

An analysis of the *Gayatri* mantra as a mega-compression: A cognitive linguistic perspective in light of conceptual blending theory

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In this article, the *Gayatri* mantra, one of the most sacred chants to be found in Hindu lore, will be analysed as a blend, where an entire philosophy is compressed into these few syllables, which will be expounded upon here in more detail. Drawing upon insights from conceptual blending theory, this sacred mantra will be unpacked and explored, and it will be shown here that this ancient Rigvedic hymn is actually a nucleic compression which once tapped into leads the practitioner to new insights and higher levels of spiritual awareness as the inner meaning unfolds. Practising Hindus around the world revere and recite this mantra with the utmost reverence, and this is true of the Indian diaspora in South Africa as well. Aside from presenting this hymn through the lens of blending theory, the aim is to demonstrate and explain why exactly this mantra is chanted with such reverence and given precedence over the many other mantras found throughout the Vedic texts.

Keywords: Hindu philosophy; Vedas; Sankhya; cognitive linguistics; conceptual blending theory; *Gayatri* mantra.

Introduction

The aim of this article is to look at a well-known mantra and expound on the importance of the chant, which is seen as a mega-compression with concentrated layers of meaning. What this entails will be explained further in the section 'The *Gayatri* mantra' with regard to the mantra specifically and in 'References to the *Gayatri* mantra in other Hindu scriptures' section with regard to the theory being applied to shed light on the mantra. The context of where this chant comes from, and what it means within the context of largely Indian and Hindu society (including Indian diasporas), will be discussed below, followed by the theoretical framework within which this analysis is grounded, namely, blending theory (BT); however, emphasis is given on one particular aspect of the theory which talks about the idea of 'compression'. This nucleic decompression will lead to insights which speak about what the mantra stands for and aims to provide an explanation as to why chanting the mantra is believed to be conducive to spiritual edification and an intuitive understanding of the *Sankhya*¹ philosophy, which is one of the main schools of thought within the Indian philosophical tradition. This mantra is conceptualised as a mega-blend in the sense that as one breaks down the import of the *Gayatri* blend, one sees different aspects of the mantra which can be analysed as blends at different levels.

The *Gayatri* mantra

A brief outline of what the Vedic tradition is follows, although there is no space here to do justice to the importance of the Vedic tradition generally and the Vedas specifically. This is just a rudimentary outline intended to contextualise the appearance of the mantra known as the *Gayatri* mantra (henceforth GM) in the Hindu tradition.

According to Naicker (2013:349), the word 'Veda' simply means 'knowledge', and 'some would not even want to commit to using this term in any sense which would classify a certain body of work'. For the purpose of contextualising the GM, it would be necessary to understand what exactly the Vedas are and what the phrase 'Vedic tradition' refers to.

The Vedic hymns are seen as media via which ordinary people can connect with 'beings' from various celestial realms; these include gods, deities, ancestors or even disembodied spirits.

1. Sanskrit terms are indicated in italics, unless the term is derived (as in Vedic, not *Vedic*), or unless it is a quotation and the original text did not use italics – for the sake of textual fidelity, it is therefore written as is.

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These entities are propitiated in various ways, sometimes premised on the idea that if they are not, some kind of misfortune will ensue. These entities are also called upon to assist with various problems. Ancestor worship is very much part of the Hindu tradition as well, although this is not strictly part of the Vedic tradition. There are also mantras addressed to 'the Universal Being or the Absolute' (Krishnananda 1973:4). There are specific rituals prescribed, which would determine which deity is invoked. The GM specifically, for example, is dedicated to the goddess in her various aspects, especially Savitri.

Nowbath, Chotai and Lalla (1960:29) explain that there are four Vedas: the *Rig Veda* (comprising 10 chapters and 10 589 mantras), the *Yajur Veda* (comprising 40 chapters and 1976 mantras), the *Sama Veda* (comprising 29 chapters and 1875 mantras) and the *Atharva Veda* (comprising 20 chapters and 5977 mantras). The *Rig Veda* is concerned with various hymns praising the deities, and it is said to be the oldest of the four texts; of more relevance to this study, the mantra being analysed here first appears in this text, as discussed below. The *Yajur Veda* has a 'black' section and a 'white' section, as does the *Atharva Veda*, and primarily contains hymns to be chanted at the performance of a sacrifice. The *Sama Veda* comprises hymns meant to be sung during various sacrificial rites. The *Atharva Veda*, said to be the 'youngest' of the four, comprises various spells and incantations. If one reads the *Atharva Veda*, one would certainly understand why orthodox scholars would want to discount this as being part of Hindu sacred literature – it is filled with spells and sacrificial rituals, many of which are for worldly gain, like wooing a lover, material success, along with charms and spells to drive away diseases and even 'to injure the enemy' (Nowbath et al. 1960:27). This is a contentious and peripheral fact and need not to be delved into here any further, as this aspect of the *Atharva Veda* is not relevant to this study.

Each Veda has another four divisions known as the *Samhita*, *Brahmana*, *Aranyaka* and *Upanishad* (Raghavan 1996:265). The *Samhita* portion comprises various hymns for the deities. The *Brahmanas* detail how sacrificial rites ought to be carried out. These are loosely designated as *Karmakanda* [the ritualistic portion].

The *Samhitas* and the *Brahmanas* are meant to complement each other, as the hymns from the former are generally meant to be chanted during the latter's rites. The *Aranyakas* and the *Upanishads* are the portions dealing with mystical contemplation. The rites mentioned in the Vedas can be performed for material gain on earth, or for spiritual edification, for which the practitioner will be rewarded in the 'hereafter'. Emphasis on the latter leads to the philosophic mysticism referred to as *Jnanakanda* [knowledge section], the portion dealing with supreme knowledge, whereas the converse is referred to as the *Karmakanda* [ritual section].

The concluding section of each Veda has been gleaned and published separately and is collectively known as the *Upanishads*, which is the scriptural basis for the school of

thought known as the Vedanta. There are three schools of thought within the Vedanta tradition, and it is said that there are 108 various Upanishads, generally focussing on the philosophical metaphysics within the tradition (Chatterjee 1996).

