

Article

Diagnosing Complex Organisations with Diverse Cultures—Part 1: Agency Theory

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Abstract: Complex organisations require coherence to achieve adaptive goals through agency. This paper introduces Mindset Agency Theory (MAT), a metatheoretical framework designed for modelling and diagnosing agency within culturally diverse populations. MAT, a cybernetic multi-ontology framework, delineates five formative traits defining agency character. Its cognitive style trait (with bipolar values of Patterning–Dramatising) elucidates how agencies acquire information. Examining diverse agencies requires an appreciation of the social relationships that exist there, but MAT is currently devoid of this capability. Using the configuration approach to enable the integration of Tönnies’ social organisation theory into MAT, social relationships can be suitably explored, thus enhancing its capacity to investigate agency coherence. Tönnies’ theory of social organisation (with bipolar values of Gemeinschaft–Gesellschaft) that frames inter-agent interactions is configured within MAT. This integration births a new formative trait, pairing cognitive style with social organisation, and is thus capable of indicating the likelihood of operative coherence. Configuration is applied by relating propositional attributes of a holding metatheory framework such as MAT, with an entry theory such as Tönnies’ social organisation theory as determined from the literature. The elaborated MAT serves as a diagnostic tool, linking trait instabilities with agency pathologies that deliver dysfunction. A subsequent paper will apply this framework to ASEAN, a regional intergovernmental organisation addressing cultural diversity issues. The study aims to evaluate ASEAN’s mindset and diagnose its pathologies, such as narcissism and paradoxical behaviour.

Keywords: Mindset Agency Theory; cybernetics; agency; complex adaptive systems; sociopolitical organisations; cultural diversity; cognitive style; social relationships; Tönnies’ theory of social organisation



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1. Introduction

Sociopolitical organisations can be modelled as adaptive systems with a property of agency, which is derived from adaptive agents set in a population defined by some commonality, such as co-interests. Agency is defined through inter-agent interactions, where each agent has its proprietary capacity for agency, as noted by Archer [1] and Giddens [2], where its actions occur autonomously and with intentionality, and its choices are based on its internal attributes such as values, beliefs, and intentions. The capacity for agency to undertake behaviour pertains to its degree or level of ability to act and make choices that shape its existence. This capacity is influenced by idiosyncratic attributes such as beliefs and external factors such as ambient social structures, cultural norms, power relations, socioeconomic status, demography, and access to resources. One may ponder whether agency is externally or internally created. The former perspective, advocated by Bourdieu [3], asserts that agency emerges as a product of social position and historical context. Bourdieu introduces the concept of habitus—a system of acquired dispositions that subtly influences actions and limits choices. In contrast, Foucault [4] proposes that agency

is a historical and ethical phenomenon involving both external and internal factors, and that it is self-produced and transformed through practice and discourse. This aligns with Maturana and Varela's [5] concept of autopoiesis, which recognises that self-production is inherent in complex organisations. Agency possesses the ability to self-create reality and make choices that impact the surrounding environment. It also has character, defined in terms of its disposition and sociocultural orientation, influenced by ambient factors, as reflected in the views of Bandura [6,7]. Agency also holds the power to shape its own life and context, and exercise control over its environment. It can additionally influence the behaviour of others—a notion supported by Giddens [2], who sees agency providing the capacity to actively influence and shape its social context, and vice versa. Understanding the shaping of agency behaviour requires a holistic perspective on how inter-agent interactions influence its dynamics, as noted by McAdam et al. ([8] p. 7).

Cultural diversity may be a beneficial attribute, delivering a balanced stable culture when different cultural values coexist and reinforce each other, and resulting in harmony and cohesion. In this situation, the organisation recognises and leverages the unique strengths of each cultural group, promoting mutual respect, understanding, and collaboration. Here, agents are likely to have a sense of collective identity and commitment. However, it does not always lead to stable agency conditions, and particularly when it results in cultural instabilities that can in turn give rise to pathologies. These pathologies encompass abnormal or unhealthy outcomes, such as disorders, conflicts, crises, corruptions, or collapses, significantly impacting agency well-being and sustainability. For DeYoung and Krueger [9], they may also manifest as a failure to achieve adaptive goals due to the absence of reflexive processes or their disruption, rendering the agency unable to inform its regulative capacity adequately to control its behaviour. Adaptive goals, in this context, refer to objectives aligned with agency needs, values, and interests, capable of being adjusted or replaced in response to reflexively identified changing conditions, according to Swindells et al. [10].

It has been said that instabilities can generate pathologies, and these can inhibit agency in achieving its adaptive goals. However, not all agency goals are adaptive. With instabilities, inefficacious information about an adaptive source (a notion that arises from the ideas of von Foerster [11] and explained by Yolles and Frieden [12]), that may result in maladaptive, unrealistic, or incompatible needs, values, and interests. Adaptive goals and pathologies are interrelated and interdependent phenomena that can impact agency functionality, and they require a comprehensive diagnostic approach to identify and pursue adaptive goals, and to recognise, prevent, and resolve pathologies. According to Holland [13], instabilities disrupt agency balance and harmony, while pathologies are the negative consequences or outcomes of these instabilities. Following Page [14], psychological, social, and organisational pathologies can impair agency functionality—the ability to act and make choices that shape their existence. These pathologies can manifest as a lack of resilience (an inability to cope with external stress), an inability to adapt to changing circumstances, and a rigid functionality that limits creativity and innovation.

Cultural instabilities arise when different cultural norms and values conflict with each other, leading to tension, confusion, and inconsistent behaviour. Shared culture, in this situation, can no longer provide a reliable anchor for the organisation's values and norms, and when this occurs, agents may revert to their own cultural norms and behaviours, which can lead to contradictory, inconsistent, and paradoxical behaviours, as noted by Hofstede [15,16]. Schneider and Barsoux [17], Harris and Morgan [18], Kotter [19], Adler [20], and Trompenaars and Hampden-Turner [21] are some of the conventional authors who have studied culture and its impact on organisations. They have focused on different aspects of cultural dimensions, such as values, practices, symbols, and orientations. They have also assumed that cultures are stable and homogeneous entities. In contrast, radical approaches embrace complexity theory. This can recognise that culture is a dynamic attribute of complex systems which have the properties of instability, emergence, unpredictable behaviour and agency. Such systems embed reflexivity, self-reference and self-organisation, as Beer

explains [22,23], and as is further noted by Fields [24]. Here, Faye and Pylkkö [25] recognise that agency refers to the capacity of agents to act, make decisions, and exercise self-control over behaviour, the predisposition of which is determined by a symbolic observer with a subjective disposition. Disposition is embedded in a sociocultural orientation, the two together forming agency character. The connection between disposition and operative behaviour is centrally important, as we shall explain in due course, and it may be subject to instabilities that can result in pathological processes and further instabilities and loss of adaptive viability [12]. Sociocultural orientation inherently influences disposition through the functionality of particular trait values, and both are ultimately determined by the mutual interactions of the agency's population of agents. Here, each agent has the capacity to act and interact with others through its own local agency. Hopwood and Bleidorn [26] explain that agency character is relatively stable, but not fixed or predetermined, and it is a product of ongoing inter-agent social exchanges. It also plays an important role in determining agency behaviour and the possibility of identifying potential threats to its stability and viability.

The application of cybernetic modelling to agency involves notions such as self-awareness and an understanding of the nature of the impact that events relevant to it have, where an event (in a generic sense) is taken as a specific point in time when the nature, existence, or state of an object or entity can be recognised by an observer as a parametric structure with effects that are understood by context. This approach emphasises the interconnectedness of agents that comprise an organisation and create agency, as well as the reflexive nature of dispositional development, and the idea that self-reference shapes behaviour. Cultural diversity can have both positive and negative agency consequences depending on whether it occurs under stable or unstable conditions, and how it impacts sociopolitical coherence. An improved understanding of how the differences can affect such coherence can be gained through reflexivity, which goes beyond linear cause-and-effect relationships due to the complexity involved. A cybernetic approach also allows for nonlinear thinking, enabling the uncovering of patterns and relationships that are not immediately apparent through analysing individual parts. By promoting a more holistic understanding of agency behaviour, including its emergent properties, a cybernetic approach deepens our perception of how cultural differences shape sociopolitical coherence.

The primary purpose of this paper is to tackle the intricate challenges posed by culturally diverse agencies, recognising the potential transformation of instabilities, where they occur, into pathologies, and recognising their consequential impact on behaviour and performance [27,28]. The research question centres on the resolution of pathological issues arising from cultural diversity in complex and dynamic situations. To tackle this issue, we use suitable theory configured within a metatheory that is able to elucidate and establish connections among theories, and facilitate activities such as analysis, comparison, evaluation, or integration through meta-analysis. That which constitutes suitable theory can be recognised using theory-building approaches, and these have gained importance with the propagation of notions of complexity, as explained by Shepherd and Suddaby [29] and Borsboom et al. [30]. Here, the theory-building approach to be adopted is that of configuration.

To satisfy its purpose, the paper is structured as follows. In the next section we explain the methodological approach. Then, in Section 3 we spend considerable time considering the framework to be adopted, from a theoretical perspective including a discussion concerning the relationship between state and process instabilities and the pathologies that can arise from them. This is followed by an illustration of the relationship between pathologies and possible consequences for the cultural trait belonging to the changing nature of agency belonging to different civilisations over history. Then we further explore the nature of the framework and its capacities to explain how pathologies can result from instabilities, and their consequences. Section 4 is concerned with the process of configuring social organisation theory into the framework. Finally, Section 5 is a discussion and conclusion.

2. Methodology

Metatheory can be aligned with the idea of relativistic theory building noted by Guo et al. [31], where theory builders are recognised as subjective beings with varying perspectives capable of delivering alternative theoretical trajectories. Our framework, Mindset Agency Theory (MAT) [32], coupled with a configuration approach involving meta-analysis, serves as an example of a metatheory having a capacity to incorporate multidimensionally distinct yet essentially relatable theories. Configuration is capable of examining the inherent nature and characteristics of candidate schemas to determine theory compatibility. The configurative theory-building process involves modification, extension, or integration within a specified context, guided by well-argued rational perspectives from a subjective inquirer. As a metatheory, creating configurations under a MAT framework can enable the generation of new knowledge or understanding about a subject of inquiry by using existing theories as a basis and modifying, extending, or integrating them. A methodology may be seen as a body of methods, rules, and postulates employed by an inquirer. The broad intention in the methodology we provide here is to create two attributes of the paper. The first is theory building, which we provide in this, Part 1, paper, and an application in an upcoming Part 2. To elaborate on this, the theory construction part adopts a configuration composed of the following steps: Theory building: step (1) the identification of a specific situational context (in this case agencies with diverse cultures), and (2) a structured meta-analysis to establish the model (through configuration processes). To elaborate on the application process, we have these steps: Application: (3) a pragmatic application of the model for a defined situation and (4) model validation; then, if necessary after experiential inquiry, a return to theory building, delivering (5) reflexive reflections on theory building, and so on round the cycle again. It is clear that configuration seamlessly fits into the theory-building phase of the process, employed to identify and analyse patterns or configurations of causally relevant conditions associated with a thematic interest. Acknowledging diverse ways of explaining and predicting the effects of causal conditions, configuration serves as a comprehensive approach within the theory-building framework.

The MAT configurative framework is a cybernetic formative trait theory that elucidates how agency behaviour and performance are influenced by the agency's mindset. Formative traits shape a mindset, defining character and portraying the disposition of an agency capable of interacting with its environment. These traits influence how agencies perceive, interpret, evaluate, and respond to situations, particularly in complex and dynamic scenarios. MAT, derived from metacybernetics [33], integrates theories from psychology, sociology, anthropology, and cybernetics [32]. It serves as a tool for analysis and diagnosis, offering insights into the dynamic and nonlinear nature of agency operations and behaviour, as well as exploring the positive or negative consequences of cultural diversity. MAT is grounded in the ontology of Schwarz [34], with influences from von Foerster [11] and Varela [5], and a configuration deriving from thinking by people such as Bandura [7], Piaget [35], Triandis [36], Schwartz [37], Sorokin [38], and Shotwell [39]. It has already been noted that MAT will be applied, in a subsequent paper in a qualitative pragmatic exploration, to a regional organisation defined by the member states that compose it. The member states are autonomous agents that collectively form an agency population with cultural diversity within the Association of South East Asian Nations (ASEAN). This upcoming paper will demonstrate how MAT can be used to explore the consequences of cultural diversity. In particular, for Tan [40], this is useful where cultural instabilities manifest pathologies that result in incoherent operative processes resulting in paradoxical behaviour, and they can also create issues with integration, including communication and information flow problems.

MAT incorporates concepts of agency within a broader sociopolitical perspective that can offer a more comprehensive understanding of complex organisations, particularly in addressing cultural diversity. While agency is a global phenomenon, it is already noted that it only exists as an emergent phenomenon due to the interactions that occur among its population of agents, and that each have their own local agency. To understand the

relationship between global and local agency, one might usefully refer to Simon's [41] hierarchical levels, which are the result of evolution and adaptation in agencies, as they tend to evolve from the simple to the more complex by adding new hierarchical levels over time. These levels may appear as fractal reflections, where a fractal is the structure or organised pattern at one level that is similar to the structure or pattern at another level, but with some variation.

This recursive and fractal phenomenon can thus be observed at different levels of organisation, providing an effective way to organise agencies. Simon's hierarchical levels can help us identify and analyse the relationship between different hierarchical levels and how they interact and influence each other. Seeing them in terms of fractal reflections can help us better understand and model agency structure and dynamics, as well as how it changes and adapts over time. The different hierarchical levels may also be recognised, within a cybernetic setting, as distinct orders of ontology from which we gain the expression cybernetic order. By integrating these concepts into a comprehensive modelling framework, one can better understand how agency emerges from its local agencies.

MAT provides a comprehensive lens to understand, diagnose, and improve agency functionality. Its holistic perspective is rooted in metacybernetics, which is a general cybernetic theory for complex systems, as Yolles notes [12,42], and it involves a multi-ontological model of culture, disposition, and operative functionality that can represent key aspects of complex organisations. Operative functionality provides agency with an operational capacity that encompasses an ability to execute behavioural tasks and achieve adaptive goals, efficaciously undertaken when requisite conditions of stability are satisfied. It is a multidisciplinary approach that captures the distinctions arising from different knowledge trajectories, whereby connecting knowledge pathways enhances theories and helps identify potential pathologies that limit functionality and adaptability. Agency pathologies can result from multiple factors, including internal instabilities, which may go unrecognised. Multidisciplinary approaches might be better able to detect them due to access to a broader knowledge base. MAT derives from Schwarz's [34] cybernetic theory, which originated in 1988 and which has been built on the notions of complexity by Prigogine [43,44], the principles of cybernetics as identified by Wiener [45], and the attributes of psychology, biology, and philosophy.

3. The Nature of Mindset Agency Theory

3.1. Mindset Agency Theory

To understand MAT, it is important to recognise the role of agency and its character in shaping the behaviour of complex adaptive systems. Agency character can be attributed to the interaction between constituent agents and the organisation that defines it. There are two primary forms of agency character: idiosyncratic and generic. Idiosyncratic character refers to the unique, specific properties and tendencies that arise due to the organisation and its constituent agents. This character is particular to a given complex adaptive system and reflects its distinctiveness from other systems. In contrast, generic character is a set of fundamental properties of complex adaptive systems (such as adaptation) shared across the class, as described by Mitleton-Kelly [46]. When personified, agency disposition can be called its personality.

The character of MAT can be described in terms of formative traits that create the idiosyncratic mindset. It embeds a symbolic observer characterised by a certain disposition that shapes that mindset. This disposition is socially normative since it emerges from within its population of interactive agents. We are aware that character is determined by both disposition and sociocultural orientation, and in MAT these arise as a mindset that creates an imperative for agency behaviour. While the traits can deliver a stable mindset, agency character can change if trait values alter under different contexts. This occurs in a way reminiscent of the way changes in context can result in different connections with individualism and collectivism, as shown by Tamis-LeMonda et al. [47]. The traits take on a dyadic nature, each possessing two epistemically independent but interactive polar

opposite trait values, where one polar trait value may dominate, or alternatively, the trait values may be in a state of balance or conflict [32]. If trait values can change, then perhaps they can be measured; the question, then, is how might this occur?

If we refer to trait measures, we are really talking about qualitative values. By this we mean quantitative representation of qualities, and for this one could use landmark theory [48]. Postulating about the approach, one might consider that culture may take one of two trait values (Sensate or Ideational), and suppose that one might or might not take dominance over the other in a given culture. We could represent this as (Sensate, Ideational) = $(\pm 1, 0)$. We may also consider an equal balanced or unstable culture with the trait value being ± 0.5 . According to Sorokin [38], instability occurs when the cultural dynamic moves from Sensate to Ideational and generates a tendency toward value conflict (-0.5 say), while when it moves from Ideational to Sensate, stable balance occurs ($+0.5$ say). Of course, other balances may occur (e.g., 0.3) that indicate distinction in the relationship between Sensate and Ideational cultural values, where lower values will indicate greater dominance of the Sensate. A balance may be seen in societies in which material comfort and intellectual or creative exploration is relevant, and where no dominant conflict occurs between Sensate and Ideational values. An example is during the period of the 18th-century industrial revolution, where Sensate values included materialistic pursuits, scientific rationality, individualism, and economic growth, while Ideational values included spiritual and religious beliefs, moral values, and philosophical ideas. An unstable culture occurs where cultural values conflict, resulting in a tension or struggle to reconcile the demands of each of the value sets. This may be seen in societies where there is a significant divide between those who prioritise material wealth and pleasure versus those who prioritise intellectual or creative expression. An example is Bauman's [49] concept of "liquid society", which refers to a metaphorical state of society in which traditional structures and solid institutions become increasingly fluid and unstable. In this "liquid" state, people experience uncertainty, disorientation, and a sense of constant change.

