

# Transformative Social Ecosystem Dynamics: A psychological architecture of emotional trust

Cadell Last<sup>1</sup>, Gael Van Weyenbergh<sup>2</sup>, Ben Werner<sup>3</sup>

**Abstract:** This paper aims to develop an understanding of a new trust architecture for social system dynamics. Modern social systems have been structured by top-down hierarchies that prevent fluid realization of individuation and lack the ability of navigating the pragmatic dynamics of a complexifying world. Furthermore, there is a seeming impossibility or at least an extreme difficulty in utilizing the logic of complex adaptive systems to aid in restructuring social systems capable of embodying authentic values of individuation and navigating the dynamics of the information age. Thus, here we propose to add to the contemporary literature by supplementing the basic principles of complex adaptive systems with the logic of human emotional drives in order to define an emergent dynamical and robust trust architecture stabilized by resonance and reciprocity. The aim of this model is to start to build out the social architecture for the emerging information age based on a deeper sense of emotional resonance and reciprocity capable of reflecting authentic individuation.

## Introduction

Throughout the modern industrial era social systems have been structured by top-down mechanics. In these mechanics individuation of subjective potential is often not factored into the equation of what defines or constitutes successful social system operations. In other words, the individual's authentic subjective valuation is seen as an excessive intrusion to the formal functional operations of the system as a whole which is supposed to run like a clockwork or a computer program. Thus, the individual is seen as an automatized or programmable unit of functional utility whose work energy should be directed towards the maximization of profits over and above any social or emotional development [1]. Here social and emotional development, although central to the experience of the subject, is conceptualized as an epiphenomenal externality. However, in a complexifying world social and emotional individuation is becoming more important and thus there is an emerging conflict between the modern industrial era's top-down mechanics, and new desires for greater levels of meaning, purpose and autonomy in work life [2].

The ultimate causal location of the contemporary lack of satisfaction in work life has to do in large part with the institution-centric nature of the social real. In this macro dimension all decision-making becomes regulated by command and control structures that are often disconnected from the micro dimensions of the psychological real where personal individuation is experienced emotionally. Thus one can feel that the impersonal mechanics of the macro-level

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<sup>1</sup> Anthropologist; Evolution, Cognition, and Complexity (ECCO) group, Vrije Universiteit Brussel (VUB)

<sup>2</sup> Electrical Engineer (MSEE) private industry, DoD electromagnetics research, Santa Barbara, CA, USA

<sup>3</sup> Founder, Meoh, Brussels, Belgium.

overdetermine the desires, beliefs and intentions of the micro-level, as if one is a puppet of an enormous invisible ventriloquist [3]. In terms of basic mechanics the very nature of the modern social system structure is only capable or only willing to accept the vision and voice of one or a small cluster of primary agents who organize the overall network. This process is articulated precisely through symbolic means of communication boundaries, where certain inputs are deemed acceptable, and certain inputs are deemed unacceptable. As a result there is a tendency to a homogenous and hegemonic expression of social desire, belief and intention obfuscating the underlying psychological matrix where there exists (insists) a complex multiplicity of desires, beliefs and intentions [4]. This complex multiplicity has no place in the operational mechanics leading to the realization of meaninglessness, purposelessness and alienation.

The thesis of this work is that, although seemingly pragmatic and functional, the macro dimension of the modern social system structure can be developed otherwise. The reason why modern social systems develop as they do is because the basic mechanics of a top-down institution-centric social system leads to a social real where trust can only solidify in hierarchical vertical accountabilities or responsibilities. This vertical 'trust architecture' then retroactively structures the psychological desires, beliefs and intentions of the individuating units solidifying a social real where it becomes difficult or impossible to think a different possible coordination. However, in contrast to this structural arrangement, we believe that it is possible to think the positive dimension of horizontal accountability and heterarchical structure where a new trust architecture could meta-solidify an alternative social real [5]. The result of such a process would be that the macro-level of dynamics of the social system more accurately reflected the micro-level of dynamics of the psychological systems. Although there are retroactive paradoxes in the relationship between macro-social and micro-psychological dimensions there is a new necessity for a qualitative transition in order.

