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Holistic Flexibility for Critical Systems Thinking Inspired by the *Nataraja*

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ABSTRACT

The *Nataraja* is perhaps the most well-recognized anthropomorphic form of the Hindu god, *Shiva*. This paper articulates a set of principles for a recently developed conceptual lens in systems thinking called Holistic Flexibility for flexible and responsible management practice. The five most important function of the Nataraja, or the *panchakritya*, have been drawn on to articulate these principles; these principles are – "system as becoming", drawing from *srishti* or creation, "transformative flexibility", drawing from *samhara* or transformation, "responsible practice" drawing from *tirobhava* or (freedom from) ignorance, "spiral of learning" drawing from *samhara* or liberation, and "pragmatic artistry" drawing from *sthithi* or assurance. An argument is presented to establish the importance of management consciousness drawing from the *Shiva* philosophy. Behaviors associated with the principles are enlisted along with the challenges for managers to display these behaviors. The discussions presented argue that Holistic Flexibility and its principles can lend a new character to systems thinking as a state of mind to supersede a rational-analytical approach.

Introduction

This paper draws inspiration from the cosmic dance of the *Shiva*, epitomized in the popular manifestation of the *Nataraja*, to articulate key principles for flexible and responsible management practice. The stream in management considered for this discussion is Critical Systems Thinking (CST). Significant deliberations in the literature that attempt to build epistemological bridges between the philosophy of the *Nataraja* and the human sciences already exist. However, there is a lack of scholarly inquiry into how this philosophy can shed light on management science, a gap this paper bridges. A conceptual argument is presented on how management science can benefit from the integration of religious philosophy and symbolism in the theories it propounds and the actions it provokes.

The paper will begin with an introduction to the *Nataraja* and highlight the relevance of religious and spiritual symbolism for modern-day management. This will be followed by a discussion on how systems thinking and CST, in particular, can benefit by embracing the *Nataraja* philosophy. Holistic Flexibility, a recently developed conceptual lens in CST, will be introduced that shall form the central theme of this paper. The place of Holistic Flexibility in CST will be examined, followed by a discussion that highlights gaps in extant literature on the subject. The philosophy of the *Nataraja* will then be drawn from to articulate five principles of Holistic Flexibility. Further, a discussion will be presented on how this philosophy can enable management consciousness. Finally, the paper will present what this means for the advancement of CST as a discipline.

In this paper, "manager" is used as an umbrella term to denote anyone who is involved in conceptualizing, leading, executing or measuring social/organizational change. All Sanskrit words have been italicized.

The *Nataraja*

Shiva is one of the most important gods in Hinduism. References to *Shiva* go back to the Vedic literature that dates to the mid first-millennium BCE and even earlier in some cases (Flood, 1996). *Shiva* encompasses the good and bad, sublime and evil, day and night, male and female, creation and destruction, matter and energy, and time itself.

The *Nataraja* (see Figure 1) is perhaps the most well-recognized anthropomorphic form of the *Shiva*. Pullanoor (2019) traces the evolution of the *Nataraja* to the confluence of Vedic Hinduism of 1500-to-500 BCE and the Indus Valley civilization from 2500-1500 BCE in various forms through the ages till the appearance of the dancing *Shiva* during the third-to-fifth century CE.

Figure 1. The *Nataraja*.

The description and interpretation of the *Nataraja* presented in this paper draw from selected literature of Choudhury (2016), Coomaraswamy (1918), and Pullanoor (2019).

Although *Shiva* is referred to as male and hence the pronoun "he" is used, it is to be noted that the *Nataraja* transcends gender-divide and portrays *Shiva* as the *Ardhanarishvara*, or hermaphrodite. *Shiva* wears a male earring on the right ear and a female earring on the left ear representing the two sexes. Several other ornaments are seen such as necklaces, armlets, anklets, bracelets, rings, and a jeweled belt. *Shiva* adorns a tiger skin that is representative of his supreme power. He is depicted as having four arms and engaged in a blissful dance with his locks of hair whirling towards the eternal cosmic circle.

In the first right-arm, *Shiva* holds the *damru*, a form of hand-held mini-drum, in its beating mode; its vibration representing *srishti* or the creation of the universe and time. The first left-arm is raised holding a flame of fire that "atrophies matter to a formless state" (Pullanoor, 2019). The fire represents *samhara* or transformation. *Srishti* and *samhara* represent the constant cycle of creation and transformation that defines the cosmic cycle. The second right-arm with an open palm offers reassurance of stability and 'becoming' while humanity is braced with this force of continual transformation. This is representative of *sthithi*. The second left-arm with the palm pointing downwards depicts *tirobhava,* which can be interpreted to mean ignorance in which humans fall. This serves to understand concealment of knowledge and preoccupation with the creative illusion of our lived-in experience, known as *maya*. The raised left-leg represents *anugraha* or liberation and is indicative of humankind's possibilities to attain liberation from ignorance and from being a mere witness of *maya* caught in the intense cyclical metamorphosis of birth, life, and death. *Srishti, samhara, sthiti, tirobhava,* and *anugraha* are recognized as the five most important functions of the *Nataraja* and are referred to as the *panchakritya*. The right-leg is shown to trample upon a dwarf called *apasmara* that is symbolic of *avidya,* or ignorance, and *ahamkara,* or ego. Only by trampling these vices, can one tread the path of self-actualization, or *moksha*. The *Nataraja* is seen encircled by an eternal burning flame representative of the cosmos as the cyclical force of dynamic existence. *Shiva*'s long hair-locks are seen expanding into this unending cosmos in a representative union of the lord and the cosmos itself – the microcosm and the macrocosm, respectively.

Further, certain characteristics of *Shiva* are retained in the *Nataraja*. The powerful presence of *vasuki*, the serpent representing the preservation of secret knowledge. The locks of *Shiva*'s hair can be interpreted as channeling the course of the holy Ganges as it descends from the symbolic Milky-Way galaxy to the Earth. Several depictions of the *Nataraja* also come with the *thrishul* or the trident. The three prongs of the trident represent the three worlds in Hindu mythology - *bhur* (material world), *bhuvaha* (mental world), and *svaha* (spiritual world).

The dance of the *Shiva* is a profoundly powerful symbol representing the cosmic loop of energies. Kashmir Shaivism, attributed majorly to the works of Utpaladeva (c. 925-975 C.E.) and Abhinavagupta (c. 975-1025 C.E.), provides extensive commentaries on the philosophy of the *Shiva* as the principle of cosmic pulsation, or *spanda*, resulting in the manifestation of the worldly experience that is represented by the symbolism of the *Nataraja*. Parallels to Kashmir Shaivism can be drawn to the *Samkhya*, the oldest school of Hindu philosophy, that also talks about the cosmic fusion of energies. Tracing its roots back to the *Vedic* or the

immediate post-*Vedic* period (Dasgupta, 1975; Larson, 2011), the *Samkhya* advocates for the "liberation of man's [sic] self from bondage to the body and the material world" (Chatterjee, 1996, p. 208). It talks about *purusha*, the male energy, and *prakriti*, the female energy, as the only fundamental realities; the former representing the individual consciousness and the latter, the creative force of nature bearing the basic argument of *satkaryavada* or the effect pre-existing in the cause. *Purusha* and *prakriti* must fuse as one for reality to unfold. The supreme consciousness of *purusha* would remain unmanifested without the creative energy of *prakriti.* Whereas *purusha* needs *prakriti* to manifest itself, *prakriti* needs *purusha* to activate its energies that otherwise lay in a dormant state (Bravo & Aduan, 2015). *Purusha* and *prakriti* can be related to the *Nataraja*'s male *Shiva* (right side) and female *Shakti* (left side) respectively. It is to be noted that male and female are archetypes rather than sexes per-se. Similarly, Kashmir Shaivism argues that the manifestation process for humans is a transcendental play of *prakasha,* or light, and *vimarsha,* or activity – read as *Shiva* and *Shakti*, respectively.