Overall, identifying the relationship between polar trait values in balance or conflict, and the degree to which they dominate or balance each other, can provide insights into cultural dynamics, values, and priorities in different contexts. This can help in understanding how different traits interact within different societies and how they shape the beliefs, attitudes, and behaviours of individuals within those societies. Conflict can arise with agency instability, when states of imbalance are experienced. Thus, for instance, culturally diverse agencies may experience cultural instabilities with conflicting trait values, which leads to a loss of identity, coherence, and operative legitimacy that can result in inefficiency, inefficacy, and corruption [32]. This may occur when certain important processes are poorly informed or ineffectively performed. An explanation for this comes from von Foerster [11], referred to earlier, when, in terms of the framework given here, the relationship between disposition and operations is unstable if either its behavioural or operative information is not intrinsic to the source from which it is acquired (i.e., it has some degree of acquisition error). Set in terms of Varela's notion of autopoiesis [5], this has been called autopoietic instability [12], but since higher orders of autopoiesis exist [33], a more general term might be von Foerster process instability. This reflects an incapacity to function efficaciously, which interferes with a capacity for self-regulation and requisite adaptation. When this occurs, agency loses the ability to dispositionally monitor and control its own behaviour and functioning through regulative structures and standards, thus endangering its viability.

Besides self-regulation, there are two other important facets of agency: self-stabilisation and self-reflection. We note that self-regulation is the process by which an agency maintains or adjusts its state or behaviour according to its purposes, involves comparing the agency's current state or outputs with intended or reference state or outputs, and where there is autopoietic stability, applies corrective actions if there is a discrepancy. It also enables an agency to adapt to changing conditions [50]. Self-stabilisation refers to agency's homeostatic property that seeks to stabilise the autopoietic dispositional–operative interaction. It enables an agency to maintain a relatively constant internal environment despite external

changes by regulating the relationship between disposition and operations. Through it, agency can maintain its functionality and performance within a certain range, required for viability. Self-reflection is an important process that enables agency to maintain its viability and evolve in its dynamic environments. It denotes monitoring its own behaviour and performance, enabling agency learning and adaptation under changing conditions. As such, it is a reflexive process leading to self-organisation that can spontaneously create order and structure due to local interactions among its agents.

MAT is a reflexive agency model that enables investigation of complex organisations through the lens of third-order cybernetics. To better understand this, it is useful to recognise the differences between first- and higher-order cybernetics. First-order cybernetics is the study of self-regulating systems that operate within mechanical or living systems, and it relies on an external observer to respond to reflexive information from that being observed, thereby enabling the system to maintain equilibrium and stability. For Foerster [51], second-order cybernetics involves agency, and focuses on the relationship between the symbolic subjective observer and the observed in complex open systems, where reflexive processes include the observer as an integral part of the system, together with its associated perceptions and interpretations of system operations that define the observed. For Julià [52], and also Foerster [53], this may be connected with disposition, which plays an important role in shaping agency operations and consequently behaviour in its environment. Higher-order cybernetics, for Kauffman [54], builds upon the ideas of second-order cybernetics, maintaining the concept of agency and its disposition–operative relationship that influences how operations function in the environment.

The disposition–operative relationship may be taken as an inferior fractal with a second order ontology. It is embedded in a superior fractal (otherwise just referred to as the fractal), so defined through its third order ontology. Here, sustentation acts as a disposition that regulates the inferior fractal which may be seen as an autopoietic system in its own right [33]. In higher-order cybernetics, the concept of agency is integral and builds upon the second order. The symbolic observer plays an active role in creating and understanding the system, leading to mutual interactive influence between operations and disposition that constitutes both the symbolic observer and the observed. This view is particularly relevant in third-order cybernetics due to its increased complexity. The third-order cybernetic perspective recognises that a fractal of second-order disposition–operative relationships has a meta-disposition that takes its context into account in a higher-order ontological hierarchy. Agency can be defined in terms of power potentials, with the dispositional potential representing the innate idiosyncratic regulatory structure that (as previously noted) with personification might be called personality, and an operative potential encompassing both innate structural and learned capabilities such as skills, with both being subject to sociocultural conditioning. Differentiating between dispositional and operative potential allows for a comprehensive understanding of how external and internal factors contribute to overall agency performance, emphasising the autopoietic connection between them that enables self-organisational processes (cf. [32,55]).

It has been noted that the interplay between disposition and operations is important for agency coherence. The model representing this relationship has evolved [56] by engaging with trait psychology and incorporating the ideas of Sagiv and Schwartz [57], thereby resulting in MAT [32]. It is clear that concepts of autopoiesis and its higher-order autogenesis lie at the heart of this theory, which Schwarz originally published in 1988, and derives in part such authors as Maturana and Varela [58] and Prigogine and Stengers [44]. Most considerations of autopoiesis recognise that it is a dynamic network of processes that enables agency self-regulation to facilitate directed self-production from dispositional to operative structures. However, it is also capable of initiating dispositional (and indeed sustentational) adaptation [12]. This is because autopoiesis is a dynamic network of processes that not only allows for agency self-regulation and directed self-production, but also carries information that can become responsible for dispositional adaptation. To understand this, we can use the idea that disposition can be expressed in terms of formative traits, which are

sets of interconnected features that define the nature of a disposition (as proposed by Yolles and Fink [32]). When autopoiesis influences a disposition, it can modulate the intensity or orientation of its traits, or even transform them, based on the information it receives from operations. To illustrate this, consider for instance that a trait indicates a tendency for agency dominance in its environment. Autopoiesis might reduce or even reverse this trait under certain conditions, leading to less dominance, or even a tendency towards submission, which results in a change in behaviour. This highlights the malleability of traits and the potential for autopoietic systems to generate diverse outcomes in response to external and internal factors.

3.2. *The Ontology of Mindset Agency Theory*

So far we have only considered the epistemic nature of the issues under consideration, and it is perhaps time to centre on ontology by recognising that Maturana and Varela's theory of autopoiesis provides a framework for understanding the inherent ontology of agency [59]. The ontology is built upon the principles of self-organisation, self-maintenance, self-production, and adaptation, all essential agency characteristics [60]. In this theory, agency structure and processes are dynamically interconnected and mutually reinforcing, leading to autonomous and self-organising interconnections [61]. In other words, agency structure reflects and is a reflection of its processes. Agency functionality derives from an internal organisation that is self-referential, being based on the internal relations among its components rather than external inputs [59]. Schwarz' [55] system hierarchy ontology for this has been reformulated by Yolles and Fink [32], originally as Cultural Agency Theory (CAT), and then with the development of formative traits, as MAT. This models agency structure and processes, and represents the interplay between the dispositional and operational states. These are connected by an autopoietic network of processes that, after Piaget [35], has been called operative intelligence [32].

The purpose of autopoiesis is to self-produce by creating and maintaining its own components and organisation. This unique ability enables an agency to continually adapt to changing environmental conditions by using its internal mechanisms to maintain its viability. The self-regulating and self-organising nature of autopoietic systems allows them to establish and uphold their own boundaries and identity, and to adapt their internal processes in response to environmental disturbances. In this way, autopoietic systems are continuously adjusted to reflect changing circumstances in a way that preserves the agency's internal structure and organisation.

The MAT model comprises three domains in an ontological hierarchy that integrates autopoietic and related processes: the phenomenal, noumenal, and existential [32]. The phenomenal domain is named as such because it encompasses the phenomenal patterns that give structure to relevance and determines the meaning of actions within specific contexts. It represents the structures that both constrain and enable behaviours. The noumenal domain is influenced by Kant's positivist idea of the noumenon and refers to the relative noumena that exist within it. This domain consists of virtual ideates, which are valued figurative images or symbolic representations that contribute to the development of theories. These noumena help shape the interpretative relevance of phenomena and guide the agency's direction by selecting relevant elements from experiences. Additionally, the noumenal domain contains symbolic "relations" that mirror the organised whole of interacting components. These relations contribute to the formulation of regulatory structures within the system. Lastly, the existential domain obtains its name from its focus on the existential pattern of thematic relevance to the constituents of phenomenal experience, which constitutes the essence of agency self. This pattern embodies agency's current and historical experiences and is expressed as an existential whole. It is rooted in somatic knowledge, which encompasses internal perception and experience, senses, perception, and mind/body actions and reactions [62]. As May [63] argues, a position supported by Becker [64], the existential domain provides a capability for self-stabilisation and is rooted in holistic understandings of humans and agencies. Specific systems sit within each of

these domains. The operative system sits in the phenomenal domain and delivers operative structure, processes, and behaviour; the figurative system sits within the noumenal domain and delivers dispositional structure, processes, and operative regulation; and the existential domain houses the sustentative system, which anchors agency, enabling it to maintain and sustain itself. Self-stabilisation is cybernetically manifested through sustentation, denoting agency's capability to uphold its structure, functionality, and integrity over time. Self-maintenance involves preserving its organisational coherence, focusing on internal integrity and stability. Self-sustainability entails adapting and persisting in an environment, and maintaining operative functionality despite external disturbances. Thus, the state structure of self-sustentation, like that of self-regulation, is essential for homeostasis, addressing both endogenous conditions for internal stability and exogenous requirements for effective operative functionality in an external environment.

Schwarz [55] explains that autopoiesis alone does not suffice for agency to achieve sustainability, and higher-order autopoietic processes called autogenesis are necessary. Autogenesis connects the sustentative system with the dual dispositional–operative couple delivering the autopoietic system, providing a capability for self-stabilisation. By integrating experiential and cognitive processes with the autopoietic system, autogenesis enables agency self-creation that secures the agency's internal organisation and identity. The highest-order ontology of interest here is that of the sustentative system. Its homeostatic function creates a stabilising influence on disposition and operative action and their interaction, confronting agency existence and embracing freedom and responsibility for self-creation, and contributing to the stability of the entire assembly. MAT offers an opportunity to explore the interplay between agency disposition and operations, recognise emergent potentials, and understand external factors that influence the system as a whole. The stability of agency depends on the efficacy of process intelligences, where for instance a coherent balance between disposition and operative actions and interactions is important [12]. The sustentative system acts through figurative intelligence to stabilise the autopoietic system. The integration of dispositional and operative aspects, achieved through their coupled relationship, significantly contributes to system stability and viability. Various behavioural and operative process intelligences allow for the identification, selection, and measurement of contextual and dynamic parameters in the relative environment, connecting these factors with the operative system [12].

MAT therefore provides an opportunity to explore agency disposition and operations and their changing relationship, recognises the potential for emergence, and appreciates the external factors that influence the whole assembly, which a requisite response to them can determine. Agency stability is dependent on the efficacy of the process intelligences, and in the autopoietic system this depends on a coherent balance between disposition and operations, mediated by operative intelligence and stabilised by the actions of figurative intelligence. The integration of dispositional and operative aspects of agency, through the autopoietic couple, is important for system stability and viability.

The MAT inferior fractal, shown in Figure 1, is a second-order ontology where disposition and activation are intrinsically connected through autopoiesis/process intelligence, forming what has been termed an autopoietic couple. The concept of appreciative information and knowledge draws inspiration from Vickers' [65] notion of appreciative systems. Appreciative information is that which agency employs to comprehend its situation and guide its actions. On the other hand, appreciative knowledge is an agency understanding derived from this information, and shaped by its values, goals, and perspectives. Agencies function as appreciative systems when equipped with the capacity to generate, modify, and utilise appreciative information and knowledge through reflexive processes. They exhibit the ability to learn from experience and adapt to their environment by adjusting their appreciative information and knowledge.

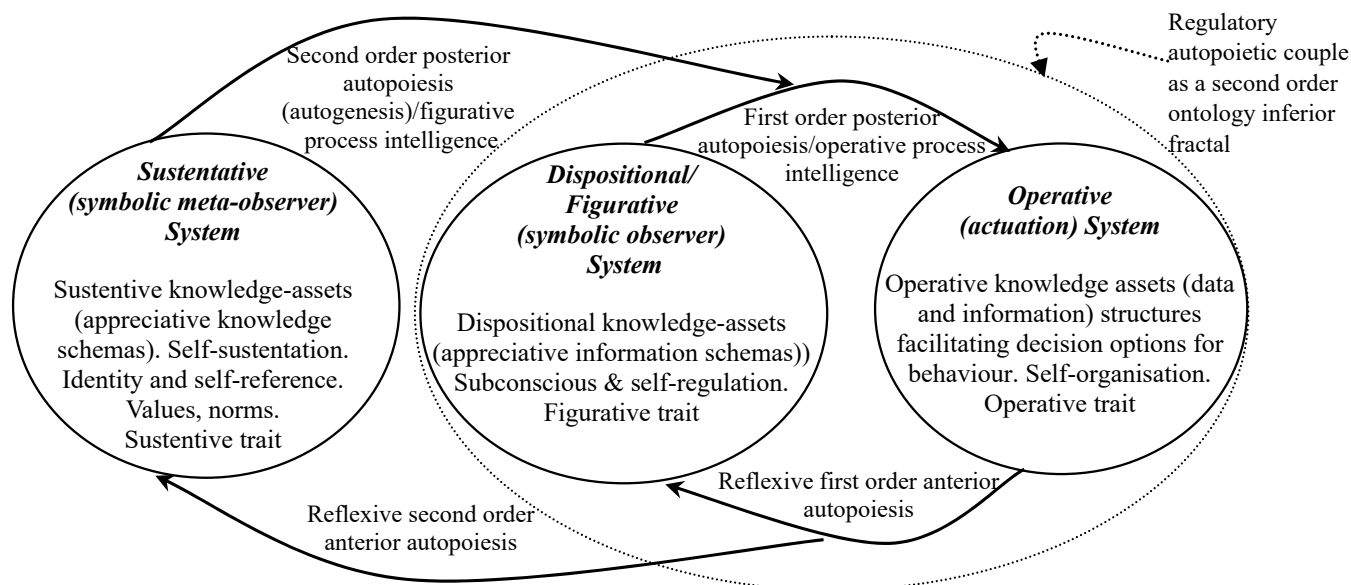


Figure 1. Third-order ontology agency (superior) fractal as a regulator of an autopoietic couple (a second-order fractal).

Agency is an instrumental entity if only defined through its autopoietic couple. Transitioning it toward sustainability elevates it to a living system, marking the shift to a third-order ontology (adapted from Schwarz [34]). The interplay between the dispositional figurative system and the operative system is defined by autopoietic processes of self-organisation, anchored by the sustentative system through processes of self-sustentation. Each of these systems—sustentative, dispositional, and operative—incorporates various knowledge-assets [66], encompassing intangible agency resources such as knowledge, information, and data. The sustentative system plays a significant role as the sustainability regulator for the autopoietic couple, encompassing both an interactive dispositional and operative systems. These latter two systems are dedicated to distinct facets of agency behaviour—the dispositional figurative system focuses on self-regulation, while the operative system concentrates on structures that facilitate behaviour.

Figure 2 provides a dual (interactive) MAT model, one aspect representing cognition influence by affect, the other with affect influenced by cognition. The cognitive version of the model interacts with the affect version through their operative system to create the cognition–affect agency that has both cognition that determines rationality, and emotion that creates personal context. The operative system is anterior to the dispositional figurative system, and their combination as an autopoietic couple (as a system in its own right) is anterior to the sustentative system. This suggests that autopoietic processes are not only the property of cognition, but also of affect, and where cognition and affect autopoiesis are mutually independent. Posterior systems coincide with a higher-order ontology. Autopoiesis and autogenesis are central to this structure. Yolles and Fink [32] explain their equivalence with Piaget [35] intelligences. Intelligence is the ability to comprehend the knowledge-assets of a source and construct new knowledge-assets, enabling the character and influences of a source to be appreciated. The intelligences have reverse trajectories, one originating from the posterior system and the other from the anterior system, defining circular reflexive causality, often referred to as feedforth and feedback. Three types of intelligence are identified: behavioural, operative, and figurative. Consider that a subject has a set of parameters that define its character, the subject being an agency environment or a system within it. Agency behavioural intelligence connects environmental event parameters to the operative system, enabling the identification, selection, and measurement of that character through parameter evaluation. Its anterior and posterior orientations allow the operative system to recognise environmental changes and enable agency intervention in

the environment. Operative intelligence facilitates autopoiesis that couples the operative and figurative systems, allowing self-organisation, operative system adaptation along the posterior originating operative intelligence, and dispositional figurative system adaptation along the anterior originating operative intelligence. The autopoietic system formed in the autopoietic couple maintains stability when the information it holds is intrinsic [12]. This intelligence provides structure-forming stability and allows autopoietic processes, operating along the posterior emerging operative intelligence, to deliver operative adaptations and, along the anterior originating operative intelligence, to deliver, as noted earlier, dispositional adaptation. Figurative intelligence enables self-creation (autogenesis) by acquiring information from parameters in the autopoietic system, seeking to correct instability, and providing regulatory and operative direction to improve autopoietic coherence. The distinction between the cognition and affect versions of Figure 2 is that in the former the intelligences are cognitive, while in the latter they are emotional [67].