As mentioned, this background is necessary because the GM is to be found in the *Rig Veda*, although much more can be said about the tradition as a whole. The *Rig Veda* is divided into 10 books, known as *mandalas*, and the said mantra is to be found in the third book, in Section 62, stanza 10 (3.62.10). The mantra reads as follows, when transliterated (without diacritics):

Om Bhur, Bhuva, Swaha; Tat Savitur Varenyam Bhargo Devasya Dheemahi; Dhiyo Yonaha Prachodayat.

Translated into English, the mantra reads as follows, according to Adiswarananda (2011):

Om. We meditate on the radiance of that Supreme Divine Being, the creator of the world planes – earth, heaven and those spaces in between. May that Divine Being direct our intelligence. (p. 128)

As will be discussed in the next section, the syllable structure of the mantra is quite significant and essentially is the basis for the current analysis.

References to the *Gayatri* mantra in other Hindu scriptures

The GM is quite pervasive not only within actual practice, with almost every Hindu temple, ashram and household making it part of their daily prayers, but also within the scriptural canon. In addition to its appearance in the above-mentioned scripture, the GM is referred to specifically in several other Hindu scriptures, including Chapter 2 of the *Manu Smriti* (Sivananda 2018:3), Chapter 3, verses 12 and 16 of the *Chhandogya Upanishad* (Sivananda 2018:6–7), Chapter 3 of the *Aitareya Upanishad* and in various sections of other Upanishads (Adiswarananda 2011:440). Adiswarananda (2011:440–441) provides a fairly detailed list of references to the GM in various primary and secondary scriptures. However, an in-depth discussion of what is said in text would require at least another full paper and therefore would not be discussed here in detail.

There are various encomiums, sometimes ostensibly hyperbolic, written and said about the GM, some of which are cited below:

- 'The Gayatri should be the one mantra for all Hindus' (Sivananda 2018:2).
- It is 'the essence of the Upanishads' (Sivananda 2018:2).
- 'The traditions and scriptures of Vedanta consider the Gayatri to be the *most sacred of all mantras*' (Adiswarananda 2011:127 – italics added).
- '[...] *nothing* is more exalted than the Gayatri' (Sivananda 2018:2, [author's own italics])
- Shankara, respected as the key exponent of the non-dualistic school of Vedanta says, '[i]t is beyond the

TABLE 1: Mapping of MB1.

Source: Syllables 1–5 of GB	Target: The five organs of knowledge
1st syllable	→ Ears
2nd syllable	→ Eyes
3rd syllable	→ Nose
4th syllable	→ Tongue
5th syllable	→ Skin

GB, Gayatri Blend.

TABLE 2: Mapping of MB2.

Source: Syllables 6–10	Target: The five organs of action
6th syllable	→ Feet
7th syllable	→ Hands
8th syllable	→ Rectum
9th syllable	→ Genitals
10th syllable	→ Mouth

TABLE 3: Mapping of MB3.

Source: Syllables 11–15	Target: The five subtle sense-elements
11th syllable	→ Hearing
12th syllable	→ Sight
13th syllable	→ Smell
14th syllable	→ Taste
15th syllable	→ Touch

capacity of a man to know and describe the importance of the Gayatri. The thing by which the divine sight for self-realisation is obtained, is the result of the inspiration of Gayatri' (Pathar 2006:20).

- Radhakrishnan, the world famous philosopher-statesman of India, is cited as having said that the *Gayatri* has 'all-pervading power' (Pathar 2006:21).

On a more esoteric and arcane note, it is generally accepted that mantras are mysteriously imbued with a mystical power, which is unleashed when chanted correctly. It is also believed that when a spiritually evolved person initiates a disciple into a mantra, this mysterious power is passed simply through the sounds that are uttered.

This is why it is said that mantras should not be translated into other languages because 'the effectiveness of a mantra depends upon the power inherent in its sound structure' (Adiswarananda 2011:128). Adiswarananda (2011:144) later states that by concentrating on the GM, one's dormant spiritual tendencies are unleashed.

Another ostensibly counterintuitive claim made by scholars and spiritual leaders within the Hindu tradition is that understanding the semantics and the import of the mantra intellectually is not a *sine qua none*; one can repeat the mantra mechanically 'without full knowledge of the science of metre and rhythm' and still be blessed with the benefits believed to be derived from such practice, just as 'a person who mechanically follows the exact formula for preparing a chemical compound obtains that compound, without having knowledge of chemistry' (Adiswarananda 2011:128).

Regarding the issue of metre and syllable structure, another conspicuous point is the fact that the GM comprises 24

TABLE 4: Mapping of MB4.

Source: Syllables 16–20	Target: The five gross elements
16th syllable	→ Ether
17th syllable	→ Air
18th syllable	→ Fire
19th syllable	→ Water
20th syllable	→ Earth

TABLE 5: Mapping of MB5.

Source: Syllables 21–24	Target: The human mind
21st syllable	→ Intellect
22nd syllable	→ Ego
23rd syllable	→ Memory
24th syllable	→ Consciousness

syllables, which is significant in Hindu philosophy as there are 24 'cosmic principles' comprising the *Sankhya* philosophy, which will be outlined briefly in the analysis below. Number 5 is significant in the chanting of this mantra because various sub-aspects comprising discrete aspects, or mental spaces, are divided into five segments. Number 4, as a remnant symbolising the human mind (see Table 5), could be significant because it is the most gross aspect, which is the starting point in most spiritual practices, and is certainly the explicit starting point in the *Yoga* philosophy, which is based on the ideology of the *Sankhya*. Sivananda (2018:4, [*author's own italics*]) points out the following: 'Gayatri bestows the four kinds of Purushartha ["objects of human pursuit"] viz., Dharma (righteousness), Artha (wealth), Kama (desired objects) and Moksha (liberation or freedom)'. Sivananda also (2018:6, [*author's own italics*]) alludes to the fact that one should meditate on the 'five-faced Gayatri'. More importantly, Sivananda (2018, [*author's own italics*]) has the following advice regarding the actual chanting of the GM:

Herein there are *five halts* or stops viz., 'Om' is the first stop; 'BhurBhuvahSvah' the second; 'Tat SaviturVarenyam' the third; 'BhargoDevasyaDheemahi' the fourth; and 'DhiyoYo Nah Prachodayat' the fifth. While chanting or doing Japa of the Mantra, we should stop a little at every stop or halt. (p. 2)

This is significant because when the mantra is chanted correctly, 'a sound vibration representing the mantra is produced within. Meter and rhythm play an important part in producing this sound vibration' (Adiswarananda 2011:127).

