
Original Paper

Viable Progress: The Cognitive Creativity

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Abstract

The human *civilisation* is odd upshot, modifying wilderness by inventing culture/ethics artefacts and starting in-progress *relational* setups, specifically enabled by the social worth of “collective orders”. The trend is men centred, say, it addresses contingency paths, leading to provisional life-quality upshots. Progress is bet, built on the “cognitive revolution”, by knowledge artefacts on which building the mind authority and business frames of life-quality step-up. The *civilisation* entails *language, trade, legality*, etc. formats, to shape communities towards “closed unions” with the assigned goals. Ecology is impending menace, requiring innovation, if progress extension is hunted. The “open unions” are the *inclusive* alternative that merges decision aims for supply chain transparency, keeping eco-coherent goals. The changes join “technology innovation” (by robot keys), to “global breakthrough” (by *civic* vs. *political* paths), yielding the *altruism* outlines. The survey is aware that the “civilisation” is odd pick: “anthropic” views track the *life* and *intelligence* “marvels” along crafty *meme* fruition, after keen *gene* evolution, ending in “global village” controlled fairness.

Keywords: Cognition intellection courses, Technology innovation manufacture methods, Political deployment relational methods, Cognitive Creativity, Ecology sustainability, Robotics globalism

1. Introduction

The “progress” is bizarre occurrence, establishing hierarchies in men’s statuses and behaviours, and in the surrounds’ qualities, to make certain appreciating the improvements, from wilderness, to anthropic setups. We presume that: our habitat is modifiable; we are aware observers and gifted actors; what done is safe and effective. The overall changes are accounted as “civilisation” and easy parallel establishes among the different world regions and populations, to distinguish many development ranges. The idea to enjoy whole appraisals, soon, follows, trying to establish upper/intrinsic links, and/or to define absolute standards [23]. It is hard to assess the worthiness of these conceptions [39], yet, the *rational* choice shall aim at “improvements”.

The self-interest on “progress” seems fringe; the course appears following other trails, drafting “advances”, having, either exogenous godly origin or intrinsic built-in causes [45]. The trails are full way and acknowledge linking “actual surrounds” and “accredited alterations”, i.e., we concede that we deal with mutable realities, and we expect that the changes are “effect” of “reasons”: our views collect series of shots, taken along what happens around us. If the guess is correct, “matter” and “information” are supplemental outlooks, if the observation of the current setting has godly back. In alternative, the conjecture apply, using the *genome* reading: data are encrypted in every cell, supplying entire account of the individual development [36]. The data decoding, at present, does not imply creating life, rather holding its entire recorded process [9].

The substitute trails, hence, persist: *transcendence* looks at non-reachable holiness; *immanence* implies inner coding of the “information”, already present in the carrying “matter”. The trails can be both mistaken: the, “progress” does not enjoy *absolute* worth; rather, it has *contingent* value. The cause/effect” nexus is not outright; “matter/information” links do not benefit from “natural laws”. The conjecture on primordial “information” suggests that “cosmos” opposes to “chaos”, and the name means innate *cosmetic* trimming. The “natural laws”, then, surface, showing right (godly or built-in) orderliness. The reciprocal reading proposes that the allotted *forms* (or *shapes*) inherit “matter”

regularity, projected as “routine bias”. However, even if *absolute* “matter/information” links encode as “natural laws”, the access to them is out of the human reach or subjected to actual restrictions, thus, allowed only to aware intelligences [25].

The above remarks are useful to introduce the dilemmas on the “progress” [48]: if advantageous or detrimental; if founded on “natural laws” or conceived and adapted by men; if unequivocal and out-and-out or provisional and questionable achievement; and so on. The earth’s happenings are, presently, recognised to be negligible, compared to the universe: they, definitely, do not affect the cosmology’s courses, whatever planned and done, within residual spot, by trifling actors. Open question is, in case, the reverse condition: whether the earth’s happenings are already written in the “cosmos’ information”, or, similarly, that the universe does not appear or comes into being as totally neutral fact, rather it involves upshots and effects, carrying coherent meanings [27]. Yet, the dilemmas leave unanswered the queries on how recognising their *absolute* or *contingent* value.

2. Anthropic Hypotheses

The anthropic hypotheses help attacking the dilemmas [24]: the *strong* version accepts *absolute* dependence on upper godly steering or on inner natural determinism, Figure 1; the *weak* sense takes up *contingent* bonds of cosmos’ qualities and earth’s oddities, namely [44]: *biology*, granting the copy autonomy of the living beings; and *cognition*, marking the men’s emulation and reasoning abilities Figure 2.

- THE MEN BENEFIT OF ALL THE OPTIONS, TO EXPLOIT THE TWIN ODD *LIFE AND INTELLIGENCE* WHEREWITHAL;
- SIDE COROLLARIES ARE: ■ *THE INTELLIGENT DESIGN OVERSEES THE ALL, TO FASHION THE OBSERVERS*; ■ *THE OBSERVERS ARE NECESSARY, BEING THE GOAL OF THE DESIGN*; ■ *THE UNIVERSE REPEATS TO CONCLUDE THE DECLARED TWO ODDITIES, AS OUR EARTH HAS ACKNOWLEDGED DISTINCTIVENESS (WITH OR WITHOUT LIFE AND INTELLIGENCE REITERATION)*.

Figure 1. The *strong* anthropic principle

The universe’s coherence means that the *biology* and *cognition* processes are *total* qualities, already present in it; the *life/intelligence* complements are necessary, started and implemented with *causal* merit, in the *strong* construal. In the *weak* reading, the *life* and *intelligence* are local singularities, with *relational* worth. The “progress” just establishes, if sets of corollaries occur; the *interpersonal* one, e.g., develops as human culture and ethics artefacts [13].