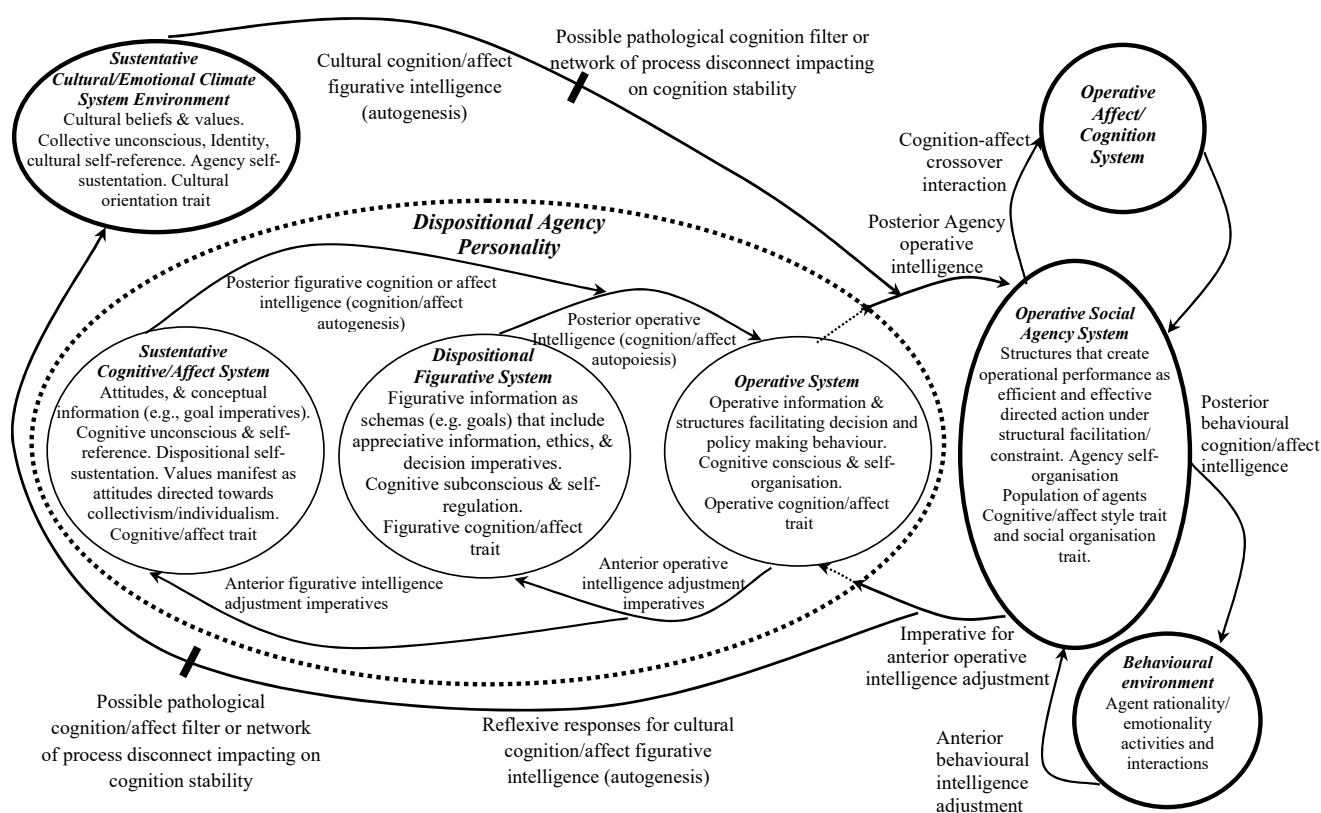


Figure 2. Cognition/affect model of agency (adapted from Yolles and Fink [32]).

The operative system houses social cognitive and affect structures. Here, in the same way that cognitive style operates in the cognitive operative system and determines how agencies think, perceive, and retain information, so affect style can be thought of as residing in the affect systems, and can be understood as a descriptor of how agencies articulate their emotions and feelings. Both intelligences are rooted in the processes involved in acquiring, transforming, and utilising information within living systems. Information is obtained from the environment via behavioural intelligence and delivered to agency disposition via operative intelligence, and disposition uses it to formulate requisite operative imperatives that will determine and regulate agency behaviour. The intelligences differ in how they process information and what kind of information they deal with. Intrinsic information is the information that is inherent to the object it is being acquired from, and reflects the essential nature or constitution of that object. In MAT, the intrinsic information [13] is acquired by the intelligences through the use of Fisher information, which is a measure of how much a random variable changes when a parameter is varied, as Frieden [68] notes.

The intelligences can refer to either cognition and affect. Cognition intelligence is part of the cognition system from which rationality emanates, and is responsible through its network of processes for efficacious action [43]. The affect intelligence is responsible for regulating and manifesting emotion, as well as recognising it in a social setting. The notion of emotional intelligence arises from Salovey and Mayer ([67] p. 185), who define it as a “set of skills that contribute to the accurate appraisal and expression of emotion in oneself and others, the effective regulation of emotion in self and others, and the use of feelings to motivate, plan, and achieve in one’s life”. The cognition and affect forms of intelligence are independent, but they are also mutually responsive to influences that occur through cognition and affect crossover interaction.

Figure 2 also notes that possible von Foerster process instabilities may occur that may result in pathologies as indicated along the figurative intelligence, arising from inefficacious information flows that, for instance, filter and potentially inhibit cultural attributes to influence disposition and, indeed, the autopoietic couple as a whole. Inefficacious information may not enable an agency to achieve an intended goal. Such process instability may also occur in the operative intelligence, impacting processes of self-organisation and perturbing adaptive processes that can be recognised as pathologies. Using such information can lead to undesired outcomes, and may cause or develop process instabilities so that deviation away from an intended state occurs, and this may result in unpredictable or even chaotic behaviour. Efficacious information may be intrinsic if it reflects the true or hidden structure of an observed event, whether it is internal or external to agency [42]. Intrinsic information is a measure of how much an agency discovers from the hidden structure of events by maximising/optimising the content description of its observable event, including hidden data. It may be efficacious if it helps agency to reduce uncertainty or improve performance. It may not be efficacious if it is irrelevant, redundant, or misleading for agency goals or outcomes. Therefore, efficacious and intrinsic sets of information are not necessarily equivalent or interchangeable, and their relationship may vary depending on the situation and agency character.

For Yolles and Fink [32] the formative traits are influenced value-based, and tend to be stable due to the sustentation that anchors them. However, they are also dynamic, can be reflexively influenced. However, state instabilities within an agency can arise from the complex interactions between trait value systems, potentially resulting in the emergence of pathological conditions. Each of the formative traits may exhibit pathologies due to the dominance of extreme value systems, with each extremum carrying its own ontological significance. Alternatively, an Idealist value system may develop, representing a state of equilibrium and integration between the two extremes, achieved through continuous transitional dynamic interactions over time. However, if no dominant stable state appears in the relationship between extreme value systems within a trait, the transitional process results in an unstable trait, even though temporary stability may develop given the right conditions. Persistent instability inhibits agency ability to adapt, evolve, and maintain a harmonious state. Exploration of transitions between local stable states offers insights into agency’s potential for self-organisation and transformation through emergence.

Recognising when stable local states occur may enable predictive evaluation for overall behaviour. It enables the analysis of agency reactions to perturbations, achievement of stability, and its potential transitions to new trait configurations. However, stable local states may not endure over time if the traits become subject to evolutionary alterations. Changes in agency due to self-organisational processes, reflexive processes, or external influences can disrupt balance and coherence. These transitions represent shifts in overall agency behaviour, arising from inherent nonlinearity and complexity, where small changes can amplify and eventually lead to significant transformations. As the system enters a new stable state, its behaviour and interactions may undergo considerable changes in its functioning, capacity for adaptability, and orientation. This does not mean that stable states do not have their pathologies, which arise with undercurrents that occur as the value systems continually interact and deliver change that creates conflict.

3.3. Illustrating Instability–Pathology Shifts

To better understand state instability and the development of pathologies, it is useful to consider the role of culture for which there is considerable theory [38]. This is because the dynamics of the cultural trait that will be discussed here also applies to the other formative traits. Here, consideration will be made of the agency of civilisations, already well studied in the literature.

According to Sorokin’s theory of socioculture as explained by Bierstedt [69], cultural state stability occurs when there is a logico-meaningful integration of cultural elements. This means that an agency culture is stable when its elements are integrated in a way that makes sense and has meaning for the agents. On the other hand, it is unstable when the value systems are connected in a chaotic, contradictory, or meaningless way. Persistent stability occurs in the transition from Ideational to Sensate states, but this is not the case for the reverse trajectory. The transition from Sensate to Ideational culture has a variety of mechanisms, but the most frequent is based on external coercion, which creates a forced functional integration that can lead to confusion, conflict, and dissatisfaction among agents [38]. Cultural changes pass through periods of relatively brief stability during mixed transitional phases, when only some elements of the cultural value system duality are integrated in a logico-meaningful way.

In Table 1, which is an adaptation from Yolles and Fink ([32]: p. 457), we show the cultural shifts over the centuries. The stable Sensate and Ideational periods may have unstable subphases that result in subordinate pathologies. The mixed transitions are culturally unstable and it is here that dominating pathologies can arise. The adapted table highlights the cultural dynamics and the dominant or subordinate pathologies that might arise. During stable periods, the subordinate pathologies are negative consequences of cultural differences and a reflection of the conflicts that exist within a dominant culture. However, during mixed transitional periods, pathologies tend to be dominant. The difference between dominant and subordinate pathologies is that the former are the main drivers of cultural change during transitions, but they are less influential and visible during stable periods, unless they are triggered by outside pressures or extraordinary events within the culture.

Table 1. Speculative illustration of pathologies during cultural change.

Period	Cultural State	Dominant Culture	Dominant/Subordinate Pathologies	Sociopolitical and Economic Consequences
Mycenaean and Greek Dark Age (1200–1000 BCE)	Stable	Sensate	Subordinate: Hedonism, corruption	Collapse of civilisation, loss of literacy, population decline, decline in trade, production, and innovation, warfare and raids by various groups
Greek Uncertainty (1000–900 BCE)	Transitional	Mixed	Dominant: Confusion, conflict, nihilism	Rise of city-states, emergence of democracy, cultural diversity, growth in trade, colonisation, and coinage, hoplite warfare
Archaic Greece (900–550 BCE)	Stable	Ideational (Active then Ascetic)	Subordinate: Decadence, corruption, cynicism	Expansion of empire, cultural assimilation, civil wars, heavy taxation, slavery, and public works, tyranny and autocracy
Classical Greece (550–320 BCE)	Transitional	Idealistic	Subordinate: Violence, chaos, anarchy	Fall of empire, migration of peoples, cultural fragmentation, collapse of trade, currency, and urbanisation, major Peloponnesian War *

Table 1. Cont.

Period	Cultural State	Dominant Culture	Dominant/Subordinate Pathologies	Sociopolitical and Economic Consequences
Hellenistic—Roman (320–400 BCE)	Stable	Sensate (Active, Passive and Cynical)	Subordinate: Fanaticism, intolerance, persecution	Rise of feudalism, spread of Christianity, crusades, development of agriculture, guilds, and banking, major wars of conquest and resistance *, despotism and oppression
Barbarianism (400–600 CE)	Transitional	Mixed	Dominant: Nihilism, moral ambiguity, social unrest	Globalisation, multiculturalism, social movements, diversification of industries, services, and technologies, major violence, chaos, and anarchy
Middle Ages (600–1200 CE)	Stable	Ideational (Active then Ascetic)	Subordinate: Hedonism, corruption	Collapse of civilisation, loss of literacy, population decline, decline in trade, production, and innovation, religious wars, fanaticism, intolerance, and persecution
High Middle Ages to Renaissance (1200–1600 CE)	Transitional	Idealistic	Subordinate: Confusion, conflict, nihilism	Rise of city-states, emergence of democracy, cultural diversity, growth in trade, colonisation, and coinage, innovation, exploration, and humanism
Rationalism, Age of Science (1600–1844 CE)	Stable	Sensate (Active, Passive)	Subordinate: Decadence, corruption, cynicism	Expansion of empire, cultural assimilation, civil wars, heavy taxation, slavery, and public works, rationality, empiricism, and progress, absolutism and divine right
Extended postmodernism (1933 CE)	Transitional	Sensate-cynical and Mixed	Dominant: Violence, chaos, anarchy	Fall of empire, migration of peoples, cultural fragmentation, collapse of trade, currency, and urbanisation, major World Wars, nihilism, moral ambiguity, and social unrest

* According to Sorokin, major wars tend to be the prerogative of unstable periods [70]. The indicated periods had major wars that were not caused by the dominant or subordinate pathologies of the cultural state, but rather by the external or exceptional internal factors that affected the political and economic situation of the regions. This relates to the Peloponnesian War [71] in the Classical Greek period, which was a result of the rivalry and tension between the democratic Athens and the oligarchic Sparta, and the wars of conquest and resistance in the Hellenistic–Roman period were a consequence of the expansion and consolidation of the Roman Empire [72].

Transitions between stable cultural states can be triggered by various factors, such as changes in the environment, agency goals, or identity. These transitions can vary in their characteristics, depending on the degree of instability and complexity in the system. Recognising state instabilities in any of the formative traits provides valuable insights into an agency's overall behaviour and may shed light on its trait dynamics, offering a holistic perspective on its self-organisational potential and transformative capacity.

In Table 1 it is evident that stable states of Ideational and Sensate cultures can have pathologies because they are based on an extreme and one-sided view of reality, which leads to distortions, imbalances, and conflicts in the cultural system and its relations with the environment [73]. Sorokin views these pathologies as signs of the decline and disintegration of the dominant cultural system, which can also initiate the emergence of a new cultural condition. Even the transitional Idealistic culture can have its own pathologies, such as utopianism, idealism, and naivety, if it fails to recognise the limitations and challenges it faces [74]. This is the case if utopianism is unrealistic, naïve, or impractical, if it ignores or denies the complexity, diversity, and conflicts that exist in the real world, or

if it imposes a rigid or oppressive vision of a better society on others. A form of idealism, it can operate at the expense of practicality or reality, and be blind, dogmatic, or fanatic. When associated with naivety, it can become a pathology if it leads to ignorance, gullibility, or vulnerability. The different possible pathologies for the two Ideational entries are suggested due to the different stages they represent. The traditionalist Ideational cultural state values stability, order, conformity, traditions, customs, and authority. However, adhering strictly to these traditions can lead to pathologies such as fanaticism, intolerance, and persecution. The transitional stable Idealistic cultural condition represents a shift from the traditionalist Ideational state to a rationalist mindset. During this transition, pathologies such as anomie, alienation, and social unrest emerge from the interaction between traditionalist and rationalist values, causing tensions and conflicts within society.

3.4. From Traits to Mindsets

Mindsets arise in the substructures that guide the possibilities for agency behaviour. Since formative traits are the variables that take type values that determine agency orientation, normally (under stable conditions) it is these that create imperatives for agency patterns of behaviour, and provide opportunities to predict instances of behaviour. Mindsets are determined by formative traits as they interact, enabling a mindset to emerge that reflects the overall agency cognitive/affect orientation. The mindset may also change over time, as the agency learns and adapts to its environment and tasks, and as its internal characteristics (such as values, beliefs, and norms) evolve. Therefore, the mindset is a dynamic and holistic construct that captures the essence of agency cognitive substructure.

Following Yolles and Fink [32], one can identify agency mindsets that indicate a normative orientation that influences personality. Five ontologically distinct traits (for each of cognition and affect) are represented in Figure 2. The cognition and affect traits are presented in Tables 2 and 3, respectively. The relationship between cognition and affect traits is shown in Table 4. The traits can coalesce into groups that define cognition and affect mindsets, as shown in Table 5. These are dispositional personality mindsets since they are composed of only three personality traits. Another agency mindset model can be constructed for agency cognition and affect mindset [32] where each mindset is composed of five traits. Yolles and Fink have also delivered a methodology that can establish whether there are likely to be agency–personality identity conflicts, resulting in a comparison between personality and agency mindsets.

Table 2. Cognition traits for agency and the dispositional personality [32].