Fritjof Capra (1975) draws inspiration from the *Nataraja* to talk about the dance of energies as an essential aspect in physics through which both particles and virtual particles determine mass and form. He says (Capra, 1975, pp. 244-245):

> "For the modern physicists… *Shiva*'s dance is the dance of subatomic matter. As in Hindu mythology, it is a continual dance of creation and destruction involving the whole cosmos; the basis of all existence and of all natural phenomena… [modern physics experiments] bear testimony to the continual rhythm of creation and destruction in the universe, are visual images of the dance of *Shiva* equaling those of the Indian artists in beauty and profound significance. The metaphor of the cosmic dance thus unifies ancient mythology, religious art, and modern physics. It is indeed, as Coomaraswamy has said, 'poetry, but none the less science'."

The philosophy of *Nataraja* and quantum physics possess a confluence of similar ideas that view reality as a constant force of creation, destruction, and preservation. This cosmic reality manifests itself as our experiential world. This is what is referred to as *maya* in the *Samkhya* and Kashmir Shaivism. *Maya* is commonly interpreted as illusion, but it is actually the creative power of the manifested experience from the unmanifested consciousness.

At one level, the symbolism of the *Nataraja* depicts continual upheaval, while at another level it represents the cosmos as the ultimate thermodynamic system with great symmetry and rhythm. Despite the quantum dynamism, the essential character of *Shiva* is 'nothingness' or supreme bliss in the *Shiva Puranas,* the scripture dedicated to *Shiva* that is estimated to have been composed between the fourth- to the second-century BCE (Klostermaier, 2007), to denote the involution of the entire universe into a state that is formless and unmanifested. Hence, the call for humility and the suspension of judgement with the attainment of *vidya*, or knowledge, in the *Samkhya*.

In all its glory and powerful imagery, the dancing *Shiva* is interpreted as the substratum of reality and revered throughout the length and breadth of India in its multiplicity of creative

manifestations. The cosmic dance of the *Nataraja* is a highly sophisticated representation of the coming-together of philosophy, metaphysics, spirituality, art, and science.

Having described the *Nataraja* and its philosophical significance, this paper will now provide a note on the relevance of religious symbolism in management research.

Religion and management research

The current socio-economic malaise created by a simplistic and linear approach to management has put in question fundamental assumptions of modern businesses and the way social/organizational institutions are run (Chowdhury, 2019; Ison & Straw 2020; Jackson, 2019; Sur, 2017). Certain religious and spiritual traditions can lend an alternate lens in understanding complex problems as they create a sense of purpose, meaning and self-transcendence (Cash & Gray, 2000; Hood et al., 2009; Nash, 1994; Richardson et al., 2014; Williams, 2010). Religious beliefs and symbolisms do not exist in isolation but are integral to human life (Hee, 2007). In recent years, there has been a surge in the research of religion and spirituality in several aspects of management studies (Tracey, 2012). Perspectives from religious philosophy and symbolism can offer an alternative understanding to the dominant worldviews that have surfaced in the twentieth century onwards that separate mind-and-matter, cause-and-effect, and profit-and-responsibility with a dualist standpoint. Certain religious philosophies can offer a holistic framework for a "purpose-oriented approach" (Sur, 2017, p. 69) in business and management. Sur (2017) particularly talks about the perspective Hinduism can lend in approaching reality in an integrative manner by breaking silos and merging paradigms.

The study of religious symbolism in the context of systems thinking presents an exciting arena, given that systems thinking has evolved to be an integrative discipline that challenges perceived divisions and dualisms (elaborated in the next section). Ivanov (2011) says that systems practice needs to be developed at the interface of formal science, political ethics, analytical psychology, and religious thought. Whereas significant work has been carried out in systems thinking that draws from natural science, political theory, ecology, complexity, sociology and psychology (Capra, 1975; Flood & Romm, 2013; Ison & Straw, 2020; Jackson, 2019; Midgley, 2000), exploration of religious thought as an inspiration has been limited and can be found in select works of Gu and Zhu (2000), Rajagopalan (2020), Shen and Midgley (2007a,b,c, 2015) and Zhu (2000). This paper is the first attempt to explore the philosophy of the *Nataraja* in the context of systems thinking in management.

Having talked about the relevance of religion in management research, the next section will elaborate on the evolution of systems thinking to its current stage called Critical Systems Thinking.

Systems thinking and critical systems thinking

Systems thinking is an integrative discipline that considers interrelationships, interactions, and emergent behaviors. It is the network and interaction between the parts (subsystems) that give rise to the system as a whole (von Bertalanffy, 1950). There are three distinct periods in the history of systems thinking in Operations Research/Management Science (OR/MS) or,

as Midgley (2000, 2003) refers to as waves, building on its predecessors (Cabrera & Cabrera, 2019), that have culminated in what we call Critical Systems Thinking.

The first wave of systems thinking was characterized by the realization of the importance of interconnectedness in social/organizational systems in order to manage complex problems in the post-World War-II scenario. This wave came to be known as hard systems thinking and was influenced by developments that believed that social reality can be optimized and managed with a functionalist mindset (LeLeur, 2014; Mooney et al., 2007). Midgley and Rajagopalan (2021) refer to this wave as the "applied-scientific methodological tradition". The first wave gained popularity during the 1950s and 1960s (Midgley & Rajagopalan, 2021) but it soon faced criticism for its emphasis on prediction and control with systems thinkers positioned as experts (Rosenhead, 1989) and neglect of human agency (Checkland, 1981; Jackson, 2000; Lleras, 1995). This wave failed to account for complexity, subjectivity, and power in social/organizational reality (Burton, 2003; Flood & Romm, 1995; Schecter, 1991).

Criticism of the first wave led to a "significant paradigm shift in the theory underpinning the application of systems thinking" (Midgley & Rajagopalan, 2021) and paved the way for the rise of the second wave through several scholarly contributions (Ackoff, 1981; Checkland, 1981; Checkland & Scholes, 1999; Churchman, 1979). These scholars emphasized interpersonal relationships, intersubjectivity, learning, and a spirit of open dialogue and accommodation and created what came to be known as soft systems thinking. Churchman (1979) raised fundamental questions on the nature of defining a system arguing that system boundaries are value-based. Such arguments provided the basis for the recognition of participatory approaches and collaborative action.

Although the second wave sought to address the shortcomings of the first wave, it soon faced criticism from scholars for its inability to address issues of power and hidden dynamics (Jackson, 1982). Rajagopalan (2020) notes that soft systems thinking neglects the multiple influences of social-structural factors and their effects. Other scholars (Clarke & Lehaney, 1999; Mingers, 1984, 1992; Oliga, 1988) talked about power-based ideological frames that create false consciousness amongst stakeholders that the soft systems tradition fails to address. Criticisms of the second wave and an attempt to bridge the growing fragmentation (Dando & Bennett, 1981) between hard and soft systems thinking gave rise to the third wave in systems thinking that had a focus on liberation and emancipation (Burton, 2003) and employed developments from complexity theory (LeLeur, 2014). This wave came to be known as Critical Systems Thinking (CST).

CST had two foundational theories: Critical Systems Heuristics (CSH) (Ulrich, 1983, 1987, 1988, 1994, 1996) and methodological pluralism (Jackson & Keys, 1984). CSH synthesized Habermas' (1972) theory of communicative action with the underlying argument that dialogue is central to rational planning, and Churchman's (1979) theory that views boundaries as value-based constructs. Ulrich developed twelve boundary questions in CSH for systems interventions based on the sources of motivation, control, knowledge, and legitimacy of the stakeholders involved and affected. Methodological pluralism, on the other hand, was developed in the works of Flood and Jackson (1991), Jackson (1987, 1990, 1991, 2019), and Jackson and Keys (1984), predominantly in the form of a framework called the

System of Systems Methodologies (SOSM) that aligns an array of systems methodologies based on two axes: nature of the system and the relationship between participants. Integrating the two foundational theories, Midgley (2000) proposed Systemic Intervention (SI) as "purposeful action by an agent to create change in relation to reflection upon boundaries" (p. 8). SI was founded upon a new approach to systems philosophy that considers dealing with coercion not so much based on employing methods, but on engagement with boundaries. It allows for mix-and-match between methodologies and extends the purpose of methodologies beyond their initial objectives to enable accommodation between stakeholders and dissolve conflict. SI therefore achieved a convergence of the initial two stands in CST. More recent research by Jackson (2019) integrates several key debates in CST and highlights the importance of purpose, curiosity, self-awareness, flexibility, and risk-taking for managers to display responsible leadership for a complex world.