The aim of this study is to try to explain what could be happening conceptually when this mystical power is unleashed, and BT allows for such an explanation via the phenomenon of compression. The next section outlines the key tenets of BT, which will be applied in the 'Analysis' section.

Theoretical framework²

Fauconnier and Turner (2002) pioneered the theory commonly known as BT. This theory has been applied to a variety of domains, although there seems to be one specific sub-domain

²Sections here are based on work done by Naicker (2016), although his emphasis there was not on this particular theory, and the cited study was actually viciously critical of Blending Theory as a whole.

where this framework has not been applied to in this way, namely, compression in the context of Eastern philosophy. However, Fauconnier (2005:531) and others have referred to the theory being applied to the domain of religion in other contexts, like how a ritual space is created (cf. Sørensen 2007), for example.

Coulson and Oakley (2000:175) refer to BT as an attempt to account for dynamic, 'online meaning construction'.

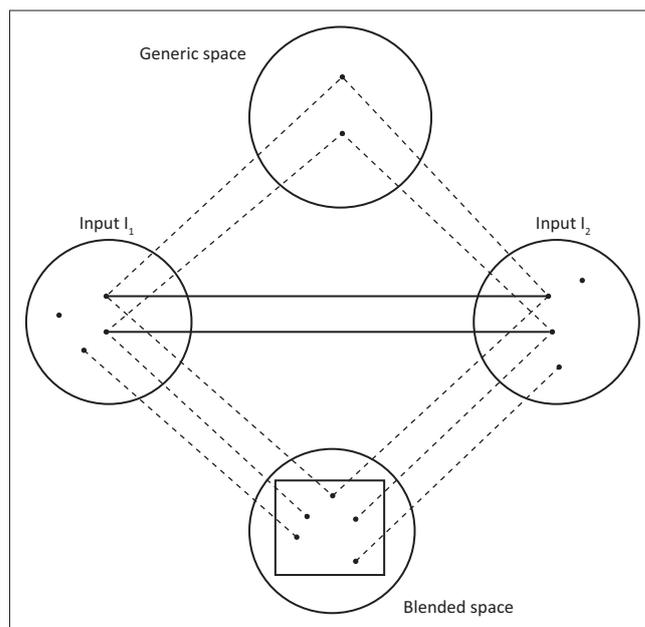
Likewise, Fauconnier and Turner (2002:40) refer to BT as a theory that is meant to account for conceptual 'packets', which are 'constructed as we think and talk for purposes of local understanding and action'.

Metaphor is understood as mappings between domains or frames, which are generally assumed to be latent in long-term memory. The ability to blend, on the other hand, most probably resulted in an 'expansion of working memory', which now uses blending 'as a platform' (Turner 2014:215). Furthermore, blends are usually novel and generated in the moment of thinking, speaking and interpreting in working memory, but they recruit entrenched mappings and frames from long-term memory.

Many assume that the kind of mapping found across disparate domains can be seen as a kind of conceptual integration.

There are numerous examples cited in the literature about blending taking place in real time, like a group of children imagining a basketball court with a piece of paper and a wastepaper basket, thereby blending two very disparate mental spaces (Fauconnier 2010:186). Fauconnier and Turner (1998, 2002) expanded on BT and illustrated blends diagrammatically. They postulated a 'generic space', followed by (at minimum) two input spaces and a blended space. The basic diagram of a blend is presented in Figure 1.

Turner (2010:20) concedes that the circles representing input spaces are 'theoretical constructs', which may or may not change as the theory develops, and further adds that 'there is no such circle in our brain'. Blending theorists consider diagrams like the one depicted in Figure 1 as mnemonic aids, in that they represent a hypothetical model of how thinking takes place. Turner (2010:27) even says that 'conceptual integration does not look like this fetish four-space diagram'. Hence, a rudimentary schema of a prototypical blend is presented simply for illustrative purposes. In Figure 1, the generic space represents one's general knowledge schema within a particular context, and selective aspects from the generic space get projected into the respective input spaces. The contents of these mental spaces are dictated by the context. The input spaces are 'partitioned mental packets' which can be 'connected together' (Fauconnier 2010:4). It is assumed that these input spaces are commensurable, in the



Source: Adapted from Fauconnier, G. & Turner, M., 1998, 'Conceptual integration networks', *Cognitive Science* 22(2), 133–187. https://doi.org/10.1207/s15516709cog2202_1

FIGURE 1: A general conceptual integration network schema.

sense that there are 'counterpart connectors' between them that can be mapped (Sørensen 2007:57). These input spaces then project selected aspects of each input space into the blended space, which results in emergent structure. This process is referred to as 'running the blend'. The counterpart connectors are bidirectional, and this implies that information is mapped both ways, meaning that the mental spaces are dynamic and constantly updated in light of new projections and mappings being made. People can even 'adjust the projections' made through feedback (Turner 2014:44).

Fauconnier (2010:141) says that scholars 'need to study not just the superficial mapping, but the underlying networks that really are responsible for these metaphors', implying that the complexity 'behind' metaphors can be explained via BT. Fauconnier and Turner (2008: 53) agree, pointing out that because scholars now have a 'richer and deeper understanding of the [cognitive] processes underlying metaphor', the complexity behind metaphorical mappings can be better understood. The standard distinction between input spaces as online, transitory, mental packets, and frames and domains as entrenched schemas of knowledge stored in long-term memory is assumed here.

Compression is a very important sub-component of BT because 'what otherwise would lie beyond human understanding is compressed via blending to human scale' (Turner 2014:183). These specific types of blends were referred to as 'dino compressions' in work of Fauconnier and Turner (2002). However, Turner (2014:200) goes so far as to refer to an advert proscribing the feeding of bears as a 'phonological compression', because the slogan 'A fed bear is a dead bear' creates a blend between the feeding and the dying, a link which shows emergent structure that would not otherwise have been there.