Agency Trait	Bipolar Type	Value System Elements
Sustentive Cultural (cognition) dimension of agency	Sensate	Sensory and material reality, pragmatism, becoming, happiness, external orientation, instrumentality, and empiricism
	Ideational	Super-sensory reality, morality, tradition, creation, self-examination, internal orientation, and spirituality
Sustentive cognitive dimension of dispositional personality	Intellectual Autonomy	Individual uniqueness, expression, meaning, and independence
	Embeddedness	Social relationships, identification, participation, shared goals, order, tradition, security, and wisdom
Figurative dimension of dispositional personality	Mastery + Affective autonomy	Self-assertion, mastery, direction, change, monism, egocentric or altruistic ends, and meaningfulness
	Harmony	Understanding, appreciation, pluralism, unity with nature, environmental protection, and world peace
Operative dimension of dispositional personality	Hierarchy	Hierarchical roles, obligations, rules, authority, legitimacy, power, and benefit of the organisation
	Egalitarianism	Moral equality, co-operation, concern, choice, negotiation, service, and welfare of everyone

Table 2. Cont.

Agency Trait	Bipolar Type	Value System Elements
Operative social dimension of agency	Dramatising	Interpersonal events, communication, narrative, belief systems, social contracts, individual benefit, and ideocentric agencies
	Patterning	Configurations, curiosity, relationships with individuals

Table 3. Affect traits for agency and the dispositional personality [32].

Agency Trait	Bipolar Type	Value System Elements
Sustentive Emotional Climate dimension of agency	Fear	Seeks isolation due to fear, non-cooperative due to insecurity and anxiety, potential for aggression, concern cause by being scared.
	Security	Trusting, confident, satisfied with situation, solidarity with others, is encouraged, hopeful.
Sustentive affect/emotional attitude dimension of dispositional personality	Stimulation	<i>Context positive as an assertion for dominance in emotional attitude:</i> passionate, emotional and sensitive, full of joy and exuberance, tend to be delighted by experiences, seek exiting situations that might provide ecstasy, elation and joviality. Openness, serene, intense, independent and quire creative. <i>Context negative as a demand for conjoint balance with containment:</i> tend to be angry and hostile, may tend to panic and paranoia, be susceptible to annoyance, rage, disgust and, grief. This may emerge as outburst from apparent containment.
	Containment	Dependability, restraint, self-possession, self-containment, self-control, self-discipline, self-governance, self-mastery, self-command, moderateness and continence.
Figurative (motivation activation) dimension of dispositional personality	Ambition	Aspiration, intention, enthusiasm for initiative, objectives important, desire, hope and wish, enterprise, craving or longing for something appealing, ardour is important, aggressiveness, the killer instinct.
	Protection	Safety and stability/security, defensive shield for immunity/salvation, safekeeping, conservation, a need for insurance, preservation and safeguard.
Operative (emotion management) dimension of dispositional personality	Dominance	Control, domination and rule for supremacy and hegemony, power seeking, situational pre-eminence, sovereignty, ascendancy, authority and command over dominion, susceptibility for narcissism and vanity.
	Submission	Compliance, conformity, obedience, subordination and subjection, allegiances, deference, observance, lack of resistance, loyalty, devotion, passiveness, fealty, resignation, homage, fidelity.
Operative social affect dimension of agency	Missionary	Imposition of ideas on others, encourages others to be a proponent of the ideas by converting or heralding or promoting them to others, potential as a propagandist and revivalist.
	Empathetic	Accepting, compassionate, sensitive, sympathetic.

Table 4. Agency/personality cognition and affect trait relationship (adapted from [32]).

Agency Mindset	Trait	Polar Value	Summary of Nature	Alternative Polar Value	Summary of Nature
Cognition-Type Agency					
Personality	Cognitive	Intellectual autonomy	Leads an agency towards Individualism	Embeddedness	Centres on group identification and Collectivism
	Figurative	Mastery + Affective Autonomy	Concerned with self-assertion	Harmony	Accept situations as they are
	Operative	Hierarchy	Supports ascription of individuals to given roles	Egalitarianism	Others are seen to be equal
Sociocultural	Cultural	Sensate	Seeks material things such as money or power	Ideational	Seeks cognitive values such as friendship or love
	Social	Patterning	Social relationship configurations, collective benefit, action delay through observation	Dramatising	Interpersonal relations, self-interest and individual benefit, action-oriented
Affect-Type Agency					
Personality	Affective emotional attitude	Stimulation	May be context positive or negative	Containment	Supporting self-discipline and continuance
	Figurative motivation activation	Ambition	Aspirations and goals	Protection	Safety or preservation
	Operative emotion management	Dominance	Control and supremacy	Submission	Compliance and subordination
Sociocultural	Cultural emotion climate	Fear	Insecurity and uncooperative	Security	Trusting, solidarity, hopeful
	Social	Missionary	Imposing and promoter	Empathetic	Accepting and sympathetic

Table 5. Personality mindsets assigned as Collectivist and Individualist classes [32].

Affect Mindset	Trait	Cognition Mindset	Trait
Stimulation Oriented		Individualism/Intellectual Autonomy Oriented	
DS: Dominant Sanguine	Stimulation	HI: Hierarchical Individualism	Intellectual Autonomy
	Ambition		Mastery + Affective Autonomy
	Dominance		Hierarchy

Table 5. Cont.

Affect Mindset	Trait	Cognition Mindset	Trait
MD: Moderate Sanguine	Stimulation	EI: Egalitarian Individualism	Intellectual Autonomy
	Ambition		Mastery + Affective Autonomy
	Submission		Egalitarianism
RM: Reformer Melancholic	Stimulation	HS: Hierarchic Synergism	Intellectual Autonomy
	Protection		Harmony
	Dominance		Hierarchy
SM: Subversive Melancholic	Stimulation	ES: Egalitarian Synergism/Social Anarchism	Intellectual Autonomy
	Protection		Harmony
	Submission		Egalitarianism
Containment Oriented		Collectivism Orientated	
EC: Expansive Choleric	Containment	HP: Hierarchical Populism	Embeddedness
	Ambition		Mastery + Affective Autonomy
	Dominance		Hierarchy
DC: Defensive Choleric	Containment	HC: Hierarchical Collectivism	Embeddedness
	Protection		Harmony
	Dominance		Hierarchy
CP: Compliant Phlegmatic	Containment	EP: Egalitarian Populism	Embeddedness
	Ambition		Mastery + Affective Autonomy
	Submission		Egalitarianism
DP: Dormant Phlegmatic Fatalism	Containment	EC: Egalitarian Harmony Collectivism	Embeddedness
	Protection		Harmony
	Submission		Egalitarianism

That Table 5 is formulated in terms of collectivism and individualism is a function of the ideas of Triandis [36], who has discussed these concepts in some detail. His work is cognition-related, and the table shows the lead traits that indicate collectivism (Embeddedness) and individualism (Intellectual Autonomy). Similarly, following Yolles and Fink [32], for affect, the lead traits are Stimulation and Containment. The Collectivist mindset is defined in terms of connective disposition paradigm intangibilities, and this has consequences for both social organisation and agent behaviour. These are dichotomous values that can be used to describe differences in behaviour. The variable of connective disposition corresponds to the degree to which agencies identify with self rather than society. The methodology developed by Yolles and Fink involves differentiating between dispositional (personality) and agency identities as indicated in Figure 2. These two forms of identity are equivalent to the personal and social identities where, for Lupie [75], personal identity refers to self-definition in terms of personal attributes, and social identity refers to self-definition in terms of social category memberships. For Ashforth and Mae [76], the latter provides the mental mechanisms that make collective behaviour possible. Differences indicate an identity conflict, the nature of which is determined by the mindsets involved. This can occur with respect to the cognition system or the affect system. The theory recognises that there are two forms of identity, cognitive and emotional. Cognitive identity is a

cognitive structure that provides a frame of reference for interpreting self-relevant cognitive information for solving problems and making decisions (cf. [73]). Emotional identity is an agency awareness of affective attributes associated with social interactions, and includes how it defines itself by its (handling of) emotions and how others may use emotions as social markers to define itself or its agents [77]. It involves an affect structure that provides a frame of reference for interpreting self-relevant emotional information for recognising and imitating the attitudes, thoughts, emotions, and behaviours of others or their collectives, and becomes assimilated when it becomes the internal motivation for cognitive identity (cf. [78]).

Personal and agency identities are different, and identity conflicts may arise that give a sense of discrepancy between the beliefs, norms, and expectations held [79]. When identity conflicts occur that can be classed as cognition identity conflicts, a consequence can be irrational behaviour [80]. Similarly, when affect identity conflicts arise, a consequence may be an internal emotional tension that creates an emotional climate/emotional attitude dilemma (a transverse elaboration of the rationality of security dilemmas of Heraclide [81]), and leads to recalcitrant emotions, i.e., those emotions that are in tension with an agency's evaluative (cognition) judgements, as explained by Majeed [82]. Noting that all conflicts can be expressed in terms of identity conflict [83], a methodology has been developed that provides a relatively simple theoretical and pragmatic approach to evaluate whether an agency has a cognition identity conflict [32], and where this may be extended to affect identity conflicts. In Table 6 we present personality mindsets. It should be noted that the Collectivist or Individualist nature of an agency may not only depend on the tendency of its personality, but also on its cultural and operative orientations. Here, then, it is clear that Collectivism is directly associated with Embeddedness and Individualism with Intellectual Autonomy. The table depicts personality as three-trait mindsets, and agency as five-trait mindsets, and this applies to both affect and cognition. The methodology analyses texts produced by agencies by looking for trait keywords associated with each mindset type, which are statistically evaluated, and the three-trait personality (defining disposition) and five-trait agency (defining character) mindsets are compared for the best fit, from which identity conflicts can be inferred. Where the two mindsets are the same, there is no identity conflict, but where they are different, there will be, with its severity depending on the nature of the personality–agency mindsets identified. In other words, where disposition is different from character, agency pathologies are apparent. While it is not certain how affect and cognition mindsets relate, we have connected them in Table 6 according to a particular rationale. This is because connecting “Intellectual Autonomy” with “Stimulation” implies that the affect “Stimulation” is cognitively directed primarily at freedom, creativity, curiosity, and broad-mindedness, and only secondarily to values of “Affective Autonomy”. It is similarly possible to make connections between embeddedness and containment. Thus, for instance, following Matsumoto [84], containment is a means by which power holders organise relationships through which embeddedness occurs. In Table 6 only some of the mindset types are listed. This is because 32 agency mindset types are possible using the various combinations of the five trait types, though it is not currently known if all of these are stable. Those that are listed are likely stable, though research here is wanting. So, it does need to be tested as to whether Stimulation-oriented agencies tend to see Security, but vary according to whether they are Missionary- or Fear-oriented, and whether Containment-oriented agencies are driven by Empathy.

Table 6. Mindsets and their relative personality (three traits) and agency (five traits) distinctions [32].

Affect Mindsets			Cognition Mindsets		
Mindset Types	Affect Traits		Mindset Types	Cognition Trait	
	Personality Traits	Agency Trait Options		Personality Traits	Agency Trait Options
Stimulation Oriented			Individualism Oriented		
DS: Dominant Sanguine	Stimulation	Missionary Security	HI: Hierarchical Individualism	Intellectual Autonomy	Dramatising Sensate
	Ambition			Mastery + Affective autonomy	
	Dominance			Hierarchy	
MD: Moderate Sanguine	Stimulation	Missionary Security	EI: Egalitarian Individualism	Intellectual Autonomy	Dramatising Sensate
	Ambition			Mastery + Affective autonomy	
	Submission			Egalitarianism	
RM: Reformer Melancholic	Stimulation	Missionary Security	HS: Hierarchical Synergism	Intellectual Autonomy	Patterning Sensate
	Protection			Harmony	
	Dominance			Hierarchy	
SM: Subversive Melancholic	Stimulation	Fear Security	ES: Egalitarian Synergism	Intellectual Autonomy	Patterning Sensate
	Protection			Harmony	
	Submission			Egalitarianism	
ContainmentOriented			Collectivism Oriented		
EC: Expansive Choleric	Containment	Fear Empathetic	HP: Hierarchical Populism	Embeddedness	Dramatising Ideational
	Ambition			Mastery + Affective autonomy	
	Dominance			Hierarchy	
CP: Compliant Phlegmatic	Containment	Fear Empathetic	EP: Egalitarian Populism	Embeddedness	Dramatising Ideational
	Ambition			Mastery + Affective autonomy	
	Submission			Egalitarianism	
DC: Defensive Choleric	Containment	Fear Missionary	HC: Hierarchical Collectivism	Embeddedness	Patterning Ideational
	Protection			Harmony	
	Dominance			Hierarchy	
DP: Dormant Phlegmatic Fatalism	Containment	Fear Empathetic	EC: Egalitarian Collectivism	Embeddedness	Patterning Ideational
	Protection			Harmony	
	Submission			Egalitarianism	

3.5. Agency and Multiple Identity Theory

Agency is a sociopolitical entity with a mindset that is influenced by its formative traits that determine its character and patterns of behaviour. The interaction between the traits is a complex process from which one envisages that there emerges the agency's identity,

which gives it a sense of self and purpose. We are aware that agency is the capacity of agency a complex system to act in a given environment, and to use its power and autonomy in its relationships and the sociopolitical and other forces that it is exposed to, which can limit or facilitate options for behaviour. Its identity refers to the distinctive qualities or traits that make an agency unique, and it is associated with the concept of self, and with self-image and self-esteem. Identity is seen differently in different disciplines. Thus, a brief summary of sociological theories concerning the development of identity states emerges through the interactions between individuals and society, implying that the individual is unable to attain an identity in an autonomous manner [85]. This sociological view focuses on society's impact on the self. In contrast, the view from psychology focuses on an individual's sense of self, noting external influences. Such a view would deny that an agency is unable to attain an identity in an autonomous manner, and would rather hold that both autonomous processes and environment are important (cf. [86]). The latter view is consistent with MAT theory, which embraces a social psychology perspective.

Multiple Identity Theory comes out of the discipline of psychology with two conceptual prongs. One takes a horizontal perspective that recognises that agencies can have different identities that are activated in different contexts and situations [87]. The other takes a vertical perspective that there are levels of identity, and that the levels are arranged in ontological hierarchies [88]. It suggests that identities are real entities that belong to different levels of being or reality, and that the hierarchy of identity salience (or prominence) corresponds to the hierarchy of ontological priority [87]. While the horizontal perspective is taken as given, our interest here lies in the vertical perspective.

From a complexity perspective, let us propose that agency is psychologically composed of autonomous and adaptive formative traits that interact, and from these interactions there emerges properties of identity. The traits, and those which emerge, co-evolve and interact through reflexive processes. The reflexivity enables the emergent phenomena to constrain and facilitate trait behaviour, which can in turn adjust and sustain the emergent phenomenon. Figure 2 can then be considered in different terms, as an ontological hierarchy of emergent identities. Internal agency identity conflicts can then have an autopoietic explanation, and provide an illustration of how such conflicts can be represented as behavioural pathologies, a theory adopted by Yolles and Fink [32] where they distinguish between three ontologically distinct levels:

- Private identity is primary in that it constitutes a mind that reflects personal values, beliefs, goals, and motivations, and is influenced by emotions, memories, and experiences. This identity is not usually shared with others, unless there is a high level of trust and intimacy.
- Personal identity is secondary and is displayed to others in interpersonal interactions, reflecting attributes like self-image, self-esteem, self-confidence, and self-expression. This identity may vary depending on the context and the audience, but it is generally consistent with private identity.
- Public identity is tertiary, relates to a larger social environment, and reflects social roles, norms, expectations, and obligations. This identity may be imposed or chosen, but it is usually visible and recognisable by others.

That identity emerges from trait interactions recognises that there is a connection between identity and mindset traits. This is shown using the Hijmans [89] Dynamic Identity Model related to media image, which explains identity as the link between the personal/psychological and the social/cultural, and results in the recognition that there is a relationship between agency personality/sociocultural mindset traits [32]. This is also supported by Kaplan and Garner [90], who independently explain that personal identity is a complex dynamic system that is mediated by, among other things, implicit dispositions, where dispositions are indicative of mindset traits. They also note that identity (like mindset) is not static, but changes over time and with context. Thus, identity and mindset traits are integrally related, enabling us to propose a relationship between personal identity and personality mindset. Personality mindset traits affect personal identity by shaping

how agency relates to others and to itself. Personal identity affects personality mindset traits by reflecting how an agency perceives itself, and its possibilities in relation to its environment. In other words, there is a close correspondence between identity and mindset of the personality, and this could be reflected in variations of Figure 2.

Di Fatta and Yolles [32,91] applied the above identity theory to Donald Trump, the US president during the period 2017 to 2021. It uncovered an identity conflict that would be consistent with a narcissistic personality disorder. Such an analysis could similarly be applied to organisations to determine whether they have identity conflicts. Identity conflict happens when an agency encounters difficulties in reconciling different components of identity that prescribe behaviours that are incompatible with each other [92]. Identity, as noted by Priante et al. [93] and van Stekelenburg [94], is important to collective action because it explains the coherence and organisation of agencies as collective actors. This is elaborated on by Yolles and Fink ([32] p. 65), who explain that the development of identity pathologies can be reflected in the multiple identity literature, and that a theory of cleavage between multiple identities can arise that is indicative of trait instabilities and personality pathologies. Trait instabilities are a state function, and result in the development of uncertainties in processes of communication and cooperation, leading to likely incapacities to organise collective action.

