

# Collective Orders and Human Organisation Challenges

RINALDO C. MICHELINI & ROBERTO P. RAZZOLI

Department of Mechanics and Machine Design

University of Genova

Via Opera Pia 15/a, 16145, Genova

ITALY

michelini@dimec.unige.it, michelini@dimec.unige.it <http://www.dimec.unige.it/PMAR>

*Abstract:* - The civilisation is bewildering accomplishment, rooted in voluntary measures that men conceive and apply to the surrounds, aiming at improving their life-quality. The paper gives an overview of how the artificial mind worlds coherently prefigure such (actually ascertained) happening, with, nevertheless, emerging construal ambiguities. The devised pictures are background of increased concern about the man civilisation continuation. The sustainability of the growth is impeding threat, produced by the ecology globalization, viz., the vibrant alarm on bio-sphere (today mistrusted) reliability. In truth, several reasons exist for fear about future growth, especially, when considering the advanced countries, too much used into undiscerning faith about financial instruments. The ecology comes to be sharp intruder in the economy globalisation prospects, worsening the already actually serious events. The analysis, without hiding the critical character of the challenge, is somehow comforting. The progress, if organised on merely a posteriori rationales, will persist, on condition of ground-breaking discoveries of the man intelligence. The «cognitive revolution» is a devised up-turn, offsetting the current industrialism over-pollution and over-consumption, by means of the «to de-materialise» and the «to re-materialise» routines of the robot age technologies.

*Key-Words:* - Collective Order, Human Civilisation, Economy Globalisation, Sustainable Growth, Cognitive Revolution, Meme Evolution

## 1 Introduction

The human civilisation is difficult to manoeuvre accomplishment, bringing forth prosperity and efficiency by intentional modification of the original natural order of the wilderness. A conventional recognition of the changes moves through «culture» formation, i.e., the man capacity of creating processing know-how, to transform the surrounding resources and to offer value-added provisions and amenities. We may quote the archaic «agricultural» revolution, taming savagery and fostering domestication; and the modern «industrial» revolution, fashioning energy and controlling manufacture. A (perhaps) less conformist reading looks at «ethics» construal, i.e., the human ability of creating relationships, to assess collective orders and to define principled demeanour. We may quote the primeval «social» breakthrough, using the group selection, to arrange sectional political cohesion and in-progress sovereign nation-states, to classify the world over all the citizens [1], [2], [3], [4].

Indeed, «culture» and «ethics» are *artificial* inventions, not included by the primordial background. They establish as new oddities, which characterise the man «relational intelligence». We

might accept that they are God's gifts, so the civilisation follows as attainment ruled from above. Remaining on *a posteriori* facts, the oddness is rather entangled, and the related accomplishments are hard to appraise, unless assuming creative intellectual deployments, in-progress enabled by the humanity. For now, the quality «artificial» means man planned his *intellectual* wherewithal. Thereafter, the world progress is appraised through the enjoyed life-quality, viz., the privileged circumstances built by the men, yielding intentional prosperity and authenticity, relative to the earth original dearth and wilderness [5], [6], [7], [8].

The deliberate improvements exploit the additive knowledge sharing, by communication and appraisal of the collective mind worlds. The man distinguishes from the other living beings, because of scholarly and empathic training. The affluence and influence build on competence and productivity. The society organises on a series of artificial constructions: business project, indorsed corporation, lawful entrepreneurial cluster, etc., with nation-state ruling, bureaucracy steering and legal institution measures. The progress is not at all inborn; the government-and-company competitive

arrangements need to evolve, incorporating updating from technology, administration, economy, management, ecology, etc. sources, all planned contrivances, purposely invented by the man *intellectual* ability [9], [10], [11], [12].