Holistic flexibility and its place in CST

CST set the stage open for diversity in thinking, reasoning, designing, and intervening in OR/MS. However, it soon came to be engulfed with dominant frameworks and meta-methodologies by scholars (Jackson, 2019, 2000; Midgley, 2000; Mingers & Brocklesby, 1997; Ormerod, 2014; Sushil, 1994; Ulrich, 2012) that may even contain variety and diversity within their own boundaries offering little room for practitioners to act boldly outside their prescribed frameworks. Such limitations can pose a challenge for managers to adopt CST in a more experimental and fluid manner in contexts outside traditional systems research and practice such as general management and consultancy. Further, framework-based prescriptive models make it problematic for managers who are working with a separate framework to bring in the benefits of CST. In another critique, Cordoba-Pachon (2010) says that systems thinkers use their own terminologies that often sound alien in general management. Such challenges have led to limited adoption of CST in general management despite its potential. Greater adoption of CST requires managers to wholeheartedly embrace a more pragmatic stance within and beyond OR/MS. This is where Holistic Flexibility comes in as the first conceptual lens in CST that offers a more democratic, egalitarian, and flexible stance for systems practitioners.

Chowdhury (2019, 2020) reviewed key debates in systems research and undertook an analysis of empirical cases in applied systems thinking and presented Holistic Flexibility as a conceptual lens for CST. He proposes a fresh perspective by arguing that CST is a state of mind weaving an inextricable interlinkage between holistic thinking and flexibility. Holistic Flexibility is the "dynamic interplay between a state of mind that has the ability to absorb systemic complexity and a state of intervention that has the ability to embrace flexibility both in intent and form" (Chowdhury, 2019, p. 404); see Figure 2. Elements of Holistic Flexibility and discussions around the same are covered later in this paper.
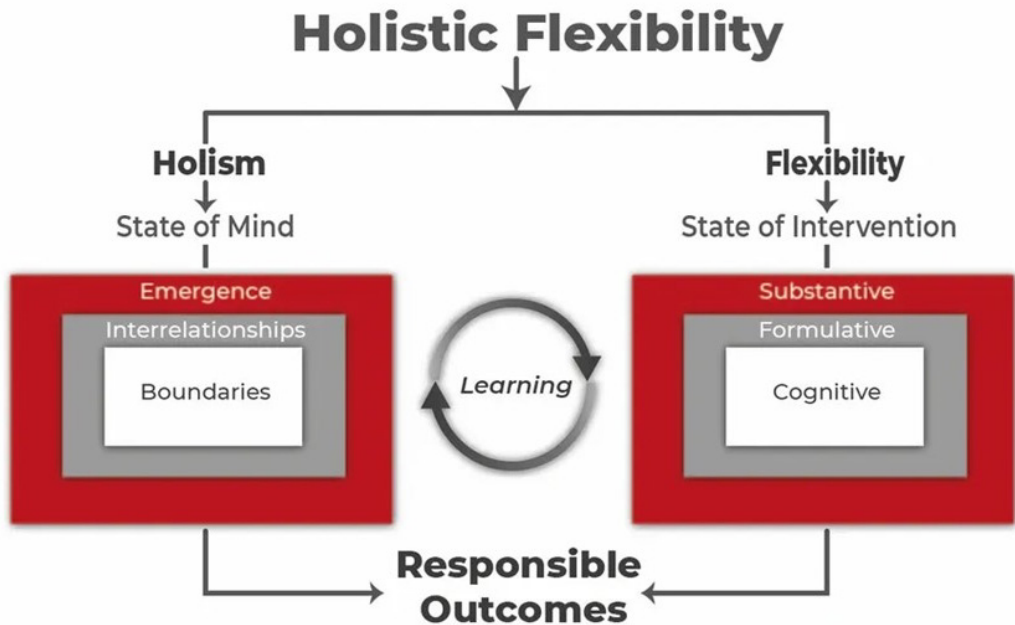
Figure 2. Holistic Flexibility (Chowdhury, 2019, p. 404).

Holistic Flexibility argues for a pragmatic stance in CST emphasizing a manager's ability to seamlessly manage and work with multiple variables, stakeholders, and factors to deliver responsible outcomes with the aid of learning-loops. A pragmatic stance aligns with several other works in OR/MS. For instance, Taket and White (2000) suggest that there can be three kinds of uncertainties – environmental, guiding values, and related decisions – to which managers need to continually adapt in a dynamic process of evolution and involution of their thinking and actions. According to Snowden (2015), systems can transition between simple, complicated, complex, and chaotic states due to several interlinked factors, influencers, and constraints. He highlights the preference for individuals-and-interactions over processes-and-tools, and change-responsiveness over plan-adherence. Ormerod (2013) refers to OR practice as a "craft" that is based on intuition and experience. Schön (1983, 1987) popularized the importance of acting reflectively on the spot and being driven by tacit knowledge towards transformative learning and embedded creativity. Other scholars (Broekmann & Cornish 2000; Fook, 1999; Perdomo & Cavallin, 2014) talk about contextuality driven by reflection, intuition, and artistry. Schön (1992) talks of reflection-in-action as an on-the-spot process of reflection and experimentation. Learning remains a central element in the process of doing and the enhancement of tacit knowledge through reflection-in-action (Khisty & Khisty, 1992). Cordoba-Pachon and Midgley (2003) suggest that the criteria for ascertaining the sustainability of outcomes based on such practice may also not be fixed and there is a need for constant iteration and a break-away from traditional thinking.

Holistic Flexibility is neither a framework, nor a methodology; rather, it is a conceptual lens for managers that can offer them intellectual, emotional, and tactical elasticity in management practice. Through his research, Chowdhury (2019, 2020) alludes to certain

principles that can help managers in applying CST to aid flexible and responsible practice. With Holistic Flexibility, managers can deploy CST as a state of mind without explicitly using any traditional systems frameworks or methodologies; this also implies that managers can work across mainstream management and systems frameworks seamlessly. Holistic Flexibility appeals to a manager to be open to "make use of various types of thinking, reasoning, and doing; of anticipating, creating, and negotiating; of managing, enabling, and facilitating; of investigating, modelling, and analyzing" (Ormerod, 2018, p. 1359).

Having introduced the place of Holistic Flexibility in CST, it is important to acknowledge the gaps in the extant literature on the subject. The next section highlights two fundamental gaps and points towards how these gaps can be addressed by drawing inspiration from the *Nataraja* philosophy.

Gaps in the literature on Holistic Flexibility

Principles of Holistic Flexibility not clearly articulated

A general search on the word "principle" directs us to understand the term as a proposition bearing certain essential qualities and standards about something. Principles help in clarifying the assumptions, attributes, and actions necessary to bring a concept to life. Although extant literature on Holistic Flexibility (Chowdhury, 2019, 2020) alludes to certain principles, these are not clearly articulated and there is no discussion on what these principles should exactly mean for managers. In the absence of an articulation of such principles, Holistic Flexibility remains a fuzzy concept. Articulating the principles of Holistic Flexibility will add substance to this new character proposed for CST and will potentially bring it to a wider audience in OR/MS. This is where the symbolism of the *Nataraja* comes in. Religious symbolisms can serve as effective metaphors in understanding complex social/organizational reality as also reflected in the works of Acevedo (2011), Fotaki et al. (2019), Harper (date not available), Hekkala et al. (2016), and Ruth (2014), amongst others. Application of metaphorical archetypes as a mode of inquiry has led to the development and adoption of various scientific frameworks (Berggren, 1963; Black, 1962; Brown, 1977; Hesse, 1966; Schon, 1963). The *Nataraja* can serve as a powerful metaphorical archetype – call it a reference – to understand the philosophy of continual change, adaptiveness, and fluidity that is reflected in the complexity of situations that managers encounter. The symbols embodied in the *Nataraja* can propel thinking about the world we experience from an alternative perspective and its philosophy can help managers to "dance" in the cyclical and dynamic realities that they find themselves in. This paper will later present how the symbolisms of the *Nataraja* have been drawn from to articulate the principles of Holistic Flexibility.

