theology as verbal art and the confrontation with mystery and something the boundary of meaning and on meaninglessness. In other words, non-natives are focusing more on the mysterious aspects of these holy texts.

Some believe that if the Bible is translated into Persian or any other language in a poetic style like Golestan Sa'di ("The Rose Garden" is a landmark of Persian literature, perhaps its single most influential work of prose), it will be able to communicate more with people. However, I think this is not true because even though other language speakers (except Hebrew) sometimes are unable to understand the meaning of some parts of the Bible or other religious texts (The texts were mainly written in Biblical Hebrew, with some portions (notably in Daniel and Ezra) in Biblical Aramaic; Biblical Hebrew, sometimes called Classical Hebrew, is an archaic form of the Hebrew language. The very first translation of the Hebrew Bible was into Greek); they understand the music and state of passages; so they understand the essence of religion. Basically, those whose mother tongue is close to the Bible or religious texts have a holy denunciation of the Bible. Because their understanding of religious texts tends to focus on content rather than appearance, except while coming across the mysterious aspects of the Bible or metaphorical verses.

In addition, the interpretations of some people from religious texts are intrinsic (esoteric) and interpretive, while the Hebrew commentaries are based on apparent. For this reason, I believe those who wish to extract physical, mathematical. or astronomical subjects from the holy books like the Bible, the Qur'an or the Torah are after de-sacralizing these devotional sources, and personally I do not approve it because the holy books have religious state and essence, and we can refer to them at any time to get that devotional essence, but through that scientific approach, the foundations of such understanding will be ruined.

Literary speaking, I believe, what makes a holy book miraculous is its beautiful words, music and expression. In other words, the word (speech) in the holy books has a physical body that all its spiritual state is based on this corporality and the word is the embodiment of religion. Essentially, the essence of religion like literature is not an easy task to be discovered by everyone, and basically this is the secret of its sustainability. The poetic and secular nature of religion is the mainstay of religion, so those who intend to interpret it in an extreme way and feed the people with their deviant interpretation are not seeking the essence of religion and religious experience, but are seeking to use religion; so those who pursue interfaith dialogue should

consider the common essence among all religions. Like literature, the ethical structure of religions is different, but the essence of ethics is a known, fixed and floating matter.

As I mentioned at the beginning of this paper, literature is categorized into three types: religious, secular, and intersect literature. The secular Western literature or modern literature, was in fact a reaction to enlightenment and renaissance in the beginning (romanticism era) since the Enlightenment era began with the slogan of nature interpretation, and as a result, in response, Romantic poets harbored the inner world and in confrontation with Science discovered the inner geography; therefore, this reaction, which was often full of religious experience, was an Anti-scientific counterparts response.

6. CONCLUSIONS

In the contemporary literature of the West, the position of Christ, which used to be in the heavens, descended on the Earth, and what was transcendental, turned earthly (physical). That is to say, Christ laid down his divine aspect and placed himself as self-sacrifice for human being in the world at the center of Western art. For example, literally speaking although Don Quixote in some sense is considered the end of Romanticism era, he is a man with values that the world doesn't accept and eventually fails; so some believe that Don Quixote is the Christ's myth.

There is also the same fact in John Steinbeck's work "The Grapes of Wrath"; again we witness an image of Christ. Therefore, Christ is located at the heart of secular European literature. We always witness an oppressive face and a ruthless face in Western movies that the ruthless character is defeated, and the protagonist who has litigated, leaves the scene without any expectation at the end of the movie. Therefore, the Westerns as well as Eastern have this ethical-religious substance. Even the detective and spy stories have the same substance. Therefore, and according to those who have worked on the religious literature in the West, all these discussions reflect the presence of Christ at the center of Western literature.

Although the form and passages of the Bible are available in the works of Keith Blake, Zozu, Stevens, Bonnie Sharkey, and many others, what has been remained out of the New Testament in the works of these writers is the essence of religion and Not the narration of the New Testament. Wallace Stevens (American Modernist poet) in response to one of his critics says: "I am not an atheist, but no longer believe in the god I believed in when I was a child" [8]. Therefore, although this point is strange at first look, the fact is that the continuation of Christianity must be found not in the New Testament, but in the new secular literature. Over 300 years is passed since Paradise Lost (an epic poem in blank verse by the 17th-century English poet John Milton) was created, but the fallen myth in the imagination of the artists has found fresh aspects; it means after the end of the Second World War and the cremation furnaces, the resurrection issue revived and was placed at the center of literature" [9].

John Selden in the book "The Doctrine of Christianity" believes: "Paradise is not located in any geographical map and the descent of Adam is not consistent with any historical calendar." Moses is not closer to the descent than us just because he lived more than 3000 years before we live. The fall (descend) does not refer to a calendar (history) of humans in the past, but it is an aspect of the human's experience which is always present.

By way of conclusion, the influence of modern literature on changing a reader's mind is not less than religion, because we have to penetrate into the core of such works in order to understand the connection between these literary works, religion and religious heritage. Hence, those who consider the new Western literature and novels just a petty story, are not able to understand the Western civilization.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- 1. Ramsaran John A. English and hindi religious poetry. Leiden; 1973.
- Koenig HG. Religion, spirituality and health: A review and update. National Center for Biotechnology Information, U.S. National Library of Medicine; 2015. Summer. Available:https://www.ncbi.nlm.nih.gov
- 3. Available:<u>https://www.ncbi.nlm.nih.gov/pub</u> med/26026153

Dumézil Georges. Mythe et épopée. Paris. 1968–1973;5.

- Monthly News Letter. The relationship between religion and literature. The Center of Christian Culture and Thought; 2005. Available:<u>www.kfam.co.uk</u> Available:<u>https://www.kfam.co.uk/articles/c ul/religionaliterature/</u>
- 5. Dr. Zia Mohed. Literature and religions. Institute for Interreligious Dialogue. December 4, 2014.

Available:http://iid.org.ir

- 6. Frye Northrop. The great code: The bible and literature. New York; 1982.
- 7. Available:https://en.wikipedia.org/wiki/Nish mat
- Lesky Albin. A history of greek literature. Translated by James Willis and Cornelius de Heer. New York; 1966.
- 9. Fish Stanley. Surprised by sin: The reader in Paradise Lost. Berkeley, Calif.; 1971.

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