In truth, the civilisation is combined issue of political arrangements, establishing cohesion orders, and of economic organisations, allowing fair affluence and influence balance. The progress is *artificial* paradigm, brought forth by the relational intelligence of the *Homo Sapiens*, an awkward talent, which discriminates human frames from all other living-beings. The paper intends analysing how the combined issue develops, figuring out hypotheses for future deployments. The ecology, pointing out the over-consumption and over-pollution practices of the industrialism are impending warning, making growth sustainability crucial theme of current citizens. The progress continuance is bet, rooted in the past proficiency. Technology innovation is crucial, for sure, but together with the other peculiar issues of the *relational intelligence*.

The discussions carried out by the paper correctly look at the fancy build-up of our planned constructions, conventionally assessing on-the-go progress. The survey covers the tricky cross-links of *collective orders* and acknowledged *rationality*, viz., respect and dependence assigned to mind objects expressing culture and ethics. Subsequently, our relationship with the external world is shortly tacked, because we need some sort of certainty about the *real* consistency of what is perceived, to trust in the planned improvements. In the following, the substantiation moves to *intelligence* enabled processes, with especial focus on political cohesion rules, necessary foundation of the organised effectiveness. Last, the conditional framework of the human progress continuance is sketched, using an overview of existing economy globalisation drawbacks, to enlighten the requirements imposed by the impending ecology globalisation. The topics repeat known facts, only, perhaps, assembled with unusual construal.

## 2 Progress and Collective Orders

The *artificial* character of the *progress* benefits are conventional statement, because we might, as well, better appreciate the *natural* wilderness. Thus, the judgement entails the set of stimulated changes that support thriving life-quality by speculative changeovers. The abstract makeup of mind worlds proposes that *intelligence* is further discontinuity occurring on earth after *life*. With the first break, the

*natural selection* promotes *the differential amplification of specific features within a population of items, to enhance the fitness to the surrounding stimuli*. The principle understands the *agentive character* of the life phenomena, saying that the extant traits of the living beings are adaptive: the *gene evolution* develops along with the *genome* information modifications. The physiology variations (such as immune worth) might exploit *clone growth*, fostering *somatic fitness* at the individual range, by *virome* adjustments.

The second break establishes on neuronal deployment (*fit* for intelligent behaviour); it generates the *mind categories*. All the processes are *creative*, bringing forth extension of the *fitness* features. The creation of the increased *fitness* (locally) opposes to the entropy growth. The *life* structures establish *ordered* living bodies, characterised by *inborn* *order imprint* (identified by the DNA); the *gene evolution* leads to the species (with inherited characters); the *physiology adaptation* carries out somatic changes limited to the individual. Besides, the *knowledge development* ends in culture and ethics objects, which are shared as collective heritage, implemented with *intentional* *order imprint*. The discontinuity yields such awkward *intelligence* institutions, as trade tenet regulation and political cohesion organisation. No other animal conceived money and administration [13], [14], [15]. [16].

The intangible culture and ethics objects show the man centred roles, along with the progress *invention*. We might list the ownership and tenure institutes or the authority and jurisdictional frames, to exemplify purposeful cognitive innovation and authenticity prospects. For sure, the intellectual activity has total freedom inventiveness. The knowledge society easily emerges, once its rational effectiveness is stated, and the sustainability demands (citizens' imperatives and manufacturers' responsibility) shall follow, with the tied changeovers in (robot age) technology upgrading and (global village) political conversion. We are too much confident in the logic of the primeval *social* breakthrough, perhaps, to suppose that the astonishing *inventions*, such as the conceived languages or the settled bureaucracy, are intrinsic chances.

Yet, the *intelligence* institutions are invasive preconditions of the civilisation beginning and progression; markets and governments are totally *artificial* compositions, settled because of recognised *utility*. Their back-up moves through the foundation of *authority*, endowed of accepted

⟨authenticity⟩. The ⟨king by grace of God⟩ or the ⟨nation by race validity⟩ do not have clear-cut proofs. Once dropped transcendental and immanent truthfulness, governments require *a posteriori* legitimacy, with intended settlements among the involved citizens. The *deliberate* ⟨order imprint⟩ is purposeful alteration, get done by ⟨group selection⟩, as the inner co-operation granted synergic advantage. The planned ties tell apart fellow citizens from alien individuals, giving rise to *sovereign* countries and *loyal* nations. The *artificial* construction requests decisive resort to lawful conduct: responsive governance and civic mindedness [17], [18], [19], [20].