It is likely that where there is a conflict between the personality/disposition mindset and the agency mindset (the latter also involving cultural and social traits), inherent potential conflicts are agency medial, i.e., arise internally. Thus, for instance, where personality is Individualist and agency involves Ideational culture and Patterning traits, Individualism is converted to a form of uncommitted conflictual Collectivism that lies in conflict with its personality imperatives.

It must be noted here that while agencies can be associated with mindsets, these can change with qualitatively distinct contexts, the qualities being defined by a set of parameters that are different from those in another distinct context. This has been shown by Tamis-LeMonda et al. [47] (cf. [32]), who were interested in the socialisation of children by their parents concerning the dominating influence of Collectivist and Individualistic mindsets, thus indicating a potential for adaptive mindsets with contextual change. While we have shown that there are a variety of Collectivist and Individualist mindsets, there is still an effective but nuanced variety of Collectivism–Individualism dualities. This is dynamic in that the duality of coexisting cultural value systems often has one which dominates to some degree over time. This duality may be viewed as being conflicting, additive, or functionally dependent, and the interaction between the dual parts, which are individually dynamic, can change across situations, develop over time, and have responsiveness to sociopolitical and economic contexts. The dominant cultural tendency as set in a given situation should be seen as a variable that is sensitive to fluctuating contexts, contained within a single continuum that maintains characteristics that can embrace both value sets. This is reflected in the different traits that may be associated with any of the Collectivist or Individualist mindsets. The dynamic nature of the Collectivist–Individualist relationship also implies discontinuities in mindset shifts that impact behaviour, so that while the traits that compose mindsets may be subject to continuous variation, they coalesce into only a few stable personality states that can result in particular modes of behaviour.

This also applies to the political sphere, where the context may be identified in terms of collections of cultural values. These can coalesce into seven worldviews [95], and within the context of this paper, the two that are of particular relevance are: (a) political epistemological liberalism characterised by tolerance towards political differences, through variations such as the shift towards political neoliberalism, characterised by neoliberalism migrated to right-wing political conservatism, and a trending intolerance toward other political position [96]; and (b) political authoritarianism characterised by intolerance towards political differences through the rejection of political plurality, and the use of strong central power to preserve the political status quo [97].

3.6. Configuring Traits

MAT has been formulated respectively as a disposition/character theory of cognition/affect that is hierarchically and recursively embedded in agency. Its autopoietic nature is delivered through operative intelligence, referring to the capacity for beliefs, values, emotions, attitudes, and knowledge that can be assembled in an operative function. In the normative personality, ontologically distinct traits exist, each having bipolar options with different epistemic states. Consider the operative system of the personality with a cognition trait that may take one of two bipolar values: Hierarchy and Egalitarianism. The hierarchical distribution of roles is taken for granted and needs to comply with the obligations and rules attached to their roles ([98] p. 16). An egalitarian approach promotes the view that people recognise one another as moral equals who share basic interests. There is an internalisation of a commitment towards cooperation and to feelings of concern for everyone's welfare. There is an expectation that people will act for the benefit of others as a matter of choice. Sagiv and Schwartz ([57] pp. 179–180) were concerned with cultural values in the organisation and distinguished between them by assigning two bipolar states to each identified value. In Hierarchy, agents belonging to an agency population are expected to comply with role obligations and to put the interests of the organisation before their own. Egalitarian organisations are built on cooperative negotiation among employees and management ([57] p. 180), or more generically among operative and governing agents. Concerning affect, the operative system also has the two options of Dominance (relating to the imposition of control) and Submission (relating to compliance). These interact with other traits through emotional forms of intelligence.

The dispositional figurative system of the personality model also involves the figurative trait, which can take one of the values of Mastery plus Affective Autonomy, and Harmony. The former is concerned with self-assertion and egocentric/altruistic ends, the latter with an appreciation of others as opposed to their exploitation. The third domain of personality is the cognition/affect system. The cognition system has a trait that may take values of either Intellectual Autonomy or Embeddedness. Since this system provides self-stabilisation for the personality, whether it has an Intellectual Autonomy or an Embeddedness orientation respectively determines whether it is Collectivist or Individualist in its nature. In the affect system, the affect trait may take values of either Stimulation towards the ascendancy of emotional attitude or a balance with Containment. Containment is the other value the trait can adopt which delivers dependability and restraint. The tri-domain personality model sits inside an agency model that has cultural and social functionality in both cognition and affect. Cultural functionality provides agency self-stabilisation, and social functionality determines its mode of interaction with its environment. We have noted that the trait for the cultural system for cognition arises from Sorokin [38] and may take the values of Sensate (materialism) or Ideational (ideas). The social trait is an imperative for social behaviour, determines agency's orientation in the environment, and directs its potential for actions, interactions, and reactions that (re)constitute the social environment [98]. These cultural values mutually interact in any culture, and over time may take ascendancy over the other as societies change. Idealistic cultures combine elements of Sensate and Ideational cultures in a balance.

The cognition social trait is ultimately responsible for how policy will be applied (cf. [99]), which is influenced by the social affect trait. This social cognition trait originates from the cognitive style theory of Witkins et al. [100] (see Kozhevnikov [101]), for whom an event occurs in a field that defines an environment or context. They then differentiated between field-dependent individuals, who are likely to be Patterners, and Field-independent individuals, who are likely to be Dramatists. Patterners tend to focus on details while Dramatists tend to rather see the big picture. Shotwell et al. [39] then adopted these concepts of Dramatising and Patterning in their study on cognitive style. Seitz [102] notes that in their investigation of cognitive style, they recognised the dual modes of engagement relating to either constructive or symbolic play. Constructive-object play by "Patterners" produced a relatively high incidence of metaphoric behaviours connected with perceptual

and enactive metaphors. In contrast, symbolic play by “Dramatists” produced a relatively low incidence of metaphoric behaviours. Constructive behaviour pertains to physically manipulating objects, while metaphoric behaviour uses symbols and metaphors to represent abstract concepts. For Rosenberg [103], cognitive style can be seen as a trait with dynamic properties.

Distinction between Dramatists and Patterners has developed [98], as inherently argued by Burke [104]. Dramatists are motivated by individual goals and interests, shaped by the situation and the means available. Agents act in self-interest and form social contracts with others based on mutual advantages and expectations. Communication and individual relationships are essential for creating meaning and identity. Dramatists prefer symbolic and social activities, and are comfortable with narrative and persuasion. They express their social contracts through social interaction, and value communication and individual relationships as sources of meaning and identity. In contrast, Patterners are people who seek knowledge and competence, and who are interested in understanding how things work and finding logical solutions. They form social contracts with others based on mutual respect and competence, and they value communication and individual relationships as a way of learning and improving. They prefer constructive and mechanical activities, and pursue their own goals and interests through the use of logic and rationality. They are exploratory in their use of logic and symbols. Patternism, as distinct from Dramatising, has the key values of symmetry, pattern, balance, and the dynamics of social relationships. There is some connection between Dramatising social orientation and Sensate cultural orientation, while Patterning social orientation is likely to be more connected with Ideational cultural orientation ([105] p. 16). According to Park [106], culture affects the performance of organisations, and Dramatisers outperformed Patterners. Agencies have their own schema (or self-schema) within the figurative system, which consists of an ideology, ethics, and goals. This schema can act as a self-script for Dramatisers in a social context. If the schema matches the context, the self-script will be effective and lead to success. If, in a specific social context, the figurative self-schema is appropriate, then self-script Dramatising will be effective and it will contribute to success. In the affect system, emotional climate traits may be either Missionary or Empathy, with the former imposing perspectives on others and the latter being responsive to others. In the affect agency, the cultural domain is concerned with the emotional climate, through values of either Fear or Security, and the social domain, where the trait may take Missionary or Empathy values.

4. Configuring MAT with the Social Organisation Paradigm

4.1. The Social Organisation Paradigm

Tönnies [106,107] was interested in providing a way by which social organisation could be understood, based on the dichotomous concept of social action and agency behaviour as expressed through the notions of *Gemeinschaft* (community service) and *Gesellschaft* (company service [108]). Here, we consider this paradigm, and explore how it may be related to collective action.

Gemeinschaft is a structural condition of community that is enabled by norms, values, and beliefs, while *Gesellschaft* is rather a condition that relates to society in which structural relationships are driven by self-interest as a primary justification. This distinction directs the actions of social agents. Social agents, in this theory, can be individuals, communities, societies, or a state or region. While *Gemeinschaft* creates a location for productive work, *Gesellschaft* does not produce any utilities at all [109].

Agents form *Gemeinschaft* relationships when they value and aim for the same things, and feel a lasting and stable connection to their groups, as considered by authors such as Coole [110], Vaise [111], and Beckwith [112]. This connection gives them a sense of self-identity [113] and feelings of social solidarity [114]. For Wille [115], it is an identification with the group. It also involves strong altruistic feelings, illustrated for instance by the idea of the spirit of public good [116]. In contrast, *Gesellschaft* arises through values that are based on rationality, and hence goal rationality is the dominant attribute and means by

which certain goals can be achieved; it is also instrumental and calculating [116]. More, a characteristic of the *Gesellschaft* perspective is that the world should be left unchanged and unimproved. This perspective shares similar characteristics with the idea of harmony, where the world should be understood and appreciated rather than exploited. *Gesellschaft* decisions are based on instrumental (i.e., goal-directed) and (optimal) economical calculations, and it is blind to feelings of security, trust, and intimacy between members of a community ([116] p. 6). Associates are defined in terms of objectives rather than in inter-agent relationships, and sensitive to time, location, and situation [110].

Following Rodriguez [117], *Gemeinschaft* is driven by natural and spontaneously arising emotions and expressions of sentiment (*Wesenswille*, or natural will). However, *Gesellschaft* is connected with bureaucratic processes, and with rational self-interest and calculating conduct acts that weaken the traditional bonds of family, kinship, and religion (*Kürwille*, or rational will). *Gesellschaft* operates within the *Gemeinschaft* structure, and when connected with human relations is more impersonal and indirect, where rationally it is constructed in the interest of efficiency or other economic and political considerations.

Thus, in large agency contexts, agents have neither pure *Gemeinschaft* nor *Gesellschaft* structural relationships. This varies in a way that depends on the characteristics that dominate the organisation. The paradigm as constructed in the 1880s was relevant to a European social structure in which there was a different dominating culture. In those days, social and economic inequality was normal, and not something to be overcome. Tönnies argued that members of the society obtain status by birth (*Gemeinschaft*), and 19th-century Europe was an unequal-class society. A *Gesellschaft* orientation indicates that membership in a society is determined by status, education, and work. This is not so relevant to the current situation in Asia, where societies embrace class and hierarchy, and where social status depends on birth and family. In other words, the *Gemeinschaft*–*Gesellschaft* paradigm is Western-centric.

4.2. The Tönnies–Triandis Cognition Connection

The *Gemeinschaft*–*Gesellschaft* paradigm of Tönnies looks at the social organisation in terms of intangible conditions that reflect on agent behaviour and social action, linking to other intangibles such as values. Triandis [36] rather came to a similar consideration from the connective disposition paradigm intangibilities, and this has consequences for both social organisation and agent behaviour. These are dichotomous values that can be used to describe differences in behaviour. The variable of connective disposition corresponds to the degree to which agencies identify with self rather than society. Collectivists view themselves primarily as parts of a whole and tend to be motivated by the norms and duties imposed by the collective. Individualists, on the other hand, view themselves as independent entities that are primarily motivated by their own goals and desires. Triandis came to his paradigm from a detailed examination of Hofstede's [18] propositions concerning the cultural dimensions of cross-cultural communication, which some argue (such as House et al. [118], Sweeney [119], and Schwartz [120]) has issues with its credibility. Like the Tönnies paradigm, that of Triandis [121,122] has had significant interest over the last two generations, as shown by Minkov [123], Hofstede et al. [124], Greenfiel [125] and Davis et al. [126]. Other fields of study show this; for example, in economics with "Methodological Individualism" and "Methodological Institutionalism" [126] and in politics with "Transactional Individualism" and "Relational Collectivism" [127]. However, Schwartz [37] (p. 139) criticised the connective disposition paradigm for being too broad: it misses values that benefit both individuals and groups (such as wisdom), it neglects values that support other groups besides the ingroup (such as social justice), and it wrongly assumes that Individualistic and Collectivistic values are opposite and consistent. Schwartz used a finer analysis of ten types of values in all culture [128] and found significant group differences that the connective disposition binary values of Individualism–Collectivism hide. He, therefore, developed what he considered to be an alternative value system theory that was devoid of the concept of connective disposition. As if in a full circle, however, his theory

has returned to including the connective disposition paradigm [129]. This Mindset Agency Theory arises through configurations that include Schwartz's [57] value system theory, set within the context of Maruyama's [130] mindscape theory. From these beginnings, a set of cognitive traits were formulated that coalesce into a variety of mindsets, neatly falling into a variety of Collectivistic and Individualistic categories. For a given agency, the construct enables the Tönnies paradigm to be shown to be ontologically distinguishable from the Triandis paradigm. Epistemologically, the two paradigms operate with relatable knowing about values and structural relationships in social organisations. It also includes the concept of the normative personality, which is the collective personality that emerges from the interactions of the agents of an agency. This is slightly different from the more common psychology idea of the term, which refers to changes in an agent's personality over its lifespan.

Neff [131] examines the relationship between the connective disposition paradigm involving Collectivism–Individualism, and explains that it strongly echoes the social organisation paradigm of *Gemeinschaft–Gesellschaft*. A *Gemeinschaft* agency operates through collective structural relationships with collective goals and understandings, and its agents are connected with shared customs and traditions. *Gesellschaft* agencies are associated with explicit contracts and pursue rational self-interest that overrides any concern they may have with others. Individualist agencies have weak group boundaries and reduced constraints on individual activities and are characterised as having an autonomous view of life, adopting abstract principles of morality, and seeing themselves as independent, competitive, creative, and self-reliant, with personal goals placed ahead of group goals. Greenfield [125] is consistent with this by noting that sociocultural environments are not static in either the developed or the developing world and should be considered to involve dynamic processes. Agencies can adapt to changing situations. Through their adaptive processes, social variables may shift between *Gemeinschaft* and *Gesellschaft* [107]. These are coherent with cognitive shifts of connective disposition towards either Collectivism or Individualism.

Connective disposition creates social adaptive imperatives for social orientation. Independence and interdependence are more psychological variations of the same concepts. In Collectivism, sharing occurs among agents and is adapted to the daily practices that occur in *Gemeinschaft* environments such as sharing a social good. Individualistic values such as privacy are adapted to the characteristics of *Gesellschaft* environments, such as distinguishing attributes of a social good. However, the terms Collectivism and Individualism are not adequate to describe cognitive adaptation in the two classes of the social environment. Connective disposition summarises social adaptations as two types of the environment, Collectivism with interdependence and Individualism with independence. However, due to their cultural values origin, they do not immediately explain causal behaviour [132]. Connecting with other value theories, such as that of the sociocultural dynamics of Sorokin [38] both the Tönnies and Triandis paradigms can be elaborated through configuration processes [32].

The connective disposition paradigm is indicative of agency attitude, which is created through the manifestation of values collected in one or the other of the dichotomous options [133,134]. To illustrate this, agencies with Collectivist attitudes have firm group boundaries with strong collective constraints on individual activities. Such agencies have a connected view of self (being socio-centric), placing value on attachment and interdependence, with the moral world seen in terms of interpersonal responsibilities of care and duty. While the Tönnies paradigm has been usefully applied to agencies in the past, the developments that have occurred in the Triandis paradigm make it more suitable for the analysis of culturally diverse organisations.

Collectivism makes agency well-being a priority, while Individualism focuses on individual agent well-being. Collectivism means people join a group and follow norms to achieve a shared goal or interest [135]. Individualism means that only agents and their attributes can explain social phenomena and their changes. Collectivistic or Individualistic

agencies see reality differently. They have different boundaries that shape their reality and affect their communication.

4.3. The Tönnies–Triandis Affect Connection

There are also affect aspects to the social organisation theory of Tönnies, although additional research is required to explore them in terms of the affect traits of MAT. It can be noted, however, that *Gemeinschaft* and *Gesellschaft* both have emotional attributes [136,137]. *Gemeinschaft* is characterised by natural will and spontaneously arising emotions and expressions of sentiment, while *Gesellschaft* is characterised by rational will and impersonal and indirect human relations. Therefore, *Gemeinschaft* is more emotional and personal, while *Gesellschaft* is more rational and impersonal [71]. For Heberle [136] “emotional, affectually-conditioned” situations do exist. With respect to the sociocultural traits, we can speculate as follows. With respect to the emotional attributes that underpin *Gemeinschaft* and *Gesellschaft* in the emotional climate, the Fear trait could be associated with the impersonal and indirect human relations of *Gesellschaft*, while the Security trait could be associated with the personal relationships of *Gemeinschaft*. Similarly, in the operative system which is directly related to the *Gemeinschaft* and *Gesellschaft* traits, the Stimulation trait could be associated with the spontaneously arising emotions of *Gemeinschaft*, while the Containment trait could be associated with the rational will of *Gesellschaft*.

