

Indigenous Concepts of Consciousness, Soul, and Spirit: A Cross-Cultural Perspective

Radek Trnka

Prague College of Psychosocial Studies, Prague, Czech Republic
OUSHI, Palacky University Olomouc, Czech Republic

Radmila Lorencova

College of Applied Psychology, Terezin, Czech Republic

Abstract

Different cultures show different understandings of consciousness, soul, and spirit. Native indigenous traditions have recently seen a resurgence of interest and are being used in psychotherapy, mental health counselling, and psychiatry. The main aim of this review is to explore and summarize the native indigenous concepts of consciousness, soul, and spirit. Following a systematic review search, the peer-reviewed literature presenting research from 55 different cultural groups across regions of the world was retrieved. Information relating to native concepts of consciousness, soul, and spirit were excerpted from the sources and contrasted. Contrasting these indigenous concepts revealed important implications for understanding consciousness within a cross-cultural perspective and has practical implications for applied approaches utilizing native indigenous traditions.

Keywords: #consciousness, #Indigenous psychologies, #decolonial psychology, #decolonial turn, #Indigenous science, #Indigenous knowledge, #decoloniality, #decolonizing, #cross-cultural comparison, #cultural psychology, #relational ontology, #global consciousness, #collective consciousness, #quantum binding, #quantum entanglement, #mind-body problem, #mind-body relations, #soul-body relations, #shamanic consciousness, #Indigenous concepts, #altered states of consciousness

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1. Introduction

Recently, native indigenous traditions, especially shamanistic ones, have experienced a resurgence of interest which could even be considered as a "renaissance" of these traditions (e.g. Blain, 2002; Gearin, 2016; Langdon and De Rose, 2012; Minkjan, 2008). Traditional indigenous healing practices have inspired psychiatric approaches (Blom *et al.*, 2015; Lee, Kirmayer, and Groleau, 2010), mental health counselling (Stewart, Moodley, and Hyatt, 2017; Sutherland, Moodley and Chevannes, 2014), dance therapy (Ramos, 2018), treatment of addictions (Rich, 2012), as well as psychotherapeutic approaches for facilitating recovery from traumatic life events (Harris, 2009). For these reasons, the exploration of how human consciousness is understood from the perspective of various native indigenous cultures is very topical and needed.

Different cultures have different conceptual systems, i.e. the conceptual knowledge of a culture that is shared among its members (Margolis and Laurence, 1999). These conceptual systems involve various concepts that are complex mental representations defining conditions for something to exist (Margolis and Laurence, 1999). The concepts help members of these cultures

understand the experience of their worlds, because they involve meanings that are shared among members of the cultures. Human experiential life is closely connected with phenomena such as consciousness, soul, or spirit, and one may therefore ask what meanings these phenomena have in native indigenous cultures.

Indigenous psychologies have been found to be highly inspirational for the development of contemporary psychology and cognitive science (e.g. Chakkarath, 2005; Sedlmeier and Srinivas, 2016). However, the native indigenous concepts of consciousness, soul, or spirit remain largely unexplored within recent cross-cultural psychological research (but see Wierzbicka, 1989; 1992). An exploration of the concepts that have emerged in indigenous cultures may bring new insights into the cross-cultural understanding of consciousness and related constructs. Therefore, the present study aims to provide an initial exploratory overview of available findings in the field of indigenous understanding of consciousness, soul, or spirit. The main aim of the present, empirically based review is to summarize the available empirical evidence involving native indigenous concepts of consciousness, soul, and spirit. The present review draws information mostly from ethnographical, field-based evidence. The ethnographical research involves some pieces of knowledge about indigenous understanding of consciousness; however, these original descriptions were sometimes fragmentary and lacking in detail. This fact thus also influenced the amount of detail in the descriptions provided in the present review. On the other hand, cross-cultural systematic psychological research on the indigenous understanding of consciousness is totally lacking, so the ethnographical evidence is currently the only available source of knowledge in this area. For these reasons, the present study aims to provide an initial background and jumping off point for future detailed research into specific indigenous concepts of consciousness and their relations to Western consciousness science. Before proceeding further, selected theories of consciousness are briefly outlined to introduce some examples of the recent understanding of consciousness in cognitive science.

2. Theories of Consciousness

Gennaro (2018a) provides a comprehensive overview of recent general theories of consciousness. Providing descriptions of all of the theories of consciousness here is far beyond the scope of the present study. Therefore, given the limited space, only several cognitively based theories relevant for the present study are very briefly outlined in the following section (but the reader can find more information about them in the cited sources).

The representational theory of consciousness considers states of consciousness to be intentional mental states that have representational content, i.e. mental states which are “directed at something” (Gennaro, 2018b; Prinz, 2019; Tye, 1995). From this perspective, consciousness is suggested to be related to a flow of mental representations, that is, internal mental objects or symbols with semantic properties representing some parts of the external reality of a subject. The representationalism assumes a close relationship between intentionality and consciousness. The conscious experience is suggested to be always connected with the world-directed (or first-order) intentional states. In other words, the representational content of a subject’s conscious experience is identical with the phenomenal properties of the subject’s experience. A subject is suggested to “see right through” his/her experience to its representational properties, and nothing else to the experience over and above such properties is expected to exist. In a similar manner, mental events are suggested to represent outer objects properly because they are caused by the objects which a subject perceives. Thus, the representationalism assumes that consciousness can be explained in representational terms and representation can be understood in physical terms, as within the

framework of a naturalistic approach. One objection to the representational theory of consciousness is that it cannot explain all kinds of conscious states, because some conscious states do not seem to be “directed at something”, e.g. the experience of anxiety or restlessness (Gennaro, 2018b).