Indeed, the main pragmatic and functional weakness of vertical accountabilities and top-down command and control hierarchies is the fact that they are too rigid and static for a world that is every year becoming more complex. Due to the increases in complexity in many different dimensions of society (technological, ecological, cultural, psychological, ethical, etc.) command and control hierarchies have an increasingly difficult time to effectively and efficiently execute decision making schemes that are capable of predicting the best possible navigation pathways for future action. In short, the structure that supports the solidification of one vision and voice undermines its own reproduction in a complex landscape because there are too many excessive variables internal to the system which escape its perspective and discourse. Thus, in a complex environment, we must utilize the knowledge and wisdom of all possible psychological agents by structuring social systems that fractionate decision-making down to the level of individuation [6]. This means that decision-making would become more distributed throughout the system as a whole, inverting the traditional relation between symbolic logic structure and experiential sense structure. In the traditional modern social system the symbolic logic structure comes to overdetermine the experiential sense structure, but in this inversion the experiential

sense structure would overdetermine the symbolic logic structure, infusing it with a conscious embodied agency [7].

Consequently, in a macro dimension where the unified real of vertical accountabilities clearly reveals its incoherence, inconsistency and historical contingency; it may not be so surprising that there is a growing demand on the micro level for new meaning, new values and a new sense of autonomy and ownership over one's own work energy [8]. The main features of this growing micro level demand include the realization that profit maximization on the macro dimension does not reflect the highest levels of the self's becoming. Indeed, as is well known from humanist psychology, desire for inner spiritual fulfillment in terms of creativity and connection, and a real social impact in terms of well being and enjoyment of others, takes primacy in the mind of an individuated psychology [9]. Thus, what was once the opposite of pragmatic and functional, namely rethinking hierarchy, command and control, and vertical accountability, has become essential to the future of pragmatic functioning. In a social real that was capable of dynamically facilitating the emergence of distributed ownership of one's own work energy the possibilities for navigating a complexifying landscape all of a sudden becomes manageable because the functional units of the process are themselves increasingly adaptable to change and growth.

The main dimensions that demonstrate the need for new pragmatic functioning of social systems includes the real of contemporary emotional divides [10], the rise of new forms of collective ideological identification [11], fears of chaos and novelty [12], and general information overload and confused disorientation [13]. We can explain these contemporary social manifestations in part due to an increasing macro-level breakdown of trust and accountability internal to the top-down command and control system hierarchies. There is a sense of anxiety, fear, vulnerability and uncertainty in a world without clear direction or guidance. There is a need for identitarian politics in a world that seems devoid of higher purpose and meaning. There is a sense of a great unknown due to the loss of reliable information centers. All of these dimensions call for a new pragmatic functioning that can make use of accountabilities and responsibilities without recourse (or at least a reduced recourse) to the vertical command and control structure. In this social system transition we are presented with the opportunity to rethink authority and leadership, community cohesion and collective identification, as well as what we consider meaningful information and communication. From our conception all of these dimensions can be aided with the heightened reflective awareness of contextuality and temporality.

Consequently major questions emerge for the future of our social systems related precisely to the domain of horizontal accountabilities and responsibilities and how to manage tensions and antagonisms that emerge within this qualitatively new horizon. Although there are problems and difficulties with hierarchical accountabilities and responsibilities there are also well known issues with more distributed orders due to the fact that there is a difficulty in maintaining some sense of a stable structure and productive output. Indeed, distributed systems often get mired in problems of a lack of cohesion and a lack of organizational abilities because there are

no available means of metastabilizing a trust architecture on the macro-level (due to issues of developing around scale independent structuring principles). Thus, one of the major issues with more distributed structures is the well known issue of the tragedy of the commons [14]. The problem of the tragedy of the commons is that the collective consequences of individualistic action on the micro-level (narcissistic, self-centered desires, beliefs, intentions) lead to collective consequences that erode the whole (holistic, selfless desires, beliefs, intentions). Thus, from a purely evolutionary point of view operating on the level of social system adaptability, hierarchical command and control structures predominate because of their efficiency and efficacy in the historical context [15].