Lack of a discussion on consciousness in Holistic Flexibility

Holistic Flexibility calls for managers to undergo a mind-shift from the individual to the collective, from short-term to long-term, from rigidity to fluidity, from holding-on to letting-go, and from results-focus to learning-orientation. An awareness and understanding of consciousness can greatly enhance this journey. The philosophy of the *Nataraja* can be of profound inspiration for managers to understand the individual self in the realm of the

cosmic self that can help them work towards the mind-shift highlighted above. A consciousness-based awareness of certain existential elements can help in striking a balance in managerial pursuits and in an evocation of managerial behaviors to display humility and release of the ego. A wide range of research has shown that a consciousness-based discourse can lead to management behaviors that are more compassionate and rewarding, and organizational practices that are more responsible and sustainable (Fairholm & Fairholm, 2010; Giacalone & Jurkiewicz, 2010; Khalsa, 2010; Nandram & Borden, 2010; Sheep, 2006; Tackney et al., 2017; Tzouramani & Karakas, 2016). World events, especially COVID-19, has taught managers that organizations of the current day exist in highly complex and transient times and business goals need to be set and management interventions need to be defined by drawing meaning from such dynamic realities. Importantly, humans interpret meaning out of affective relationships between the infinite possibilities of perception in relation to the goals that they work towards (Medin & Aguilar, 1999; Peterson, 2013). This also piques attention to the importance of intuition in OR/MS. It has been well established for quite some time that intuitions that guide behavior are pragmatic and embodied in experience (Gibson, 1979; Lakoff, 1987). Intuitiveness and the meaning-making process is not analytical but stems from higher consciousness (Nandram, 2016). For management consciousness, intuition needs to be considered as a "holistic spiritual approach" (Nandram, 2016, p. 65) that require an ability to connect the awareness of the individual existence to the wider cosmic existence. With a call for managers to think more responsibly, sustainably, and with value-centricity, there is a need to link Holistic Flexibility with consciousness, which is currently a gap in the extant literature.

After articulating the principles of Holistic Flexibility, this paper will present an argument to connect Holistic Flexibility with consciousness. Inspiration will be drawn from the philosophy of the *Shiva* to shed light on management consciousness that will serve to advance the conceptual lens of Holistic Flexibility.

Articulating the principles of Holistic Flexibility

The symbolisms of the *Nataraja* offer concrete references for the principles of Holistic Flexibility. In the following discussion, perspectives will be drawn from the *panchakritya*, or the five most important functions of the *Nataraja*, to articulate these principles.

Srishti

Srishti, or creation, represented by the perennial beat of the *Nataraja*'s mini-drum held in the upper-right arm is symbolic of dynamism, unconcealment, and constant change. Philosophically, a system can be interpreted as having no beginning and no end and it is always in a state of 'becoming' (Bunge, 2000). Holistic Flexibility identifies holism as a state of mind that is constantly demarcating systems and subsystems based on boundaries, interrelationships, and emergence – identified as the three core determinants of holistic thinking (Chowdhury, 2019), a view also shared by Jackson (2019). Jovan (2005) defines a state of mind as an "aim-free flow of ideas and associations that can lead to a reality-oriented conclusion". This state of mind can enable a manager to appreciate a system considering their boundaries, which in turn are dependent on values, perspectives, situational conditions,

and stakeholders. Based on social identity theory, Gregory et al. (2020) highlight the importance of critically understanding the term "stakeholder" in light of multiple variables *including* the researcher, or manager, as an observer. Boundaries cannot be static. Rather, they are dynamic as the criteria that influence them must change alongside the evolving nature of a situation (Midgley, 2000, 2003, 2006; Midgley & Pinzon, 2011, 2013; Midgley & Rajagopalan, 2021). Therefore, a system is always in a state of 'becoming' influenced by the energies between its subsystems (Camargo-Borges & Rasera, 2013; Gergen, 2009; Gergen & Gergen, 2012; Ulrich, 2017). Boundaries are thus pulsating with expansive energies that are defining, connecting, and creating, leading to emerging characteristics of new self-organizing systems that demonstrate the same qualities.

This leads us to the first principle of Holistic Flexibility – **system as becoming** – that embraces dynamism and change at the very crux of understanding a system. A system is constantly being unconcealed just as the pulsating energy of creation in *srishti*. A manager needs to address a problem/situation as an emergent representation of a time-shot in the entire journey of a system that can be understood in terms of a time-lapse. The criteria of what is intended and what can count as a desirable change may itself keep changing from context to context. Hence, a manager's role is not to find a "solution", but to craft the "next adaptive move" (Schein, 2016). This is central to the idea of dealing with emergence in people, structures, and culture (Archer, 1995). Other researchers (Baker et al., 2004; Barros-Castro et al., 2013; Petrovic, 2013; Ufua, 2020) have also talked about the benefits of designing interventions in OR/MS with the understanding of boundaries, interrelationships, and emergence.

Samhara

S*amhara,* the power of transformation and regeneration, is represented by the flame held in the *Nataraja*'s upper-left arm. This can be used to understand the value of flexibility and change-adaptiveness in management. Holistic Flexibility talks about flexibility as a "state of intervention" (Chowdhury, 2019), which can be interpreted as a manager's involvement in bringing about transformation through action. It is important to note the shift in focus from thinking to action as we move from the first to the second principle. Managers need to be flexible in their use of tools and in their ability to navigate both intended and unintended consequences of their actions (Rioz & Suarez, 2012). Grohs et al., (2018) talk about the importance of cognitive flexibility along with the three dimensions of problem, perspective, and time that they collectively refer to as "fluencies" (Grohs et al., 2018, p. 111) necessary for systems understanding. Sushil (1994, 1997, 2015) builds his Flexible Systems Methodology on spectral and integrative theories. Going beyond methodological discussions, the positive impacts of flexibility have been studied in various fields such as business, government, manufacturing, administration, ecological management, and services industries (Bahrami & Evans, 2011; Richman et al., 2011; Sushil, 2015). Holistic Flexibility identifies three kinds of flexibility along with their respective aspects addressed, dependencies, and related disciplines (Chowdhury, 2019): first, "cognitive flexibility", pertains to thinking that is dependent on nature and nurture, and that draws from the related disciplines of psychiatry, psychology,

neuroscience, and sociology; second, "formulative flexibility", pertains to planning that is dependent on frameworks and models, and that draws from the related disciplines of management and administration; finally, "substantive flexibility", pertains to action that is dependent on resources, and that draws from the related disciplines of material science, finance, human resource, and supply chain.

Presented with different and/or differing situations, managers need to be able to move between thoughts and effectively shift between tasks. Flexibility in thought allows managers to be comfortable with working across paradigms. Flexibility in approaches allows them to be open to freely adopting multiple approaches in problem-solving. A flexible approach to resource-utilization allows them to direct and use resources as per contextual requirements rather than having to stick to straightjacketed plans. These qualities are essential for managers intending to display transformative flexibility to maintain a meaningful steady state in the "system as becoming". Managers need to be open to their own and others' experiences and changing thought patterns so that they can assimilate new ideas seamlessly in the continual act of catalyzing transformation.