- THE MANKIND IS END-RESULT OF ODD EVENTS, THOUGH, WARRANTING *CONTINGENCY* COHERENCE;
- *THE RECOGNITION OF THE PHYSICAL MODELS REQUESTS MATCHED HAPPENINGS, BECAUSE THE TWO RESTRICTIONS EXIST: (*) TO MAKE FULFILLED SELF-REPRODUCTION LIFE AND COGNIZANT INTELLIGENCE; (*) TO APPORTION PROPER SEQUENCE AND EXTENSION OF ACCOMPLISHMENTS, CONFIRMING THAT THE TWO EVENTS ARE ALREADY HAPPENED.*

Figure 2. The *weak* anthropic principle.

We do not know if, elsewhere in the universe, the *biology* the *cognition* exist with meaningful developments, or if their peculiarities are meaningless. Our cosmology tales offer rich wandering; nevertheless, the start and replication of self-reliant bio-courses or the aware mind and mimicry of coherent thoughts and judgments are, perhaps, irrelevant and futile. The topics hard to catalogue: “cosmos’ information” and “natural laws” are, maybe, non-existing or out of our reach. Instead, the *strong* anthropic principle implies that cosmology has scientific applicability, i.e., the cause/effect links permit unfolding the entire universe with pertinent details. The “life” tells us that the course

self-reliance is regular: we may account causative strings in the natural surrounds, even if the replication of the *biology* carbon-based ones are oddness. Then, the “intelligence” tells us that the consciousness and rationality are standard: we may explain how and why things happen, relating their real chaining and, maybe, inventing substitutes. The *cognition* records are necessity of the cosmos’ trimmed congruence [15], as if the “natural laws” retain absolute coherence.

The *absolute* “matter/information” logic is faith; it is further required to conquer fit “natural laws” decoding. The *strong* anthropic principle, along with the current readings (inner natural determinism and upper godly steering) is difficult to acknowledge, with *explicit* ratification. The *implicit* acquiescence in the use of “natural laws” is, however, habit, with unspoken acceptance that their usefulness is true, at least, until when the “falsification rule” does not show fabrication or inconsistency of the outcomes. The practice helps introducing to the *weak* anthropic principle on, merely, a *posteriori* signal [30].

Random Encoding Chance

The practice entails the occurrence of “singularities”, i.e., discontinuities, inserting new options. On earth, “life” and “intelligence” add the *biology* and *cognizance* ways, somehow after breaks. We figure out that the probability of the events is low (not zero, since they occurred); Darwin requires the beginning of primordial “life”, from which, via *gene* evolution, multicellular beings ensue, and numberless *species* diversify. The anthropic specialisation yields to choice species (*chimpanzee*, *orang-utan*, etc.) and, finally, to *homo sapiens*, which can be educated through social interactions, to enable *meme* fruition, bringing forth culture and ethics stuffs by the inventions such as idiom, trade or law. The scheme is rich of many data ending: by the *genome*, programme with the details to build individuals [18]; and by social ethnic patterns, with economic and political setups, showing programming continuity [49].

The sketched picture avails of readings, through computer’s images. Thus, a *programmer*, an *operation system* and a *programme* simultaneously define to make the hardware running. The last identifies the genome; the second refers to parental conduction, via DNA/RNA interchanges and other details; but the first is hard to single out. The beginning of the primordial “life” has, perhaps, random encoding, ending in the creative programming of a self-replicating process. The theory is fascinating: it permits looking at the analogous random encoding for the “intelligence” beginning: it enables the relational capabilities, aimed at the quoted culture and ethics abstractions [6]. The regular jolts, planned by eventful or lucky random encoding, consistently bypass the existence of explicit (“life” and “intelligence”) *plans*; the tasks are, already coded in the “cosmos’ information”, and the chance is, just, casual highlight of the otherwise *unconscious* changeovers with, possibly, *absolute* worth [10].

To the point [16]: the *programmer* role simply links to upper spheres, if godly steering exists. It has random encoding by probabilistic theory, if natural determinism enjoys plain inner assent. It becomes alert discontinuity, whether *biology* and *cognition* are *singularities*, i.e., the “life” and “intelligence” are *miracles*. In the last instance, the odd events recognise that a *posteriori* facts or restrictions exist, which add to the “matter” (the “cosmos”), with pertinent “information” (when human knowledge rebuilt natural laws). In the materialist Darwinism, instead, the *gene* evolution is immanent “information”: the “life” (then, “intelligence”) enjoys *absolute* meaning; the random encoding empowers *programmers* and *operation systems*. The all is open query (or faith, like the said *miracles*). Our a *posteriori* trail is contingent, via *creative* aids: the *biology* conveys “agentive” power, qualifying *operation system* working; the *cognition* allows “rational” reflecting, enabling fit *programmers* [32], once *meme* fruition has planned *relational* settings.

3. Progress Continuance

The *strong* anthropic guess has foundation on *absolute* “matter/information” links, encoded as “natural laws”. The *weak* anthropic one includes the restriction that *creative* additions exist, letting “agentive” and “rational” capabilities. The *biology* and *cognition* are earth peculiarities. Carbon-based “life” and aware interactive “intellect” are social traits, which allow building the civilisation, as the anthropic chance of the wild surroundings. The alteration is *conditional*, boosting “progress” according to some conventional standards, agreed within the human *parental* life [4]. The quoted “singularities” are

awkward facts:

- “life”, through *agentive* procreation and growth, adapted by *gene* evolution;
- “intellect”, via *rational* mimicry and emulation, modified by *meme* fruition.

The *general* “natural laws”, if existing, make change, fluctuate the cosmos’ reality, evidently, stimulated, controlled by them and free from *provisional* conditions. The *gene/meme* variations establish *contingent* reworking, with variants of extant trends: improvements or deteriorations are opposed to the pre-existing setups. Conformist views, expressing comfort or preference linked to routines, then, measures the “progress”. Our built knowledge (and *science*) shows flawed print, which we deem describing the universe, and keeps the coherence of contributory accounts, with cause/effect logics, supporting the cue to derive future facts, from past occurrences [2]. Can we presume causative or influential links, so that, if proper rules verify, given outcomes follows?

