

## Economies of Scale-Linking, Part 1: Re-thinking value co-creation, or the rewilding of potential...

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### Overview

In this paper, Part 1 of a two-part inquiry<sup>2</sup>, I will weave together various strands of deep thinking on the workings of aspects of our world, relevant to the rethinking of value co-creation. The title is a play on words. It is intended to challenge the paradigm that we can and must sustain economies of scale, a fragmented and fragmenting worldview that, in the name of efficiency, extracts value from, and in so doing, depletes Life energies from our biosphere. Economies of scale-linking finds a different path forward, where aliveness, the free-flow of Life energies becomes central principle to how we create value in human social systems.

To do so, I have enlisted the assistance of some extraordinarily insightful minds. Together, we progressively image our way through to, what could lead to a veritable rewilding of (more-than-human) potential, manifested in practical terms, via how we engage in economy.

Specifically, in order of appearance:

- Edgar Morin will assist us in to diagnosing what's going on and open our vision;
- William James and Adolf Portmann will be essential to establishing of premises/principles that guide my approach;
- John G. Bennett will help us to understand the scales we propose to link;
- David Bollier et al. with a rationale for rethinking what we value;
- Brian Massumi will prove foundational for imaging the workings of capitalism, sensing into how Life's economy works, understanding the interconnectedness of quantity and quality, and how we might hack capitalism via alt-economics;
- And I, will act as re-source<sup>3</sup>, curator and guide for the experience, bringing it all together around how we might approach economies of scale-linking.

### My Approach

There are several practices I am utilizing in my approach, which are interlinked and build on each other. These make it possible to perceive, interrogate, understand and participate with our universe-of-complexity on its own terms.

Hermeneutics. As you may notice, I have a predilection for bringing to life older, deeply insightful texts and thinkers, which were very likely ahead of their time and whose import in understanding the workings of our universe-of-complexity has been grossly underappreciated, not-to-mention almost entirely underutilized. Many of these thinkers employ exemplification.

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<sup>2</sup> Part two will be dedicated to value exchange, giving concrete examples of how scale-linking can be operationalized.

<sup>3</sup> Re-sourcing is a technology use in the Developmental School, of which I am a practitioner, borrowed from the Socratic method of questioning in order to arrive at the source of what a person is really trying to express; in this instance, I am extending this approach to the thinkers via the texts in question.

Exemplification. Exemplification is my term for evidencing a final system of reality via admitting every single occasion of experience as valid; a notion championed by James and practiced by other thinkers presented herein. It confirms, there are nowhere exemptions nor outliers. Everything experienced is true somewhere. Every situation, case, entity we encounter in our experience, must be included whatever schema we use to represent such a system of reality as whole.

Dynamic Systems Frameworks. Frameworks are “instruments for understanding the complex, dynamic wholes within which we live, so that we can be conscious participants. Frameworks shape what we pay attention to and how we act.”<sup>4</sup> They provide a stable, yet dynamic schema of parts-in-relation as wholes, enabling our minds to give form to “lay hold of our experiences and to co-ordinate them withal.”<sup>5</sup> Such relational maps<sup>6</sup> are vital for rendering a universe-of-complexity as continuum-of-experience, especially when our atomized concepts serve to fragment reality.

Imaging and Thick Description. Imaging creates mental pictures of the workings of some region of the continuum-of-experience. Imaging is not imagination, because the imager is intimately nested within the region of continuum being imaged. Imaging requires thick description—poetic language—to express the ineffable ways you and I and everything else we experience are interconnected, living processes, and to render it as felt experience powerful enough to invoke a mental image for the experient.

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<sup>4</sup> Regenes Institute for Regenerative Practice: The Regenerative Practitioner Series course materials

<sup>5</sup> James (1920): 235

<sup>6</sup> A great example of relational maps are the Polynesian stick maps used by traditional navigators to interpret the complexity of forces they participated with, see [http://thenonist.com/index.php/thenonist/permalink/stick\\_charts/](http://thenonist.com/index.php/thenonist/permalink/stick_charts/).

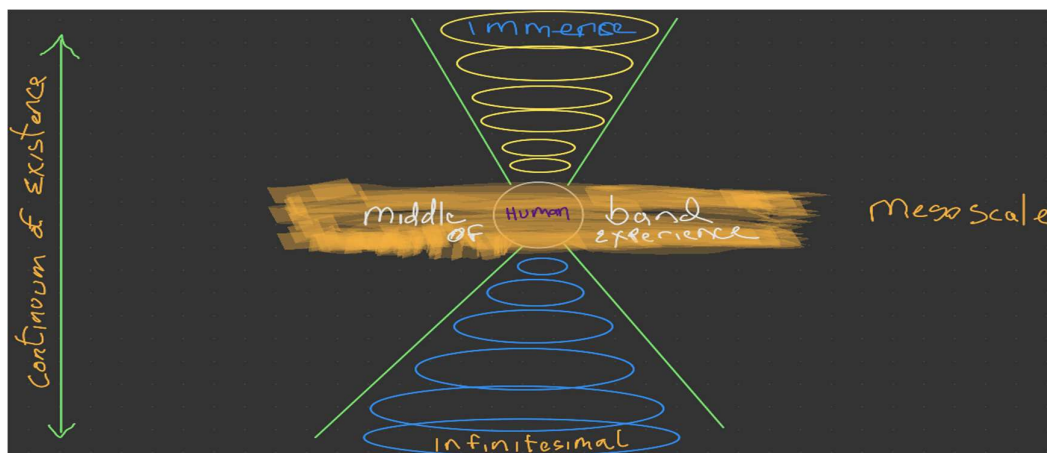
## Introduction: What's going on?<sup>7</sup>

"We are children of the cosmos, (...) [yet] we have become strangers to this cosmos from which we were born and with which we nevertheless remain secretly intimate (...) We are children of the living and animal world, and all our mythologies have perceived our family ties and closeness to the other living beings. (...) But our animal identity has been long hidden by western civilization (...) we have just discovered the matrix link with the biosphere, without which we could not live (...)."

--Edgar Morin

## Nested wholes in every direction

This inquiry approaches value-creation from the perspective of regenerative development, a paradigm whose central practice involves working with systems as nested wholes. The more we look, we find them in every direction and at every scale—ranging from the infinitesimally small to the grandest immensity imaginable, presenting itself to us as an ordered continuum-of-experience<sup>8</sup>.



Humans occupy the mesoscale: the *middle band of experience*<sup>9</sup>. From this vantage point, we look down upon the scales beneath us, and up to the scales above us. It's not difficult to see how this vantage point could source our dualistic thinking thus far. This is perhaps, because we don't truly inhabit this space within the scales, rather we colonize it. Our relatively young species stepped out of its ecosystem context some time ago, as we transitioned from hominids to humans. In our stead, we left a void, a chasm that inhibits the flow of the creative life force<sup>10</sup>. Our dominant mode of presence on the planet has become an externality, we've removed ourselves from the value-adding processes of Life<sup>11</sup>.