According to integrated information theory (Favela, 2019; McQueen, 2019; Tononi, 2008), consciousness has an experiential character and includes a special case of information instantiated by the physical properties of a system, i.e. the human body. The integration of information is suggested to be a major function of consciousness, because it is both necessary and sufficient for consciousness regardless of the substrate (e.g. neural or biological) in which it is realized. Consciousness is suggested to have an emergent nature and to be a purely information-theoretic property of all complex systems. Consciousness is expected to have a compositional nature and conscious experience to be composed of various interdependent elements that are integrated to a certain degree. Thus, consciousness can be compared to a system that contains many overlapping complexes. This holistic view of consciousness assumes that the information is involved in the parts of a given system but also in the organization of the system over and above these parts. This also means that consciousness is irreducible to its separate elements; it is expected to be unified. The integrated information theory has recently faced criticism (e.g. Sovik, 2020; van Stekelenburg and Edwards, 2020).

The attention schema theory of consciousness (Graziano, 2018; 2019a; 2019b; Graziano and Morsella, 2019; see also Dewhurst and Dolega, 2020; Wiese, 2019) proposes that consciousness is closely related to the operation of attention schema. Consciousness emerges in the brain, which is considered an information-processing machine. Subjective conscious awareness is crucially influenced by the focusing of attention and giving different values to particular mental events. During the processing of internal and external inputs, the brain builds a set of information, a representation, or an internal model – the attention schema. The attention schema is an internal model of attention responsible for the quality of a subject’s conscious experience, covering a wide range of mental events, from sensory events to abstract thoughts. The attention schema influences the fact that some signals in the brain are boosted and therefore processed more deeply, often at the expense of other competing signals that are partially suppressed.

According to biological realism and biological naturalism, consciousness is a real, natural, biological phenomenon (Revonsuo, 2018). Conscious states are suggested to be caused by brain processes and all mental properties to be emergent properties of neurophysiological systems. Consciousness is considered to be a unified qualitative subjectivity. All conscious states are subjective in the sense that they exist only when experienced by a subject. The human cognitive system is suggested to operate on many different levels of description. The same subject can have different levels of description for conscious mental events. However, these levels of description are not competing or distinct; they simply represent different levels within a single unified system of conscious awareness. In other words, all momentary conscious states are parts of a single unified conscious field. Higher-level properties of conscious experience can be causally explained by the lower-level or the micro-properties of the same cognitive system. Thus, the subjective conscious experience is suggested to be biologically determined, showing a hierarchy of levels of description for conscious mental events.

In contrast to consciousness, the constructs of soul and spirit from the perspective of recent cognitive science are considered to be examples of supernatural, paranormal, or afterlife beliefs. The human mind is suggested to have a tendency to believe in various supernatural or afterlife beliefs, such as the belief of an immortal soul, the possibility of the separation of the mind from

the body (Gray *et al.*, 2018), or the belief of the existence of supernatural entities like ghosts, angels, and devils. Most of these beliefs are considered to be artifacts of religious cognition (Ross *et al.*, 2019), i.e. the mental abilities and processes involved in constructing beliefs about supernatural, spiritual, or paranormal beings. The true existence of these beings is considered questionable from the perspective of scientific sceptical materialism.

3. Indigenous Concepts of Consciousness, Soul, and Spirit

An exploration of indigenous concepts of consciousness, soul, and spirit is an interesting avenue for looking at these phenomena through the perspective of native indigenous cultures. However, getting to empirical material involving the descriptions of cultural understandings of consciousness, soul, and spirit is not easy. There are published reports of ethnologists and anthropologists who studied indigenous cultural groups, and some of them also involve descriptions of cultural understandings of consciousness, soul, and spirit. However, the main problem is that it is difficult to distinguish the extent to which the ethnographical evidence is biased by the subjectivity of the researcher. Furthermore, it is also difficult to reveal the slight nuances in semantic meanings that could possibly occur during the translation of meanings from native languages into English. It is also quite common that indigenous people describe the consciousness, soul, and spirit in a metaphorical way. Cajete and Williams (2020) pointed out that during indigenous storytelling, multiple levels of meaning may occur, ranging from the relatively basic and straightforward to the complex and metaphoric. Especially for highly abstract concepts, such as consciousness, soul, and spirit, a metaphor has a great capacity for conveying their meanings (Cajete and Williams, 2020). In contrast, scientific descriptions of psychological or cognitive phenomena are more structured, aiming to provide exact definitional differentiation in terminology.

All these limitations will always be present when working with ethnographical evidence, and these are also *a priori* limitations of the present study. On the other hand, the field-based evidence of ethnologists and anthropologists is grounded in an in-depth knowledge of the studied cultures, because ethnologists and anthropologists usually spend many months or even years living with the people of the studied cultures. This represents a strength of the field-based ethnographical material.