Turner (2014:208) then conducts a thought experiment, asking his readers to imagine long line of gears are on the floor, spanning as far as the eye can see. The first one is moved to the left, and the second to the right, with the third to the left and the fourth to the right, and so on. Most people would have no trouble in inferring that *all* even numbered gears would be to the *right*, and all *odd* numbered gears will be to the *left*. We do this via a 'compressed blend' which could be illustrated as follows: Turner claims that we otherwise explain why we are able to immediately say which one is to the left or right, given that it is theoretically infinite.

In everyday English, identity compressions are at play when one looks at a similar-looking item to, say, the one owned by the speaker, who then says, 'Hey look, that's my ____'. The author recently looked at a motorbike which looked almost exactly like his and exclaimed to the persons present, 'That's my bike!' What is happening here is that all motorcycles which are similar enough gets compressed into a single blended space, enabling the speaker to refer to all similar-looking bikes as if they were one entity. There are several other examples as well, like when referring to the actor who plays Roger Taylor in the upcoming movie *Bohemian Rhapsody*, based on British rock group Queen, a fan commented as follows, 'Walter Hartright is Roger!' referring to another character played by the actor on a popular British TV show, called *The Woman in White*.

The actor goes by the name of Ben Hardy, and for lack of space, this blend cannot be expounded upon in detail, but it is clear that there are several identity compressions and blends at play, once one understands the various allusions to literature and pop culture. This is a very pervasive strategy in meaning construction and serves to bring otherwise incomprehensible phenomena down to human scale because a central feature of blending is the (Fauconnier 2005):

... [A]bility to compress diffuse conceptual structure into intelligible and manipulable human-scale situations in a blended space. These compressed blends [...] can be expanded flexibly to manage their integration networks. (p. 523)

Fauconnier (2005) adds that:

[C]onceptual integration networks with useful compressions are the rule in human thought and action, as has been shown for domains as different as material anchors [...], sign language [...], and magic and religious practices. (p. 524), [author's own italics]

Mark Turner (2016)³ confirms that the latter certainly includes the hypothetical happenings 'in' the human mind whilst engaging in practices like the chanting mantras. Fauconnier (2005:531, [author's own italics]) actually goes on to say that when one analyses domains pertaining to the mystical and arcane, they reflect 'the deepest reality behind our conscious experience' because 'they are part of shared religious beliefs', although he does not expand on that particular aspect directly.

The discussion above ultimately culminates in the claim that mantras like the GM are actually compressions and are

3. Personal communication during the author's tenure as a visiting scholar at Turner's home institution at case Western Reserve University in Cleveland, Ohio.

referred to here as 'mega-compressions' because the author argues that these terse, concise aphorisms (for want of a better word) are like the nucleus of an atom, which houses incredible energy, which is unleashed by the practitioner chanting the words correctly, resulting in some kind of esoteric flow of energy 'between' the words uttered and the practitioner. In this way, the 'power of prayer', as hackneyed as it may seem, can be explained.

The final point regarding BT is that metaphor, and its cognate, metonymy, can plausibly be said to have emerged from conceptual integration networks as a whole, and a detailed discussion of how this happens is to be found in Fauconnier (2008) and in works like Evans and Green (2006). Here, it is taken for granted that this process occurs quite pervasively, with the caveat that this does not necessarily imply that all metaphors, conceptual or otherwise, arise from blending. To assume this would be to commit a fundamental logical fallacy anyway, known as 'the fallacy of affirming the consequent', discussed in Naicker (2012:60), of course, Naicker (2012) discussed this within the context of a critique of structural universalism in this study; the details are applicable to logical structure in general, but this is a digressive point and will not be delved into much further here.

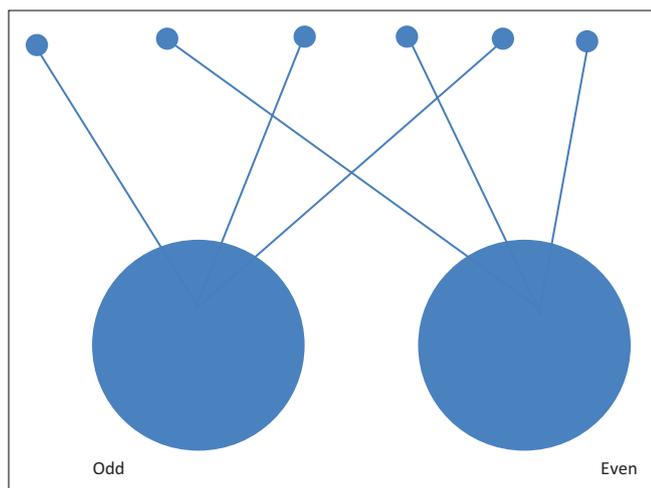
The next section applies the BT to the GM, together with an exposition of the import of the blend.

Analysis

Once understood as a mega-compression in terms of BT, the GM can be systematically unpacked and explained at different levels. Perhaps this will help explain why moments of spiritual epiphany are experienced by those who chant the mantra regularly, possibly because the spiritual energy inherent in the very words is unleashed systematically, like the splitting of a nucleus, which eventually culminates in a state of spiritual realisation, similar to those experienced by mystics of all traditions. This is an attempt to explain 'rationally' how that might happen, in light of BT.

It may be a fiat assumption, but the idea here is that once it is accepted that there is a systematic decompression at play, then the mere chanting of this mantra activates mental spaces which create connections from the generic space to the mapping between the two input spaces, which allow the practitioner access to this metaphysical realm, and in fact creates some degree of concomitant physical edification as a result. The first level of access comes from activating the mystical number 'five' by pausing five times during the chanting of the mantra, which then culminates in the unfolding of the 24 cosmic principles that form the basis of Reality, in line with the *Sankhya* philosophy.

The first four levels of analysis after illustrating the mega-blend will expound upon the *jnanendriyas* [organs of knowledge], the *karmendriyas* [organs of action], the *tanmatras* [subtle sense elements] and the *mahabhutas* [gross elements], followed by the fifth level that will pertain to the human mind.