This leads us to the second principle of Holistic Flexibility – **transformative flexibility** – in a system temporarily deduced from a state of flux. Just as *srishti* and *samhara* define the *Nataraja*'s cosmic cycle, a "system as becoming" and "transformative flexibility" define the perennial cycle of problem-definition and agile-management. This comes close to a social constructionist perspective in management that can be sometimes led with unconventional questions (Camargo-Borges & Rasera, 2013) in a manner that almost metamorphosizes organizations into something different to instigate new thinking and co-create collaborative futures. Similarly, Tomm (1988) talks of "circular questions" that create difference and spark creative friction to unravel new meanings and possibilities.

It is important to note at this point that with flexibility, there comes great responsibility to ensure adherence to certain core values, respect of shared vision, and focus on responsible and inclusive goals. To quote from extant literature in Holistic Flexibility: "Flexibility is not free of danger, unless it is managed with informed choices, decision making with foresight and balanced control (Chowdhury, 2019, p. 52). Managers need to be working with a spirit of what Chowdhury (2019) calls "flexibility with authenticity", and what Sushil (2017) calls "focused flexibility".

Tirobhava

Tirobhava, or ignorance that traps humans into the tunnel of darkness, is represented in the symbolism of the *Nataraja's* second left-arm pointing downwards as he steps on *Apasmara*, the dwarf of the human ego, self-centricity, and jealousy. Managers need to dwarf short-term goals, and question unsustainable business practices that prioritizes economic gains at the expense of social and environmental wellbeing. Instead, they need to shift their focus to outcomes that are democratic, sustainable, inclusive, and empowering, and therefore, responsible. Wong and Mingers (1994) say that the desire to do socially beneficial work has always been a motivator for the vast majority of OR practitioners. While identifying their responsibilities, managers need to exercise value-based judgements to draw their own boundaries of who and what to include and exclude in their intervention. It is also not

possible to obtain universal information to decide on the right boundaries. Hence, managers have to work with whatever information is available and possible to obtain at a certain point of time, or what has been called "sufficiencies" (Snowden, 2015).

To demonstrate responsible practice, managers need to be engaged with their stakeholders at all stages (Jackson 2000). An important aspect of responsible practice is problem-structuring at a stage prior to problem-solving. Problem-Structuring Methods (PSMs) require a combination of technical, institutional, and heuristic understanding (Murphy, 2005). PSMs have the potential of bringing together a variety of factors such as negotiation devices, accommodations of multiple positions, power relations, understanding and learning, ownership of problems, and consequence of planned actions (Daellenbach, 2001; Foote et al., 2007; Franco, 2007; Jackson, 1991; Mingers & Rosenhead, 2004; Ormerod, 1997).

In Holistic Flexibility, responsible outcomes address economic, environmental, and social parameters (Chowdhury, 2019). Further, managers need to ensure that the benefits of their interventions are sustained as also highlighted by other scholars (Ashkenas, 2014; McKenna, 2006; Sturdy, 2009). Transferring knowledge and skills to change-teams in their settings and building systemic capability are fundamental levers for the same goals. Managers need to play an integral role in questioning assumptions, convening stakeholders, and challenging dominant beliefs to achieve responsible outcomes. They need to be conscious agents of change rather than being mere witnesses. Responsible action involves inculcating an attitude of openness and risk-taking and ejecting ignorance, self-centricity, and myopic thinking.

This leads us to the third principle of Holistic Flexibility – **responsible practice** – aimed at addressing problem situations holistically, meaningfully, and sustainably. Responsible practice needs to touch both human and non-human dimensions as both exist in close interrelationships with one another (Eckersley, 1992; Gregory & Miller, 2014; Ormerod, 2013). Taking this a step forward, as the *Samkhya* advocates, the self can be realized in other selves and the inanimate as well, as an extension of the same cosmic force. Responsible practice requires one to courageously question one's own moral reasonings (Midgley & Pinzon, 2013) and make way for conditions that shape and nurture a just society. It is acknowledged that demonstrating responsible practice is not easy, especially when over the longest period of time, managerial intentions and ambitions have led to the creation of institutions and structures that have resulted in the gravest damage to humans, the environment and the planet in current times (Rockström & Klum, 2015). The COVID-19 pandemic has brought to the forefront the fragility of such institutions and structures and laid bare the need of a system for personal, societal, and global consciousness by learning ethical values and engaging in what Morin (2006) calls "cultural resilience". Haley et al., (2021) refer to this as the process of "critical recovery". Although difficult, the realization of this process is not impossible. Managers are only people and "people are essentially caring, relational, and cooperative… cooperation and symbiosis play a central role in living systems" (Laszlo, 2020, p. 310).

Anugraha

Anugraha, or liberation, represented by the raised left-leg of the *Nataraja*, is indicative of salvation and graceful co-evolution rather than of humans acting as mere witnesses of the cyclical metamorphosis of the self and the world resulting in what Kashmir Shaivism and *Samkhya* call *maya*. Managers are continually exposed to new situations and contexts, and they have to work with new stakeholders or the same stakeholders with new perspectives. In addition, managers also need to work in a highly complex world where values are no longer taken for granted, regulations transcend national boundaries, and where the civil society is increasingly involved in various kinds of activism. A manager can strive for liberation only by applying a multidimensional approach to learning in every situation, with every intervention, and with a mindset that would let them challenge their pre-existing mental models (Garvin et al., 2008). Bowen et al., (2006) say that learning is the main origin of competitive advantage and that it leads to positive evolution in organizations. Taking the significance of contextuality deeper, Wang and Ahmed (2003) talk about the interconnections between individual and collective learning in the context of the organization system, culture, knowledge management, and continuous improvement. Saadat and Saadat (2013) argue for the building of "flexible dynamic learning organizations" that can be pertinent to the intricacies posed by the current age of digital-agility, as argued by Lenart-Gansiniec (2019).

Borrowing from select works (Argyris & Schon, 1974, 1978; Flood & Romm, 1996), Holistic Flexibility embraces three loops of learning (Chowdhury, 2019). Single-loop learning is about doing *things right* without questioning the end objective. Double-loop learning involves doing the *right thing* (as opposed to doing *things right*). Double-loop learning shifts the mindset from a "goal-seeking purposive system" to a "goal-searching purposeful system" (Ackoff & Emery, 1972). Finally, triple-loop learning addresses learning at a deeper level of values and ethics. Bateson (1972) talks of triple-loop learning as one in which a manager delves into fundamentally questioning the beliefs behind what they consider to be right or wrong. It is this spiral of learning that managers need to immerse themselves in and continually adapt to, in order to remain relevant.

With this we arrive at the fourth principle of Holistic Flexibility – **spiral of learning** – that is multipronged and multidimensional and will lead the manager towards what the *Samkhya* calls *vidya* or knowledge. Managers will need to display sincerity and have the courage to ask difficult questions about their values and biases that influence their boundaries and define their system time-shots ("time-shot" and "time-lapse" are discussed in section "*Srishti*") from the "system as becoming". Managers will need to question myopic organizational priorities, market dynamics, and regulatory pressures that often lead to the misrepresentation of reality, and misdirection of managerial decisions. It is important to note that in triple-loop learning, the three loops are not exclusive, but mutually inclusive and draw from one another's strengths. Holistic Flexibility, thus, calls for a manager to display efficiency, effectiveness, and value-centricity through their work (Chowdhury, 2019).

Although the "spiral of learning" appears fourth in the sequence, it is a prelude to conceiving of a "system in becoming", deploying "transformative flexibility", and demonstrating "responsible practice" and therefore is a seminal principle as it continually

drives the manager to question taken-for-granted assumptions and deep-rooted value systems ingrained through their personal, educational, and professional discourse.