The anthropic principles build on such faith: the *strong* form advises to trust in God or in the Nature; the *weak* one implies to count in the mind’s culture and ethics artefacts, Figure 3. The former entails crediting the “cosmos’ information” *absolute* setup and the “natural laws” entire openness. The latter devolves the tasks to the (actually happened) “life” and “intelligence” *singularities* [1].

<p>RELIANCE IN ABSOLUTE PRINCIPLES: REALITY HAS SUITABLY ACCESSED A <i>PRIORI</i> PRE-SET MODELS</p> <p>TRANSCENDENCE: GOD ROUTING BY TRUTHS - IMMANENCE: DETERMININIST FINAL OUTCOMES</p> <p>RESORT TO CONTINGENT PRINCIPLES: THE MODELS ARE A <i>POSTERIORI</i> MIND INTERPRETATIONS</p> <p>TANGIBLE AIDS: TECHNOLOGY REVOLUTIONS - INTANTANGIBLE AIDS: SOCIAL BREAKTHROUGHS</p>
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Figure 3. The switch, from *absolute*, to *contingent* grounds.

The “human science” and the “cosmos’ information” have questionable links, starting from the reference *frames*. We notice a 3D-space, using the light electromagnetic scanning. Many items are *non-existing*: too small particles, anti-matter pieces, etc.; the inborn *relativity* needs counting the fourth time dimension. The electromagnetic field, soon, hinted the (Kaluza-Klein) 5D-space, stiff result, as its physical meaning was hard to devise. The, hunted by Einstein, field-unification, finally, looks fulfilled, by merging 10D-space, via string and graviton aids. The unifying setting is said to be close to the early big-bang, when space-time extents are hard to figure-out, still, the further seven dimensions remain complex outcomes; the string theory, just, aids by smoothing the gravitation macroscopic determinism. Quantum physics is impressive erection, but we, even now, are aware that the “cosmos’ information” retain not yet disclosed secrets [21].

The “human science”, in contingency construal, is a *posteriori* result, based on the “falsification rule”. The “progress”, then, is not written in the stars or god’s gift; it is men’s effect, built by social breakthroughs and technology revolutions. It is *provisional* feat, pace wise gained, appraised by self-reliant norms and totally managed by blow-up picks. Its meaningfulness requires conscious perception and decision keeping ability, at least, as current accomplishments. The “progress” continuance needs, first, that each one is liable of his fortune or misfortune, at the individual and the collective ranges. This is, for sure, insufficient condition, because the surroundings always play critical function [8].

Growth Sustainability

The “progress”, on *absolute* grounds, has upper or inner causes; little or nothing rests on men’s ingenuities. On *contingent* grounds, the men have central roles. If we focus the attention on the earth, the total insignificance of the related effects on the universe follows. The passing recover is conceivable, moving contamination outside, with triviality resource’s consequence on the cosmos, Figure 4. Surely, the all ought to be men’s business, after aware acknowledgment of the situation and of the remedial options [5]. The *sustainable* growth is open defy. The resort to *contingent* picks are current

chance, on curbed horizon visions. The *absolute* pictures do not help: the total control is pre-set by *upper* or *inner* powers, with all chores outside the humankind, since the “nature laws” already establish steady “progress”. Actually, the rely on *upper/inner* “laws” is *faith*.

UNIVERSE vs. EARTH, NOT AKIN REALITIES: THE LATTER IS NEGLIGIBLE COMPARED TO THE FORMER
EARTH: OVER-DEPLETION/POLLUTION BRINGS TO “PROGRESS” END, BY PENDING SCARCITY/LITTER
UNIVERSE: ENTROPY IS LONG-TERM PHENOMENON, YIELDING DECAY AND DEFEATING HABITABILITY
SUSTAINABLE GROWTH: EARTH PROVISIONAL RECOVERY BY “TO DEMATERIALISE”/”TO REMATERIALISE”

Figure 4. Makeshift “progress”, on universe’s bases

If these “nature laws” are *absolute* rules, we shall only wait and see the pre-set happenings; our “knowledge” plays the clashing role, if consistent or imaginary. The resort to “life” and “intellect” *singularities* is the way to mark the cut-off, bringing in the *biology* and *cognition* novelties. These are not negligible, even if the earth is trifling in the universe. Quite the contrary, the cosmos, if well-arranged system, shall include autonomy marks such as self-purposeful habits and self-reliant practices, or automatic self-sufficiency and intentional perception. These activities add evolution and fruition potentials and appear finishing prospects, more than basic qualities [17]. If the clues are sound, the *weak* anthropic principle proposes looking at the “life” and “intelligence” and at the *gene* evolution/*meme* fruition aftermaths as the sign that the civilization belongs to denoted facts: it necessary that self-rule and discernment need to develop, as the cosmos shall mean something and the humanity is parts of the supported meaning. The changeover is precisely in what brought about by the singularities, i.e., in the *agentive* and *rational* chances conferred to the humanity, or in the creative *evolution* and *fruition* aptitudes. The “progress” means “adapting the wilderness to the human urbanity “. Men shall remove the disliked series with profit, increasing the life-quality of the earth’s inhabitants [29]. Until when the positive trends last, growth occurs; then, the men shall modify plans, talking stand-in options by technology revolutions and social breakthroughs. Whether the course cannot deals with fitting innovations, the growth sustainability stops, and the “retreat” can only ensue [50].