The surprising dimension of these problems of horizontal accountabilities and organizations is that the science of complex adaptive systems have not helped us to reorganize the structure of human social systems. Throughout the history of complex adaptive systems science we have come to formulate a better and deeper understanding of general system structure [16], emergence of qualitative transitions [17], dynamics of self-organization [18], self-referential levels of autopoiesis [19], and so forth. However, the way in which such knowledge pragmatically and functionally transforms the real of historical social dynamics is not at all clear or evident. In other words, there have been many attempts to rethink the foundation of human society since the development of complex adaptive systems science but little difference in the basic operations of civilizational mechanics. There appears to be a gap in our ability to externally observe general system functioning and deduce principles of self-organization, autopoiesis and emergence, and our ability to apply these principles to our own social systems so that we can facilitate the self-organization, autopoiesis and emergence of higher levels of individuation. Of course, this may call for the necessity of a higher order perspective capable of reflectively inscribing subjectivity into the systemic analysis, and specifically the nature of subject-object division [20].

In our approach to the future of social system organization we feel that the complex adaptive systems literature must be more attentive to an irreducible tension related to the emotional psychic drives of subjectivity [21]. The emotional psychic drives of subjectivity are themselves structured by an internally objective field of vision and discourse where desires, beliefs, and intentions primordially manifest and express themselves in recursive self-relation. In order to invert the relationship between symbolic logic structures and experiential sense structures we must be attentive not to the external observations of social system mechanics but to the inner worlds of subjects. Thus we must invert our own analysis. This means that we must pay more attention to modes of systemic engagement that are based on intrinsic motivation and inner fulfillment which are not easy to measure or quantify through external observation [22]. Indeed, this dimension of intrinsic motivation and inner fulfillment are micro psychical dimensions that can only be understood through an emergent qualitative level of intersubjective valuation.

Thus the problem is that we must be able to think a complex social real where a multiplicity of desires, beliefs and intentions must be structurally maintained without recourse (or

with minimal recourse) to top-down command and control hierarchies. In focusing on emotional psychic drives and forms of engagement based on intrinsic motivation and inner fulfillment we suggest that core mechanisms related to resonance and reciprocity must be mediated with first hand experiential information. Here first hand experiential information grounded in sense is contrasted with second hand symbolic information grounded in logic, such as monetary and reputation systems [23]. In this way we would be able to transform the system from within by placing greater emphasis on forms of horizontal accountability and the dynamical heterarchical centers that emerge from a result of these synergies. Here emotional resonance is seen to be expressed as a genuine reflection of self in the other, and reciprocity is seen to be expressed as a open and free participation in webs of social debt.

To be specific the development of new social systems must be based on the emergence of a new macro-level trust architecture. In order to define this new trust architecture we assume that foundations of micro-level emotional resonance would create the conditions for preferential attachment where one contingently links and associates with others who have similar interests and aims (desires, beliefs, intentions). In other words, the foundations of emotional resonance leads to an appeal to an attunement and awareness that the substructure of the social system is based on psychical drives. From this we assume that reciprocity would reinforce these initially contingent links and associations and allow for the solidification of a metastable form of trust where horizontal accountability can become increasingly robust across time. Reciprocity assumes a perpetual social debt that is constantly holding the field in a mutual interdependence. This field is something that becomes possible to hold with first hand sensory information (personal relations) over second hand symbolic information (money, reputation) in part due to reflective self-change on the side of the micro-level psychical systems, and in part due to structural design change on the side of the macro-level social system.

From these dynamics we suggest that a new micro-macro relationship can emerge between the individuated parts and the social system as a whole. In this micro-macro relationship we do not require the emergence of one or a small network of agents to command and control the entire structure. Instead we suggest that emotional resonance between a multiplicity of dynamic drives on the micro-level of organization could lead to webs of emotional reciprocity at the macro-level of organization, igniting a positive feedback loop that builds individual responsibility and accountability. The formation of such a micro-macro relationship is necessary for social systems that are capable of navigating the complexity of the social real that cannot be guided by only one vision and voice. This complex social real can only be navigated by a multiplicity of visions and voices that synchronize in new metastable structures [24]. This gives us a view of the next level of information age society as one in which a new domain of individuated potentiality structures a higher level of creative and collaborative synergies free of direct external control [25].

