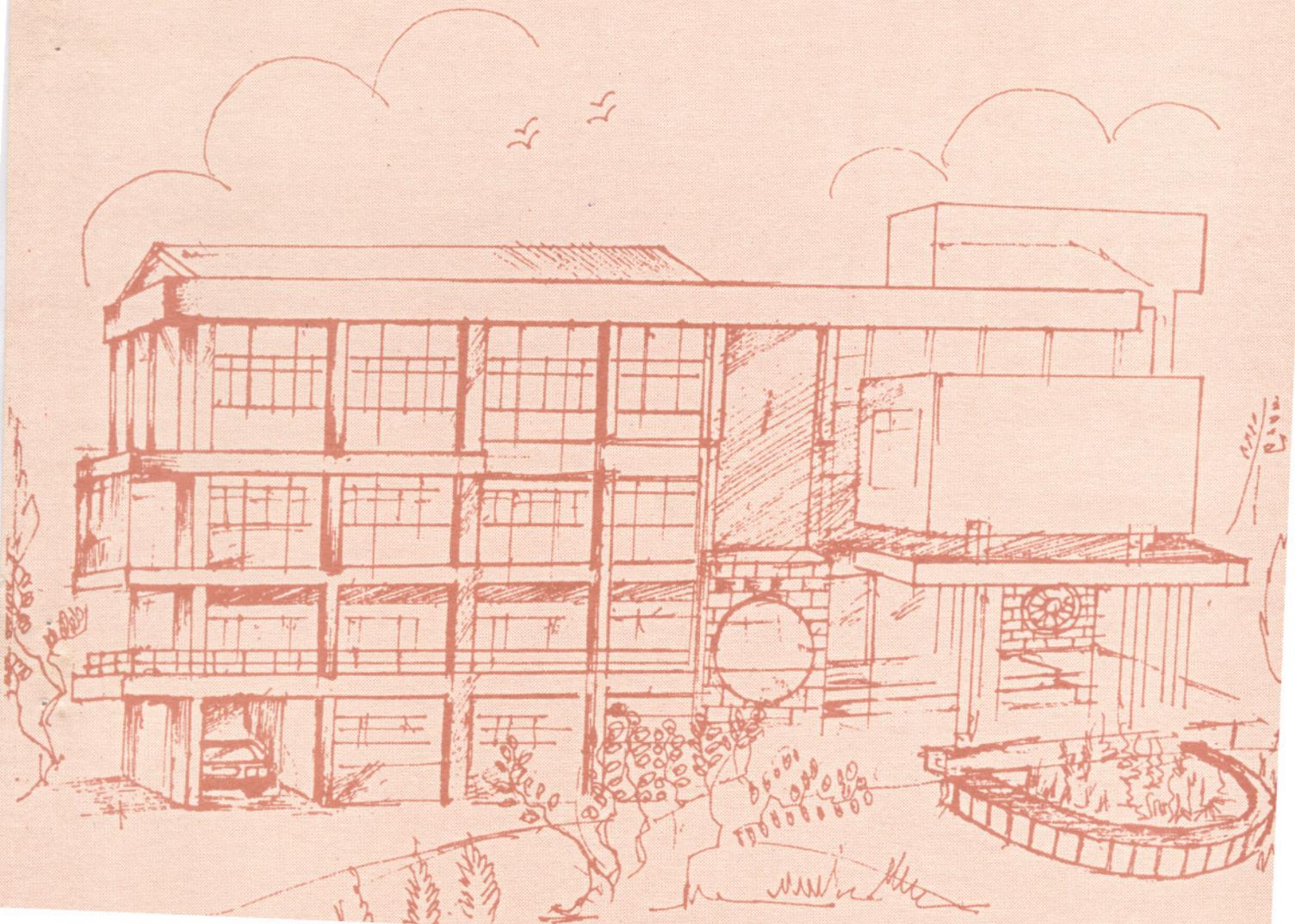


## Working Paper Series

**Self-Conscious Organizations:  
Organizations Evolving  
Towards Tapping the  
Power of Collective Awareness**



# **Self-Conscious Organizations: Organizations Evolving Towards Tapping the Power of Collective Awareness**

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# **Self-Conscious Organizations: Organizations Evolving Towards Tapping the Power of Collective Awareness**