<sup>7</sup> This section is mainly sourced from de Siena, 2005, who presents a comprehensive overview of Edgar Morin's philosophy and thinking.

<sup>8</sup> Because the scales are always relative to where within them one sits. A cell or a solar system would experience the scales in a very different fashion than a human. For example, any one of us is nested within a community-place-bioregion-continent-planet, etc.

<sup>9</sup> Morin's term from Morin, 1977.

<sup>10</sup> Louis Dumont, in his anthropological work, recognized a basic distinction in human social systems between what he labeled holistic social systems: typically small-scale societies, whose values and the arenas of life organized around these, where never extracted away from the singular cosmological continuum-of-experience of all that is. This is in stark contrast to the fragmented and disjointed structures of our own modern, individualistic society. (Graeber, 2013)

<sup>11</sup> The role of all other living beings in the biosphere add value, that is they bring greater aliveness to it, not less.

### From Community to Immunity and Back Again<sup>12</sup>.

For us moderns, who have banished ourselves from the rest of the living world, participation flattens into a systemic taking apart. We cannot create value from outside the continuum, we can only extract it! Few can avoid being complicit, in the *paradigm of human domination-colonization*. By not inhabiting our place within this continuum, a false sense of unboundedness is enabled, allowing unfettered exponential growth to seem possible, and expressing a *tragically-underdeveloped idea of development*. Because our economy-of-domination operates outside the continuum-of-experience, it is unable to continually communicate with, nor respond to biospheric restraint. There is no opportunity for scale-linking, only voracious growth, and what we might call scale-crashing—the unraveling of vast living webs of relations. Behind this, is a futile quest for immunity from the game of Life. In doing so, we have sacrificed relationship in all its forms, and exiled ourselves to the *cosmic void*. As Heidegger observed, our species is singularly capable of being different from what we truly are, *to ex-sist*—to sit outside—the continuum-of-experience.

Throughout his body of work, Morin persistently calls for a paradigmatic shift concretely based on the logic of living systems, solidly rooted in a continuum that includes physis (physical world) and bios (biosphere)<sup>13</sup>. His premise is that Life is ontological, a poiesis entirely inconceivable outside the cosmological continuum-of-experience<sup>14</sup>. Aliveness is a cosmic property, not limited to Earth's biosphere, and as such all beings, including humans, have a cosmic role to play in the transformation of energies, each in their unique way.

Life's economy values the production of *genuine wealth*<sup>15</sup>, a systemic, negentropic vitality flowing throughout the continuum. In the *thickness of relation*<sup>16</sup> that belies the continuum-of-experience, mutual exchanges of energies by vast *pluri-dimensionality of beings*, forms the key principle for co-creation of value. Morin challenges us to regain access to a broad horizon of meaning—the genuine wealth generated by the more-than-human perspectives, we otherwise forfeit, and without which we simply cannot be fully-human<sup>17</sup>. The question then is: how do we, as a species, inhabit, rather than inhibit, anew our place within this poietic continuum-of-experience?

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<sup>12</sup> Sourced almost entirely from de Siena, 2005, except where otherwise noted.

<sup>13</sup> See Yanez, 2023, [The Self-Organizing Bioregion](#), for a deeper description of Morin's concepts of Physis and Bios

<sup>14</sup> Note here the importance of the dash, which serves to enjoin, to hold in active relation, what has been previously disjointed; in this case "all organizations of organizations of systems of systems," (Morin, 1977)

<sup>15</sup> Genuine wealth is the condition of bringing a greater degree-of-aliveness to the scales of the continuum-of-experience we find ourselves nested in.

<sup>16</sup> See Yanez, 2023, [The Self-Organizing Bioregion](#).

<sup>17</sup> The inquiry of what it means to be fully-human, is a research I am undertaking in my forthcoming PhD dissertation; fully-human humans know, embrace and inhabit their place within the continuum-of-experience.

## The Continuum-of-Experience

“Without being one throughout, such a universe is continuous. Its members interdigitate with their next neighbors in manifold directions, and there are no clean cuts between them anywhere. (...) All real units of experience overlap.”

--William James, A Pluralistic Universe

### Cosmopoiesis

I offer the following framing<sup>18</sup>, as a first pass at addressing the above question, inspired by theme of the [2024 SSE & the Commons conference](#), sympoiesis, mutual co-creation of selves (self/other) in a field-of-relation, without which no self can exist. This is often offered as a replacement/upgrade to *autopoiesis*<sup>19</sup>, the self-re-generative ability of any being. What was plainly missing here is, what I will call *cosmopoiesis*<sup>20</sup>, the scalable wholeness endemic to our universe-of-complexity<sup>21</sup>, which is not a monadic totality but a *dynamic unity*<sup>22</sup> expressing itself through everything we can possibly encounter, exquisitely ordered and organized.

Cosmopoiesis gives explicit recognition to, and completes the ordering of, the larger wholes at play, alluded to earlier, in which sympoietic fields-of-relation are nested and in service to, enabling every self to take on a value-adding role in the first place. Cosmopoiesis, at minimum, requires us to consider simultaneously, three poietic levels:

## cosmopoiesis

ordering of continuum of nested wholes at every scale

## sympoiesis

organizing of fields-of-relatedness, at a given scale

## autopoiesis

harmonizing of self

Throughout this section, we will unpack this framing. For the moment, we will explore the notion that our lack of presence might have something to do with how we render reality. And, if experience, as William James once said, is what we agree to attend to, so, we will attend to rendering a reality in ways that enable our fullest participation in continuum-of-experience.

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<sup>18</sup> The framing is inspired by Morin’s Cosmosophy, of which I align with, and, my practice of regenerative development. In particular, I am referring to the [Three Lines of Work framework](#), which says that if we are to be developmental, we must work to develop capabilities at three scales simultaneously: our self, other relevant selves engaged in shared purpose, larger system we are in service to, which imparts shared purpose.

<sup>19</sup> Maturana & Varela, 1972.

<sup>20</sup> It is important to note, that these three levels of organizations are continuous in two ways: appearing in space as a continuity, and in time, as a series of reconstituted events; hence the significance of RE as paradigm, not just pre-fix. See Morin, 1980.

<sup>21</sup> I introduced this term in Yanez (2023), to stress the fact that we can not speak of either the universe, nor of complexity in isolation.

<sup>22</sup> Bateson’s term from Bateson, G., 1979.