In the explication of this system we posit that such a dynamics would not represent an industrial model of machinic production, nor a computer model of programmable production. Instead we see this system as similar to an ecosystem model of complex interdependencies

where radically different forms of subjectivity interrelate in unpredictable configurations producing distributed structural forms that we cannot currently imagine [26]. However, the consequence of thinking in terms of this ecosystem model of complex interdependencies is that the individuating agents are always on the border between order and chaos. The dialectical balancing act of this formation thus requires that checks and balances be developed on an emergent order which becomes too fixed-static and also calls for the responsibility of autonomous individuated agents to prevent the fall of valuable order into chaos. As a result, such a model requires self-actualization as a constitutive feature of its operations, otherwise there is always the risk of a reformation of command and control hierarchies where vertical accountability once more gets concentrated into a few agents.

In our understanding of this process the result of a micro-macro foundation based on emotional resonance and reciprocity would lead to an increasingly self-organized world where the emergence of autopoietic unities are capable of maintaining themselves without recourse to any one embodied by a human agent [27]. What this means is that the macro-level emergent unities operate against a fundamentally open and incomplete background where unity is always being repetitively divided in relation to the dynamical action of the individuated network [28]. Thus, this places the level of the emergent one or the unity, not on the level of the hierarchical command and control agent(s), but on the level of the emotional drive internal to any given form of subjectivity whatsoever. Our basic claim is that from the integrated emotional drive internal to subjectivity a sense of collective consciousness and awareness can bring to life in a new way the already sophisticated networks of collective intelligence [29]. In our current information age networks of collective intelligence have produced a field of unprecedented hyperconnectivity, but have failed to properly synergize with psychical drives, creating the aforementioned emotional divides, identitarian attachments, and chaotic nihilisms. Thus in inviting complex adaptive systems science to consider emotional psychical drives we may be able to enhance collective intelligence with collective consciousness.

From the philosophical perspective this emphasis on internal emotional drive with unity places emphasis on a knowledge that situates itself between subject and object, between self and other. This knowledge between subject and object, between self and other, cannot be neatly categorized, but rather must be situated in a strange emergent non-psychical space that depends on the motion of psychological drives for its existence. To be specific this non-psychical space is something we have come to think of as the inner stage or arena where a virtual “future present” allows for the coherence and consistency necessary for the motion of subjectivity [30]. The essential claim here is that in moving from modern top-down command and control social systems to bottom-up distributed social systems the ontological location of the internal unity reflectively transforms in a crucial and meaningful way. Whereas in modern top-down social systems unity is projected into an external social world of others (reifying the social system as an objective externality), in the bottom-up distributed social world, unity is understood as one’s own intimate other within that is cultivated through a self-understanding facilitated by resonance and reciprocity.

Finally, from the physics perspective, the emphasis on internal emotional drive with unity places emphasis on a type of movement that can only be described when one starts with the real of experience and the real of individuation (over the real of the physical world). In describing the physics of a real of experience and individuation one is irreducibly in a world where the four forces of nature must be described as they relate to the becoming of the subject. Here in the same way we assume that individuated systems evolve against an open and incomplete social background, we also assume that this evolution is occurring against an open and incomplete physical background [31]. From this perspective the inclusion of subjects into the physical system does not just mean we have to take into consideration the futural causality of their own becoming, but also the way in which this becoming and futural causality should affect the very physical structure of nature itself. This claim is of particular importance when thinking about the way in which future technological mediation with the complex dynamics of emotional resonance and reciprocity could affect, not nature in-itself, but the way in which we have come to perceive the nature of nature in-itself and our role in its a priori transcendental constitution [32].

In this perspectival mediation of philosophy and physics of subject-object division we leave the reader with a speculation. In the same way that we have attempted to invert the symbolic one overdetermining sensual multiplicity to a sensual multiplicity overdetermining the symbolic one; perhaps nature itself can be inverted in a similar way: from a physical one overdetermining a symbolic multiplicity (physical sciences, naturalism), to a symbolic multiplicity overdetermining a physical one (the force of free logos in-itself). In order to think such a perspectival shift one must be able to hold the immanence of all individuated symbolic entities at the height of their own-most intimate self-realization. Such a phenomenon is the logical consequence of a bottom-up sensual-experiential mediation of the symbolic in emotionally charged networks of resonance and reciprocity. From this mediation the multiplicity of subjective forms do not intersubjectively merge but rather dynamically increase the speed of their own conscious relations potentially allowing for an erasure of asymmetrical tension.

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