## **ABSTRACT**

In this paper we trace the historical evolution of the metaphor called organizations. The stages we discern are explained through five metaphors: Mechanistic, Organic, Strategic Choice, Internal Ecology and Self Conscious. The last of these metaphors may have important implication for post-modern organizations. Taking cue from Stacey (2004) we emphasize the body-mind connection at “social level” and show how organizations could indeed be described as self-conscious. Finally, we briefly discuss the implications of such a view on organizational purpose, organizational identity and organizational values.

# **Self-Conscious Organizations: Organizations Evolving Towards Tapping the Power of Collective Awareness**

## **INTRODUCTION**

In this paper we trace the evolution of management thinking during the last over half century. In trying to do this we track the developments with respect to the metaphor called organizations. The metaphor has a powerful paradigmatic impact on the consciousness of individuals who ultimately decide the kind of institutions and organizations they create (Kuhn, 1970; Morgan, 1986)

These metaphors provide signposts of development through which management thinking has traversed during the last sixty years. The last of the metaphors we present here, which we call the “the self-conscious organization”, the paper argues, is more congruent with the aspirations of individuals, institutions and societies of the new century. We discuss the implications of such a metaphor in greater detail.

Whatever metaphor we choose to accept, the reality of organizations is far too complex for our minds to entirely conceptualize it. The famous statement of Alfred Korzybski comes to mind: The map is not the territory. The objective of this paper is to further the discourse on how mental maps on organizations are created, communicated and shared. This would facilitate reflective action. And reflective action would create mental maps. A spiral of positive feedback would constantly enhance and enrich our views of organizational reality and thereby continue to shape appropriate responses to organizational issues.

By discussing the five metaphors we are not pitting one metaphor against the other. All of the paradigms we describe are accurate and right in that they provide a legitimate partial view of organizations. Yet there are all incomplete and hence wrong too! The purpose is to embrace the complex called organizations and discourse the various metaphors. This will allow us to reconcile between different viewpoints and synthesize one’s own collective view of organizations.

The five metaphors may indeed be connected to each other in that they form a progression from “less evolved” to “more evolved” forms of organizations. The more

evolved forms would be a “plus” over the previous forms, and therefore not in opposition to the previous one.

While the tenor in defining organizational metaphors is essentially mythos, the paper is also keenly grounded in the logos that accompany each metaphor. If mythos provides a perspective, logos provide the levers for action in a manner consistent with a particular mythos. One of the major purposes of organizational discourse is to bridge the left-right paradox that constantly confronts organization members. This paper contributes towards such a discourse and praxis that accompany it.

### **THE MECHANISTIC METAPHOR**

The entire world, overcome by shadows of the Second World War, was on a renewal process in the 1940 and 50s. With respect to management those were heydays of Management Science. Operations Research had been hugely successful and effective in logistics during the war. Keynesian Economics was hailed as a panacea for managing economies governments. To give shape to these aspirations several international organizations came into existence.

Systematic application of scientific principles was no more the preserve of physics or other branches of natural sciences, but also of social sciences. It was a given axiom that, for achieving results, organizations had to be managed using scientific principles. In line with such a position disciplines like Management Science and Industrial Engineering emerged. The basic purpose was to enhance efficiencies in man-machine systems through application of well-defined scientific rules.

The machine metaphor sought to enhance efficiency through application of scientific principles. The initial results were spectacular. Fredrick Taylor’s time and motion study, followed by developments in Industrial Engineering offered great scope for solutions based on optimization models. Developments in operations research, scientific user of statistical techniques and algorithmic model building resulted in enormous generation of knowledge regarding the workings of an organization and offered decision-making tools. In the field of Psychology too there were similar developments of the mechanistic variety that greatly influenced the field of management. Skinner’s behaviorism and Pavlovian experimentations are examples of

the mechanistic worldview. Behaviorism peaked in popularity around the same time that Management Science took the central stage.