## Principles and Premises

I have organized and summarized principles and premises for working with the cosmopoiesis framing in order to set the foundation for how we might render reality comprehensively as a continuum-of-experience:

Cosmopoiesis<sup>23</sup>. The *primal whole* is a logical necessity, the minimum that can exist; it constitutes an ultimate reality. Reality is not an *all-form*, but widely distributed *each-forms*, real enough to be observable by us in our everyday life. What we experience conceptually as ourselves, is really a nucleus of fuller-selves, a much larger field-of-relations, indefinitely radiating potential. Nestedness is such that more limited forms of consciousness make-up the more inclusive forms. This whole universe-of-complexity is *everywhere alive and conscious*<sup>24</sup>. An ultimate system of reality requires a minimum of four aspects: 1) all reality must be an occasion experienced by an experient; 2) there must be a sense of something going on, an event, a change; 3) everything real must somewhere be experienceable; and 4) a real entity must appear, be felt, experience. Nothing in our immediate continuum-of-experience is inherently external.

Sympoiesis<sup>25</sup>. We live in a wholly relational world. This world is the realm of appearances, where there is always infinitely more beneath the visible. Everything is nature precisely because *every* thing has a unique nature. Life gives primacy to form. Form-differentiation anticipates the gift of consciousness. Archetypal patterns for world-relating are everywhere at work, wherever individuals take place. The inwardness of living bodies is essential for relationship. The quality of an individual's being state regulates its experience. The visible exterior of higher-order organisms, reflective of the interior, enables individuals to consciously establish relations. The realm of appearances is always active in the world availing itself to *sensitive inwardness*, a perennial generator for experiencing.

Autopoiesis. All living beings, including humans, are autopoietic at the most basic level. Every living entity maintains some degree of inner-togetherness<sup>26</sup> for a duration of time. Higher-order organisms have the capacity to consciously self-regulate the quality of their being state.

## Understanding the Continuum-of-Experience<sup>27</sup>

Bennett's scales of existence is a meta-framework of our collective human experience—one complete whole—a continuum segmented into gradations, not artificial categories, rather an ordered, flowing sequence of structures similar to musical octaves<sup>28</sup>. It consists of three distinct regions with transition zones in between. Regions are further disambiguated, producing 12 gradations in total, each representing the emergence of a qualitatively-new level of capability along the continuum, where every exponentially-higher order of wholeness, subsequently enables greater degrees-of-aliveness.

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<sup>23</sup> The principles and premises for Cosmopoiesis were originally sourced mainly from Gustav Fechner by James (1920); where from a different source, will footnote.

<sup>24</sup> This is consistent with Christopher Alexander's theory of centers discussed in Yanez, 2023.

<sup>25</sup> The principles and premises for Sympoiesis were sourced entirely from Portmann (1974); where from a different source, will footnote.

<sup>26</sup> John G. Bennett's term.

<sup>27</sup> The schema in this section in its entirety from Bennett (1959) the chart and summarizing is entirely my own

<sup>28</sup> A musical octave is a continuum divided into 12 intervals: 7 whole notes, 5 half notes, which could more perfectly be divided into 60 intervals; but, playing music that way would prove insanely difficult.



Bennett's meta-framework functions as relational map to the cosmic drama as it's unfolding. And, it is merely a description of the explicate lay-of-the-land, that which we can experience through our senses, amplified or otherwise. As such, it is useful for starting point for understanding our place within a universe-of-complexity. The continuum-of-experience expresses increasingly higher-order scales of complexity, based on patterns of emergent differentiation. No step is too big or small—in other words, each scale overlaps with, hence is linked to, the next.

<b>Bennett's scales or levels of existence</b> <b>(existential hypothesis)</b>				
<b>physis</b>	<b>sub-animate existence (hyponomic dominant)</b> <i>There is a class of entities dominated by the hyponomic mode, and therefore essentially passive in all their relationships both inner and outer.</i>			
	levels or scales	1	2	3
	quality	<b>wholeness</b>	<b>polarity</b>	<b>relation</b>
	principle	<b>existential indifference</b>	<b>invariant being</b>	<b>identical recurrence</b>
	class of occasions	the laws of which are independent of the nature of the existents that participate in them	entities behave as if exempt from mutual interaction and were self-identical and invariant with respect to all four determining-condition	entities behave as if they were exempt from any but reversible interactions and subject only to cyclic changes in their inner constitution
exemplified by		{universal processes limited by four determining conditions*}	{forces, corpuscles, light}	{ultimate particles}
-transition-	<b>-- first transitional hypothesis: active surface --</b> There is a class of occasions in which entities behave as if their wholeness were maintained by a pattern of potentialities that enables exchanges of hyle—Life potential—to take place across their boundary surface without loss of identity {exemplified by proteins/nucleic acids and enzymes/catalysts}			
<b>bios</b>	<b>animate existence (autonomic dominant)</b> <i>There is a class of entities dominated by the autonomic mode and therefore able to maintain a balance of reconciliation between their inner and outer relationships.</i>			
	levels or scales	5	6	7
	quality	<b>potentiality</b>	<b>repetition</b>	<b>structure</b>
	principle	<b>self-renewing wholeness</b>	<b>reproductive wholeness</b>	<b>self-regulating wholeness</b>
	class of occasions	entities whose duration of existence in time is prolonged by renewal of potential energy at the expense of environment	self-renewing entities can reproduce outside their own surface other entities similar to themselves	entities able to maintain and regulate a functional balance within their own enclosed surface or skin
exemplified by		{viruses}	{cells}	{multicellular organisms}
-transition-	<b>-- second transitional hypothesis: biospheric wholeness --</b> There is a class of occasions in each of which one total living whole is associated with the active surface of a planet {exemplified by Earth's biosphere}			
<b>cosmos</b>	<b>super-animate (hypernomic dominant)</b> <i>There is a class of entities dominated by the hypernomic mode and therefore able to act as originating active sources for external relationships.</i>			
	levels or scales	9	10	11
	quality	<b>pattern</b>	<b>creativity</b>	<b>domination</b>
	principle	<b>sub-creative wholeness</b>	<b>creative wholeness</b>	<b>super-creative wholeness</b>
	class of occasions	entities can exert an affirming force towards life without being themselves independent wholes	entities atomic in nature exercise a free creative power within their own presence	entities—not themselves autocratic—are nevertheless manifestations of the supreme affirming power
exemplified by		{planets}	{sun; stars}	{galaxies}
notes	* four determining-conditions: eternity (potentiality and intensity of being); time (actualization and irreversibility); hyparxis (ableness-to-be and cyclicity); space (presence and co-existence)			

The following serves as an extremely surface-level overview of Bennett's meta-framework:

1. Sub-animate existence. This region of the continuum is exemplified by entities that are passive in their relations; what Morin calls *physis*.<sup>29</sup> Entities range from undifferentiated wholes to entities that have thinghood. This is the home of the functional, the knowable, what we can experience as facts.
2. Animate existence. This region represents the world of being and is exemplified by entities who actively reconcile their inner and outer worlds; what Morin calls *bios*.<sup>30</sup> Autonomic beings are entities ranging from viruses—sometimes alive, sometimes not—to humans—capable of choosing their own destinies—beings that we can never fully know<sup>31</sup>, however, that we can experience as adding-value via their presence, and be in conscious relation with. This region is bounded by a lower limit of autopoiesis and upper limit of cosmopoiesis.
3. Super-animate existence. This portion of the continuum represents the cosmic realm, the source of universal will, of all-pervasive organized complexity (order-disorder/being-nonbeing). It is exemplified by entities experienced with our minds eye, collectively understood via shared experience. Entities here range from planets to the fullest expression of a universe-of-complexity.
4. Transitional zones. Bennett identifies two transitional zones that perhaps hold the key to our understanding of the workings of scale-linking:
  - a) the transition, between Physis and Bios and is demarcated by the emergence of active surface, a capability of beings to regenerate their inner being, while simultaneously, navigating the hazards of an external environment, to access potential energy;
  - b) the second transition arises between Bios and Cosmos, this is marked by the emergence of a biosphere, a total living whole with it's active surface at the planetary scale.

This has major implications for how we understand ourselves in relation to the continuum-of-experience. As humans, we find ourselves potentially at the upper limits of an extraordinary world of being, with the ability to stretch our minds into the cosmic realm. We alone have the capability to choose consciously how we render our own reality. Yet, we continually fall short of our potential of rendering a reality of ever-greater aliveness to the biosphere. Our globalized extractive economy reduces aliveness to the realm of subanimate existence. The balance of the paper, is dedicated to understanding and expanding the concept of active surface, so that we can create economies that scale-link in the same way living systems do.

### The Role of Active Surface in Scale-Linking

The continuum-of-experience is woven through-and-through from a continuous universal fabric of wholeness, gradually and progressively enfolding on itself at various scales of ever-greater, unfolding aliveness. As it moves into the realm of animate existence, the capability of active surface emerges. Active surface holds a dynamic inside-outside tension; creating interior space entities for identity and interiority to develop, and with it, the capability endemic to living beings, of sensing of an exterior world beyond their living membrane that demarcates living whole. Active surface acts as a filtering medium that allows selective communication (information) and relation (energy) with the world outside.

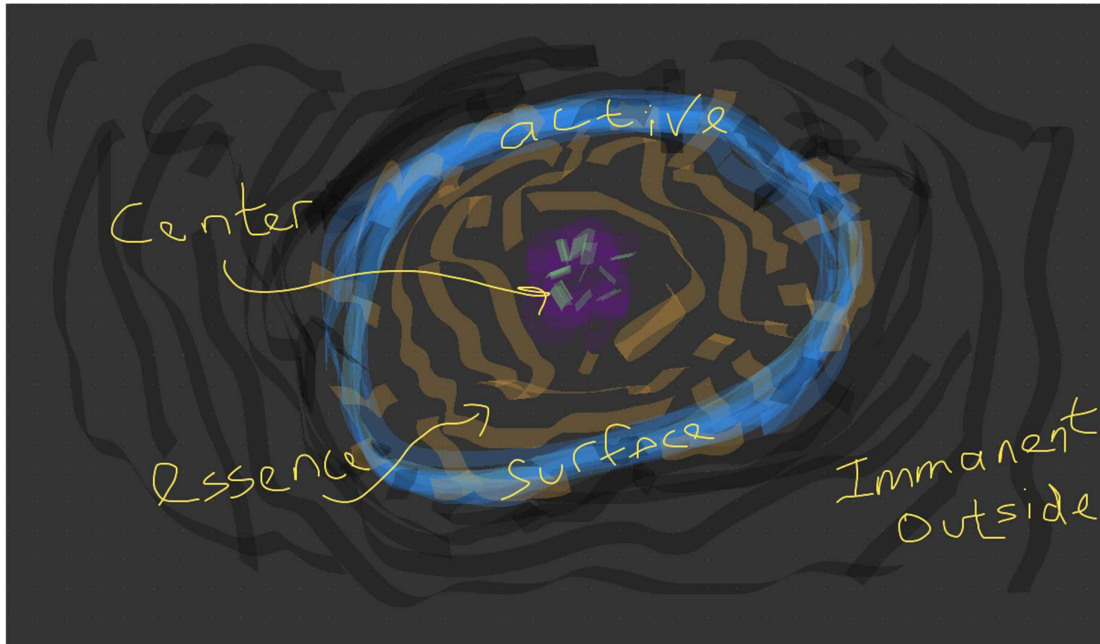
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<sup>29</sup> see Yanez (2023)

<sup>30</sup> *ibid*

<sup>31</sup> We can know other beings as things with thinghood, and even observe their behavioral patterns, but that's not indicative of the fullness of their being.





Active surface enables centeredness within organisms where we find a concentration of essence—what makes each organism entirely unique—that which makes it capable of adding-value to the greater wholes it it makes part of in a unique way. Since, each being is a whole, composed of other wholes, and in turn constituting larger wholes, we can say that the centeredness within an active surface is how they participate in economies of scale-linking. The following table summarizes our framing as thus far developed.

## cosmopoiesis

ordering of continuum of nested wholes at every scale  
[kosmos | super-animate existence | wholeness as conduit of value]

## sympoiesis

organizing of fields-of-relatedness, at a given scale  
[bios | animate existence | aliveness as source of value]

## autopoiesis

harmonizing of self  
[physis | sub-animate existence | centeredness, as expression of value]

### Relational Scale-Linking

There are various dimensions of scale-linking we could consider within the larger discourse. Bennett's meta-framing of the continuum gifts us the four determining-conditions that delimit all Universal processes: space, time, hyparxis, and eternity. Space represents the three spatial-dimensions, unique places where each-forms present themselves for some duration in time to actualize potential. Time represents the actualization of potential in each-forms in space for a certain duration. Hyparxis is the ableness-to-be of any each-form to actualize in time and space. Eternity represents the wellspring of unactualized potential available in varying-degrees to all each-forms in the Universe.

I will use these to reorganize the larger discourse on this subject, which has proven too immense too fit within one paper. This paper limits its scope to **relational scale-linking** (eternity): Part 1, is focused on re-thinking how our economies source value—unactualized potential—from our biospheric world-of-relation; Part 2, will look at practical ways we can exchange value, both in ways that bring the further aliveness to the continuum-of-experience.