Considering the above-mentioned strength and limitations of ethnographical evidence, a systematic review search (Higgins and Green, 2008) adapted for the purpose of the present study was conducted to obtain sources providing empirical evidence involving the indigenous concepts of consciousness, soul, and spirit. In January 2020, sequential searches of Web of Science, Google Scholar, and JSTOR were performed. The key words "consciousness", "soul", "spirit", "indigenous", "culture", and their combinations were used to retrieve peer-reviewed, English written empirical papers, books, and book chapters including the descriptions of the native understanding of consciousness, soul, and spirit in different indigenous cultures. Database searches generated 1104 occurrences, and the titles and abstracts were then scanned for relevance. Full texts of sources, in which a title or abstract indicated the possible inclusion of information about consciousness, soul, or spirit in an indigenous ethnic group, were retrieved. To find further key sources, the reference lists of all the retrieved papers, books, and book chapters were scanned for any relevant sources, and the full texts of these sources were later also retrieved.

The indigenous cultural groups that were included in the retrieved sources were summarized and verified in the eHRAF World Cultures database (<https://ehrafworldcultures.yale.edu/>). Since most of the indigenous cultural groups are recently less or more influenced by world religions, e.g. Christianity, Islam, or Buddhism, the information about this influence was checked in the eHRAF World Cultures database. Based on this information, indigenous cultural groups that showed a

strong syncretism and high acceptance of influences from external religious traditions were excluded from further analysis. More specifically, celebrating world religion-related holy days and seasons (e.g., All Souls Day, Easter, Ramadan, etc.), performing weddings and burials according to world religious traditions, worshiping the saints of world religions, and the absence of the role of a traditional priest or healer were considered to be indicators of a relatively strong syncretism and high acceptance of aspects from external world religions.

After removing duplicates, 95 peer-reviewed papers, books, and book chapters (all of them are included in the list of references and marked with an asterisk) dealing with the native understandings of consciousness, soul, and spirit in 55 different indigenous cultural groups (Table 1) were selected for further excerpting. All the full texts were retrieved and screened for the relevant information. The descriptions involving the indigenous understandings of consciousness, soul, and spirit were excerpted from the sources. 46 descriptions relating to consciousness, 46 descriptions relating to soul, and 51 descriptions relating to spirit were obtained.

The excerpted descriptions were contrasted and axially coded. Axial coding involved comparing concepts with one another with the main aim to determine semantic differences and similarities between concepts from different cultures. In the following subsections, the selected cultural patterns with examples are introduced with the main focus on consciousness.

Table 1. Indigenous cultures involved in the review

Geographical regions	Indigenous cultural groups
Africa	Akan ^{c,so,sp} ; Alur ^{c,so,sp} ; ; Azande ^{c,so,sp} ; Baganda ^{so,sp} ; Bakongo ^{c,so,sp} ; Dinka ^{c,sp} ; Mbuti ^{c,so,sp} ; Ndembu ^{c,sp} ; Nuer ^{so,sp} ; Maasai ^{c,so,sp} ; San ^{c,so,sp} ; Tonga ^{c,so,sp} ; Yoruba ^{c,so,sp} ; Zulu ^{c,so,sp}
Asia & South East Asia	Ata Tana 'Ai ^{so,sp} ; Igorot ^{c,so,sp} ; Benuaq ^{c,so,sp} ; Burung ^{c,so,sp} ; Ifugao ^{c,so,sp} ; Ngaju ^{c,so,sp} ; Karen ^{so,sp} ; Minahasa ^{c,so,sp} ; Toraja ^{c,so,sp}
Australia, Oceania & Melanesia	Kai ^{c,so,sp} ; Kwaio ^{sp} ; Mono-Alu ^{c,sp} ; Tsembaga ^{sp} ; Warlpiri ^{c,so,sp}
North Europe & Siberia	Evenki/Tungus ^{c,so,sp} ; Inughuit ^{so} ; Nenets ^{so,sp} ; Saami ^{c,so,sp}
Middle America	Chamula ^{c,so,sp} ; Emberá ^{so,sp} ; Nahua ^{c,so}
North America	Apache ^{c,so,sp} ; Blackfoot ^{c,so,sp} ; Cherokee ^{c,so,sp} ; Cheyenne ^{c,so,sp} ; Dene Tha ^{c,sp} ; Iroquois ^{c,so,sp} ; Micmac ^{c,so,sp} ; Oglala ^{c,sp} ; Tanaina ^{c,so,sp} ; Tlingit ^{c,so,sp} ; Yuit ^{c,so,sp} ; Yup'ik ^{c,so,sp}
South America	Araweté ^{c,so,sp} ; Ayoreo ^{c,so} ; Cashinahua ^{c,so,sp} ; Desana ^{c,sp} ; Guajiro ^{c,so,sp} ; Guna ^{c,so,sp} ; Jívaro ^c ; Kogi ^{c,so,sp}

^c Information about indigenous concept of consciousness found and retrieved for analysis.

^{so} Information about indigenous concept of soul found and retrieved for analysis.