The idea of mechanistic organizations assumes that managers are designer of organizations carrying blueprints in the form of organizational charts, activity diagrams and reporting formats. It is assumed that the entire working of the organization can be conceptualized by the designer and appropriate component pieces designed and simply pieced together to create the right working of the organization. The organization resembled a machine, cold and impersonal, ready to be acted upon by the humans who created it in the first place. The view was that with the right choice of tools and techniques organizational designers would achieve the efficiencies similar to those achieved by engineers with machines. Increasing output while not increasing input, or decreasing input while not adversely impacting output, were the dominant means of achieving improvements. In such a scheme just as engineers use material and tools as building blocks, so also organizational designers use structures, processes and systems as the building blocks to design the organization.

Limits of the scientific paradigm were being felt towards 1960 and 1970s. Food shortages of the 1960s in developing countries, oil shock of the early 1970 that affected the poor and the rich alike, run-away inflation, bloated government spending which did not deliver the promised results of Keynesian economics, the Vietnam fiasco all saw a new metaphor emerging for organizations too.

### **THE BIOLOGICAL METAPHOR**

Organizations are more complex than machines, echoed the new sentiment. People implanting change cannot be mandated to work like cogs in the wheel. Inertia and change in organizations cannot be explained through Newtonian laws of motion, they reasoned. Here biology came to the rescue. Burns and Stalker (1961) made the interesting distinction between mechanistic and organic systems. The organic metaphor taken from biology adopts the evolutionary perspective. It has it that growth and development take place across time without pre-determined purpose. Change happens in a gradual manner. No doubt there are always occasional spikes in the rate of change. But these are more aberrations. The evolutionary theory has it that underlying all change is a gradual unfolding of higher forms of potential inherent in the system. The

expression of the potential is triggered by the changes in the environment. This happens through a process of variation, selection and retention (Campbell, 1970) through which better forms of the organism would survive, argued the evolutionarists. This was an attractive alternative to the machine metaphor which was too reductionistic to account for those changes that seemed to follow the path of gradual evolution. Not that the biological metaphor is without problems. For instance, the biological model is completely silent on the role played by human intentionality. We will revisit this limitation and how later metaphors overcame it would be discussed later.

This difference between the mechanistic and biological paradigms can be further understood by what Prigogine and Stengers (1984) have to say. They pointed out how the mechanistic view of reality (including that of organizations) presupposes the acceptance of the second law of thermodynamics. According to this view, the world is constantly moving towards greater disturbance and to keep order in such a system external force has to be applied to it. Control under this view has to come exogenously. The latter view, the biological view would have it that, left to itself, the system, through endogenous action, would move towards evolutionarily progress into higher states through a process of natural selection. These are diametrically opposite views.

Based on the paradigm is adopted, organizational members would describe organizations differently and practice management differently. Prescriptions would differ on the basis of the chosen paradigm. For instance, with the biological worldview, we are offered a model of human association that does not require coercion as a means to influence human behavior. Such a view would be at odds with the mechanistic view.

The biological metaphor is an attractive proposition and evokes ideas of gradualness that does not require “huffing and puffing” by humans. It evokes images of harmony with nature. Competition happens in nature, but only in retrospect. It needn’t be hastily set by humans. Under this view, natural selection would ensure that the fittest would survive and there is no need for humans to engineer natural selection.

## **THE STRATEGIC CHOICE METAPHOR**

The trouble with the biological metaphor is that it is too naïve an idea and discounts purposefulness, an idea and an expression that is uniquely human. Strong leadership

driven by intentionality, or in other words, purposefulness, is what runs the organizational “engine”, argue the critics.

The biological metaphor forces on us a rather simple (or simplistic) view; that the environment entirely determines the fate of the organization. Evolution would be a gradual process that would have no role for humans to engineer what Schumpeter (1911) calls “creative destruction”. The purely biological view would have it that, at a point in time, there would only be one “naturally selected” product design, one technology with one dominant process design and industrial organization with fixed rules of competition. There is no opportunity for making choices in such a situation. The supplier would have to blindly follow the rules of the game played out, on the demand side, by the market, and on the supply side, by the industrial organization.