5. Relating MAT and Cognitive Style

5.1. Configuring Sociocognitive Style

While social relationships can influence cognitive style by affecting, for example, social learning or social influence on cognition, cognitive style can influence social relationships by affecting, for example, social network diversity. Social relationships and cognitive style can also interact to influence outcomes. The explanation for this is as follows. Cognitive styles affect social relationships [137], for instance, by influencing how agents perceive, think, solve problems, interact, and form social bonds, how interactive influence develops, and the formation of inter-agent compatibility or conflict. Similarly, social relationships affect how people develop and modify their cognitive style through social learning, and this then links to the formation of social relationship [138]

Here, we reflect only on the cognition dimension of the operative system, leaving the affect connection of *Gemeinschaft*–Stimulation and *Gesellschaft*–Containment to later research. Examining the relationship between Patternism/Dramatism and *Gemeinschaft*/*Gesellschaft* reveals significant connections. In essence, *Gemeinschaft* aligns with informal structures and emotional aspects, while *Gesellschaft* aligns with formal structures, such as contracts and rational processes. Conversely, Patternism emphasises symmetry, balance, and the dynamics of social relationships, while Dramatism revolves around goal formation for self-centred benefits and social inter-agent contracts. This relative association exists between *Gemeinschaft* and Patternism, as well as between *Gesellschaft* and Dramatism. Although these connections may not be universally coincident, a discernible correspondence between Patternism/Dramatism and *Gemeinschaft*/*Gesellschaft* is evident.

It is important to remember that *Gemeinschaft*/*Gesellschaft* function as modes of expression, effectively becoming trait values that describe social relationships. These traits enable and shape interactions between agents in various contexts. On the other hand, Patterning/Dramatising are cognitive style traits describing how agents process information. Combining the possible acquirable values of social relationships and cognitive style results in what we shall call a sociocognitive style. This encompasses both a social (including the political) and a cognitive dimension, providing a more accurate description of sociocognitive organisation.

In summary, the sociocognitive style of an agency can vary along a coherence–incoherence spectrum. A high degree of coherence in sociocognitive style indicates that the values associated with the agency’s social relationships (*Gemeinschaft*/*Gesellschaft*) and cog-

nitive style (Patternism/Dramatism) are in harmony, aligning seamlessly. This suggests a consistent and compatible interplay between how the agency forms social bonds and processes information. On the other hand, a low degree of coherence implies inconsistency between these values. In such instances, the sociocognitive style reflects a lack of alignment, indicating that the agency's approach to social relationships contradicts its cognitive processing or vice versa. Essentially, the sociocognitive style trait serves as a measure of the agency's operational consistency or inconsistency in integrating social relationships with cognitive processes.

Recognising that *Gemeinschaft* and *Gesellschaft* are concepts from sociological theory that describe different types of agencies based on their inter-agent (social) relationships, a multiplicity and interplay of other influences shape sociocognitive organisation derived from other traits represented in Mindset Agency Theory, relative to context. Patterning and Dramatising are concepts used in cultural anthropology to describe different ways in which agencies create meaning and order. The overlap between the two pairs of dualities may be relatively easily identified in terms of the relationships among the agents of an agency. The similarities between *Gemeinschaft* and Patterning occur because both are associated with agencies that have strong bonds of solidarity, loyalty, and trust among their agents. They tend to have a low degree of differentiation, complexity, and conflict among them, and a high degree of stability, continuity, and harmony in their interactions. *Gesellschaft* and Dramatising are both associated with agencies having weak bonds of solidarity, loyalty, and trust among agents. Due to their characterisation of being associated with impersonal and formal relationships, they also tend to have a high degree of differentiation, complexity, and conflict, with a low degree of stability, continuity, and harmony in their interactions. However, the differences between the pair of dualities are that *Gemeinschaft* and *Gesellschaft* are optional trait values that describe intangible qualities in structural relationships, providing an operative agency potential, delivering phenomena such as polity and laws. Patterning and Dramatising are trait values that relate to cognitive style, also reflecting on the intangible psychological processes and patterns of behaviour that influence the cognitive–affective processes and actions of agents. These are shaped by agent experiences, cultural norms, and other social factors. It is therefore plausible that there is a connection between social relationship and cognitive style represented through sociocognitive style. This trait may deliver operative coherence if there is a similarity match between social relationships and cognitive style, but operative incoherence if there is a mismatch between them. This suggests that the sociocognitive style trait can take values from a coherence–incoherence duality. Sociocognitive style can also take intermediate values that reflect different degrees of operative coherence or incoherence. A high degree of coherence means that in sociocognitive style, the agency's social relationships and cognitive style take values that are consistent with each other, while a low degree of coherence means that they are inconsistent with each other. Under conditions of cultural instability, this likely means the existence of a pathology, but where there is balance between the two cultural value systems, this might not be the case.

The concept of sociocognitive style provides a way to understand how social relationships and cognitive styles intersect to shape agency behaviour and organisation in multiple contexts. The similarities and differences between dualities such as *Gemeinschaft*/*Gesellschaft* and Patterning/Dramatising reflect the degree of interpersonal bonds and coherence within an agency's interactions. These multiple contextual layers, including macro- and micro-levels, influence how agents interact with each other and the agency's behaviour, which can be understood through the lens of sociocognitive style.

5.2. Multiple Contexts

So, one possible way to distinguish between multiple contexts is to consider whether one is looking at the macro-level or the micro-level of social phenomena, and whether focus occurs on the similarities or the differences among the agents. Additionally, there may be contexts within contexts that influence how agents perceive and interact with

each other in different situations. For example, consider an agency that has a *Gesellschaft* context at the macro-level, where the agents have weak bonds of solidarity, loyalty, and trust, and where they face a high degree of differentiation, complexity, and conflict in their interactions. However, at a more micro-level of specific subgroups or individuals, such as ethnic minorities, civil society organisations, or political leaders, there might be a *Gemeinschaft* context, where there exist strong bonds of solidarity, loyalty, and trust, and where there is a low degree of differentiation and complexity. Other ways of defining context are also possible, for instance, where the agency maintains a set of principles that requires *Gemeinschaft*-related processes, even where they might be underlying *Gesellschaft* processes at work.

In this potential for increased complexity, an agency exhibits a coherent sociocognitive style trait when its cognitive style aligns with its social relationships at the relevant level of analysis and context. For instance, coherence is evident when an agency demonstrates a Patterning-type cognitive style at the macro-level with a *Gemeinschaft*-type social relationship, or a Dramatising-type cognitive style at the micro-level aligned with a *Gesellschaft*-type social relationship. Conversely, an agency displays an incoherent sociocognitive style trait when its cognitive style does not match its social relationships at the relevant level of analysis and context. The degree of coherence or incoherence in an agency's sociocognitive style trait carries implications for its performance and outcomes across various situations and contexts.

An agency, endowed with operative intelligence/autopoietic processes, can uphold its identity and viability through self-regulation. Stability is measured by the agency's ability to sustain autopoietic processes in diverse situations and contexts, a feature connected to the sociocognitive style trait. Incoherence in sociocognitive style may impact agency stability by disrupting autopoietic processes. Given cultural instability, a misalignment between cognitive style and social relationships could indicate that a pathology has arisen that will impair agency capacity to generate and regulate structures, functions, and behaviours that define its identity and viability. This diagnosis can be confirmed by exploring behavioural consistency and identifying whether there is supportive evidence, such as paradoxical behaviour.

5.3. The Determinant for Sociocognitive Style

Until now, we have discussed the sociocognitive style trait but we have not considered how it determines its values of coherence/incoherence. We are aware that sociocognitive style is defined by the connection between social (or more broadly, sociopolitical) relationships and cognitive style. Social relationships refer to the predominant use of either communal or contractual bonds to relate to others, while cognitive style refers to the predominant use of either patterns or narratives to organise and interpret information. We have explained that sociocognitive style can be expressed in terms of the dual operative traits with paired value extrema of (*Gemeinschaft*, *Gesellschaft*) and (Patterning, Dramatising). Summarising: *Gemeinschaft* is the social relationship trait that involves using emotional, personal, and cooperative bonds to form and maintain close and loyal groups; *Gesellschaft* is the social relationship trait that uses rational, impersonal, and competitive bonds to form and maintain remote and contractual groups; Patterning is the cognitive style trait that uses logical, analytical, and abstract thinking to create and apply general rules and principles; and Dramatising is the cognitive style trait that involves intuitive, creative, and concrete thinking to create and apply specific stories and scenarios. We earlier noted that social relationships and cognitive style interact, and coupling them results in a meaningful pairing in their trait values.

This has relevance to Multiple Identity Theory [32]. Public identity, principally determined by operative trait interaction with other traits, is an agency self-schema projected to the social environment so that agency can adopt a synthetic representation of self. It is both a determinant of, and is determined by, cognitive style. Personal identity, similarly principally determined by figurative trait interactions with other traits, is a personality self-

schema that agency has in relation to itself, and reflects how it feels and thinks about itself. It influences social relationships by shaping how agents perceive, interpret, communicate, cooperate, and collaborate with others and with themselves in different social contexts and situations.

When personal and public identities are coherent together, an agency can express its true self and values in different contexts to which identity is sensitive. It can also pair its social relationship and cognitive style traits in a way that suits its identity and purpose. When personal and public identities experience a schism, then this will be a consequence of the interactions between traits. In this case, public identity may become a false self, when psychological disturbances are possible that can result in conflict or stresses that the fracture has delivered. Identity schisms can be reflected in a sociocognitive organisation by affecting trait formation and the relationship between social organisation and cognitive style. The interaction between these traits can be seen as a schema in the sense that it is a cognitive structure that serves as a framework for one's knowledge about people, places, objects, and events. The mechanism that is caused by the interaction between cognitive style and social organisation is sociocognitive. This, and its accompanying processes, involve schema activation and the conscious organisation of experiences and categories that structure the environment, including the influences of other traits.

As explained by Yolles and Fink [32], just as mindset traits influence behaviour, so does identity, and both are dynamic and adapt to changing contexts and interact through mutually reflexive processes. Identity may also be thought of as a self-schema that connects an agency to others, reflecting feelings and thought about self and how it wishes to be seen and treated by others. It is influenced by factors such as emotions, memories, experiences, personality, knowledge, values, beliefs, goals, motivations, culture, and social categories. Mindset traits are the distinctive agency qualities or characteristics that influence and reflect perception, feeling, thinking, and behaviour with respect to context and situation.

Recall the proposition that identity is an emergent phenomenon resulting from the interaction between mindset traits. The emergent phenomenon provides mindset context that feeds back to the interactive traits, and this can affect all traits resulting, for instance, in adjustments in behaviour, cognition, affect, and motivation, and perceptions of context can be altered. Its emergence is a self-schema that relates an agency to others, reflecting its feelings and thoughts about itself, and how it wants to be seen and treated by others. Identity is influenced by various factors, such as emotions, memories, experiences, knowledge, values, beliefs, goals, motivations, culture, and social categories. However, mindset traits are also part of these factors, as they reflect how the agency perceives itself and its possibilities in relation to its environment. Therefore, identity emerges from the interaction and feedback between mindscape traits and other factors that shape the agency's sense of self.

6. Discussion and Conclusions

Here, we bring closure to this paper by reflecting on the arguments that surround its capacity for diagnosis. MAT offers considerable promise in exploring agency pathologies through its multiple levels of ontology and its corresponding levels of the connecting network of processes that includes reflexivity. It has a capability to qualitatively analyse the processes by examining external behaviours and relate them to internal stability conditions. It also has the potential, albeit not yet developed sufficiently for pragmatic implementation, to undertake quantitative analysis involving von Foerster information flows by examining process efficacies, thereby delivering the potential to evaluate the failures that can diminish agency viability. Reflexivity, a cornerstone of MAT, becomes particularly important in comprehending and resolving issues hindering improved agency functioning. Pathologies often stem from trait instabilities, delivering such impoverishing attributes as conflicting interests or weak institutional capability. By promoting coherence through reflexive processes, agencies can elevate their functionality, effectiveness, and adaptability, thereby fostering viability.

The concept of agency instability serves as a significant link to this discussion, explaining how it can give rise to pathologies, thereby providing insights for diagnosis. We have distinguished between two types of instability: process and state. Von Foerster process instability refers to inefficacious information flows perturbing autopoietic processes responsible for self-production and self-creation. These processes, important for agency establishment of its boundaries and identity, may be misdirected when involving non-intrinsic information, which leads to a loss of capacity to recognise requisite adaptability. This misdirection can result in maldirected adaptive intent, explaining paradoxical behaviour, i.e., those patterns of actions that contradict expected agency outcomes or violate the agency's norms and values. In contrast, formative trait state instabilities occur when the relationship between trait value systems becomes inharmonious and antagonistic, ultimately having the potential to influence decision making, communication, and performance. This can also occur if the information flow in the von Foerster processes (of autopoiesis and autogenesis) are in some way inadequate so that through reflexivity, self-regulation and self-sustentation structures become corrupted.

These concepts are inherent to the metacybernetic theory of MAT, which is capable of analysing and diagnosing the agency dynamics of complex organisations. The theory is based on formative bipolar traits, where culture, disposition, and operative functionality are expressed in terms of polar value sets that dynamically interact to identify a context-sensitive mindset that creates potential determinants for behaviour.

MAT provides a comprehensive and holistic view of agency, with attributes that may be beneficial or detrimental. We have integrated Tönnies' theory of social organisation into MAT, introducing a new formative trait indicative of agency operative stability in culturally diverse complex organisations. This has been undertaken through a configuration approach that combines distinct but relatable models, and was undertaken previously to create the traits for MAT using Sorokin's theory of sociocultural dynamics, Schwartz's theory of cultural values, and Shotwell's theory of cognitive style. The overall approach takes a metatheoretical perspective, connecting distinct attributes of theories to show how they relate, and providing a unique way of capturing the underlying cognitive and affective processes that drive agency behaviour within the broader social, cultural, economic, political, and emotional contexts. By applying this metatheoretical framework, this paper has aimed to demonstrate the importance of understanding agency diversity and complexity, especially during conditions of instability. In doing this, it has highlighted the need for creating stability, resolving conflicts, promoting well-being within populations of agents, and delivering agency coherence.

As a model through which analysis can be delivered, MAT is adaptable to various contexts, allowing for particular interventions to improve agency performance. Additional research could further develop the framework, increasing its theoretical and practical significance. It needs to be recognised that the cybernetic framework developed here has a diagnostic purpose, aiming to identify and analyse the factors that affect agency with its population of diverse agents, and recognising the existence of levels of ontology. These levels are connected by extremely important reflexive processes in a fractal hierarchy that represents the autopoietic network of processes that enables a core feature of living systems, which demonstrates how complex systems can sustainably adapt. A lower-order fractal explains the regulatory capability of agency, embedded in a higher-order fractal that anchors it, and explaining agency capacity for sustainability. The fractal engages an ability to maintain von Foerster process stability, determining its capacity to be efficacious in its functionality. In the lower-order fractal, this can be referred to as autopoietic stability enabling efficacious self-organisation, and in the higher-order fractal, it may be referred to as autogenetic stability enabling efficacious self-creation.

According to metacybernetic theory, higher-order ontology fractals always have a potential capacity to anchor immediately embedded lower-order ontology fractals. This distinction between the higher and lower orders is that the latter are a scaled-down self-similar copy of the former, enabling one to refer to the fractal scale. The lower-order

fractal is contained within the larger, sharing some of its features and properties, but it may also have some differences or variations. This is especially the case where different scales indicate different contexts, suggesting a hierarchy of context. The lower order may also be seen as a part of the higher order or as a separate entity with its own identity and characteristics. Still, the higher-order fractal anchors the lower order, and some mutual dependency evolves. This highlights the role of the linking network of processes, defined as autopoietic orders, that creates multiscale causal relationships. The relationship between the two orders of the fractal is seen as a recursive function of scale, indicative of complexity. The fractal nature of agency, as explained by metacybernetic theory, implies that the degree of its complexity and diversity can affect its coherence and trait stability. Agency diversity may enhance or detract from its coherence, with enhancement occurring when diversity results in synergy and detraction occurring when diversity results in instability. This recognises that diversity can be either beneficial or detrimental to agency coherence—the degree to which its set of adaptive goals and portfolio of actions are coordinated. Coherent agencies tend to function effectively and efficiently, while incoherent ones are prone to conflicts and dysfunctions.

Diversity can enhance coherence when its synergy dominates, occurring when diverse agents complement each other's strengths and weaknesses, creating new opportunities and constructive outcomes. Diversity can detract from coherence when it leads to instability, the phenomenon where agency trait value systems are discordant and unable to maintain balance. This is observed when diverse agents clash with each other's interests and values, creating new challenges and threats. For example, when agency arises from organisations with diverse cultures and instability occurs, conflict may occur that hinges on a lack of inter-agent trust, mutual respect, and understanding, with agents perceiving each other as competitors or enemies. Conversely, agency may provide an agent environment in which there is harmony and cooperation, with a high level of trust, mutual respect, and understanding, and with agents perceiving each other as partners or allies. This can lead to increased creativity, innovation, and productivity, as well as improved well-being and satisfaction for the agents involved. Diversity can be a source of strength and resilience for the agency, fostering learning, adaptation, and development.