Sthithi

Sthithi, or reassurance, is represented by the *Nataraja*'s second right-arm with an open palm. It is the reassurance that life will continue with order amidst disorder, and that hidden patterns will emerge out of chaos. A manager's primary role, as the word suggests, is to manage, and to lead with a sense of purpose. The manager is responsible for continuity and enforcing meaningful change whilst seamlessly handling dynamic social/organizational realities. This balancing act of sorts requires a 'dance' of competencies and skills, dependent on both nature and nurture. With reference to nature, Linard and Aretz (2000) talk about innate systems thinking traits that managers may display to aid the creation of organizations that are naturally able to learn and remain nimble. However, such traits may be difficult to imitate. With research indicating that the presence of systems thinking is directly linked to better leadership and business performance (Kvedaraviÿius et al., 2009), that lack of systems thinking is now directly linked to grave financial, technical, and societal losses (Chapman, 2004; Valerdi & Rouse, 2010), and given how current global events have revealed that the world is more interconnected today than ever before, systems thinking is indeed too important a capability to be left to just nature. Several scholars have highlighted competencies and skills for inculcating systems thinking in managers (Davis et al., 2015; Frank, 2000; Gharajedaghi, 2006; Mahler-Rogers, 2017; Richmond, 1993; Senge, 2006; Sun et al., 2014). Managers can acquire systems thinking competencies through experiential learning (Davidz & Nightingale, 2008), coaching (Derro & Jansma, 2008), and simulation-based exercises (Valerdi & Rouse, 2010).

Holistic Flexibility does not offer a list of competencies for managers. However, it does point to certain traits and behaviors that managers must display in order to operate with CST as a state of mind. It is important for managers to pragmatically bring together the first four principles of Holistic Flexibility not in isolation, but as a lyrical synthesis in an act of artistry. This brings us to the final principle – **pragmatic artistry**. The term, "pragmatic" is used to indicate the importance of contextuality over standardization and seamless customization over method-adherence. The term "artistry" is used to indicate that such behavior requires understanding, elegance, and poise in part of the manager and that it does not come by chance. Artistry requires focus, dedication, direction, and practice. This artistry is meant for a manager to perform the 'dance' of CST to catalyze not just optimal but meaningful functioning of the systems they work in. Pragmatic artistry requires managers to hone certain demonstrable traits that include being open to challenge, questioning conventional paradigms, being ready to embrace diversity, and shifting between thinking and acting with tenacity, whilst constantly striving for outcomes that are meaningful, empowering, and sustainable. Finally, they need to adopt a learning attitude and incorporate new knowledge through their journey.

Just as *sthithi* means reassurance, it can also be interpreted to mean protection. A manager's role is to identify, balance and maintain those symmetries and patterns that are

inherent in the system in flux. This also calls for a manager to look inwards and explore the connection between their own consciousness and the wider existence. Needless to say, the symbolism of the *Nataraja* manifests great pattern, stability and symmetry despite the quantum flux it represents.

Having articulated the five principles of Holistic Flexibility, the paper moves on to introduce a consciousness dimension as an important element for this conceptual lens to realize its potential.

Holistic flexibility and management consciousness

Inspiration drawn from the *Nataraja* to articulate the principles of Holistic Flexibility opens up new vistas for CST in terms of linking it to a consciousness dimension. The following discussion will draw from the philosophy of the *Shiva* to crystallize this argument.

Through thirty-six *tattva*s, or cosmic elements, Kashmir Shaivism expounds how manifested reality is nothing but *Shiva* himself. The *tattva*s are arranged in six descending categories: *Shuddha Tattva*s I (elements of universal experience – I), *Shuddha Tattva*s II (elements of limited individual experience – II), *Ashuddha Tattva*s (elements of mental operation, sensation, and materiality), *Jnanaindriya*s (elements of sensation), *Karmindriya*s (elements of action), *Tanmatra*s (elements of perception or reflection), and *Puncha-Mahabhuta*s (elements of materiality). The universal consciousness of *Shiva* is manifested in the worldly experience through the cycle of the *tattvas* in a constant pulsating vibration of energies, or *spanda*, as represented by the *Nataraja*. The *Shiva* philosophy can cast a profound mind-shift for managers from the prioritization of objective approaches to the appreciation of the subjective dimension of existence. Kak (2021) talks about similar developments in the transition of assumptions from classical to quantum science with the shift in understanding of consciousness as being "produced by the brain" to consciousness "is primary". The principles of Holistic Flexibility, which emphasize on intuition and mindfulness for managers, can be greatly enhanced by understanding the deeper philosophy of the *Nataraja*.

More than a hundred years ago, the celebrated metaphysician and Indian art critique, Coomaraswamy commented:

> Throughout the East, wherever Hindu or Buddhist thought have deeply penetrated, it is firmly believed that all knowledge is directly accessible to the concentred and 'one-pointed' mind, without the direct intervention of the senses. Probably all inventors, artists and mathematicians are more or less aware of this as a matter of personal experience. In the language of psycho-analysis, this concentration preparatory to undertaking a specific task is "the willed introversion of a creative mind, which, retreating before its own problem and inwardly collecting its forces, dips at least for a moment into the source of life, in order there to wrest a little more strength from the mother for the completion of its work," and the result of this reunion is "a fountain of youth and new fertility." [sic] (Coomaraswamy, 1918, p. 24).

The above quote from Coomaraswamy can have significance at two levels for managers. First, his perspective on how Eastern mysticism believes that universal cosmic knowledge is "directly accessible" to human beings through concentration and mindfulness. Second, his commentary that dedicated practitioners (inventors, artists, and mathematicians) – read in reference to managers – can achieve this universal cosmic knowledge by looking deep inwards, which can result in "a fountain of youth and new fertility". The phrase, "fountain of youth and new fertility" has been borrowed from Jungian (1916, p. 336) psychology and in the context of this discussion, an interpretation of this phrase can be derived to denote an illuminated state of mind with knowledge and creativity that can unite the manager and the problem (subject and object, respectively) on a higher spiritual plane.

Such discussions point towards the understanding that consciousness is the substratum on which experience, and therefore, reality, is based. For managers, awareness of their consciousness and participation, *prakasha* and *vimarsha,* respectively, in Kashmir Shaivism, in the wider complex and transient reality can let them lean towards being one with the context. This understanding can be labelled as management consciousness that can lead to decision making with mental clarity and responsible goals. A conscious awareness can go a long way in helping managers drop their ego, display emotional balance, and work in unison with the universal forces of existence. Even in the toughest situations, consciousness will allow managers to stay calm and undertake a journey that is fulfilling for the self and the society (Khalsa, 2010).

Deliberations presented in this paper make a call for managers to invest in greater self-awareness and to look inwards to engage with organizations and societies in a more responsible manner creating an intimate connection between themselves and the larger whole. Several studies have pointed towards the positive effects that practices such as meditation, concentration, and self-exploration have in business outcomes (Carlock, 2014; Hafenbrack, 2017; Lockhart & Hicken, 2012; Mrazek et al., 2012). In a Harvard Business Review article, Seppälä (2015) notes that positive effects of meditation and mindfulness exercises in business leaders include building resilience, boosting emotional intelligence, enhancing creativity, improving interpersonal relationships, and sharpening focus. These qualities need to be clearly embedded in the principles of Holistic Flexibility. Meditation and mindfulness can aid towards making managers act more intuitively without solely relying on the rational analytical course.

The five principles of Holistic Flexibility and their relevance for managers

The five principles of Holistic Flexibility can be summarized as the following:

- **System as becoming** directs towards a dynamic approach to a system based on negotiation of boundaries, appreciation of interrelationships, and cognizance of emergence.
- **Transformative flexibility** brings about transformation in situations propelled by flexibility in cognition, formulation, and substantiation.

- **Responsible practice** aimed at addressing problems holistically, meaningfully, and sustainably touching both human and non-human dimensions.
- **Spiral of learning** embraces single-, double- and triple-loop learning to enhance efficiency, effectiveness, and value-centricity respectively.
- **Pragmatic artistry** embraces pragmatism as a necessary approach in dynamic situations and artistry, requiring understanding, elegance, and poise.