Opposing this was the idea of strategic choice. One of the first proponents of the idea of Strategic choice was Child (1972). He argued that it is for firms to differentiate themselves against competitors on the basis of superior production processes or consumer preferences that are yet unexplored. He pointed out that through technological and management ideas superior returns can be generated by the supplier. This perspective came to be known under the term, “strategic choice.” Strategic choice provided for effective interplay with the environment whether it consisted of the customer and/ or the competitor.

If we look carefully essence the strategic choice perspective was a throwback to the mechanistic view, but with a slight difference. While the mechanistic view emphasized the efficiency perspective, the strategic choice perspective provided greater incorporation of the realities of the market place vis-à-vis customers as well as the competitors. It is not coincidental that, around the same time, the idea of effectiveness also came to receive dominant importance in management thinking and managerial action through the works of Drucker (1966). So we see that strategic choice is a movement to incorporate effectiveness while not completely forsaking the virtue of “efficiency”. Deeply embedded in such a view was the choice available to the organizational designer akin to that granted by the mechanistic model.

## **THE INTERNAL ECOLOGY METAPHOR**

None of these three views (the mechanistic, the biological or the strategic choice) are enough to incorporate the complexities and compulsions of modern organizations whose existence is largely based on knowledge creation and knowledge deployment, argued those who saw organizations as aggregations of knowledge. This metaphor is best represented by Burgelman's (1991) Internal Ecology Model. This view incorporates the essence of both biological determinism and strategic choice.

The starting point for the internal ecology model is the biological evolutionary model. The first process of "variation" in the variation-selection-retention triad that is essential to the biological metaphor is replaced by "enactment". This was first suggested by Weick (1979) wherein organizing is shown to be consisting of three processes, viz., enactment, selection and retention. According to Weick, "Enactment is to organizing as variation is to natural selection... The term enactment is preferred over variation because it captures the more active role that we presume organizational members play in creating the environments which then impose on them." (p. 130).

In the Internal Ecology model organizational members create a wide variety of ideas with strategic implications which are selectively chosen by the top management for implementation. It could be expected that the number of enacted ideas waiting for selection would be high in a pluralistic and democratic organization. The enactment "merely provides the equivocal raw materials which then may be seized or dismissed by the selection process" (Weick, 1979, p: 131). In other words, top management would act like a filter and, during the second stage of "selection", take in some of the enacted ideas for further attention. Finally, during the third stage of retention, it would give stability to the chosen idea-action complex to work itself out waiting for the results to flow in within a reasonable time span.

The selection and retention processes would be based on some logic which, through signaling, would be conveyed to the organizational members (Burgelman, 1991). According to Burgelman this logic or coherence could be termed the strategy of the firm/ organization.

## THE SELF-CONSCIOUS METAPHOR

If effectiveness and coherence are the objective of the organization within the internal ecology metaphor, the self-conscious metaphor would have it that the organization's main objectives are seeking, finding and upholding *meaning*. To develop our argument we draw upon from Stacey (2004). Taking the cue from social psychologist, D.H. Mead and recent developments in neurosciences, Stacey shows how human collectives could develop their own purposive behavior and learning abilities. Stacy argues that other recent developments in organizational theory which powerfully argued for collective learning entities such as learning organizations [for instance see Senge (1994)] had fallen short of establishing the process by which human collectives learn. This gap is being filled by a new paradigm that Stacey calls upon to consider. The new paradigm is characterized by what Stacey calls "complex responsive processes."

Long ago Mead (1934) had argued that when human beings communicate with each other there is are neurological processes going on in the sender and the receiver which align the individuals wherein greater communication is achieved with greater neurological alignment. This line of reasoning ties in with the ideas expressed by scientists such as Varela with deal with the idea of embodied mind (Varela et al, 1991). Embodiment of mind has implications that are methodological too, in that mind, feelings, intentions etc. become observable objectively and thereby come under the ambit of scientific inquiry subject to validation.