HUMAN CAPITAL: THE STOCK OF LATENT WEALTH IN THE SELF-ACTING COLLECTIVE ORDERS; THE ENGAGED LABOUR FORCES AND LINKED CITIZENS’ *RELATIONAL* ABILITY/WHEREWITHAL
VALUE-CHAIN SYNTHESIS: ABSTRACT MIND PROCESS, APPLIED TO PRODUCE TANGIBLE FALLOUTS
MEN-CENTRED VALUE ADDED BYPRODUCTS: MIND FORMED CULTURE AND *ETHICS* ARTEFACTS

Figure 5. The human capital: main features

4. Value-Added Courses

The “growth” entails *value-added*, to swap *wilderness*, by shaped, bartered or shared “capital assets”. “Capital”, from *caput* (head), is oddity: the assets are *personal* allocation; the ownership presumes law frames and these require on-duty authorities. The choices entail “intellect” *synthetic* construal, namely, *culture* and *ethics* cues, with *communication* (language), *market* (trade) and *law* (authority) inventions. The “capitalism” involves *human*, *natural*, *technical* and *financial* assets; the personal and communal riches need metrology schemes. The “human capital”, Figure 5, is help, to set “collective orders”, assuring structured governance of the people. The aim gains by well-selected approaches. The valued riches are *implicit* (collective order, etc.) or *explicit* (workforce pay, etc.); they call for mind abstraction and demand conversion in money, the jack-of-all-trades [40].

INTERPERSONAL BONDS: BEHAVIOURAL MIENS, CONFORMING TO AGREED LEGAL PRECEPTS
RELATIONAL CONNECTIONS, STEERING THE PERSONAL INTERCOURSES TO SHARED OPENNESS
CONTRACTUAL DEALINGS, INVENTING TRADE/BUSINESS ABSTRACT SKILLS AND CONSTRUCTIONS
POLITICAL/CIVIC ARRANGEMENTS, DEVISING LEGALITY/AUTHENTICITY GOVERNANCE FEATURES

Figure 6. The collective order value-added

The collective orders confer worth by communication (*language*), business (*trade*) and legality (*power*) inventions, **Figure 6**. The relational ties distinguish *friendship*, *domestic* or *political* forms. The *akin* (parental), *private* (civic) and *public* (governmental) manners tell that *familiar*, *professional* and *administrative* demeanours deserve suited *official* contractual formations [33] and practices. The *administrative* methods distinguish top-down *political*, from bottom-up *civic* procedures, with more or less windup into “closed society” arrangements; the *contractual* practices may replicate inclusive chances to “open society” setups. Presently, the typical collective order appears favouring the “nation-state” format, whose legality establishes on the “sovereignty” concept; the officialdom, though, does not reduce to that option and alternative formulae may develop in the future [34].

Value-Added Managing

The depiction is man centred, involving “human capital”. The “financial” and “technical” capitals require *abstract* practices, to allow worth accretions. The former is old invention, resorting to the “money”, pieces with *officially* allocated conventional values; the *market* supplants *barter*, using items, wittingly defined by allotted prices. The trade is special invention; it uses “concession” and “patent” recognition, conferring value to contrivances and procedures with protected safeguards. The end outcomes are tangible assets, Figure 7, while the start procedures deal with handling *virtual* or *provisional* items [31] and the linked management is balanced procedure [46].

FINANCIAL CAPITAL: THE STOCK OF CUMULATED WEALTH IN “MONEY” AND OTHER *OFFICIAL* OR *DE FACTO* PAYMENT MEANS, WITH MANAGEMENT OF STRUCTURED ASSET-BASED ITEMS
TECNNICAL CAPITAL: THE STOCK OF FORMED WEALTH IN TECHNOLOGY AND OTHER KNOW-HOW, INCLDING ROBOT LIFE/INTELLIGENCE PROCESSE AMONG ROUTINE TRANSFORMATIONS

Figure 7. The financial/technical capital delineation

The “nation-state” format is traditional setup. Once backed by fitting sovereign legality, the value chains profit of makeover and administration steps, joining *technical* revolutions and *social* breakthroughs [43], in view of organised governmental structures [20]:

- the “agrarian produce” stage, purposely selecting sets of biotic samples/cycles;
- the “industry product” span, manufacturing useful objects, from raw materials;
- the “business stability” rank, contriving fair and effective trade establishments;
- the “law cohesion” class, ratifying right/duty balanced governance institutions.

NATURAL CAPITAL: THE STOCK OF POTENTIAL WEALTH, EXISTING IN TANGIBLE RESOURCES, PILED-UP ON EARTH OR GOT BY PROCESSING/REPROCESSING THE EXTANT MATERIAL FONTS

VALUE-CHAIN SYNTHESIS: ARTIFICIAL LIFE/INTELLIGENCE ROBOT-CENTRED TRANSFORMATIONS

SUSTAINABLE CORPORATIONS: “TO DEMATERIALISE”/”TO REMATERIALISE” ECO-MANAGEMENT

Figure 8. The natural capital: main features

The ecology globalisation shows that “sovereignty” is babble: *private* or *public* ownership is unqualified. The qualification is out of the “nation-state” privileges; it is *global village* prerogative. The on-the-go supply chains need to compute plus-value, including the “natural capital”, Figure 8. The reviews are man centred; the extension entails recycle/remediation upshots, by “to rematerialise” and “to dematerialise” measures [42]. The man centred obligations imply the *global village* ruling, whatever enacted by the “nation-states”. The “sovereignty” is blasphemy, because the rights and duties on the planet’s contamination and habitableness cannot be authorised at split-sovereignty range. The “nation-state” format becomes nonsense, causing total upturn of the until today used value chain setups [47], if the global ecology becomes imperative constraint the world over

5. Progress Safe Running

The progress has to provide life-quality *artificial* improvements, creating value-added by the *transformation economy*, applied to natural resources and *socio-political arrangements*; the all modifies the extant collective assemblies by relational inventions. In lieu of *absolute*, civilisation denotes *contingency* virtues. Progress is provisional fact; its unassailability has to face enduring extra challenges, [26], in view to manage the ecology constraints at *global village* extension:

- the “growth sustainability”, linked to surrounds’ depletion/pollution fallouts;
- the “qualifying innovations” for technology changes and social modifications.