Subsequent inquiries will be organized along the other determining-conditions, as follows:

Developmental Scale-linking (hyparxis). One inquiry might focus on **developmental scale-linking**, that is how we create value through being uniquely who we are as individuals. It would explore how we source that value from our singular essence, what brings each aliveness, that in turn, expresses through our vocations and livelihoods in alignment with the greater wholes we serve.

Temporal Scale-linking (time). Another inquiry on **temporal scale-linking**, might explore how we live integrally in the present, allowing socio-cultural patterns that no longer serve aliveness to die out, and prioritize passing down those that do. This would naturally tie into a forthcoming paper on we collectively care for regenerative knowledges.

Geographical Scale-linking (space). Beyond **geographical scale-linking** addressed preliminarily in Yanez (2023), where the bioregion is proposed optimal scale for developing self-organizing human social systems, which scale-link between communities-of-place and planet. A subsequent inquiry, might explicitly explore the role of place in economies of scale-linking.

This dynamic systems framework, as do all such frameworks, gives a degree of confidence that we are taking into account the whole of a phenomena, such as scale-linking. This is critical, because as we discovered through our cosmopoietic principles: Nothing in our immediate continuum-of-experience is external. Especially, the working of potential, something so simultaneously universal yet intimate, abstract and amorphous yet commonplace, that we can only intuit it.

In the following section, we will develop a general understanding of the workings of value, of capitalism and economy of Life, so we might find a path forward that achieves the stated purpose in this paper.

## Value, Capitalism, Life

"The potential of the economy is ultimately life potential.  
The question of value is a vital question. Capital has its invisible hand on the pulse of life."

-- Brian Massumi

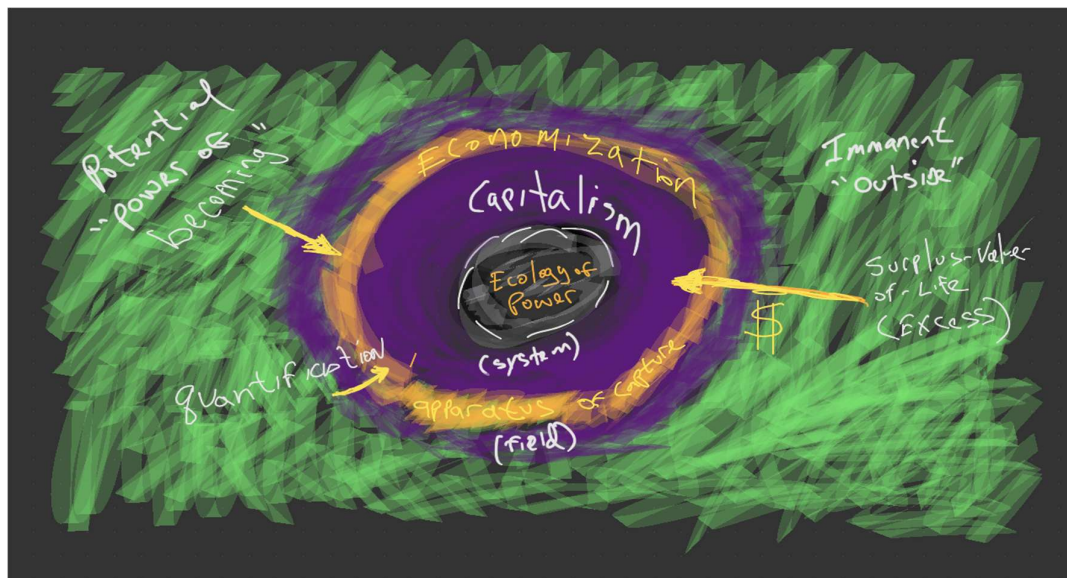
### Alternative Systems of Value<sup>32</sup>

Value, as presently operationalized in a capitalist context, is in disservice to Life, which is evident in the monumental chasm between value extracted and our values—all that we value as humans<sup>33</sup>.

There is a clear and bold call for an alternative, shared theory of value from commons advocates and their allies. The motivation is organized around restoring the thickness-of-relation interrupted for so long by systems of abstract measurement that enable commodification of the living web and the relentless *life-grabbing dynamics* that transform life into debt and deadness. Value *is* life. Value theory must be organized around greater aliveness.

In effect, what is being called for is a relational theory of value that emerges organically from living processes. Not something static, but a living notion of value that is regenerated continually, as is Life. We can develop collective meaning-making, capable of deciphering value from mutual exchanges of energies and the value-adding processes, of which the biosphere is constituted. The primary production of life processes is what makes capitalism possible in the first place.

### The Workings of Capitalism<sup>34</sup>



<sup>32</sup> Sourced from Bollier (2016).

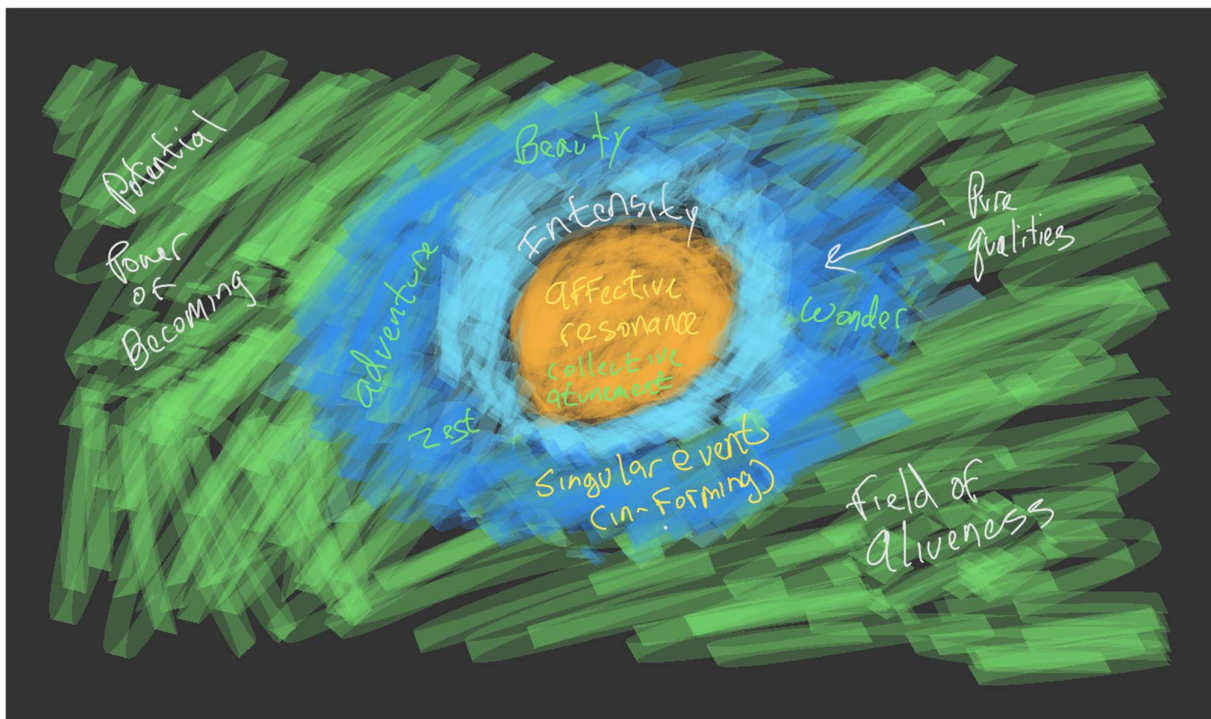
<sup>33</sup> See [Appendix C](#) for discussion of value and values.