Source: Turner, M., 2014, *The origin of ideas – Blending, creativity and the human spark*, Oxford University Press, Oxford.

FIGURE 2: An illustration of compression at play.

To repeat, the first input space is activated by the mere chanting of the mantra, and, of course, it is not to be assumed that there is a hierarchy of any kind here, although an intuitive argument can be made that the level of access will first pertain to domains which are less subtle, although this is speculative and is not specifically argued for here.

The number 24

Number 24 can be mapped onto the 24 evolutes of nature, which will be broken down and analysed briefly below (Figure 3). Broadly speaking, the GB can be depicted as follows, with the generic space housing the 24 principles inherent in the *Sankhya* philosophy, which projects onto the input space 1, housing the various groups of syllables, which map onto the various sub-aspects that pertain to Hindu cosmology and human nature (input space 2), which project onto the practitioner who recites the mantra, who gains access to the subtle inner meaning of the mantra.

What Figure 4 depicts is a mega-compression, followed by a decompression into the constituent parts, which is again re-compressed into the GM; the import here is that by chanting the mantra correctly, the spiritual aspirant is able to unleash the power inherent in the mantra by decompressing it and therefore gaining access to mystical experiences resulting from the projections into the subtle realm housing the wisdom of the *Sankhya* principles.

Before going on to expound briefly on the various sub-components of the *Sankhya*, a broad outline of the tradition may be in order at this point.

An outline of the Sankhya philosophy⁴

The etymology of the term *Sankhya* is not clear, but some have said that the word could either connote 'knowledge', as it is a system that advocates knowledge as a means to liberation, or 'number', as the system postulates 24 'cosmic

⁴This section is mostly taken from Naicker (2016), to which the reader is referred for a comprehensive discussion.

principles' that serve as the basis for the creative evolution of the universe (discussed below). In his *Glossary of Sanskrit Terms*, Sivananda (2015:113) simply defines the word *Sankhya* as 'a system of philosophy propounded by Kapila'.

The *Sankhya* is said to be 'a system of dualistic realism which is the basis of a religion without belief in God'; like the other systems of orthodox thought, the aim 'of the *Sankhya* religion is the liberation of man's self from bondage to the body and the material world' (Chatterjee 1996:208). The most important scripture within this system is known as the *Sankhya sutras*, and it contains six chapters comprising 526 *sutras* [aphorisms] altogether. A commentary on this work was written by Vijñānabhikṣu, a scholar of the 16th century, and is known as the *Sankhya-pravacana-bhasya*. The oldest text attributed to the *Sankhya* tradition is the *Sankhyakarikas*, written by Isvarakrishna, a scholar of the 6th century.

The *Sankhya* postulates three methods of knowledge: *pratyaksha* [direct perception], *anumana* [inference] and *sabda* [testimony]. *Pratyaksha* refers to the direct sensory perception of an object and is further sub-divided into *nirvikalpaka* [indeterminate] and *savikalpaka* [determinate] perception, the former being something like seeing a table, and then upon closer inspection recognising it to be a wooden table, perhaps used for dining, and whatever other details transpire after a closer examination of the percept. *Anumana* is used to refer to knowledge gained via abductive inference, for example, upon seeing smoke, one can infer that there must be a fire causing it. Finally, the testimony of a reliable person (*sabda*) is taken to be the third source of knowledge – known as *aptavakya*. In this regard, the *Sankhya* recognises the insights given in the Vedas as the ultimate knowledge, as we are relying on the testimony of the great sages who transcribed their spiritual insights, which are 'supersensuous realities' otherwise beyond one's ken (Harshananda 2011:31).

According to the *Sankhya*, the *purusha* [individual soul] and *prakriti* [nature] are the only 'fundamental realities', without a need for a Supreme Being transcending these two (Harshananda 2011:39). The basic argument behind this conclusion is based on something called *Satkaryavada* [the effect pre-existing in the cause]. This relates to the idea that when moulding a pot out of clay, for example, the pot, in a sense, already 'existed' in the clay, just in a different shape. Based on this idea, given that the qualities of pleasure, pain and indifference seem to occur quite pervasively in the world, 'the *Sankhya* comes to the conclusion that there must be three basic subtle substances from which these three characteristics are derived' (Harshananda 2011:32–33).

These qualities are called *gunas*, and it is believed that they 'can never be separated' because they always exist together; in other words, every person is an admixture of these qualities in different proportions (Harshananda 2011:33). There are three qualities: *tamas* [inertia], *rajas* [active nature] and *sattva* [calm nature].