The symbolisms of the *Nataraja* inspires the archetypical characteristics of the principles of Holistic Flexibility as it has been portrayed in Figure 3. Management consciousness is pictorially depicted as the substratum on which the principles can be realized, symbolically inspired by the cosmic consciousness in the form of the flaming ring around the *Nataraja*.
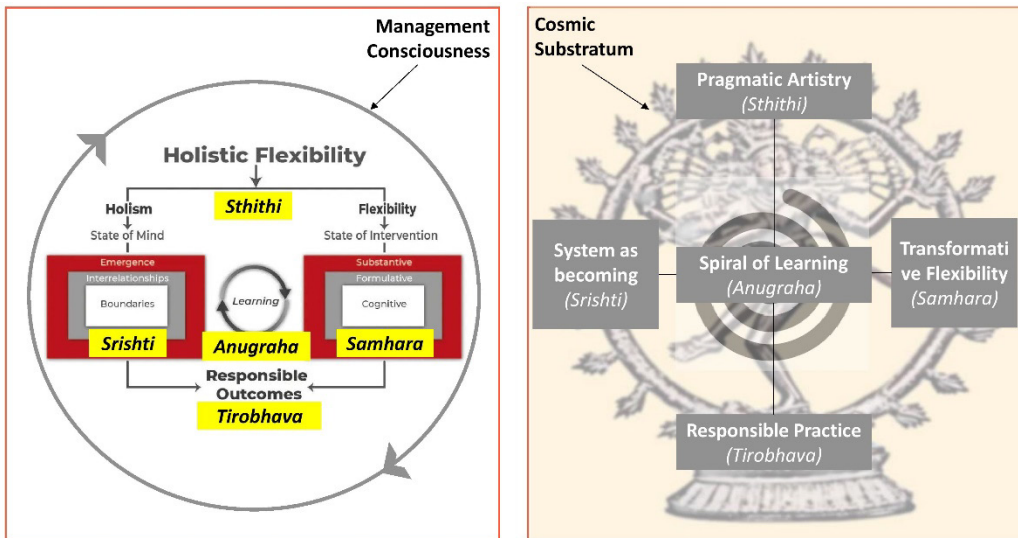

Figure 3. Five principles of Holistic Flexibility inspired by the *Nataraja*.

Holistic Flexibility and its principles can serve as an inspiration for managers to thread disparate strands with analysis and logic, and yet transcend these through lateral thinking and connected rationality. However, this will not be easy as managers are susceptible to the dominant worldviews that pressurize them to think and act with a reductionist and isolationist mindset. Considering the five principles of Holistic Flexibility for CST as a state of mind, ten behaviors have been deciphered as a guidance for managers; see Table 1. A note on the impeding challenges that managers are most likely to face in this journey and how these can be overcome has also been provided.

Table 1. Holistic Flexibility behaviors, their challenges, and ideas to overcome these challenges.

	Expected behaviors	Impeding challenges	Overcoming the challenges
i	Challenging taken-for-granted beliefs and expand the contours of one's own mental models.	Right from childhood and through formal education, managers are in a way "apprenticed" in knowledge systems bounded by defined pedagogies that are contextually determined and that result in rigid mental models.	Orient oneself to perspectives that are unfamiliar. Ask questions on why one thinks the way one does, and what are the underlying assumptions of one's thoughts. Ask how an alternative worldview based on a differing set of assumptions may look like.
ii	Openness to change and being cognizant of emergent behaviors of the system – both intended and unintended.	Managers often have to focus on closing projects and moving on to the next one. Enough time is usually not spent on understanding emergent effects of one's actions, whether they are intended or unintended. Changes in plans are often met with resistance and they need to go through cumbersome approvals.	Understand how the context and the system themselves transition as an intervention progresses both due to the effects of the intervention and due to external factors. Be open to adapt to project plans and intervention designs in response to the changing context considering both an intervention and the context as complex adaptive systems.
iii	Thinking laterally and make intuitive decisions.	Managers often have to take a structured approach and rely on evidence-based decision making driven by analytical methods. They also need to present causal linkages and rational explanations of their decisions and actions.	Trust what one intuitively believes one should do to complement the rational analytical approach. Believe in the strength of one's own judgement that is based on experience, feelings, and sense-making. Be open to risk-taking and critique.
iv	Working across paradigms and embracing a wide range of methodologies from different frames of references within and outside those associated with traditional systems thinking.	Paradigms within which managers operate and methodologies that they deploy are often influenced by the schools they are inducted in and by the institutions they are affiliated to. Allegiance can determine the modus operandi in OR/MS interventions.	Orient oneself to knowledge and contributions of schools of thought and institutions that one is not accustomed with. Be open to try out methodologies that one is not familiar with or collaborate with partners who declare allegiance to a different or differing paradigm.
v	Connecting the dots between various factors and modes of representation, even those that may seem distant from the problem itself.	Managers are taught to focus on the problem and be specific about solutions they offer. There is a general understanding that precision and directed action result in more robust solutions.	Use intuition and desegregated data to understand, project, or even imagine interconnections between a range of factors from the social, economic, political, environmental, technological, and regulatory aspects impinging upon a problem situation.
vi	Being creative in one's approach to knowledge generation and leverage different ways of knowing.	Managers are used to depend on limited sources of knowing driven by a Western rational analytical approach that normally involves theories, propositions, algorithms, and experimentations.	One needs to be open to complementing conventional ways of knowing with other creative modes such as art, theatre, experience, memory, and informal interaction.
vii	Displaying a learning attitude and challenging oneself and other stakeholders by incorporating new insights in their work, thereby enhancing efficiency, effectiveness, and value-centricity.	In usual business, due to commercial pressure, managers' focus on learning decreases in priority as one moves from efficiency to effectiveness to value-centricity. In reality, value-centricity is often ignored or eyewashed in the wake of achieving business results.	Ask tough questions. One needs to question project sponsors, leaders, and boards regarding why something is being done and what are its implications for stakeholders and for the ecosystem in the short- and the log-run. Involve diverse perspectives in project planning and implementation by inducting team

	Expected behaviors	Impeding challenges	Overcoming the challenges
			members of different genders, ethnicities, sexual identities, sexual orientation, educational disciplines, and socio-economic backgrounds.
viii	Involving and empowering stakeholders by creating conditions for the involved and the affected to realize their full potential.	Projects are normally conceptualized, designed and implemented with a top-down approach. In business, project teams are brought in after a project is finalized by the sponsors. The affected are hardly or never consulted.	Conceptualize projects bottom-up starting from drawing hypotheses on how wider stakeholder groups could be affected. This can only happen by bringing in the affected from the early stages. While inducting project teams, consider both skills and values. Democratize the project journey.
ix	Focusing on delivering outcomes that benefit social, economic, and environmental factors and thereby ensuring the wellbeing of current and future generations.	Usually, projects concentrate on a specific aspect, and they are focused on delivering outcomes within a defined time-period. Holistic impact and future generations are hardly taken into consideration; a good example is the effect of climate change on the society, economy, and environment.	Move from focusing on short-term activities to focusing on impact that is holistic and long-term. Use real examples from the world, such as the impact of climate change, to understand the vulnerabilities of the structures and institutions traditional management has landed humanity in. Voice opinions honestly and fearlessly as mature and responsible organizations will respect such views.
x	Appreciating one's position in the higher level of cosmic existence by understanding the value of management consciousness.	It is common to hear that managers do not have time to focus on meditation and mindfulness exercises in today's busy world. Additionally, modern management has seen the rational analytical supersede the consciousness discourse.	Practice mindfulness and meditation. It is a good idea to have a guide for self-discovery. Proactively make an attempt to shed the ego, and display humility, self-control, and emotional resilience.

It is not argued that a manager needs to display all the above behaviors at the same time in every situation. However, they should be cognizant of these behaviors and consider the implications of their actions in light of these behaviors. This journey necessitates training, a great deal of preparation, a supportive environment, and personal qualities that one must possess.

The next part of this paper will present a critique of the discussions presented thus far highlighting both its contributions and limitations.