<sup>34</sup> Sourced from Massumi (2018).

Capitalism as a system is inextricably entrenched within a field of living processes, the *immanent outside*<sup>35</sup>. It feeds upon life activity<sup>36</sup>. However, unlike living systems, there is no active surface that mediates the flow of aliveness; there is only a one-way capture. Economization is the *apparatus of capture*<sup>37</sup> of surplus-value-of-life—wholly-qualitative potentials otherwise, to be lived. Quantification generalizes, reducing the qualitative to quantitative. Money, essential to economization, operates under the assumption that value is both measurable and quantifiable. As such, it is destructive of life potential.

## The Economy of Life

Within the continuum-of-experience, the immanent outside of the capitalist system, Life, has it's own, much more inclusive, economy, with its own way of creating and exchanging value.



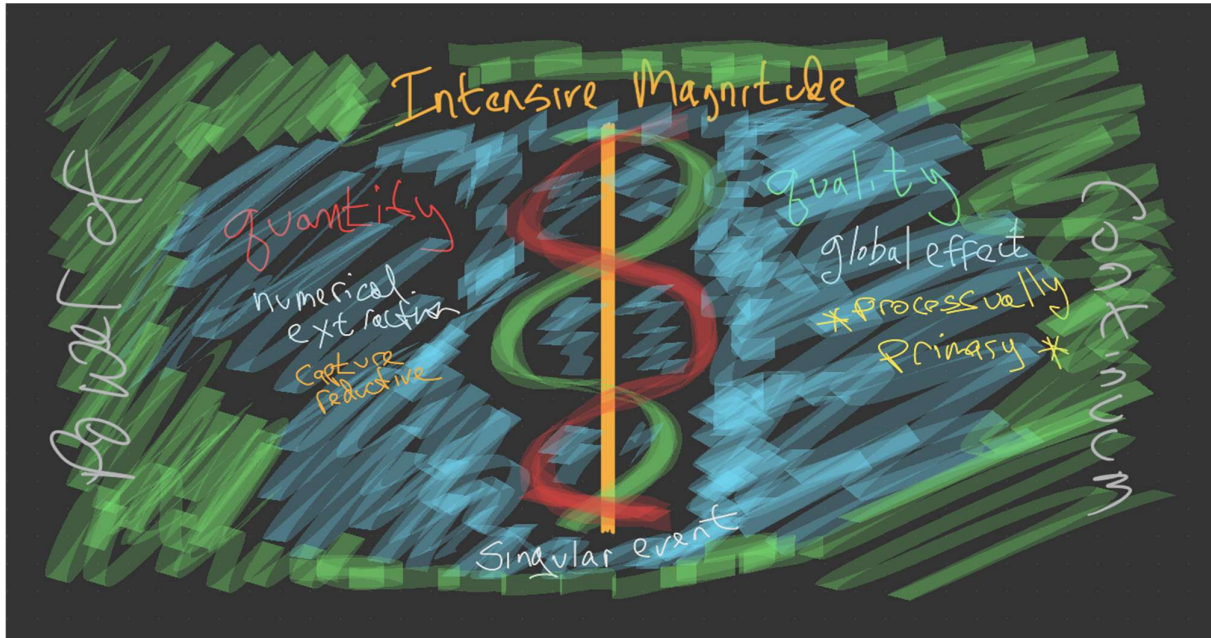
<sup>35</sup> Massumi, 2018: 10

<sup>36</sup> ibid

<sup>37</sup> ibid: 39



Surplus-value-of-life is a qualitative value based upon the *unexchangeable currency of experience*<sup>38</sup> generated by every each-forms as they express the *power of the continuum*<sup>39</sup> in unique ways. Surplus-value-of-life is a value inherent to itself, constituted from singular events—moments in the continuum-of-experience that stand out momentarily from their background, and therefore render them valueable. Qualities such as aliveness or beauty, are felt qualities that serve as qualitative indices for the intensity of the *more-than-humanness* of an event. Affective resonance is a process of attunement to these more-than-human intensities, which when practiced collectively, enables a far more accurate registration of the surplus-value-of-life—the unactualized potential represented in a given event.



Every event is both quantitative, making itself known in the extensive dimension of space, and qualitatively, producing a difference of aesthetic degree. Quality produces *global affect*<sup>40</sup>, quantity a *numerical extraction*<sup>41</sup>; together they produce the intensive magnitude of any event. In the dance with quantity, quality takes the lead. It's capability to hold space for event factors to brace into the event's wholeness, renders them indistinguishable in the production of a continuum-of-experience. The power of the continuum-of-experience as a singular rhythmic movement is irreducible.

Imaging and understanding the workings of value, of capitalism and that of life's economy will prove essential in finding a reconcile through this notion of scale-linking, which we will explore next.

<sup>38</sup> ibid: 25

<sup>39</sup> ibid: 98

<sup>40</sup> ibid

<sup>41</sup> ibid

## Scale-Linking as Creative Complicity

“The choice we make of how we dispose our consciousness is the ultimate creative act: it renders the world what it is. It is, therefore, a moral act: it has consequences.”

--Iain McGilchrist, *The Matter with Things*

### Regenerative commoning

I was imaging what a next evolutionary step within the sphere of systems-change might look like, together with colleagues, who were immersed in discernment around regeneration. At center was how to reconcile the transformative desire of systems change advocates/practitioners with very real restraint that limits their potential: economic dependency on the system they pretend to be changing.

After a year or so of playfully-purposive weekly meetings, avoiding goals, outcomes or agendas, the notion of regenerative commoning emerged. Regenerative commoning requires change-makers and their allies to release each other, at least partially, from the dependencies that currently restrict their efforts. We imaged diverse fields-of-relation co-creating and exchanging value, whilst continuing to drawdown surplus-value-of-capital from the dominant system and permanently transform it to surplus-value-of-life, to whatever degree possible.

Alter-economization<sup>42</sup>. With regenerative commoning, an alter-economization could take hold; one in service to the life-affirming *power of becoming*—where surplus-value-of-life becomes an organizing principle, retaining value for itself. Such an economy would revalue value and prioritize life-qualities, whose in-formative capabilities are essential to infusing the creative life-force into human social systems.