The two goals are interlaced. The former starts by assessing over-depletion/pollution figures. Many metrics are in use: “TYPUS” is example one, Figure 9. The latter is tough challenge; as above said, the current capital assets are man’s centred and help specifying the *legality* by “nation-state” formats [11].

▶ “TYPUS” TANGIBLES’ YIELD PER UNIT SERVICE;

▶ THE APPRAISAL COVERS THE TANGIBLE SUPPLY CHAIN, FROM THE PROCUREMENT TO THE RECOVERY; EACH DELIVERED PRODUCT-SERVICE HAS LINKED FIGURES, ASSEMBLING RESOURCE DEPLETION AND FALLOFF, REQUIRING “TO REMATERIALISE”/”TO DEMATERIALISE” REMEDIATION.

Figure 9. Example over-depletion/pollution metrics

If *contingency* ruled, the “sovereignty” and law authenticity define by “Constitutions”, blow-up deserving *a posteriori* “utility” checks. Indeed, supremacy on *relative* basis is weak result, exposed to tests and verdicts. Yet, below the top rank, the “collective orders” grant skilful *regularity* to the entailed persons and businesses. The links build on *relational* cogency, not on *causal* bonds, since rooted in men *intelligence*. The political range does not explain progress, Figure 6, if only “collective order” details operate; the economic one is, instead, central process. At economic range, “trade” invention is as fundamental *relational* tools: these happen telling the human anomaly, opposed to all the other living beings, as if, after *communication*, *business* is intrinsic “intellect” singularity. The queries are elusive with *absolute* and *contingent* proxies; the *domestic*, *expert* and *administrative* demeanours offer *private* (interpersonal) and fittingly *official* (contractual and civic) worth [35]: the “sovereignty” does not look enjoying intrinsic force out of the political grade.

The *public* red tape enjoys governance sanctions. This is why the political order has supremacy, as the one warranting official *sovereignty*. The “law” regulation is open query, basically, unsolved, unless

with resort to on-duty governments. Yet, the history teaches that men value-added growth does not limit to *sovereign* regularity. Science and technology are “culture pieces” independent on “concession” and “patent” recognition; moreover, among “ethics artefacts”, relevant *relational* options do not require sovereignty. Besides, the *sovereign* regularity of fiscal manoeuvring, when governments use *solidarity* macroeconomic measures with huge indebtedness (up to GDP, *gross domestic product*, or more), transforms in a claptrap, with resort to the fiscal tricks (following the “IBG|YBG, “*I’ll be gone/you’ll be gone*” rule) of the *structured* products [19]. Yet, the political grades manage the “big state”, but not the “big society” odds.

Ecosustainable Corporation

The “nation-state” format organises growth by managing *legality* via “sovereignty”. The multi-law option is consistent with split-sovereign countries, having *pre-set* worth. Or, rather than with multiple-reality, we may deal with split-actuality, allowing stage’s parting, to play different acts. Yet, the *global* economy, already, shows the inconsistency of the choice, because the finance flow interconnection obliges the “nation-state” to share supply chains and wealth controlling chances. The top-down *political* pick converts in drawbacks, notably, with stiff debt onuses; the bottom-up *civic* options are better substitute, if flexibility permits adapting the social frames, by *contingency* projects and dealing with single (natural/human) sets of laws. Today, *global* ecology, definitely, requires dropping the split-sovereignty formats [7].

The bottom-up *civic* options permit empowering inclusive arrays, towards “open society” setups; the *big society* outfits replace the *big state* running; *private* efficiency avoids *public* bureaucracy redundancy. The eco-consistency deals with unified *global village* entreaties, never bypassed by split-sovereign bylaws. The “sustainable corporation” is *big society* solution, with blow-up “legality” management, based on *settlement councils’* monitoring and *certifying bodies’* control. The inclusive route profits by decentralised operators and devolved liability entrepreneurship [14]. The value chain includes [47]:

- to design legal manufacture cycles, under a resource manager liability;
- to avoid dumping, planning closed flows, chaining outputs into inputs;
- to invent official supply chains, under controlled stuff/energy feeding;
- to deliver “functions” that replace “goods”, under an unified overseeing;
- to furnish lifecycle service, fulfilling the maintenance and refurbishing;
- to perform reverse logistic duties, within mandatory regaining targets.

The *official* worth can totally be rooted in *contractual* dealings, by “sustainable corporation” monitoring and control. In the immediate wiles, the *civic* procedures may apply, allowing smooth transition from split-governance, to *global village* ruling, [28], via pace wise ecology safe control.

6. Conclusion

In the survey, the “relational” model is hypothesis, with *contingency* soundness, offering higher reliability than the *absolute* frames of the godly dualism or of the immanent monism. The results are handy, [50]. Unaware, absent-minded observers recognise *global* communication adventures, which entail the everyday life of the earth’s inhabitants, as individuals or communities, in national countries or at trans-national ranges. The trend is novel. Earlier, having a good job means being staff of a strong company. The industrial revolution creates huge firms, bringing many workers under the same orders, perhaps, within different “nation-states”. This was a step down for many crafts workers, who could no longer compete with machine made goods, [48]. Companies brought in a new stability: a makeup, which discerns jobs from one another better than before. However, firms make sense, if the cost of organising things internally via hierarchies is less than the price of buying special purpose items from the market; they are a way to deal with transaction fees, once you need standard duties, for stable clients [37]. The “specialisation” is challenge.

The trend again modifies. The computer age fosters “on-demand firms”, which exploit process low cost,

to provide spot services. They still face regulatory and administrative problems with split-sovereign states; lack of qualification, if confined at low prices; size bonds, if subjected by service loyalty; and, in general, *political* vs. *economic* hindrances, due to governance/contractual mixing, [47]. The *knowledge economy* shall be next onset. The “service” provision relays on individuals and on intangibles. It takes advantage of qualification, being worthy supplying tasks, [62], when broad-spectrum enterprises dismiss marginal capabilities, [66]. Officialdom and trade unions shall adjust their strategies towards “on-demand firms”, losing strict control on the allotted fields, say, the citizenship public regulation and the contractual typified guidelines [44].