^{sp} Information about indigenous concept of spirit found and retrieved for analysis.

4. Indigenous Understanding of Human Consciousness

Basic conceptualizations of consciousness varied widely across the studied indigenous cultures. Consciousness of an individual may be understood as a state of mind (e.g. San, Guajiro), faculty of mind (Kogi), subjectivity (Warlpiri), experience (e.g. Saami, Dene Tha, Oglala), kind of being (Blackfoot, Yuit, Kai), sensing (Yup'ik), living (Bakongo), as a kind of soul (e.g. Cherokee, Tungus, Ayoreao, Cashinahua), energy (Nahua), vital force (Tlingit), or capacity to respond to communicative signals (Araweté).

These categories, however, represent only a high level of abstraction of meanings and aim to help a reader gain a basic orientation in semantic differences found in the indigenous meanings of consciousness. In the following text, more detailed information about the indigenous concepts of consciousness is provided.

Some indigenous conceptualizations of consciousness have been found to be closely related to human perception and cognition. For example, Yup'ik people link the consciousness to sensing and awareness (John, 2009). Under the term sensing, they include both "inner sensing" covering the experience of inner feelings and first-person awareness of mental processes, and the sensing of stimuli from the external environment of an individual, i.e. vision, hearing, smell, and taste. An individual's consciousness is understood as being aware, or as "my awareness". Yup'ik people distinguish between different stages of the process of becoming aware/being conscious. The concept *ellaka* means the actual state of one's awareness or consciousness. For Yup'ik people, it is important to distinguish between successful becoming aware and unsuccessful becoming aware. *Ellangua* denotes a moment when a subject successfully becomes aware. In contrast, an unsuccessful effort to become aware is called *ellangenritua*. Interestingly, the Yup'ik understanding of consciousness is not reduced to an individual. In a holistic sense, the consciousness is believed to be interconnected and shared with other humans, but also nonhumans (John, 2009).

Compared to the Yup'ik model of consciousness, the Araweté ascribe consciousness to individuals based on the observable reactions mirroring the individual's cognitive processing of reality. *Kaaki* is the verb denoting "having consciousness" (Castro, 1992). Young children are believed to not have consciousness unless they are able to respond to communication signals of caregivers. Consciousness is believed to emerge in them when they start to respond during communication, at least by nonverbal communication signals. Thus, the individual's observable reactions to communication cues of others are key aspects for the Araweté conceptualization of consciousness. Moreover, based on the extent to which a child is perceived as "having consciousness", the degree of the humanity of the infant is also evaluated. If a child dies before manifesting consciousness, its parents do not weep and express sadness and mourning (Castro, 1992).

Some indigenous conceptualizations of consciousness assume one universal source of consciousness for all beings and their individual consciousness. In Kogi people, an individual's consciousness is believed to be an expression of a universal, cosmic consciousness called *aluna* (Witte, 2017). Universal consciousness *aluna* is something that is thinking and has self-knowledge. It is the source of all life and intelligence, and the mind inside nature. People are believed to have *aluna* and therefore are also able to think. An individual's consciousness is a faculty of mind, closely related to thinking and mental processes. However, the individual's consciousness is not believed to be a product of individual human brain, but always an expression of the universal, cosmic consciousness *aluna*. Kogi people suggest that the truth can be reached only through

communication with *aluna*. Therefore, every significant decision or course of action has to be consulted and validated with the help of *aluna*.

In some indigenous cultures, consciousness is believed to be a kind of soul. For example, Cherokee people consider an individual's consciousness to be one of the souls that an individual owns (Kilpatrick, 1995). Four souls are distinguished by the Cherokee. The "soul of consciousness" denotes an individual's consciousness and is located in the head or throat. The remaining three souls are the "hepatic soul" located in the liver, the "visceral soul" located in the flesh and associated with blood, and the "osseous soul", which resides in the bones and is associated with sperm. The Cherokee model of consciousness considers an individual's consciousness to have the characteristics of a soul, which expects consciousness to be a spiritual essence of the human body.

Some indigenous cultures understand consciousness as an experience of the corporeal, real world. This is the case of Saami people, who distinguish two spheres of the world, the corporeal, or real world and the spiritual netherworld (Lehtola, 2002). Consciousness is closely related to all the experiences experienced in corporeal reality. However, the divide separating the spiritual netherworld from the corporeal, real world can be traversed when conscious experience is "transported" during a shaman's ecstatic practice.

Interestingly, conceptualizations of consciousness differ in the extent and diversity of the semantic space that relevant mental representations occupied in different indigenous cultures. Some of the concepts are highly polysemic. For example, the Nahua concept *teotl* includes many aspects, i.e. consciousness, but also an ever-flowing, ever-changing energy-in-motion, self-generating and self-conceiving sacred energy, power, or force, and a unified totality of all things (Maffie, 2008). In Cashinahua people, consciousness is identified with the concept of body soul, *yuda yuxin*, that, however, denotes also memory, thoughts, feelings, and individuality (McCallum, 1996). The Maasai concept of *oltau* at the same time denotes heart, mind, spirit, as well as soul (Westerlund, 2006). For Guna people, consciousness is a part of polysemic concept *burba* denoting soul, consciousness, the spiritual principle, shadow, reflection on water, echo, culture, essence, and way of being at the same time (Martínez Mauri, 2019).