This notion is most relevant with what is unfolding herein, which serves to image clearly and concretely how we might operationalize economies of scale-linking. And, where do we begin, when we all—even our *movements of primary resistance*—are wholly and inevitably complicit. There’s no getting out, or is there?

Creative Complicity<sup>43</sup> The hostility of capitalism towards the economy of life requires that peer communities engaged in regenerative commoning, self-organize in uncontested spaces<sup>44</sup>, to create approaches to capture value from the dominant system and transform through non-market logic of the regenerative paradigm<sup>45</sup>. The emergence of a diversity of *translocal*, *networked commons* opens the potential for parallel economies to coexist within capitalism. The key for activating regenerative commoning is to arrive at an understanding of how qualitatively different modes of exchange can be operationalized inside a *protective membrane*, an active surface with the capacity for operating within the capitalist economy, while simultaneously scale-linking with the immanent outside. A creative complicity, where a way in, becomes a way out!

### Creative Process Engine<sup>46</sup>

In this section, we image the workings of a *creative process engine*, who’s aim is to produce surplus-value-of-life, simultaneously adapting itself to the economization process of the dominant economy it must interface with. This requires a creative duplicity.

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<sup>42</sup> Sourced from Masumi (2018).

<sup>43</sup> Sourced from Bollier (2016).

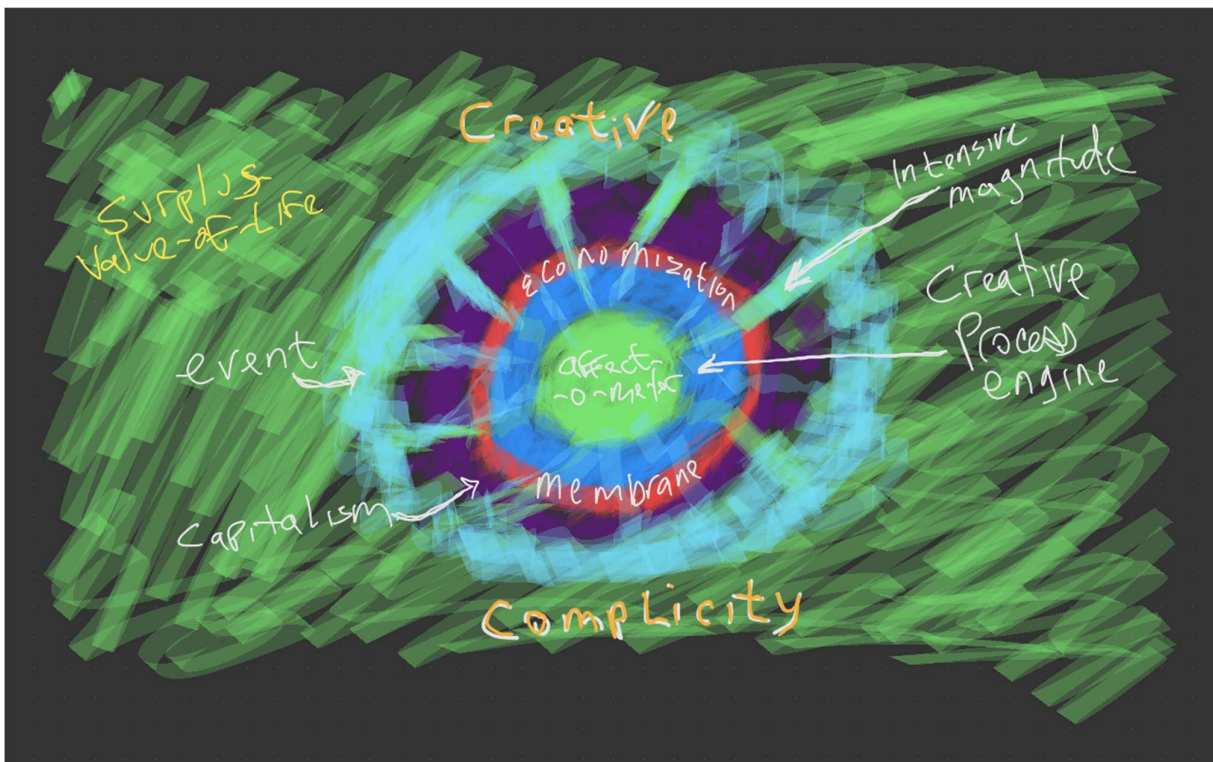
<sup>44</sup> See Yanez (2023).

<sup>45</sup> Sanford & Haggard (2020).

<sup>46</sup> Sourced from Masumi (2019).



Creative Duplicity. Creative duplicity benefits from the *two-sidedness of intensive magnitude*<sup>47</sup>, a subtle dance of quality and quantity that interweave without touching. This calls for the self-organization of *autonomous zones*<sup>48</sup> of creative duplicity: pockets of *processual singularity*<sup>49</sup>—events whose presence generates surplus-value-of-Life—interfacing with the dominant economy’s quantification processes, until some future tipping point is reached. This would necessitate the capability for developing semi-permeable economization membranes, active surfaces with the capacity to link scales.



Econimization Membrane. Econimization membranes would consist of a synchronous oscillation between inside and outside: on the inside, a registering of qualitative differentials—flow of surplus-value-of-life; on the outside, rendering quantifiable expression of value. The process would fold back onto itself, like an in-breath (*immanent inflection*) and an out-breath (*unitization*), that mimics life’s capability for active surface. Here it is in a bit more detail:

- Inside the Membrane. Inside, the creative process engine would register the flux of affective intensity, acting as an affective resonator, a space for collective sensing and embodying of surplus-value-of-life, where immanent decisions can be made from a felt sense of aliveness. This would coalesce with the quantification apparatus moving outside the process.
- Outside the Membrane. On the outside, an undifferentiated money mass—potential awaiting capture—flows parallel to the affective process; unitization that converts the inside flow of the process into conventional economic values. Some alternate currency would fulfill the function of money.

<sup>47</sup> *ibid*: 124

<sup>48</sup> *ibid*: 87

<sup>49</sup> *ibid*: 88

- The Membrane. A digital membrane serves to regulate the two-sidedness of intensive magnitude, by allowing in potential (unmonitized money mass) or conversion of the inside flow (surplus-value-of-life). The membrane would be the only enclosure around the creative process engine; otherwise, it remains radically open.
- Its Ecology. The creative process engine would inhabit an ecology of alter-economic, as of yet uncontested, spaces (commons-oriented projects), each with dedicated alternative currencies, convertible into a layering of interoperable surrounding currencies, which would eventually interface with the capitalist system. The ecology would support symbiotic economies of abundance by design enabling collaboration powered by the continuum-of-experience, a *self-renewing plenum of subjective becoming*.