The *global* economy, already, fosters the changeover of the “sovereignty” institutes. The linked analysis looks at impending *global* ecology: the political range does not grant sustainable *progress*; the changeovers require addressing combined innovation [37]:

- the *technical* skills, i.e., actions granting recycle and reintegration upshots;
- the *social* consistency, i.e., collective orders aimed at safe eco-management.

The former line of actions has to aim at “to rematerialise”/“to dematerialise” remediation: it has to do with the “cognitive revolution” and explanations via robot technology innovation. The linked outcomes are necessary, but not sufficient. The latter line is challenge not yet fully discussed and understood; the present note tries to supply preliminary hints on the matching requirement: the “global breakthrough”. This has loose conditions in fitting current trends: the inconsistency of the sovereignty (or split-sovereignty) issues; the *global* communication promises; the financial tricks of the inter-state structured products, [49]; and the incoherence of the presumed top political ruling, when the *global village* entails unifying the economic restrictions, because of the fused ecologic driving constraints. The topics, perhaps, still require deepening, but, even if only at provisional range, the eco-sustainability cannot avoid discussing the *global village* prospects, with linked split-sovereignty removal, [51].

The progress depiction in the survey, mostly, refers to the cognitive creativity, once collective, [63], and private, [64], relational modes fittingly complete the special manufacture and general effecting skills of the humankind, allowing worthy wellbeing improvements [65]. The growth seems outcome of biology, [60], possibly, helped by robots, [59], when the conscious intelligence allows selecting improvements, while avoiding drawbacks [61]. The approach appears overweening the human intelligence or neglecting the real boundedness of the human actuality. The progress investigation needs alternate coherent pictures, e.g., [53] or [55], with the explicit relevance of the manufacture transformations, [52] or [54], showing linked depletion and pollution fallouts. The prospected analyses tell that, for viable progress the awareness of the cognitive creativeness is merely optimistic reading of the “*uomo avvisato, meo salvatto*” aphorism (*alerted men, half rescued*): this allows replacing the the affluence objectives of completion autonomous nation states, by the thriftiness of the uniform global village, [57]. The recovery and salvage has to resort to suited robotic aids, [56], supplying interplanetary resources and cognisant attention, [58]. The robot-actuated aids, [59], are relevant aspect of the devised ways out, allotting remedial virtues, with practical efficiency.

References

- [1] Micheline R.C., Razzoli R.P., 2000, *Affidabilità e sicurezza del manufatto industriale: la progettazione integrata per lo sviluppo sostenibile*, Tecniche Nuove, Milano, pp. XII-278.
- [2] Micheline R.C., Crenna F., Rossi G.B., 2001, *Diagnostics for monitoring maintenance and quality manufacturing*, C.T. Leondes, Ed.: Computer Aided Design and Manufacturing: Techniques and Applications, vol. I, pp. 5.01-5.66, CRC Press, Boca Raton.
- [3] Micheline R.C., Acaccia G.M., Callegari M., Molino R.M., Razzoli R.P., 2001, *Computer integrated assembly for cost effective developments*, C.T. Leondes, Ed.: Computer Integrated Manufacturing, Vol. II, pp. 2.01-2.68, CRC Press, Boca Raton.
- [4] Fukuda T., Micheline R.C., Potkoniac T., Tzafestas S., Valavanis, K. Vukobratovic M., 2001, *How far away is 'Artificial Man'*, IEEE Robotics & Automation Magazine, vol. 7, n°1, pp. 66-73.
- [5] Micheline R.C., Kovács G.L., 2002, *Integrated design for sustainability: intelligence for*

- eco-consistent products-and-services*, EBS Review, Estonian Business School, Tallin, n°15, pp. 81-95.
- [6] Micheline R.C., Kovács G.L., 2003, *Intelligent integrated design for sustainability: products-services*, 5th Intl. Conf. Computer Science and Information Technologies, Ufa, Russia, Sept. 16-18, vol 1, pp. 31-38, ISBN 5 86911 429 9.
- [7] Micheline R.C., Razzoli R.P., 2004, *Product-service eco-design: knowledge-based infrastructures*, Intl. J. Cleaner Production, Elsevier, vol. 12, n°4, pp. 415-428.
- [8] Micheline R.C., Kovács G.L., 2004, *Product-service for environmental safeguard: a metric to sustainability*, Intl. J. Resources, Conservation and Recycling, vol. 42, n°1, pp. 83-98.
- [9] Micheline R.C., Kovács G.L., 2005, *Information infrastructures and sustainability*, in L. Camarinha Matos, Ed., *Emerging Solutions for Future Manufacturing Systems*, Springer, Berlin, pp. 347-356.
- [10] Anufriev A, Kopčesi S., Kovács G.L., Micheline R.C., 2005, *Ambient intelligence: enabling technology in modern business paradigms*, J. Robotics & Computer Integrated Manufacturing, Elsevier, vol. 23, n. 2, pp. 242-256.
- [11] Micheline R.C., 2008, *Knowledge entrepreneurship and sustainable growth*, Nova Sci. Pub., New York, 2008, p. xviii-325.
- [12] Micheline R.C., Razzoli R.P., 2008, *Innovation for sustainability in product lifecycle design*, in G. Cascini, Ed., *Computer-Aided Innovation*, Springer, Boston, pp. 217-228.
- [13] Micheline R.C., Razzoli R.P., 2009, *The service net facility integration appraisal*, Intl. J. Services, Economics and Management, vol. 1, n°4, pp. 371-392.
- [14] Micheline R.C., 2009, *Robot-age knowledge changeover*, Nova Sci. Pub., New York, 2009, p. xvi-344.
- [15] Micheline R.C., Razzoli R.P., 2010, *Environment-enterprise integration: networked entrepreneurial opportunities*, in F.Teuteberg, J.M.Gomez, Eds., *Corporate Environmental Management Information Systems*, IGI-BSR Pub., Hershey, pp. 347-364.
- [16] Micheline R.C., 2010, *Knowledge society engineering: a sustainable growth pledge*, Nova Sci. Pub., New York, p. xvi-350.
- [17] Micheline R.C., Razzoli R.P., 2010, *Industrialism reduction either complexity patterns*, in M.M.Cruz-Cunha, Ed., *Social, Managerial & Organizational Dimensions of Enterprise Information Systems*, IGI Pub., Hershey, Chap. 17, pp. 329-351,
- [18] Micheline R.C., Razzoli R.P., 2011, *Lifecycle design-driven eco-protection*, Intl. J. Environmental conscious design & manufacturing, vol. 14, n°3, pp. 66-85.
- [19] Micheline R.C., Razzoli R.P., 2011, *Integrated design: lifecycle ecoconsistency*, WSEAS Transactions on Environment and Development, Vol. 7, Issue 9, pp. 275-284.
- [20] Micheline R.C., Razzoli R.P., 2012, *Cognitive revolution: prosperity and sustainability*, Intl. J. Productivity Management & Assessment Technologies IJPMAT, vol. 1, n. 3, pp. 87-103.
- [21] Micheline R.C., Razzoli R.P., 2012, *Formation and information of value-aided attainment*, Intl. J. E-Business Development IJED, Vol. 2 n. 4, pp. 145-154.
- [23] Micheline R.C., Razzoli R.P., 2012, *The mankind growth consistency: outlook on political sceneries*, Int. J. Information Resources Management, vol. 25, n. 2, pp. 69-84.
- [24] Micheline R.C., 2012, *Society progress evolution: sustainability and responsiveness*, Nova Sci. Pub., New York, p. xxxi-418.
- [25] Micheline R.C., Razzoli R.P., 2013, *Relational deployments towards cognitive global frames*, Intl. J. Systemics, Cybernetics & Informatics, vol. 11, n. 1, pp. 1-3.
- [26] Micheline R.C., Razzoli R.P., 2013, *Extended enterprise lifecycle reliability: the KILT model and TYPUS metrics*, Intl. J. E-Business Development IJED, vol. 3, n. 3, pp. 108-115.