Instabilities can lead to a loss of efficacious functioning and performance, while pathologies can result in abnormal or unhealthy conditions or outcomes, negatively impacting agency coherence, and affecting agency capacity for self-regulation and self-creation. The relationship between instabilities and pathologies is bidirectional and causal, so that one can be a cause of, or result from, the other. Under certain conditions, instabilities can give rise to pathologies, depending on the nature of agency. For example, in a culturally diverse agency where no dominant culture prevails, traits with contrasting sets of values may define a condition of instability, which is characterised by a lack of inter-agent cohesive synergy. This phenomenon is closely tied to distinctions in attitudes, so that conversely, stability becomes attainable when attitudes lean towards cooperation. These conditions apply to both cognitive and affective structures, which introduces the possible exploration of an emotion dynamic that has not been explored in the literature within the context that our framework suggests.

We are aware that different cultural types have varying impacts on the social, political, economic, artistic, and emotional aspects of agency. Just as in Sorokin's theory, there are two polar extreme (Sensate and Ideational) value sets, and a stable balanced value set (Idealistic), so, too, other traits may have balanced Idealistic value sets. This also therefore applies to the social organisation trait of *Gemeinschaft*, *Gesellschaft*, and its Idealistic social organisation value sets. The balanced position arises where transitive conditions arise when neither *Gesellschaft* or *Gemeinschaft* dominate. This may result in an Idealistic balance, or in a mixed transition that is unstable with, in an international political context perhaps with the rise of *Gesellschaft* nationalism and populism challenging the globalised values of *Gemeinschaft*. This can lead to conflicts, polarisations, and fragmentation within and between nations, as well as a loss of trust and cooperation among different groups and

institutions. In a different cultural example, instability might result in a clash of societies having different religious, ethnic, and ideological positions, competing for resources and influence. Under conditions of trait instability, this can result in pathologies that enable violence, terrorism, and extremism, as well as a lack of tolerance and dialogue between agents. While instabilities can lead to pathologies threatening agency coherence and sustainability, pathologies can also generate more instabilities, creating a vicious cycle that further undermines agency functioning and performance.

The originality of this research, besides its cybernetic attributes, lies in its innovative metatheoretical perspective that enables the integration of diverse theories into MAT through configuration, providing an adaptive framework for understanding agency substructure, superstructure, and behaviour. Exploring theoretical relationships in this way can provide a unique approach to capture the underlying cognitive and affective processes driving agency behaviour within diverse contexts. Importantly, MAT's adaptability allows for bespoke interventions to improve inquiry into agency conditions such as instability, pathology, and performance.

Reflecting on the theoretical development here, some reinterpretation is required for the fractal in Figure 1. The operative trait should now be seen as a composite of two formative traits. The first pertains to knowledge-asset style, representing the agency's inclination towards collecting external knowledge-assets in a specific manner. The second trait revolves around functionality, detailing how the agency executes external tasks. By establishing this affect trait duality and inferring a mutual relationship between the knowledge-asset style trait and the functionality trait, a more comprehensive exploration of context-specific operations becomes possible, enhancing the depth of analysis. In the case of the cognition system, the functional trait is *Gemeinschaft/Gesellschaft*, and the knowledge-asset style is *Patterning/Dramatising*. In the affect system we have functional traits of *Missionary/Empathetic*, but would need to find knowledge-asset style traits. One candidate that might conform to this is Schachter's theory of emotion as proposed by Schachter and Singer in 1992 [139]. Here, emotions are a combination of arousal and its interpretation based on an environment, and the two styles that enable emotion to be recognised are physiological-arousal/cognitive-interpretation. The two traits could then speculatively create the new variable socio-affect style. For the cognition (as well as affect) system, additional research is required with respect to the dispositional traits, their mutual interactions, and how (perhaps as Bourdieu's *habitus*) they subtly influence actions and limit choices. Further, might there be other theories that are relevant to the dispositional traits that can be configured. An illustration might be to consider Allport's theory on "The Nature of Prejudice" to explore under what conditions formative traits deliver prejudice and discrimination. In such an illustrative way, configuring such attributes into MAT could provide a more comprehensive understanding of the substructural mechanisms that influence behaviour.

Another underlying requirement for theory development is pragmatic application. Thus, so far we have only discussed theory building, and shown how it can be applied to MAT in order to enhance its applicability to diverse agencies. The application part of the methodology is already planned to be progressed in a follow-up paper, where the elaborated MAT is applied to the complex regional organisation ASEAN, which has been argued, in the literature, to have pathological issues. In that pragmatic study, the character of ASEAN will be uncovered by determining its mindset and the cause of its agency pathologies, thereby explaining how instability in its formative traits leads to dysfunction and incoherence. Through this, its apparent narcissism and paradoxical behaviour will be explained.

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References

1. Archer, M.S. *Culture and Agency: The Place of Culture in Social Theory*; Cambridge University Press: Cambridge, UK, 1996.
2. Giddens, A. *The Constitution of Society: Outline of the Theory of Structuration*; University of California Press: Oakland, CA, USA, 1984.
3. Bourdieu, P. *Outline of a Theory of Practice*; Cambridge University Press: Cambridge, UK, 1977.
4. Foucault, M. The subject and power. *Crit. Inq.* **1982**, *8*, 777–795. [\[CrossRef\]](#)
5. Varela, F.J.; Maturana, H.R.; Uribe, R. Autopoiesis: The organization of the living and its characterisation as a model. In *Facets of Systems Science*; International Federation for Systems Research International Series on Systems Science and Engineering; Springer: Boston, MA, USA, 1991; Volume 7, pp. 559–569. [\[CrossRef\]](#)
6. Bandura, A. Toward a psychology of human agency. *Perspect. Psychol. Sci.* **2006**, *1*, 164–180. [\[CrossRef\]](#)
7. Bandura, A. Social cognitive theory: An agentic perspective. *Annu. Rev. Psychol.* **2001**, *52*, 21–41. [\[CrossRef\]](#)
8. McAdam, D.; Tarrow, S.; Tilly, C. *Dynamics of Contention*; Cambridge University Press: Cambridge, UK, 2001; Available online: <https://ir101.co.uk/wp-content/uploads/2018/10/mcadam-et-al-dynamics-of-contention-compressed.pdf> (accessed on 1 June 2023).
9. DeYoung, C.G.; Krueger, R.F. A Cybernetic Theory of Psychopathology. *Psychol. Inq.* **2018**, *29*, 117–138. [\[CrossRef\]](#)
10. Swindells, T.; Iddon, J.; Dickson, J.M. The role of adaptive goal processes in mental wellbeing in chronic pain. *Int. J. Environ. Res. Public Health* **2023**, *20*, 1278. [\[CrossRef\]](#)
11. von Foerster, H. Objects: Tokens for (Eigen)-Behaviors. *Cybern. Forum* **1976**, *8*, 91–96.
12. Yolles, M.; Frieden, B.R. Autopoiesis and its Efficacy—A Metacybernetic View. *Systems* **2021**, *9*, 75. [\[CrossRef\]](#)
13. Holland, J.H. *Hidden Order: How Adaptation Builds Complexity, Reading*; Addison-Wesley: Boston, MA, USA, 1995.
14. Page, S.E. *Diversity and Complexity*; Princeton University Press: Princeton, NJ, USA, 2010.
15. Hofstede, G. *Cultures and Organizations: Software of the Mind*; McGraw-Hill: New York, NY, USA, 1991.
16. Hofstede, G. *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations across Nations*; Sage: Thousand Oaks, CA, USA, 2001.
17. Schneider, S.B.J. *Managing across Cultures*, 2nd ed.; Pearson: Harlow, UK, 2003.
18. Harris, P.R.; Moran, R.T. *Managing Cultural Differences*, 10th ed.; Routledge: New York, NY, USA, 2017.
19. Kotter, J.P. Leading change: Why transformation efforts fail. *Harv. Bus. Rev.* **2007**, *85*, 96–103.
20. Adler, N.J. *International Dimensions of Organizational Behavior*; South-Western/Thomson Learning: Mason, OH, USA, 2002.
21. Trompenaars, F.; Hampden-Turner, C. *Riding the Waves of Culture: Understanding Diversity in Global Business*, 3rd ed.; McGraw-Hill: New York, NY, USA, 2012.
22. Beer, S. *The Brain of the Firm: A Development in Management Cybernetics*; John Wiley & Sons Inc.: Hoboken, NJ, USA, 1972.
23. Beer, S. *The Heart of Enterprise*; Wiley: London, UK, 1979.
24. Fields, C. Building the Observer into the System: Toward a Realistic Description of Human Interaction with the World. *Systems* **2016**, *4*, 32. [\[CrossRef\]](#)
25. Faye, J.; Pylikö, P. *Cybernetics and the Philosophy of Mind*; Routledge: London, UK; New York, NY, USA, 2009.
26. Hopwood, C.J.; Bleidorn, W. Stability and change in personality and personality disorders. *Curr. Opin. Psychol.* **2018**, *21*, 6–10. [\[CrossRef\]](#)
27. Pilarska, J. Cultural Diversity as a Source of Conflict in the Focus of Non-Governmental and International Organizations: Bosnian Case Study. *Eur. J. Econ. Bus. Stud.* **2016**, *2*, 117–129. [\[CrossRef\]](#)
28. Luloff, A.E.; Bridger, J. Community agency and local development. In *Challenges for Rural America in the Twenty-First Century*; Pennsylvania State University Press: Pennsylvania, PA, USA, 2003; Available online: https://www.researchgate.net/profile/Ae-Luloff/publication/288395080_Community_Agency_and_Local_Development/links/568a88f108aebccc4e1a0448/Community-Agency-and-Local-Development.pdf (accessed on 1 June 2023).
29. Shepherd, D.A.; Suddaby, R. Theory building: A review and integration. *J. Manag.* **2017**, *43*, 59–86. [\[CrossRef\]](#)
30. Borsboom, D.; van der Maas, H.L.J.; Dalege, J.; Kievit, R.A.; Haig, B.D. Theory Construction Methodology: A Practical Framework for Building Theories. *Psychol. Perspect. Psychol. Sci.* **2021**, *16*, 756–766. [\[CrossRef\]](#) [\[PubMed\]](#)
31. Guo, K.; Yolles, M.I.; Fink, G.; Iles, P.A. *The Changing Organisation: An Agency Approach*; Cambridge University Press: Cambridge, UK; New York, NY, USA, 2016.
32. Yolles, M.; Fink, G. *A Configuration Approach to Mindset Agency Theory: A Formative Trait Psychology with Affect, Cognition and Behaviour*; Cambridge University Press: Cambridge, UK, 2021.
33. Yolles, M. Metacybernetics: Towards a General Theory of Higher Order Cybernetics. *Systems* **2021**, *9*, 34. [\[CrossRef\]](#)
34. Schwarz, E. Towards a Holistic Cybernetics: From Science through Epistemology to Being. *Cybern. Hum. Know.* **1997**, *4*, 17–50.
35. Piaget, J. *The Psychology of Intelligence*; Harcourt and Brace: New York, NY, USA, 1950.
36. Triandis, H.C. Review of Culture's Consequences: International Differences in Work-Related Values. *Hum. Organ.* **1982**, *41*, 86–90. [\[CrossRef\]](#)
37. Schwartz, S.H. Individualism-collectivism: Critique and proposed refinements. *J. Cross-Cult. Psychol.* **1990**, *21*, 139–157. [\[CrossRef\]](#)

38. Sorokin, P. *Social and Cultural Dynamics*. In 4 Volumes Revised and Expanded on the 1927–1941 Edition; Originally Published in 1937–1942 by the Amer, Book, Co., New York, NY, USA; Bedminster Press: New York, NY, USA, 1962.
39. Shotwell, J.M.; Wolf, D.; Gardner, H. Styles of Achievement in Early Symbol Use. In *Language, Thought, and Culture*; Brandes, F., Ed.; Academic Press: New York, NY, USA, 1980; pp. 175–199. Available online: <https://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=C3F5F32F257CDD193149F674A3670597?doi=10.1.1.726.7490&rep=rep1&type=pdf> (accessed on 1 April 2023).
40. Tan, S.S. ASEAN's response to COVID-19: Underappreciated but insufficient. *ISEAS. Perspective* **2021**, *41*, 1–10.
41. Simon, H.A. The architecture of complexity. *Proc. Am. Philos. Soc.* **1960**, *106*, 467–482.
42. Yolles, M. Consciousness, Sapience and Sentience—A Metacybernetic View. *Systems* **2022**, *10*, 254. [\[CrossRef\]](#)
43. Nicolis, G.; Prigogine, I. *Self-Organization in Nonequilibrium Systems: From Dissipative Structures to Order through Fluctuations*; Wiley: Hoboken, NJ, USA; Chichester, UK, 1977.
44. Prigogine, I.; Stengers, I. *Order out of Chaos: Man's New Dialogue with Nature*; Bantam Books: New York, NY, USA, 1984.
45. Wiener, N. *Cybernetics or Control and Communication in the Animal and the Machine*; MIT Press: Cambridge, MA, USA, 1948.
46. Mitleton-Kelly, E. Ten principles of complexity and enabling infrastructures. In *Complex Systems and Evolutionary Perspectives on Organizations: The Application of Complexity Theory to Organisations*; Elsevier: Amsterdam, The Netherlands; London, UK; New York, NY, USA, 2003; pp. 23–42. Available online: https://www.researchgate.net/publication/38959109_Ten_principles_of_complexity_and_enabling_infrastructures (accessed on 1 August 2023).
47. Tamis-LeMonda, C.S.; Yoshikawa, H.; Niwa, K.; Niwa, E.Y. Parents' Goals for Children: The Dynamic Coexistence of Individualism and Collectivism in Cultures and Individuals. *Soc. Dev.* **2008**, *17*, 183–209. [\[CrossRef\]](#)
48. Yolles, M. Changing Paradigms in Operational Research. *Cybern. Syst.* **1998**, *29*, 91–112. [\[CrossRef\]](#)
49. Bauman, Z. *Liquid Modernity*; Polity Press: Cambridge, UK, 2000.
50. DeYoung, C.G.; Weisberg, Y.J. Cybernetic approaches to personality and social behavior. In *Oxford Handbook of Personality and Social Psychology*, 2nd ed.; Snyder, M., Deaux, K., Eds.; Oxford University Press: Oxford, UK, 2019; pp. 387–414.
51. Von Foerster, H. (Ed.) *Cybernetics of Cybernetics: Or, the Control of Control and the Communication of Communication*, 2nd ed.; Future Systems: Minneapolis, MN, USA, 1995.
52. Julià, P. Observer or self-observer in second-order cybernetics? *Kybernetes* **2000**, *29*, 770–786. [\[CrossRef\]](#)
53. Von Foerster, H. *Understanding Understanding: Essays on Cybernetics and Cognition*; Springer: New York, NY, USA, 2003.
54. Kauffman, S. *Investigations*; Oxford University Press: Oxford, UK, 2000.
55. Schwarz, E. Autogenesis. SSRN. 2021. Available online: <https://ssrn.com/abstract=3826203> (accessed on 1 December 2023).
56. Yolles, M.; Di Fatta, D. Antecedents of cultural agency theory: In the footsteps of Schwarz living systems. *Kybernetes* **2017**, *46*, 210–222. [\[CrossRef\]](#)
57. Sagiv, L.; Schwartz, S.H. Cultural values in organisations: Insights for Europe. *Eur. J. Int. Manag.* **2007**, *1*, 176–190. [\[CrossRef\]](#)
58. Maturana, H.R.; Varela, F.J. *Autopoiesis and Cognition*; Boston Studies in the Philosophy of Science: Boston, MA, USA, 1979.
59. Maturana, H.R.; Varela, F.J. *Autopoiesis and Cognition: The Realization of the Living*; D. Reidel Publishing Company: Dordrecht, The Netherlands, 1980.
60. Thompson, E. *Mind in Life: Biology, Phenomenology, and the Sciences of Mind*; Harvard University Press: Cambridge, MA, USA, 2007.
61. Froese, T.; Di Paolo, E.A. The enactive approach: Theoretical sketches from cell to society. *Pragmat. Cogn.* **2011**, *19*, 1–36. [\[CrossRef\]](#)
62. Chen, H.; Nunes, J.M.B.; Ragsdell, G.; An, X. Somatic and cultural knowledge: Drivers of a habitus-driven model of tacit knowledge acquisition. *J. Doc.* **2019**, *75*, 927–953. [\[CrossRef\]](#)
63. May, R. The Origins and Significance of the Existential Movement in Psychology. In *Existence: A New Dimension in Psychiatry and Psychology*; May, R., Angel, E., Ellenberger, H.F., Eds.; Basic Books/Hachette Book Group: New York, NY, USA, 1958; pp. 3–36. [\[CrossRef\]](#)
64. Becker, E. *The Denial of Death*; Free Press: New York, NY, USA, 1973.
65. Vickers, G. The idea of appreciative systems. In *Systems Thinking, Systems Practice*; Checkland, P., Ed.; John Wiley & Sons: Hoboken, NJ, USA, 1983; pp. 385–411.
66. Nonaka, I.; Takeuchi, H. *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*; Oxford University Press: New York, NY, USA, 1995.
67. Salovey, P.; Mayer, J.D. Emotional intelligence. *Imagination. Cogn. Personal.* **1990**, *9*, 185–211. [\[CrossRef\]](#)
68. Frieden, R. *Science from Fisher Information: A Unification*; Cambridge University Press: Cambridge, UK, 2004.
69. Bierstedt, R. The Logico-Meaningful Method of P. A. Sorokin. *Am. Sociol. Rev.* **1937**, *2*, 813–825. [\[CrossRef\]](#)
70. Sorokin, P. *Social and Cultural Dynamics: A Study of Change in Major Systems of Art, Truth, Ethics, Law and Social Relationships*; Originally Published in 1937; Routledge: Abingdon, UK, 2017.
71. Britannica, T. (Ed.) Peloponnesian War. Peloponnesian War. In *Encyclopedia Britannica*; Encyclopædia Britannica, Inc.: Scotland, UK, 2023; Available online: <https://www.britannica.com/event/Peloponnesian-War> (accessed on 4 December 2023).
72. Wasson, D. Hellenistic Warfare. World History Encyclopedia. Available online: https://www.worldhistory.org/Hellenistic_Warfare/ (accessed on 22 August 2023).
73. Berzonsky, M. A Social-Cognitive Perspective on Identity Construction. In *Handbook of Identity Theory and Research*; Schwartz, S., Luyckx, K., Vignoles, V., Eds.; Springer: New York, NY, USA, 2011; pp. 55–76. [\[CrossRef\]](#)
74. Yolles, M. The Sociocultural Dynamics of Sorokin. *Peace Res.* **1981**, *13*, 33–37.