Sourcing scientific studies, Stacey points out that human brain is continuously registering internal states of the body and that these internal states constitute feeling states. Therefore he says,

*...when a person encounters situations similar to previous ones, he or she experiences similar feeling states, or body rhythms, which orient the person to act in the situation... the body's monitoring of its own rhythmic patterns is both the ground for its construction of the world it acts in and its unique sense of subjectivity.*

*Feeling, therefore, are rhythmic patterns on a body and they make it possible for the gesture of one body to call forth in itself a similar response, a similar feeling rhythm, to that called forth in the body to whom the gesture is made. In other words, there is some kind of resonance between the body rhythms of the two interacting individuals" (p: 82-83).*

This matching of neurological processes, that align the sender and the receiver in a bodily sense, has important implications for human collectives. This would mean that there is a physical basis for social psychology. If this is right there is physical basis for collective learning and collective consciousness! It would also mean that higher order activities such as learning and being purposive and conscious, while dependent upon individuals, would also manifest in the reverse direction; from the collective to the individual. Also it would mean that a collective could even learn by itself and be purposive and conscious by itself independent of the processes unique to the individuals who constitute the group.

Let us look at consciousness in a little more detail and create its “working definition”. We prefer to restrict to a working definition because we would be better off without being conclusive. We go along with Marvin Minsky who, in the context of explaining consciousness, states

*If you 'understand' something in only one way then you scarcely understand it at all. For then, whenever something goes wrong, you'll have no other place to go. But if you understand it in several ways, then when one of them fails you can switch to another— to see it from different points of view —until you find one that works for you. Similarly, if you had only one 'way to think,' then you would get stuck when that that method fails. But if you have several ways to think, then whenever you get frustrated enough, you can switch to a different emotional state, or otherwise turn things around in your mind, until you find an effective approach.”(Minsky from [http://www-ugrad.cs.colorado.edu/~cs3202/papers/Josh\\_Hogrewe.html](http://www-ugrad.cs.colorado.edu/~cs3202/papers/Josh_Hogrewe.html))*

For our purpose we will define consciousness in terms of one of its important elementary characteristic, viz., “behavior that displays[ed] awareness... of what it was doing in relation to others (Stacey p: 78). Stacey credit’s this idea to Mead “who was talking about a... capacity for reflection on, thought about, and prediction of, the response that an action by one was likely to evoke in another (p: 78)

If one elementary characteristic of consciousness is awareness of how the “other” thinks and responds to one’s own behavior, then consciousness would unequivocally oppose the reductionistic behavior ascribed to the rational being. For instance see Principia Cybernetica (<http://pespmc1.vub.ac.be/PRISDIL.html>) according to which

“rational decision-making means that you make the decision which is best for you whatever the other actor chooses.” In other words, a rational person is one whose action does not take into account the likely action of the other person in response to one’s own action.

If a group has consciousness of their own it is also capable of being *self-conscious*. But before we comment on self-consciousness of the *group*, we have to first understand, at the individual level, what *self-consciousness* means. We will go back to Stacey. Again aided by the insights of D. H. Mead, Stacy sees “self” as the relationship between the “I” and the “me”. Dwelling deeper, Stacey says,

*... there evolves a capacity to take the attitude of others not just towards one’s gestures but also toward one’s self. The “me” is the configuration of the gestures/ responses of the others/ society to one as a subject, or an “I”. What has evolved here is the capacity to be an object to oneself, a “me,” and this is the capacity to take the attitude of the group, not simply to one’s gestures, but to one’s self. A “self” as a relationship between “me” and “I,” has therefore emerged, as well as an awareness of that self ,that is, self-consciousness (Stacey p: 88).*

So what we see is the emergence of self-consciousness in the being that is capable of being conscious. We could summarize our discussion as follows

- a) Organizations are conscious entities
- b) Organization’s consciousness has an existence by itself in separation or in continuity with the consciousness of the individuals who form part of it
- c) Conscious entities have an “I” and a “me”
- d) Through “I” and “me” conscious entities experience self-consciousness
- e) Organizations experience self-consciousness

The idea that organizations are self-conscious may give important clues to the way post-modern organizations function, and thereby, the means to design them. When an organization displays characteristics of being self-conscious there will be, for instance, a need to find meaning. Another characteristic would perhaps be that it will be keenly aware of its unique *purpose*, its unique *identity*, and the unique *means* (or values) it adopts to achieve the purpose. Let’s look at the purpose-identity-means triad more closely.