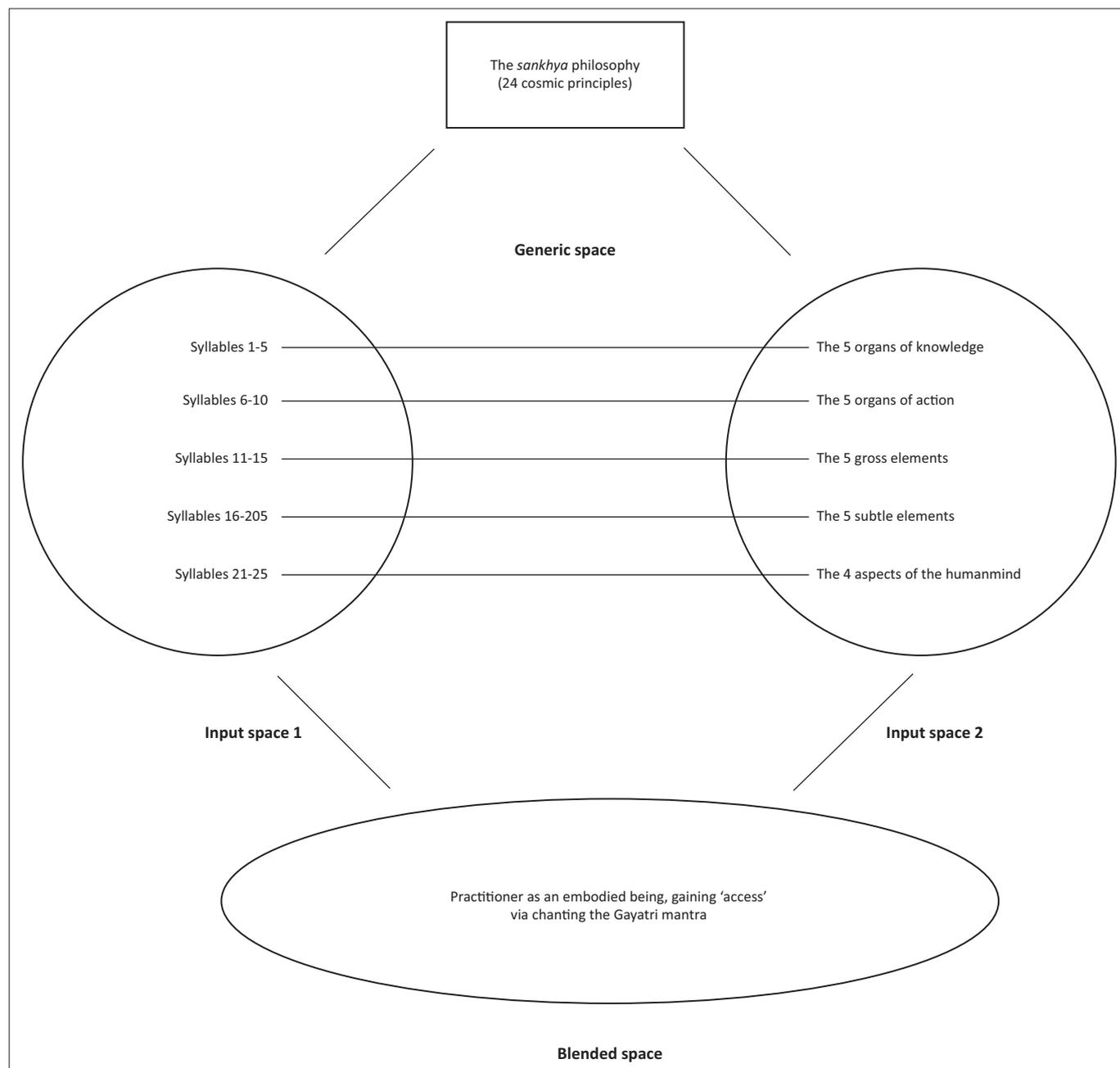


FIGURE 3: The *Gayatri* mantra depicted as a mega-blend.

Prakriti, being the basic, primal material from which the universe was said to have manifested, is said to be in a state of *jada* [having no consciousness], but exists in a state of equilibrium between these three states. When there is contact between the *purushas*, of which there is said to be an infinite number, then this state of balance is disturbed, and this sets in motion the creative process, leading to the evolution and manifestation of the universe.

As a result of the *gunas* mixing with one another, the first thing to manifest as a result is the *Mahat Buddhi* [Cosmic Intellect], from which evolves the *ahankara* [principle of individuation], from which also evolves *Manas* [Cosmic Mind], the *jnanendriyas* [organs of knowledge/perception] and the *karmendriyas* [organs of action, like the hands

and feet]. Altogether, there are 24 such principles manifesting themselves through a process of evolution because of the interaction of the *prakriti* and *purusha*, and because of the 'permutation' and 'combination' of such, everything one sees in the universe evolves; finally, 'each *purusha* gets involved with a psycho-physical complex (body) as per his karma' (Harshananda 2011:35). Hence, the individual soul must now strive for liberation by freeing itself from the karmic bonds which cause rebirth in this manner.

Naicker (2013) points out that:

[T]he *Sankhya* outlines the Hindu concept of the mind, and since *Yoga* deals with thought control and meditation techniques, the link between the two systems is evident. *Sankhya* is also seen as an anachronistic system, since *Yoga* is said to be based on the

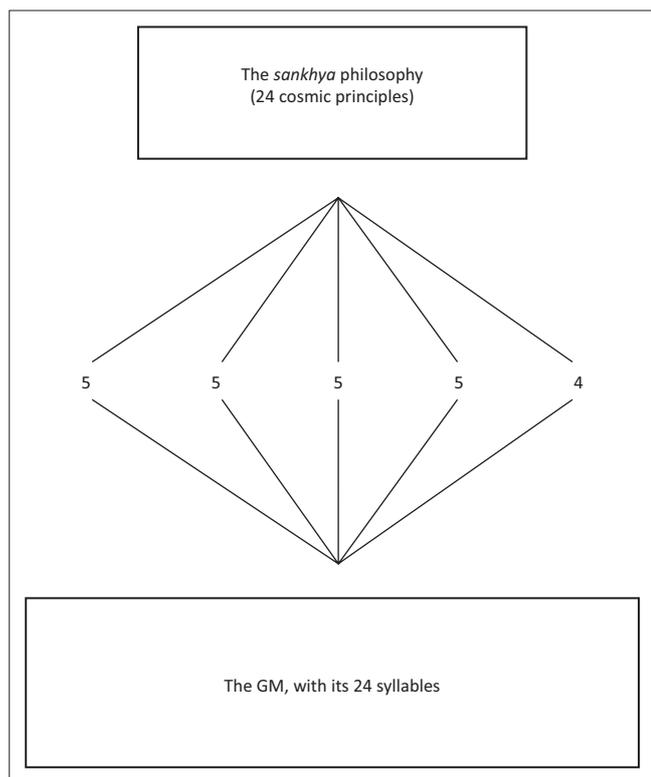


FIGURE 4: The *Gayatri* mantra depicted as a mega-compression.

Sankhya principles, and has, in a sense, taken its place. *Yoga* is practiced by many in its practical form, though there is an over-emphasis on *Hatha Yoga*, which is the physical aspect of it based on certain *asanas* ('postures'), and has regrettably been equated with *Yoga* in its entirety in Western popular culture. (p. 353)

This is why, according to Harshananda (2011:39), the *Yoga* system has been referred to as *Sesvara-Sankhya* [*Sankhya* with God].