75. Lupien, P. Identity: Personal AND social. In *The Dynamics of Identity in Online Civic Activism*; Lupien, P., Ed.; Routledge: Abingdon, UK, 2020; pp. 1–14.
76. Ashforth, B.E.; Mael, F. Social Identity Theory and the Organisation. *Acad. Manag. Rev.* **1989**, *14*, 20–39. [\[CrossRef\]](#)
77. Sturkenboom, D. Understanding Emotional Identities: The Dutch Phlegmatic Temperament as Historical Case-Study. *Low Ctries. Hist. Rev.* **2014**, *129*, 63–191. [\[CrossRef\]](#)
78. Li, Y. Exploration on the Path of Emotional Identification of University Students in New Era on Socialist Core Values. In *Proceedings of the 2018 2nd International Conference on Education Innovation and Social Science (ICEISS 2018)*, Jinan, China, 24–25 November 2018; Jiao, J., Ed.; Atlantis Press: Beijing, China, 2018; pp. 1–4. [\[CrossRef\]](#)
79. Carminati, L.; Gao Hélot, Y.F. Between Multiple Identities and Values: Professionals' Identity Conflicts in Ethically Charged Situations. *Front. Psychol.* **2022**, *13*, 813835. [\[CrossRef\]](#) [\[PubMed\]](#)
80. Watson, P.J.; Morris, R.J. Irrational beliefs and the problem of narcissism. *Personal. Individ. Differ.* **1990**, *11*, 1137–1140. [\[CrossRef\]](#)
81. Heraclides, A. The ending of unending conflicts: Separatist wars. *Millennium* **1997**, *26*, 679–707. [\[CrossRef\]](#)
82. Majeed, R. What Not to Make of Recalcitrant Emotions. *Erkenn* **2022**, *87*, 747–765. [\[CrossRef\]](#)
83. Lederach, J.P. Editoria. *South Asian J. Peacebuilding* **2010**, *3*, 1–6.
84. Matsumoto, D. Culture, context, and behavior. *J. Personal.* **2007**, *75*, 1285–1320. [\[CrossRef\]](#)
85. Scheuringer, B. Multiple identities: A theoretical and an empirical ap-proach. *Eur. Rev.* **2016**, *24*, 381–392. [\[CrossRef\]](#)
86. Erikson, E.H. *Identity: Youth and Crisis*; W.W. Norton: New York, NY, USA, 1968.
87. Yolles, M.; Di Fatta, D. Modelling identity types through agency: Part 1 defragmenting identity theory. *Kybernetes* **2017**, *46*, 1068–1084. [\[CrossRef\]](#)
88. Wu, J. Hierarchy Theory: An Overview. In *Linking Ecology and Ethics for a Changing World*; Rozzi, R., Pickett, S., Palmer, C., Armesto, J., Callicott, J., Eds.; Ecology and Ethics; Springer: Dordrecht, The Netherlands, 2013; Volume 1, pp. 281–301.
89. Hijmans, E.J.S. Het dynamisch identiteitsmodel: Een synthese van benaderingen. In *Kwalitatief Onderzoek: De Praktijk*; Hak, T., Wester, F., Eds.; SOSWO: Amsterdam, The Netherlands, 2003; pp. 114–126. Available online: https://www.researchgate.net/publication/254873449_Het_Dyn (accessed on 1 April 2023).
90. Kaplan, A.; Garner, J.K. A complex dynamic systems perspective on identity and its development: The dynamic systems model of role identity. *Dev. Psychol.* **2017**, *53*, 2036. [\[CrossRef\]](#) [\[PubMed\]](#)
91. Di Fatta, D.; Yolles, M. Modelling multiples identity types through agency: Part 3—Mindsets and the Trump election. *Kybernetes* **2018**, *47*, 638–655. [\[CrossRef\]](#)
92. Leong, C.H.; Ward, C. Identity conflict in sojourners. *Int. J. Intercult. Relat.* **2000**, *24*, 763–776. [\[CrossRef\]](#)
93. Priante, A.; Ehrenhard, M.L.; van den Broek, T.; Need, A. Identity and collective action via computer-mediated communication: A review and agenda for future research. *New Media Soc.* **2018**, *20*, 2647–2669. [\[CrossRef\]](#) [\[PubMed\]](#)
94. Van Stekelenburg, J. Collective identity. In *The Wiley-Blackwell Encyclopedia of Social and Political Movements*; Wiley: Hoboken, NJ, USA, 2014; Available online: <https://core.ac.uk/download/pdf/15476606.pdf> (accessed on 1 June 2023).
95. Boeree, C.G. Seven Perspectives. 1998. Available online: <https://webpace.ship.edu/cgboer/sevenpersp.html> (accessed on 1 December 2023).
96. Gromyko, A.A. Metamorphoses of Political Neoliberalism. *Her. Russ. Acad. Sci.* **2021**, *90*, 645–652. [\[CrossRef\]](#) [\[PubMed\]](#)
97. Klein, B. Democracy Optional: China and the Developing World's Challenge to the Washington zconsensus. *UCLA Pac. Basin Law J.* **2004**, *22*, 89–149. [\[CrossRef\]](#)
98. Yolles, M.; Fink, G. Agency Mindset Theory. *Acta Eur. Syst.* **2013**, *3*. [\[CrossRef\]](#)
99. Surel, Y. The role of cognitive and normative frames in policy-making. *J. Eur. Public Policy* **2000**, *7*, 495–512. [\[CrossRef\]](#)
100. Witkin, H.A.; Moore, C.A.; Goodenough, D.R.; Cox, P.W. Field-Dependent and Field-Independent Cognitive Styles and Their Educational Implications. *Rev. Educ. Res.* **1977**, *47*, 1–64. [\[CrossRef\]](#)
101. Kozhevnikov, M. Cognitive styles in the context of modern psychology: Toward an integrated framework of cognitive style. *Psychol. Bull.* **2007**, *133*, 464. [\[CrossRef\]](#)
102. Seitz, J.A. Metaphor, symbolic play, and logical thought in early childhood. *Genet. Soc. Gen. Psychol. Monogr.* **1997**, *123*, 373–392. [\[PubMed\]](#)
103. Rosenberg, C. Cognitive Characteristics Affecting Rational Decision Making Style. Master's Thesis. University of Oslo: Oslo, Norway, 2011. Available online: <https://www.duo.uio.no/bitstream/handle/10852/18102/%2520masteroppgavexx%2520CharlottexRosenbergxxpdf.pdf?sequence=1> (accessed on 1 January 2023).
104. Burke, K. *A Grammar of Motives*; University of California Press: Berkeley, CA, USA, 1996; Available online: https://www.academia.edu/19755928/_Kenneth_Burke_A_Grammar_of_Motives_Book_Fi_org (accessed on 1 January 2023).
105. Park, J.H. The relationship between social orientation and cultural orientation: A study of Korean American college students. *J. Intercult. Commun. Res.* **2005**, *34*, 1–17.
106. Tönnies, F. *Community & Society (Gemeinschaft und Gesellschaft)*; Transaction Publishers: New Brunswick, NJ, USA, 1957.
107. Tönnies, F. Fünfzehn Thesen zur Erneuerung des "Familienlebens". In *Gemeinschaft und Gesellschaft*, 1st ed.; Loomis, C.P., Ed.; Courier Corporation: Mineola, NY, USA, 1983; pp. 35–132.
108. Asplund, J. Aubert and Soft Data. *Sociol. Res.* **1966**, *3*, 96–104.
109. Asplund, J. *Essä om Gemeinschaft och Gesellschaft*; Bokförlaget: Göteborg, Sweden, 1991.
110. Cooley, C.H. *Social Organisation: A Study of the Larger Mind*; Charles Scribner's Sons: New York, NY, USA, 1909.

111. Vaisey, S. Structure, Culture, and Community: The Search for Belonging in 50 Urban Communes. *Am. Sociol. Rev.* **2007**, *72*, 851–873. [\[CrossRef\]](#)
112. Beckwith, C. Who Belongs? *How Status Influences the Experience of Gemeinschaft*. *Soc. Psychol. Q.* **2019**, *82*, 31–50. [\[CrossRef\]](#)
113. Brewer, M.B.; Gardner, W. Who Is This ‘We’? *Levels of Collective Identity and Self Representations*. *J. Personal. Soc. Psychol.* **1996**, *7*, 83–93.
114. Molm, L.D.; Collett, J.L.; Schaefer, D.L. Building Solidarity through Generalized Exchange: A Theory of Reciprocity. *Am. J. Sociol.* **2007**, *113*, 205–242. [\[CrossRef\]](#)
115. Willer, R. Groups Reward Individual Sacrifice: The Status Solution to the Collective Action Problem. *Am. Sociol. Rev.* **2009**, *74*, 23–43. [\[CrossRef\]](#)
116. Wolvén, L.E.; Vinberg, S. Gemeinschaft, Gesellschaft and Leadership in Non-Profit Organisations—A Comparative Study between Non-Profit Organisations and Organisations within the Public and Private Sector in the Northern Part of Sweden. In Proceedings of the EGPA 2004 Annual Conference, Ljubljana, Slovenia, 30 August–2 September 2004; Available online: https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=0CAIQw7AJahcKEwjArf6Cuob_AhUAAAAAHQAAAAAQcQ&url=https://studieplan.miun.se/converis/portal/detail/Publication/377780?auxfun=&lang=sv_SE&ps (accessed on 1 November 2023).
117. Rodriguez, E. Gemeinschaft and Gesellschaft. In *Encyclopedia Britannica*; Encyclopædia Britannica, Inc.: Scotland, UK, 2016; Available online: <https://www.britannica.com/topic/Gemeinschaft-and-Gesellschaft> (accessed on 4 December 2023).
118. House, R.J.; Dorfman, P.W.; Javidan, M.; Hanges, P.J.; Sully de Luque, M. *Strategic Leadership across Cultures: The GLOBE Study of CEO Leadership Behavior and Effectiveness in 24 Countries*; SAGE Publications: Thousand Oaks, CA, USA, 2014.
119. Sweeney, A. Critique of Hofstede’s approach. In *Online Readings in Psychology and Culture*; Lonner, W.J., Dinnel, D.L., Hayes, S.A., Sattler, D.N., Eds.; Center for Cross-Cultural Research, Western Washington University: Bellingham, WA, USA, 2002; Unit 6, Chapter 2.
120. Schwartz, S.H. Beyond individualism/collectivism: New dimensions of values. In *Individualism and Collectivism: Theory Application and Methods*; Kim, U., Triandis, H.C., Kagitcibasi, C., Choi, S.C., Yoon, G., Eds.; Sage: Newbury Park, CA, USA, 1994; pp. 85–119.
121. Triandis, H.C.; Bontempo, R.; Villareal, M.J. Individualism and Collectivism: Cross-Cultural Perspectives on Self-Ingroup Relationships. *J. Personal. Soc. Psychol.* **1988**, *54*, 323–338. [\[CrossRef\]](#)
122. Triandis, H.C. Collectivism and individualism: A reconceptualization of a basic concept in cross-cultural social psychology. In *Personality, Attitudes, on Motivation*; Verma, G.K., Bagley, C., Eds.; University of Nebraska Press: Lincoln, NE, USA, 1989; pp. 41–133.
123. Minkov, M. *What Makes Us Different and Similar: A New Interpretation of the World Values Survey and Other Cross-Cultural Data*; Klasika I stil Publishing House: Sofia, Bulgaria, 2007.
124. Hofstede, G.J.; Jonker, C.M.; Verwaart, T. Individualism and Collectivism in Trade Agents. In *IEA/AIE ‘08: Proceedings of the 21st International Conference on Industrial, Engineering and Other Applications of Applied Intelligent Systems*; Springer: Berlin/Heidelberg, Germany, 2008; pp. 492–501. [\[CrossRef\]](#)
125. Greenfield, P.M. Linking Social Change and Developmental Change: Shifting Pathways of Human Development. *Dev. Psychol.* **2009**, *45*, 401–418. [\[CrossRef\]](#)
126. Davis, J.; Marciano, A.; Runde, J. *The Elgar Companion to Economics and Philosophy*; Edward Elgar Publishing Limited: Cheltenham, UK, 2004.
127. Herrmann-Pillath, C. *Social Capital, Chinese Style: Individualism, Relational Collectivism and the Cultural Embeddedness of the Institutions-Performance Link*; Working Paper Series no 132; Frankfurt School of finance and Management: Frankfurt, Germany, 2009.
128. Schwartz, S.H.; Bilsky, W. Toward a universal psychological structure of human values. *J. Personal. Soc. Psychol.* **1987**, *53*, 550–562. [\[CrossRef\]](#)
129. Yolles, M.I.; Fink, G. An Introduction to Mindset Theory. Working Paper of the Organisational Coherence and Trajectory (OCT). 2013. Available online: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2272169 (accessed on 1 January 2023).
130. Maruyama, M. Mindscape and science theories. *Curr. Anthropol.* **1980**, *21*, 589–599. [\[CrossRef\]](#)
131. Neff, C.D. Reasoning About Rights and Duties in the Context of Indian Family Life. Ph.D. Thesis, Dept. Education, University of California, Berkeley, CA, USA, 1997. Available online: <https://www.proquest.com/openview/ca713fdd8d0d245e90b07480b0879845/1?pq-origsite=gscholar> (accessed on 1 November 2023).
132. Greenfield, C. Can run, play on bikes, jump the zoom slide, and play on the swings: Exploring the value of outdoor play. *Aust. J. Early Child.* **2004**, *29*, 1–5. [\[CrossRef\]](#)
133. Browning, M.A. Self-Sacrifice vs. Collectivism: Examining Construct Overlap with Asian-Americans. Ph.D. Dissertation, Faculty of the California School of Professional Psychology, Alliant International University Fresno, Fresno, CA, USA, 2017. Available online: <https://www.proquest.com/openview/c4e5d256796a4c59d6bdb3c5584d9814/1?pq-origsite=gscholar&cbl=18750> (accessed on 1 October 2023).
134. Kim, I.; Jung, H.J.; Lee, Y. Consumers’ Value and Risk Perceptions of Circular Fashion: Comparison between Second hand, Upcycled, and Recycled Clothing. *Sustainability* **2021**, *13*, 1208. [\[CrossRef\]](#)
135. Oyserman, D.; Coon, H.M.; Kimmelmeier, M. Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychol. Bull.* **2002**, *128*, 3–72. [\[CrossRef\]](#) [\[PubMed\]](#)

-
136. Heberle, R. Ferdinand Tonnies' Contributions to the Sociology of Political Parties. *Am. J. Sociol.* **1955**, *61*, 213–220.
 137. Wascher, C.A.; Kulahci, I.G.; Langley, E.J.; Shaw, R.C. How does cognition shape social relationships? *Philos. Trans. R. Soc. B Biol. Sci.* **2018**, *373*, 20170293. [[CrossRef](#)]
 138. Bandura, A. *Social Foundations of Thought and Action: A Social Cognitive Theory*; Prentice-Hall: Englewood Cliffs, NJ, USA, 1986.
 139. Cotton, J.L. A review of research on Schachter's theory of emotion and the misattribution of arousal. *Eur. J. Soc. Psychol.* **1981**, *11*, 365–397. [[CrossRef](#)]

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