In this way, the surplus-value-of-life—the continuing of the life process, and therefore, the continuum-of-experience—would spin off monetary surplus-value, effectively “pricing” the incommensurable living potential.

## Rewilding More-than-Human Potential:

### A tentative conclusion

#### Our Cosmopoietic Journey, thus far...

Thus far in this paper, we've seen how humans have left a void in the middle of a continuum-of-experience, which modernity, and it's handmaiden capitalism, have subsequently colonized. We have also seen how ordering frameworks, such as cosmopoiesis-sympoiesis-autopoiesis, can serve as instruments for imaging our place within the continuum-of-experience. We've laid out an approach to inquiry with capability to integrate and address cosmopoietic/sympoietic principles and premises essential for relational scale-linking. Through the work of Bennett, we also explored a meta-framing consistent with, and expanding upon, cosmopoiesis framing, that offers a preliminary understanding of the scales we could be linking via the emergent capability of active surface. From this vantage point, we saw how the current working of value, powered by capitalism's capture of Life's potential from the immanent outside, fragments our reality; allowing us to establish a rationale for re-contextualizing it within the economy of life.

In stark contrast, we imaged how the economy of life continuously generates surplus-value-of-life and therefore an excess of unactualized potential, which appears everywhere as singular, aesthetic experience, accessible to us via affective resonance, which gives primacy to qualities within the continuum-of-experience. We introduce the notion of regenerative commoning as aspiration to hack our way through and beyond capitalism and the mechanism of creative process engine as a possible approach to operationalizing this.

Now, our cosmopoietic journey has landed here, in the middle of a continuum characterized by a *thickness-of-relation*<sup>50</sup>, a place that western civilization previously misguided us from inhabiting. These are as of yet uncontested spaces, that our movements of primary resistance are being called to inhabit. They are the mesoscales everywhere, the potentiality born of creative tensions that could serve to reconcile polarizing extremes. This was exemplified in the first paper<sup>51</sup>, I presented to this conference, where the bioregion emerged as the optimal scale for mediating the local and global (local←bioregion→global). It is exemplified here too, as we establish sympoiesis as the all important mesoscale, where we might apply rewilding of potential through relational scale-linking to reweave our world-relations in a more-than-human world.

#### Rewilding Potential

Indeed, the approach outlined herein, is all about how we, as humans actualize value-adding potential from our immanent outside, the continuum-of-experience, in ways that are coherent with the extraordinary layering of Being that constitutes and continually regenerates it. It is an attempt to align *how we value* (quantity) to *what we value* (qualities). As we have seen, Life's potential is a quality we cannot ever live without, even capitalism wholly depends on it, even though it depletes it.

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<sup>50</sup> Thickness-of-relation is a term introduced in Yanez (2023).

<sup>51</sup> Ibid.

The notion of rewilding potential invites us to a deeply-layered listening—affective resonance—from within collective bodies, such as commons-oriented projects, so that we as human societies can awaken our own potential, while allowing the free-flow of Life potential, so that there might someday be no immanent outside. Without developing the capability for collective interpretation of other's otherness, and dynamic integration into our value systems, we forgo our potential to be fully-human. There is great hope for humanity. As the work of Portmann (1974) elucidates, the capability for self-organizing our world-relations in the more-than-human world is inherently inscribed in us. Homo sapiens inhabit an infinitely richer spectrum, a far wider inclusiveness, of potential relation than found in any other species. The notion of becoming fully-human as a species—the topic at the epicenter of all my research—requires that we reorient ourselves to the workings-of-the-world on its own terms and take our place within that spectrum. Relational scale-linking may be one way of doing so, of ensuring continuity of aliveness that runs through us and is amplified by our integral presence *within* the continuum-of-experience.

I realize that with this paper, we have embarked on a broad exploration, that is entirely incomplete in every which way. And, hopefully brings together just the right elements to make the improbability of economies of scale-linking a plausible potential reality.

## References

- Bateson, G. (1972). *Steps to an ecology of mind: Collected essays in anthropology, psychology, evolution and epistemology*. Intertext Books.
- Bennett, J.G. (1959). *The Dramatic Universe: The Foundations of Natural Philosophy*. Hodder & Stoughton.
- Bennett, J.G. (1961). *The Dramatic Universe: The Foundations of Moral Philosophy*. Hodder & Stoughton.
- Bennett, J.G. (1964). *Energies: Material, Vital, Cosmic*. Claymont Communications.
- Bollier, D. (2016). *Re-imagining Value- Insights from the Care Economy, Commons, Cyberspace and Nature*. Heinrich Boll Stiftung.
- de Siena, S. (2005). *Cosmosophy*. World Futures, 61:6, 409-440,. <https://doi.org/10.1080/026040290503126>.
- Graeber, D. (2013). *It is Value that brings Universes into Being*. HAU: Journal of Ethnographic Theory 3 (2): 219–43.
- Haraway, D. (2016). *Staying with the Trouble: Making Kin in the Chthulucene*. Duke University Press.
- James, W. (1920). *A Pluralistic Universe*. Longmans, Green and Co.
- Manghi, S. (2006). *The Tragedy of the Subject in the Birth of the World-Society: About Edgar Morin*. International Journal of Psychoanalysis and Education - IJPE vol. IV, n° 2 (9), 55-80.
- Massumi, B. (2018). *99 Theses on the Revaluation of Value: A post-capitalist manifesto*. University of Minnesota Press.
- Maturana, H. & J. Varela (1972). *Autopoiesis and Cognition: The Realization of the Living*. Editorial Universitaria S.A.
- Morin, E. (1977). *Method, Towards a Study of Humankind, Book 1: The Nature of Nature*. Peter Lang.
- Morin, E. (1980). *RE: From Prefix to Paradigm*. World Futures: The Journal of Global Education, 61:4, 254-267. <https://doi.org/10.1080/02604020590952583>.
- Portmann, A. (1974). *Essays in Philosophical Zoology: The Living Form and the Seeing Eye*. The Edwin Mellen Press.
- Regenesis Institute for Regenerative Practice (ongoing), *The Regenerative Practitioner Series course materials*.
- Sanford, C. & B. Haggard (2020). The Regenerative Economic Shaper Perspective Paper. Downloaded and adapted from <https://medium.com/the-regenerative-economy-collaborative/the-regenerative-economic-shaper-perspective-paper-part-1-8cd56d77f4b0>.
- Yanez, M. (2023). *The Self-Organizing Bioregion*. Social Solidarity Economy & the Commons. <https://ssecommons.cei.iscte-iul.pt/wp-content/uploads/2024/06/Yanez-Mario-2023-The-Self-Organizing-Bioregion.pdf>.