An interesting structuring of conceptual knowledge has been found in Cheyenne (Straus, 1977). On one hand, their conceptual knowledge distinguish between four features of the human self, i.e. body (*vokdtse*), breath (*omotome*), spirit (*mahta'sooma*), and heart (*hesta*). On the other hand, their conceptual knowledge distinguish between awake experience, i.e. "living here", and experience in dreams, i.e. "living over there". In this case, it is indeed difficult to determine what aspect of conceptual knowledge can be rather linked to the understanding of individual consciousness in the psychological perspective.

Unfortunately, some of the excerpted primary sources included only basic descriptions relating to indigenous understanding of consciousness and lack more detail. This is because the goals of ethnographical research were often focused on issues other than in-depth exploration of indigenous understanding of consciousness. The basic descriptions enabled meanings to be determined on a high level of abstraction but did not enable the indigenous understanding of consciousness to be explored in a detailed manner.

5. Indigenous Understanding of Altered States of Consciousness

Indigenous cultures also varied in their ways of understanding altered states of consciousness. Generally, four categories of mental representations have emerged by contrasting the indigenous concepts, a) altered state as a special kind of perception, imagination, or knowledge b) altered state

as a different kind of being, c) altered state as a kind of movement or travel, and d) altered state as a physical process.

First, some of the indigenous cultures understood altered states of consciousness as states with changed perception or imagination. Altered states are considered to be a different kind of "body knowing" (Cashinahua), ability to see spirits (Ndembu), personal visions (Blackfoot, Oglala), or hidden faculties of the mind enabling contact with the divine sphere, i.e. with the essence of being (Kogi).

Second, altered states of consciousness are also understood as a different kind of being, e.g. as being outside one's own body, or as being possessed and detached from their one's vital force to search the cosmos for aid (Akawaio).

Third, altered states of consciousness are often explained as a kind of movement or travel, e.g. as moving into the magical sphere of ancestors' spirits (Bakongo). Saami people propose a kind of an ecstatic transport into the "other world" by traversing the divide separating the spiritual netherworld from the corporeal, real world (Lehtola, 2002). In Desana, altered states are understood as ecstatic flights, by which an individual is returned to the universe described symbolically as an immense womb. Inside this womb, an abstract cosmic brain charged with energies is believed to exist, and there, the individual becomes witness to cosmogonic episodes (Reichel-Dolmatoff, 1989). The metaphor of returning to an immense womb represents a symbolic return to a state before one's consciousness is born. From this perspective, altered states of consciousness are understood as a way of getting to the universal sphere of all-inclusive consciousness, which is represented by the immense womb.

Fourth, altered states of consciousness are also described as a kind of physical process or feeling. San people describe altered states of consciousness as boiling, and compare them to fire or heat (Katz, 1976). The metaphor of feeling hot or cold was found also among other indigenous groups to describe possession, loss of soul, or illness.

Very interestingly, some of the indigenous cultures have a reverse understanding of altered states of consciousness in comparison to recent cognitive science. In Jivaro people, altered states of consciousness are considered to be true reality, whereas normal states of consciousness are only an illusion (Harner, 1973). Cherokee people understand altered states of consciousness as experiences in the world of waking consciousness (Loubser, 2009). In contrast, the normal state of consciousness is considered to be a "non-awakened" state. For Mescalero Apache, experiences during normal states of consciousness are believed to be only an illusion, whereas true reality lies in another world and can be experienced in altered states of consciousness (Farrer, 1991). In Dene Tha people, altered states of consciousness are understood as a normal experience in spirit-aware life, i.e. as kind of "seeing eye to eye" and as a source of fundamental knowledge (Turner, 2008).

6. Mind–Body and Soul-Body Differentiation

Within the psychological perspective, mind is considered to be invisible and non-observable, whereas the body is an observable, material object. A similar differentiation was found in some of the studied indigenous cultures, however, most of cultures showed different patterns of differentiating between mind and body. Interestingly, the mind-body differentiation was almost absent in some of the studied cultural groups. In Nahua people, consciousness, mind, but as well as body and matter are considered to be of same quality, i.e. a kind of energy *teotl* denoting a unified totality of all things that is essentially becoming, changing, and in motion (Maffie, 2008). Also, in the conceptual knowledge of the Cheyenne, no radical mind-body or consciousness-body dualism is found (Straus, 1977). Furthermore, Emberá people even do not generally differentiate

between material and spiritual objects or entities, that is, between physical and metaphysical realms. These phenomena are believed to be superficially different manifestations of the same reality (Loewen, 1975).

Many of indigenous cultures differentiate or connect the human body with the soul, souls, or soul-related constructs rather than showing the mind-body split. Connecting the human body with the soul, souls, or soul-related constructs occurs quite frequently in the pool of studied indigenous cultures across the world regions (Burung, Ngaju, Karen, Azande, and others). For example, Inughuit people believe that man has three main parts, the physical body, the immortal soul located outside the person, and name involving qualities of a person (Rasmussen, 1908). Cashinahua people differentiate between "body soul" (*yuda yuxin*), i.e. a concept including a combination of both material and non-material aspects of man, and "true soul" (*yuxin kuin*), which is an animating principle (McCallum, 1996). Within this perspective, both kinds of souls are believed to be localized in specific parts of human body, "body soul" in the lungs and heart, and "true soul" in the eyes, where it can be also observed by an external observer. In contrast to this localized view of the Cashinahua, Akan people believed that the soul is not connected with any bodily organ but is dispersed in every part of the human body as well as in body fluids (Akeson, 1965).