Critique of Holistic Flexibility and its principles

Contribution

Holistic Flexibility offers a seamless, egalitarian, and universal lens to CST supported by the five principles articulated in this paper. Throughout the 1980s leading to current times, CST has made considerable impact in OR/MS (Jackson, 2019) promising a more flexible and pluralist approach for problem-solving conceiving issues beyond paradigm-wars and methodological-marginalizations. Jackson (2019) gave the SOSM (for SOSM, refer section "Systems Thinking and Critical Systems Thinking") a more flexible and open stance allowing practitioners to mix-and-match methodologies and come up with their own depending on the situation and considering various value-driven parameters. Various other scholars have proposed different ways of critiquing rationalities, mixing methods, and working towards

stakeholder inclusivity and empowerment (Mingers & Brocklesby, 1997; Mingers & Gill, 1997; Midgley, 2000; Ulrich, 2012; Ormerod, 2014). However, such works remain within the rational-analytical domain of problem-solving (Midgley & Rajagopalan, 2021). More recent research (Cabrera & Cabrera, 2019; Midgley & Rajagopalan, 2021; Rajagopalan, 2016; Rajagopalan & Midgley, 2015) represents a break-away for this domain that has taken systems approaches beyond the use of methodologies and has lent it a more cognitive character. Holistic Flexibility and its principles take the momentum of these developments even further to consider CST as a state of mind. It also helps labelling the emerging unconventional deployment of CST by practitioners as was also highlighted by Dr Luis Sambo (Regional Director for Africa, World Health Organization) who spoke about how CST helped him navigate the complexities of the situation during the Ebola epidemic in West Africa without having to use systems approaches in their pure sense (Jackson & Sambo, 2020).

CST as a state of mind can open-up new avenues for the discipline especially at a time when several studies have shown the power of the unconscious over the rational-analytical (Balconi & Lucchiari, 2008; Berlin, 2011; Bunce et al., 1999; LeDoux, 1998; Phelps et al., 2000; Wiens, 2006; Wong et al., 1994).). Holistic Flexibility takes CST beyond methodologies, frameworks, and prescriptions making systems thinking a cognitive skill to allow managers to deliver excellence in a Volatile-Uncertain-Complex-Ambiguous (VUCA) environment. The principles of Holistic Flexibility allow a manager to 'dance' in the rhythm of flux where realities are temporal and experiences are contextual. They allow managers to understand that what they perceive to be prudent at one point in time might be based only on a selective abstraction of reality created by their own perspectives and biases. From this derives the need to reflect on their own mental models and on the implications of their actions on the society, the planet and on themselves. This also calls for managers to explore deep interconnections between their individual consciousness and the larger existence, an evolving body of knowledge currently gaining prominence under fields like quantum management (Heaton et al., 2011; Sheldrake, 2018; Tsao & Laszlo, 2019), conscious capitalism (Mackey & Sisodia, 2014), and integral systems thinking (Floyd, 2008).

Finally, it is important to note the story of an ancient unconventional metaphor from Hinduism – the *Nataraja* – for OR/MS. To cite Peterson (2013, p. 17):

> "It is time to understand these stories, instead of considering them the superstitious enemy of science. The great myths of mankind are not theories of objective existence. They are, instead, imaginative roadmaps to being. They have emerged, painstakingly, piecemeal, as a consequence of our continual close self-observation, our developing understanding of the patterns of action that are essentially adaptive, and their representation in symbolic, narrative and dramatic form, during the transition from implicit behavioral pattern to explicit communicable form."

Inspired by the cosmic dance of the *Nataraja*, the principles of Holistic Flexibility can 'unbound' a manager into a world of self-discovery in the process of co-creating the "system

as becoming". This perspective can indicate a paradigm shift from an emphasis on the individual to a focus on the collective (Pavlovich & Krahnke, 2012), a much-required quality in current management.

Limitations

Arguments presented in this paper have certain limitations categorized under three areas – conceptual, integrative, and practical – in the discussion below. How these limitations open up new avenues for research in CST will also be highlighted.

We start with the first limitation – conceptual. Concepts contribute to direct one's thoughts and understanding in grasping complex ideas, and thereby they play an important role in cognition (Carey, 1991). Although the literature on Holistic Flexibility states that it does not offer a framework or methodology, it still has the danger of appearing theoretical, especially for managers who are not exposed to the OR/MS tradition. This can be daunting when this paper argues that Holistic Flexibility offers a more democratic and egalitarian stance to CST. However, it is important to note that Holistic Flexibility calls for fluidity in thinking, approaching, and doing as a differentiating characteristic in CST; in addition, the proposal to include the consciousness aspect as its core element in this paper makes a distinct contribution towards building a new cognitive character for CST. With inspiration drawn from religious symbolism to evolve this new conceptual lens and with the position it situates itself in, understanding whether Holistic Flexibility is an advancement in CST or whether it sits at the frontier of an emergent new fourth wave in systems thinking is an area of future research (for waves in systems thinking, refer to Midgley, 2003).

The second limitation is integrative. Although this paper introduces a distinct consciousness angle and advances the extant literature on Holistic Flexibility, it does not clearly address how this aspect can influence a manager in embracing each of the five principles. Select works (Gu & Zhu, 2000; Midgley & Rajagopalan, 2021; Rajagopalan, 2020; Shen & Midgley, 2007a,b,c, 2014, 2015) in systems science talk about integrating consciousness in management interventions from a methodological standpoint. However, consciousness in this paper has been limited as an additional consideration. This presents an area of future research on how consciousness, drawn from the *Shiva* philosophy, can be integrated in Holistic Flexibility in a more robust manner.

Finally, practical limitations of deploying Holistic Flexibility can arise as it calls for flexible and creative adaptations of individual systems methodologies and methodologies outside the OR/MS tradition in unison. Although Holistic Flexibility offers the liberty of making bold experimentations with methodologies, it implicitly presumes that managers would have an understanding of and some degree of expertise in these methodologies. Developing understanding of the wide variety of systems methodologies can pose application-related challenges due to the maturity and expertise they demand from a practitioner. Additionally, use of systems methodologies, whether in their pure form or creatively, demands involvement of multiple stakeholders and are lengthy to execute due to the depth of work they demand. Although the discussions provide cues for managers on how to overcome practical challenges of Holistic Flexibility, in reality, managers often have to succumb to pressure from their affiliated organizations (wherever applicable) or from themselves due to

commercial considerations. The aspect of management consciousness introduced above can offer some light at the end of the tunnel. Applying Holistic Flexibility and its consciousness dimension to organizations and establishing partnerships for comparative research projects to assess the impact of its deployment can be a potential area of future research.

Conclusion

This conceptual paper presented a discussion to articulate the principles of Holistic Flexibility and make a case for management consciousness by drawing inspiration from the *Shiva Nataraja*. Holistic Flexibility is a conceptual lens in CST to aid flexible and responsible management practice. The paper began by introducing the symbolism of the *Nataraja* and arguing for the relevance of religion and philosophy for management research. Having provided an orientation to CST, the conceptual lens of Holistic Flexibility was introduced, and an argument was established for the importance of articulating its principles and for the necessity to connect these principles with an understanding of consciousness. Drawing from the *panchakritya*, or the five most important functions of the *Nataraja*, five key principles of Holistic Flexibility were articulated. These are the "system as becoming", drawing from *srishti* or creation, "transformative flexibility", drawing from *samhara* or transformation, "responsible practice" drawing from *tirobhava* or (freedom from) ignorance, "spiral of learning" drawing from *samhara* or liberation, and "pragmatic artistry" drawing from *sthithi* or assurance. An argument was presented to establish the importance of management consciousness drawing from the *Shiva* philosophy. Behaviors associated with the principles were enlisted along with the challenges for managers to display these behaviors. This journey necessitates training, a great deal of preparation, a supportive environment, and personal qualities that one must possess. Finally, a discussion was presented on how Holistic Flexibility and its principles can lend a new character to CST as a state of mind to supersede a rational-analytical approach in systems thinking. Contributions and limitations of the arguments, along with areas for future research, were presented. This paper is the first scholarly inquiry into how the philosophy of the *Shiva Nataraja* can shed new light on management science, in general, and CST, in particular.

Acknowledgements

Disclosure statement

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