The unique *purpose* of a self-conscious organization will be constantly rechecked and calibrated by it. Substance will drive style. The purpose will get constantly renewed which will provide the greatest source of decision making at decentralized levels. This will provide self order, the alternative to top-down fiat. The organization would periodically unshackle itself from formulas that worked in the past and create new models of business success. The new model will incorporate its own unique ways of inclusiveness that takes into account the diverse interests of its stakeholders. There would be a movement away from pure compliance orientation.

The *identity* of the organization will be keenly understood. It will also be keenly aware of the context within which this identity would be asserted. For instance, in a networked world the firm's identity would get consciously shaped to accommodate open boundaries. The firm would develop innovative learning partnerships even with institutions that hitherto were not seen as connected to its affairs. Boundaries may blur and firms will redefine their identity to be better corporate citizens and reach out to a larger spectrum of stakeholders while making no sacrifice on financial health. The new identity will resolve apparent conflicts between financial and social performance through organizational and market innovations. It would depart from the traditional notion that top managers alone are the custodians of organizational identity.

Self consciousness would imply being keenly aware of *values* held by the firm (including the spirit of culture and community manifested in its beliefs, attitudes, aspirations and customs). The organisation will be keenly aware of the enactive nature of its activities, giving rise to a cycle of enactive behaviour, reflection and communication, adaptive modification, back to enactive behaviour and so on.

## CONCLUDING REMARKS

We took a historical view of how organizations have been interpreted over the last over half century. We see that there has been a great deal of change in the way in which organizational theory has developed over this period. We summarize in Table: 1 the various characteristics of the five metaphors.

**TABLE: 1**

Differentiating Factors	METAPHORS				
	Mechanistic	Biological	Strategic Choice	Internal Ecology	Self-conscious
Objective	Maximize efficiency	Maximize survival odds	Maximize system effectiveness	Harmonize knowledge of diverse members	Seek collective meaning
Source of Order	Leadership control	Evolutionary impulse provided by external forces	Coherence in proactive response to external forces	Coherence in strategic selection of diverse ideas from knowledge workers	Purpose and awareness creating self order
Source of Innovation	Leader's initiative	Chance mutation	External forces providing opportunity for the right innovator	Knowledge and combinations of diverse knowledge components	Potentiality
Communication – Procedural	Top-down based on rational organizational design model	Least amount of procedural communication	Top-down to exercise control, bottom-up to communicate field reality	Keenly aware of the distinction between procedural and tacit. Constant effort to convert tacit to procedural	Procedures as accepted cultural norms. Feedback not left to nature but ordained by human intentionality
Communication – Intelligence	Bottom-up	Many-to-many	Largely bottom up	Many-to-many	Interpretive and selective and based on individual styles. Intelligence loses stealth value
Development of Knowledge	Through laboratory experiments, demonstration and instruction	Through trial and error	Through keener understanding of the environment and learning through capabilities deployment	Collective knowledge creation through constant interplay of knowledge from diverse quarters within the organization	Highly enactive behavior and collective and spontaneous mutual reflection... leading to higher levels of tacit knowledge

By seeking an evolutionary path of how organizations have come to be viewed this paper provides a peek into the future. Through this paper and work that has led to this (principally that of Mead and Stacey) researchers in the field should be able to develop these ideas further. The argument presented here has major implications on how ethical business conduct and meaning-seeking behavior could be fostered in organizations. There are also methodological implications. For instance, our theses would point out that there is need to expand the unit of analysis for studying ethics, innovation etc. from the individual to encompass the organization too. It wouldn't be wrong to say that current inquiries are excessively individual-specific because of our inadequate knowledge of what a group or an organization is and its uniquely singular attributes that we claim in the paper to include self-consciousness.

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