Another pattern of soul-body differentiation can be found in Ata Tana 'Ai people (Lewis, 1988) who believe that self is created by a first layer, i.e. the body (*ha lapen*), which gives shape to the soul (*rua lapen*). Furthermore, Tlingit people conceptualize a person to be composed of multiple layers. The incorporeal components of a person consist of two aspects, breath (*x'aséikw*), which is a person's life force, and a person's mind (*toowú*), the locus of thoughts and emotions. This incorporeal part of a person was believed to be enveloped by three layers, 1) the bones (*sáagí*) – the chief material component of the body and its inner essence, and the outer layers of 2) flesh (*daadleeyí*) and 3) skin (*cháatwu*). Very interestingly, Tlingit people do not even have a single term for a body as a whole (Kan, 2015).

7. Links and Transitions between Soul, Spirit, and Consciousness

The indigenous conceptual categories of soul, spirit, and consciousness often do not maintain stable semantic meanings over time. They can acquire different meanings depending on the situation, and also could not be stable in time in terms of both location and conceptual character. In Oglala (DeMallie, 1987), individual mind and consciousness are believed to emerge at the moment when a fundamental force called the "Great Mystery" breathes the spirit into a human body. So, the subject's body is suggested to be potentiated by a spirit, and this act causes the emergence of mind and consciousness. However, after the death of a subject, the spirit is believed to be freed from the body and transformed into a kind of non-localized state. This non-local state is described as "being everywhere and pervading all nature". In this case, the process of disembodiment of mind and consciousness is considered to cause dissolution and non-local existence.

Under some circumstances, e.g. during altered states of consciousness, trance states, possession, but also illness, the soul or its parts can leave the body, or, alternatively, the body can be possessed by another soul or spirit. In these cases, such change is believed to always affect a person's consciousness or experience. Blackfoot people understand normal states of consciousness as a state with one's own soul inside the body (Loubser, 2010). In contrast, altered states of consciousness are believed to be states of temporary "soul loss". During these states, consciousness may be invaded by spiritual helpers, who were key spirits of Blackfoot people. Interestingly, this invasion is very desirable indeed, because without the invasion of a spiritual helper, an individual

is considered to be an “incomplete person”. This example shows that the conceptual category of soul may have an important function for distinguishing between two conceptual categories describing different states of consciousness, normal and altered state of consciousness. Specifically, Blackfoot people understand the presence or absence of one’s own soul inside the body as a key marker of a normal (or altered state) of consciousness.

Indigenous cultures vary also in their beliefs relating to the transformations of consciousness or soul after death. In some cases, the existence of consciousness is believed to continue after person’s death and even still keep social and biological needs similar to the needs of a living body, e.g. hunger, thirst, or cold, need for attention, involvement, etc. (e.g. Dene Tha, Bakongo, Igorot, Benuaq and others). In contrast, some cultures believe that a death leads to a final termination of consciousness. In Cashinahua people, one of the souls, the “body soul” denoting consciousness, is believed to become permanently transformed into a faceless, monstrous, and memory-less forest spirit after a person’s death (McCallum, 1996). Furthermore, some groups of Maasai people even believe that a man’s death is the end of everything. After death, no further transformations of soul or consciousness are expected to occur (Westerlund, 2006).

8. Discussion

The indigenous conceptualizations of consciousness vary widely between different cultural groups. The results of the present review show that consciousness is understood as a state/faculty of mind, cognitive ability, experience, subjectivity, energy, state of being, sensing, vital force, or also as a kind of soul from the perspective of different cultures. Keeping in mind the above-mentioned limitations of ethnographical evidence, this variability may be considered to be the result of different, culture-specific ways of indigenous understanding of inner processes and the psyche. It is difficult to determine the possible causes of this variability. However, one of possible explanations could be based on the different use and patterns of metaphoric-symbolic thinking in the studied cultures. Glicksohn (2001) proposes that metaphors and symbols are more frequently used when trying to depict experiences that are not easily translatable into words. The conscious experience belongs to this group of experiences. Therefore, the high variability in indigenous concepts of consciousness could mirror the level of abstractness and problematic description of conscious experience in natural language. The highly-abstract nature of the phenomenon of consciousness may have lead to the cross-culturally inconsistent conceptualizations of consciousness.

Furthermore, the present study reveals that indigenous concepts of consciousness differ also in the extent and structure of semantic space. Some of the indigenous concepts have been found to be more polysemic, signifying more possible meanings when compared to similar concepts from other cultures. The emergence of polysemy is assumed to be linked to everyday experience with the world that a particular culture inhabits (Srinivasan and Rabagliati, 2015); however, it remains unclear how social, environmental, and biological factors shape the native indigenous concepts of consciousness and related constructs. More research is needed in this field.