- [27] Micheline R.C., Razzoli R.P., 2013, *Entrepreneurial social and organisation inklings*, Information and Communication Technologies for the Advanced Enterprise: an international journal, vol. 3, pp. 35-51.
- [28] Micheline R.C., Razzoli R.P., 2013, *Social breakthrough to global collective order*, Intl. J. Systemics, Cybernetics and Informatics, vol 11, n °5, pp. 13-19.
- [29] Micheline R.C., Kovács G.L., 2013, *Lifecycle eco-services for sustainability*, Int. J. Service Science & Management Research, SSMR, vol. 2, n. 4, pp. 48-56.
- [30] Micheline R.C., Razzoli R.P., 2014, *Eco-design and management of supply chains: devised extended/virtual corporation innovation developments*, Intl. J. Economics & Management Engineering, IJEME, vol. 4, n. 2, pp. 42-50.
- [31] Crenna F., Micheline R.C., Razzoli R.P., 2014, *Robot-driven cognitive revolution: sustainable growth images*, Int. J. Reseaches in Computer Engineering & Electronics, vol. 3, n. 3, pp. 60-65.
- [32] Micheline R.C., Razzoli R.P., 2014, *Understanding growth by KILT model & TYPUS metrics*, Intl. J. Universal Computer Science, JUCS, Graz University of Technology, June. 2014, Vol. 20, No. 6, pp. 924-940.
- [33] Crenna F., Micheline R.C., Razzoli R.P., 2014, *Description and measurement of progress sustainability*, Int. J. Research on Precision Instrument & Machinery RPIM, vol. 4, n. 6, pp. 5-11.
- [34] Micheline R.C., Razzoli R.P., 2014, *Supply chain transparency: the eco-sustainable corporation*, Information and Communication Technologies for Advanced Enterprises: an international journal, vol. 4, n. 2, pp. 27-39.
- [35] Micheline R.C., Razzoli R.P., 2014, *Growth vs. spoil: knowledge sceneries*, Int. J. Environmental Engineering Science & Engineering, vol. 2, n. 5, pp. 1-14.
- [36] Crenna F., Micheline R.C., Razzoli R.P., 2014, *Robot driven cognitive revolution: sustainable growth images*, Intl. J. of Research on Computer Engineering and Electronics, IJRCEE, Vol. 3, n. 3, June 2014, pp. 300-305, 2014, ISSN 2319 376X.
- [37] Micheline R.C., Razzoli R.P., 2014, *Anthropoid odds: robotics & cognitive revolution*, Intl. J. Engineering Research & Management, IJERMS, Eclat Research Pub., Jaipur, Aug. 2014, Vol. 1, No. 5, pp. 177-185.
- [39] Crenna F., Micheline R.C., Razzoli R.P., 2014, *The sustainability bet: eco-project management*, Intl. Conf. on Project Management ProjMan 2014, Procedia Technology, Elsevier, Vol. 16, pp. 934-942.
- [40] Crenna F., Micheline R.C., Razzoli R.P., 2014, *Decision support aid for eco-reliable product-service delivery*, Intl. Conf. Enterprise Information Systems CenterIS 2014, Elsevier, Procedia Technology, Vol. 16, pp. 199-205.
- [41] Micheline R.C., 2015, *Economy plans and growth features*, Int. J. Higher Education of Social Science, HESS. Vol. 8, n. 3, pp. 37-48, ISSN 1927 0240.
- [42] Micheline R.C., Razzoli R.P., 2015, *Progress continuance sustainability*, American Journal of Industrial and Business Management AJIBM, vol. 5, n 12 pp. 829-838.
- [43] Micheline R.C., Razzoli R.P., 2015, *Industrialism reduction either complexity patterns*, in M.M.Cruz-Cunha, Ed., *Social, Managerial & Organizational Dimensions of Enterprise Information Systems*, IGI Pub., Hershey, Chap. 17, pp. 329-351
- [44] Micheline di San Martino R.C., 2016, *Cognitive revolution quest: human civilisation prospects*, Aracne Ed., pp. vi-357, Roma.
- [45] Belotti V., Micheline R.C., Razzoli R.P., 2017, *Relational modes and thrifty progress*, Int. J. Application Innovation in Engineering & Management, vol. 7, n.1, pp. 131-146, ISSN 2319 4847.
- [46] Micheline di San Martino R.C., 2017, *The relational trails to sustainability*, Intl. J. Sustainable Entrepreneurship and Corporate Social Responsibility (IJSECSR), vol. 2, n. 1, pp.0.14,

<https://www.igi-global.com/article/the-relational-trends-to-sustainability/203606>.