Much more can be said about the *Sankhya*, but space precludes an in-depth analysis here. Nevertheless, the rudimentary outline above serves to illustrate this school of thought as the mainstay of the Hindu tradition, given its status as the underlying ideology in the practice of *Yoga*.

This section analyses the mega-compression. The format used is in line with the recommendation by Kövecses (2010:9–10), whereby the metaphor is stated, following by a table illustrating the mapping between the source and target domains, followed by a brief explanation of the import of the metaphorical blend (MB). The source and target domains are repeated in the table as well. When the MB is written out, the target domain appears first (x), followed by the source domain (y), as in *x is y*.

Analysis of the mega-compression

Number five (analysed in groups of four: five times four = the first 20 syllables)

These MBs emanating from the decompression of the *Gayatri* blend are listed below:

MB1: THE JNANA-INDRIYAS ARE THE FIRST FIVE SYLLABLES OF THE GAYATRI

See Table 1:

This cross-domain activation pertains to the honing of the organs of sense perception, leading to a sharper mind being able to analyse information garnered via the organs of knowledge, which naturally makes the aspirant more perspicacious.

Sensory input is said to stimulate the senses, which starts as a stimulus from outside. There are two ways in which this happens (e.g. if one considers the case of ocular stimulation): firstly, the presence of the object from one's visual field initiates mental vibration, and then the light rays, which emanate from the object of perception strike the eyes, which get processed by the occipital lobe, etc. Likewise, there are four other senses used to garner information from the empirical world, without which one's knowledge would be severely limited. This kind of sensory stimulation creates activity in the mind via the nervous system.

These abilities are overseen by the mind, and it will be explained in MB5 below that the Indian or Hindu conception of 'mind' is more nuanced than the English language can convey, as the four aspects can be taken to denote what is meant by 'mind' in various contexts.

MB2: THE KARMENDRIYAS ARE THE SECOND FIVE SYLLABLES OF THE GAYATRI

See Table 2:

The embodied is ought to be deemed an object, like any other, as it is also constituted of the five elements, which serve as a means for the body to function. One's actions are a result of these powers. According to Krishnananda (1981:8), there 'is an energy within the body which is other than the elements. This energy is called *prana* or vital force', and this vital force has various functions that are responsible for the functioning of the physical being. These are moved by the power of the *prana*, 'which is a blind energy and it needs to be directed properly' (Krishnananda 1981:8). The idea is that given that the vital force is the fuel that powers the organs of action, it needs to be directed somehow so that one's behaviour in the world is somewhat orderly, and this is the function of the intellect in the body (in Hindu thought there is no Cartesian distinction between the mind and body), which directs the vital energy accordingly. The aim of the practice of *Yoga* is to control and restrict the organs of action starting with physical self-restraint, and eventually leading to mental self-restraint which allows the practitioner to tap into this vital energy. Chanting of mantras is one way to control the mind and tap into this energy at various levels. Using the organs of action to perform good deeds in a directed and systematic manner is known as *karma yoga*, and doing this together with chanting, known as *bhakti yoga*, enhances one's access to, and control of, this vital energy.

MB3: THE TANMATRAS ARE THE THIRD FIVE SYLLABLES OF THE GAYATRI

See Table 3:

One can see that there is another blend at play here, as the elements from the target domain in MB1 map directly onto the elements in the target domain in MB2.

Krishnananda (1981) explains the *tanmatras* as follows:

Within the five gross elements there are five forces which manifest the elements. These forces are the universal causes of everything that is physical, and are called *tanmatras*, a term which signifies the essence of objects. There is such a force or power behind the elements of Ether, Air, Fire, Water and Earth. *Sabda* or sound is the force behind Ether. But this sound is, different from what we merely hear with our ears. It is the subtle principle behind the whole of Ether, on account of which the ears are capable of hearing at all. This is sound as *tanmatra*. Likewise, there are the *tanmatras* of Air, Fire, Water and Earth, called respectively *sparsa* or touch, *rupa* or form, *rasa* or taste and *gandha* or smell. *These powers are subtle energies immanent in the elements constituting the physical universe.* (p. 8), [author's own italics]

There are two things to note once more: there is another blend at play here, with sound mapping onto ether, etc., and the fact that 'subtle energies' are immanent means that there is a *compression*, which can be accessed via decompression.

MB4: THE MAHABHUTAS ARE THE FOURTH FIVE SYLLABLES OF THE GAYATRI

See Table 4:

Just as all mental faculties can be reduced to five types of function, so too can all objects be described in terms of the above-mentioned 'five great elements', or *pancha mahabhutas*. The mapping above is listed in ascending order of subtlety, with 'the succeeding one being grosser than the preceding' (Krishnananda 1981:6).

More to the point, in terms of understanding this metaphorical blend as a systematic decompression, Krishnananda (1981:6, [author's own italics]) also confirms that this entails that 'the preceding element is the cause of the succeeding, so that Ether may be regarded as containing all things *in an unmanifested form*', and then further adds that 'these elements constitute the whole physical cosmos'. Krishnananda (1981:6) further explains that the sense organs map onto each of these elements, as it is with the ear that one comes 'in contact with Ether and hear[s] sound which is a reverberation produced by Ether'. Similarly, touch 'is the property of Air', as it is felt with the tactile sense; with the eyes one contacts light, 'which is the property of Fire'; with the palate, one tastes things, 'which is the property of Water', and with the nose, one 'smells objects, and this is the property of Earth' (Krishnananda 1981:6). Later on in the same treatise, the following is said (Krishnananda 1981):

The act of meditation leads to the attainments known as *samapattis*. While the object chosen for purpose of meditation can be any particular unit or entity, whether perceptual or conceptual, the final requirement is an absorption of consciousness in the structure of the cosmos itself, which is constituted of the five great elements. (p. 51)

What is most important here is the interplay of the metaphorical blends with each other, lending credence to the claim that there are 'multiple compressions', and that meaning creation and conceptualisation is a result of the (Fauconnier 2005):

[L]inks and compressions of the network as a whole. What is emergent in the network is the compression of diffuse links into coherent vital relations in the blended space and projection of the blended space back to the inputs. (p. 528)

Therefore, the current analysis is a cogent confirmation of one of the key tenets of BT.