When comparing indigenous concepts of consciousness to scientific theories of consciousness, several analogies can be found, even though the exact semantic meanings are not entirely similar. For example, the Yup’ik understanding of consciousness as a state of awareness and sensing can be compared to some ideas of the representational theory of consciousness (Gennaro, 2018b; Prinz, 2019; Tye, 1995). A mind is understood as an “inner voice” representing both consciousness and awareness. The Yup’ik connection of consciousness with sensing is in accordance with the phenomenal mental contents related to perception, as expected by the representational theory of

consciousness. Yup'ik people further believe that certain events may become permanently imprinted in the memory and form the basis of knowledge. More levels of psychological development or awareness of self, others and the effects of one's actions and thoughts are assumed (John, 2010; Michael, 2010). The Yup'ik understanding of consciousness is not limited just to individuals but is rather holistic. The term *ellavut* means "our" (the people's and the land's) sense of awareness or consciousness. This term describes the interconnection between the human world and the sacred world, where characteristic descriptors are interchangeable. Human and non-human inhabitants are regarded as having their own awareness and consciousness in their shared worlds (John, 2010).

Some analogies can also be found between the attention schema theory (Graziano, 2018; 2019a; 2019b; Graziano and Morsella, 2019) and the Araweté conceptual understanding of consciousness. According to the Araweté, consciousness is manifested by processing information with the ability to react. An infant's smile is the first "conscious" reaction and thus proof of having consciousness (*kaaki*). If a person is not able to respond properly, as is common or expected, e.g. during intoxication or due to some illness, he/she is thought to have no consciousness. Such a person is even considered to be "dead", despite his/her observable body being alive (De Castro, 1992). The Araweté understanding of consciousness is closely related to the processing of information from the external world, and this fits well with the assumption of the attention schema theory (Graziano, 2018; 2019a; 2019b; Graziano and Morsella, 2019), where consciousness is closely related to the operation of attention, which is responsible for the processing of internal and external inputs.

Despite these similarities, it is necessary to say that the aim and process of conceptualization of consciousness among indigenous people is nevertheless different from that of science. Indigenous conceptualizations reflect rather everyday, lived experience and matters relating to life and death. Moreover, indigenous concepts are often more holistic, involving not only the individual or other human beings, but also non-human beings or global, universal (or spiritual) forces. While the two above-mentioned examples of indigenous cultural evolution resulted in a conceptual knowledge similar to some recent scientific understandings of consciousness, other indigenous concepts of consciousness correspond less to recent scientific theories, for example, consciousness as being an energy, a vital force, or a kind of soul (but see recent discussions concerning the application of the free-energy principle to the hard problem of consciousness, e.g. Solms, 2019).

Let us turn our attention to the implications arising from the analysis of the indigenous conceptualizations of altered states of consciousness. The present study classifies four general categories of indigenous understanding of altered states of consciousness, a) altered state as a special kind of perception or imagination, b) altered state as a different kind of being, c) altered state as a kind of movement or travel, or d) altered state as a physical process. Across the indigenous conceptualizations of altered states, a metaphoric-symbolic mode of thinking was strongly distinguishable. For example, Desana people understand altered states as ecstatic flights, by which an individual is returned to an immense womb. San people describe altered states as boiling and compare them to fire or heat. Glicksohn (2001) stressed that altered states of consciousness are those experiences which are not easily translatable into words. In such cases, metaphoric thinking and metaphoric-symbolic cognition is most likely to occur (Cajete and Williams, 2020).

Interestingly, the second mentioned example, the conceptualization of altered states of consciousness by San people, also has its counterpart in scientific discourse. San people describe altered states as a kind of physical process that radically changes the state of matter. Similarly, Glicksohn (2001) compared the change of consciousness from a normal to altered state to be

analogous to the change in physical state of water from liquid to steam or ice. This natural analogy of change of consciousness with physical processes mirrors the process called temporary symmetry restoration (Sundararajan & Fatemi, 2016). From this perspective, experience in normal states of consciousness can be compared to a state of asymmetry, where restrictions for admissible transformations are present (Sundararajan & Fatemi, 2016). In contrast, altered states of consciousness can mirror the moments of temporary symmetry restoration. During altered states of consciousness the mind can be expected to secede from its ordinary way of experience and temporarily leave its conventional ways of processing reality. This means that one's cognition shifts, although for only a limited time period, to the state of symmetry, i.e. a state that is generally characterized by a superposition of possibilities (Sundararajan & Fatemi, 2016; Trnka, Kuška, and Cabelkova, 2018). In this state of symmetry, all experiential variants are possible. Symmetry admits all possible experiences, even experiences that go against our common, everyday conscious experience (as is quite common in altered states of consciousness). However, these outlined analogies are preliminary and more theoretical development is needed in this field.

When comparing the indigenous understanding of altered states of consciousness to the recent psychological phenomenology of altered states of consciousness, several interesting insights arise. The indigenous understanding of altered state as a "different kind of being" may be related to a loss of (or diminished) sense of self that is proposed also by the phenomenological descriptions of deep meditative states and dreaming (Berkovich-Ohana, 2017). In contrast, the indigenous understanding of altered state as a special kind of perception could correspond to the idea of a disturbed flow of information from the body to the minimal-self sphere, i.e. the disturbed experience of "now" with a sense of agency and non-conceptual, perceptual first-person content occurring during intoxication by psychoactive drugs (Berkovich-Ohana, 2017).