[47] Michelini di San Martino R.C., 2018, *Civilisation modes and ecology constraints*, Intl.J. Historical Archaeology & Anthropological Sciences, Vol. 3 Issue 6, pp.803-812.

[48] Michelini di San Martino R.C., 2018, *Business sustainability and frugal chances*, Int. J. of robotic engineering, May, vol. 2, n 5, pp. 1-11, ISSN 2631-5106, <https://www.vibgyorpublishers.org/content/ijre/ijre-3-006.pdf>.

[49] Michelini di San Martino R.C., 2019, *Humankind engineering and management: robotic track*, Journal of Robotics and Automation, July, Vol 3, n. 1, pp. 83-98, <https://scholarlypages.org/journal.php?jid=robotics>.

[50] Michelini di San Martino R.C., 2018, *Progress bases: biology and cognition*, Intl. Robotics & Automation J., Vol. 4 Issue 6, pp. 358-366.

[51] Michelini di San Martino R.C., 2020, *Anthropic advances: global robot driven rescue*, Int. J. of robotic engineering, Feb.y, vol. 5, n 1, pp. 1-15, ISSN 2631-5106, <https://www.vibgyorpublishers.org/content/ijre/ijre-3-006.pdf>.

[52] Michelini di San Martino R.C., 2021, *Manufacture paths: robotics & sustainability*, in M.A. Mellal, Ed., *Advanced Manufacturing: Progress, Trends and Challenges*, Nova Sci., New York, chap. 7, pp. 126-188, ISBN 978 1 53618 923 0.

[53] Michelini di San Martino R.C., 2020, *Progress queries and sustainability: basic views*, Intl. J. Clinical Studies and Medical Case Reports, vol. 6, n. 4 12.1-8, Kasetsart, USA pp. 130-136. ISSN 2692-5877.

[54] Michelini di San Martino R.C., 2021, *Manufacture/relational modes: robots & sustainability*, Intl. J. Research Studies in Science, Engineering & Technology, vol. 8, n. 1, pp. 9-22,, ISSN 2349 476X

[55] Michelini di San Martino R.C., 2021, *Progress management and ecology sustainability*, Int. J. of Medical and Clinical Studies, Apr. 22, vol. 4, n 3, pp. 1-15, ISSN 2692-5877, ijclinmedcasereports.com.

[56] Michelini di San Martino R.C., 2021, *Robot-like construal and civilisation*, Client Periodic Quarterly Medicine, CPQMe, vol. 12. n. 2, June 22, pp. 1-17.

[57] Michelini di San Martino R.C., 2021, *Thrifty hedaway: Robot cooperative aids*, Client Periodic Quarterly Medicine, CPQMe, vol. 12. n. 3, July 27, pp. 1-29.

[58] Michelini di San Martino R.C., 2021, *The robot awareness sustaunability*, Intl. J. Education, Business & Economics Research IJEBER, vol. 1, n. 1, Nov., pp, 49-71, 1 IJEBER www.ijeber.com.

[59] Michelini di San Martino R.C., 2021, *Robots: aware headway and and viable reccovery*, J. Bioscinves & Biomedical Engineering, Nov., vol. 2, n.4 , pp.1-12, <https://unisciencepub.com/storage/2021/11/Robots-Aware-Headway-and-Viable-Recovery.pdf>, ISSN 2693 2504.

[60] Michelini di San Martino R.C., 2022, *The relational hypothesis of uuman societies*, Biomedical Jornal of Scientific & Technical Research, vol. 40, n. 1, pp. 1-18, ISSN 2574 1241.

[61] Michelini di San Martino R.C., 2021, *Progress by alert and conscious robots*, IAR J. Adv. Crop Sci. Techno., vol. 2. n. 11, Nov., pp. 1-17, IAR Consortium, ISSN 2789 5963.

[62] Michelini di San Martino R.C., 2021, *Thrifty headway: cooperative robotics*, International J. Emerging Engineering Research and Technology, vol. 10. n. 1, Jan., pp. 1-4, <https://www.ijeert.org/v10-i1>, ISSN 2349 4395.

[63] Michelini di San Martino R.C., 2022, *Sustainability defy: life quality courses*, Client Periodic Quarterly Medicine, CPQMe, vol. 12. n. 6, April 27, pp. 1-21, <https://www.cientperiodique.com/journal/currentissue/medicine>.

[64] Michelini di San Martino R.C., 2022, *Anthropic puzzling want of sustainability*, Current Research

- Journal of History, vol. 3. n. 4, April 22, pp. 25-40, <https://doi.org/10.37547/history-crjh-03-04-06>.

[65] Michelini di San Martino R.C., 2022, *Sustainable pathway by managing robots*, The American Journal of Engineering and Technology, vol. 4. n. 4, April, pp. 36-57, <https://doi.org/10.37547/tajet>.

[66] Michelini di San Martino R.C., 2022, *Feasible progress: effecting & relational methods*, Frontline Social Sciences and History Journal, vol. 2. n. 4, April 22, pp. 14-47, <https://doi.org/10.37547/social-fsshj>.