The number four (the last four syllables)

Besides the aforementioned discussion in Section 2.1 on the significance of the number four, it may be worth noting that the metaphorical blends discussed above are also fourfold, which is obviously why or how it comprises the first 20 syllables of the GM (five times four).

MB5: THE HUMAN MIND⁵ ARE THE LAST FOUR SYLLABLES OF THE GAYATRI

See Table 5:

The mind is seen as a tool, with the intellect playing the role of the active subject, thereby allowing for judgements to be made regarding various circumstances. The intellect is associated with the individual ego, which allows for self-identity as an individual, and the nexus between the intellect and the ego is inextricable, 'like fire from its heat' (Krishnananda 1981:4). Consciousness is that animating mainstay of the human mind and includes the 'sub-conscious', which works synergistically to draw upon information housed in the memory bank. The practice of *Yoga* as a whole, which includes chanting, starts with the practice of mind control, as the senses are controlled by the mind, and as the last 'layer' of this decompression, this MB is the most accessible, and most easily controlled, which is why it is the starting for most spiritual practices, including the chanting of the GM in preparation for silent chanting or meditation, which takes the practitioner into the other epistemological and spiritual realms. It ought to be evident however that these metaphorical blends function as a gestalt and as such cannot be truly separated given their veritable ontological inter-reliance on each other.

Summary

This section demonstrated the GM as a blend and showed how different mental spaces are activated by the chanting of

5. As there are close to 16 terms for the English word 'mind' in Sanskrit, and many texts use these terms differently, depending on the school of thought, the English term will be used here, as opposed to the norm hitherto, with the Sanskrit word written in the MB at the top of each table, but written in English in the actual table.

the mantra, and that by chanting using the correct rhythm and meter, one activates the generic space housing the 'cosmic principles' inherent within the mantra in compressed form and gains access to it, which is experienced in various ways as different aspects of the mantra's inner meaning unfold. These discrete aspects, once decompressed, were expounded upon briefly as metaphorical blends emanating from the general blend, with the understanding that emergent structure (Fauconnier 2005):

[R]esides in the entire integration network and the compressions that operate within that network. In other words, what is novel and powerful in the emergent structure is the way in which blended spaces remain linked to the network as a whole. (p. 524)

Conclusion

This article expounded upon the import of the GM, which appears in the *Rig Veda*, as well as a number of other well-known Hindu scriptures. The GM was analysed in light of BT, and it was shown that the mantra functions as a mega-compression, which means that this mantra can be decompressed systematically and understood at various levels as a conventional blend. The levels revealed included:

- A mega-blend showing that the 24 syllables in the GM map onto the 24 cosmic principles comprising the *Sankhya* school of thought in Hindu philosophy.
- Once decompressed, the number five seemed to be especially significant because these revealed four other sub-blends: these spoke about the following: the *jnandriyas*, the *karmendriyas*, the *tanmatras* and the *mahabhutas*.
- Finally, the fourfold nature of the human mind was explained as the final aspect.

From a theoretical perspective, in addition to the application of the theory to a novel domain, the theory itself was simultaneously being used as a conventional blend understood in terms of four-domain mental spaces and also as the upshot of decompressing the very same phenomenon, in other words, seeing the conventional blend as a result of decompressing the mantra. This shows that compression and cross-domain mapping can indeed be applied to the same phenomenon and it speaks about the versatility of the theory as a whole. As far as the author is concerned, this is the first study to demonstrate a phenomenon (the GM) whereby a standard blend – followed by compression and decompression, followed by its constituent metaphorical blends – applies one of the three principles to a given phenomenon, showing that Fauconnier (2005:523, [author's own italics]) has a point when he says that the 'patterns are *all products* of conceptual integration networks'. Finally, the author believes that this article will shed new light on the way in which the GM is understood and analysed.

Lastly, as a recommendation for further research, similar analyses can be done for other hymns or mantras, both within the tradition and outside of the Hindu lore. This could lead to new interesting insights which may not have been thought of

and will also test the durability and applicability of the theory. The mantra can also be analysed from a numerological perspective, whereby the number 'three' can be derived from the 24 cosmic principles (two plus four divided by two), resulting in the number 3, which shows up as a pervasive trinity as in many other traditions. The way numbers are derived and calculated from a numerological perspective within the Indian Vedic tradition has been explained in great detail in various works, like Johari (1990). However, the derivation, symbolism and significance of the number 'three' can be a rich source of data for another paper altogether. In addition to deriving the number 3, it is also evident that there are three components to the mantra itself: the first line (*BhurBhuvahSvah*), the medial hemistich (*Tat SaviturVarenyam* [/'*BhargoDevasyaDheemahi*]) and the last line (*DhiyoYo Nah Prachodayat*). For example, an analysis could be done based on Sivananda's (2018) statement, which reads as follows:

Brahma milked out, as it were, from the *three Vedas*,⁷ the letter A, the letter U, and the letter M; these form by their coalition *the three trilateral* monosyllable, together with three mysterious words, Bhur, Bhuvah, Svah, or earth, sky, heaven. From the *three Vedas* also, the Lord of creatures incomprehensibly exalted, successfully milked out the three measures of that ineffable text, beginning with the word Tat, and entitled Savitri or Gayatri. (p. 6), [author's own italics]

Adiswarananda (2011:129) provides an analysis and explanation behind the symbolism of the three goddesses invoked by the GM, and the trisyllabic elements of the chant come up more often. Even a cursory glance through any text dealing with the GM reveals the importance of the number 3, in addition to the significance of 24, 5 and 4 discussed here.

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Competing interests

The author has declared that no competing interests exist.

6. As per literary convention, the '['/]' indicates a hemistich.

7. Some have argued that the *Atharva Veda* is a later addition to the canon, but this contention has not been delved into in this study.

Author(s) contributions

I declare that I am the sole author of this research article.

Ethical consideration

This article followed all ethical standards for a research without direct contact with human or animal subjects.

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Data availability statement

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Disclaimer

The views and opinions expressed in this article are those of the author and do not necessarily reflect the official policy or position of any affiliated agency of the author.

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