Interestingly, some of the insights that emerged during the analysis of indigenous concepts may also suggest some broader implications. In Oglala and other Sioux groups, a fundamental force called the "Great Mystery" breathes the spirit into a human body at birth (DeMallie, 1987). After death, the spirit is believed to be transformed into a kind of non-local state that can be described as "being everywhere and pervading all nature". This idea is very similar to the concept of the "quantum sea", which originally emerged in physics (Puthoff, 2002) and was later also applied in anthropology (Trnka & Lorencova, 2016) and research of indigenous mythologies (Laughlin & Throop, 2001). The quantum sea is an all-pervasive energetic field including quantum vacuum energy that is a random, ambient fluctuating energy existing even in so-called empty space. This field is a single underlying substructure that is common for the entire universe and represents a primary source for the emergence of all material objects, as well as non-material processes (Puthoff, 2002; Trnka & Lorencova, 2016). The conceptual basis of the metaphor of the "quantum sea" is similar to the Sioux concept of the "Great Mystery". This example illustrates how conceptual development in science may reach similar conceptual meaning as indigenous knowledge. Of course, these similarities may be random results of parallel developments of thought in science and conceptual knowledge of some cultures. The parallel emergence of two similar conceptual meanings may be explained by the principle of equifinality (Pervin, 2001). This principle, coming from dynamic systems theory, suggests that the same endpoint can be reached through different routes. Therefore, it would be possible that the similarities in conceptual meanings may be the random results of two independent routes of a) scientific and b) cultural development. Interestingly, the metaphor of the "quantum sea" (Puthoff, 2002) also corresponds well with the conceptual knowledge of the Emberá Indians, who conceptualize the world as having originated from an original closed singularity containing everything that exists (Uribe, 1985), or

Kogi people, who conceptualize the individual consciousness as having originated from a life-giving fundamental force that permeates all things (Witte, 2017).

The present study has also practical implications for psychotherapy and mental health counselling inspired by native, indigenous traditions. In therapeutic systems following the symbolic healing model (e.g. Lee, Kirmayer, and Groleau, 2010), clients are exposed and confronted to indigenous healing symbols during the therapeutic sessions. The success of treatment depends on the therapist's ability to transform the clients' subjective states, including emotions and bodily sensations, using pre-existent indigenous cultural patterns. In the case that a therapist is not a native member of an indigenous culture, an in-depth understanding of the indigenous concepts like soul or consciousness is a necessary prerequisite for the successful application of the indigenous healing practice in modern European or other Western settings. The present study summarizes and provides this information in an accessible form to help support psychotherapeutic approaches inspired by native indigenous traditions.

Furthermore, the indigenous understanding of the mind, body, and disease plays an essential role also in body-oriented psychotherapeutic approach to post-traumatic recovery inspired by indigenous practices (e.g. Harris, 2009). Within this approach, the therapist engages clients with bodily practices that help them process traumatic events, reorganize their reactions to loss, and overcome their personal exposure to severe stressors. For a therapist who is not a native member of a particular indigenous culture, acquiring the indigenous conceptual understanding of mind and body is a necessary step for the future successful application of indigenous bodily practices and the post-traumatic recovery in a client.

The present study has several limitations that have to be addressed. First, it was not possible to retrieve the descriptions of all three phenomena, i.e. consciousness, soul, and spirit, from all of the studied indigenous cultures. The primary sources presenting empirical material from the indigenous cultures sometimes include only fragmentary information about the native understanding of consciousness, as the studies are rather focused on ethnographic research interests. Second, the terms "mind", "body", "soul", and "spirit" were used in an understanding from the position of recent psychology and cognitive science in this study. The meanings of these terms, however, may vary in different disciplines, and they are also perpetually changing under the light of new scientific discoveries. Furthermore, in some indigenous cultures, the meanings of terms "mind", "body", "soul", and "spirit" may overlap in part and may not correspond to the scientific definitional differentiation of these terms. Finally, the authors of the present study are not familiar with the indigenous languages of the studied cultures. An in-depth knowledge of indigenous languages may help achieve a deeper understanding of indigenous concepts and avoid translational problems in future research in this field.

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About authors

Radek Trnka is a lecturer and senior researcher at the Prague College of Psychosocial Studies and Palacky University Olomouc. His research interests include emotions, consciousness, creativity, coping with stress, and the interactions between culture and the human mind. Author of numerous papers published in international peer-reviewed journals. Within the philosophy of

science scope, he aims to critically examine how the principles of quantum theory can inspire the newest trends in psychology and anthropology.

Radmila Lorencova is an anthropologist teaching at the College of Applied Psychology in Terezin. She has conducted field research amongst the Dayak people of East Kalimantan, the Czech neo-Slavic pagans, and communities of “alternatives” (marijuana smokers, ecology movement adherents, living history). Her main focus is on ritual, spirituality, and ethnic or other group identities.

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