The western-style success of the modern ⟨industrial⟩ revolution is greatly affected by the related ⟨nation-state⟩ organisation, creating competition advantage at a governmental form range. The results happen to be impressive, so that some scholars theorised a *gene* motivation, giving rise to the *social* Darwinism, not really proved by the *genome* project results. Most likely, the ⟨chosen people⟩ tale just shows that especially effective social organisations assure contest promotion. Anyway, the political cohesion effectiveness turns out as a changeful prospect, with striking effects, according to subtle ⟨modernisation⟩ hypotheses, which state that consensus is directly tied to education and income (by cause-effect relationship or by correlation estimates).

Along with the ⟨modernisation⟩ lines, the parliamentary democracy occurs to be the especially *fit* stage of the recent European nation-states. ). Could it be that schooling, by making people less willing to put-up with restriction on individual freedom and more willing to question authority, promotes democratisation? A more tricky hypothesis suggests a different view, not necessarily aiming at the standard (parliamentary) democracy. Education deepens the awareness and sense of ethnic identification, and increases the spirit of political belonging and membership tolerance. The civic life and opinionated grouping are basic features, at odds with the critical determination, issued by personal instruction and strength of mind. The ⟨collective⟩ order choice of the (parliamentary) democracy is just ⟨modernisation⟩ stage, fostered by the western-style society success of the industry age, combining united competition at a fragmented sovereignty span.

In fact, today the effectiveness range moves towards a continental size, having USA, Russia, China or India consistency. The related ⟨modernisation⟩ required assembling the EU, however, with some odd hesitation in sharing

prospects, to exploit previous inner chances. In fact, the devised collective order moves by ill-at-ease course, joining ⟨common market⟩ and uniformity competition rules, with independent tax systems and internal revenue management. Citizens (and domestic companies) endure unfair situations, having biased charges, depending on the nation-state inner comfort and efficiency. The political cohesion, thereafter, is encompassing a suitably wide assembly; this grants cross-border effectiveness to bigger companies, with access to international finance market; it in-progress marginalises the home entrepreneurship, too much linked to the local nation-state sphere and extant fiscal regime.

The co-existence of cross-border actors and sectional sovereignty is paradox, making the UE ineffective, unless the related political cohesion develops into self-contained collective order. However, the outlined analysis merely deals with economic globalisation constraints. Indeed, the ⟨financial⟩ adequacy is just an element pushing to revise the nation-state size. The growth sustainability brings-in ecologic globalisation restrictions, totally modifying the split-sovereignty course [21], [22], [23], [24].

The above recalled ⟨modernisation⟩ schemes update the current ⟨collective order⟩, to improve the on-the-go effectiveness, enhancing the value-added gained by transforming the earth resources. The industrialism proficiency comes from exploiting *artificial* energy, so that the processes do not limit their outputs to the natural pace, but can be speeded-up to man-planned productivity. The prosperity becomes deliberately set achievement, with, nevertheless, *over-depletion* and *over-effluence*, compared with the *natural* recovery and refurbishing. Needless to say that the decay and pollution are transferred to third people, in regard to actual consumers, and, principally, to unaware persons and future generations. The ecologic globalisation makes clear the necessity of self-reliant ⟨natural capital⟩ balances, imposing, by manufacturer's lifecycle responsibility, suited charges on actual consumers, to repay their produced decay and pollution (and not to cheat blameless present or upcoming natives).

The ecology constraints are totally new requests. The CO<sub>2</sub> effluence has worldwide effects, and the global warming is acknowledged impending threat. The local (more or less segmented) sovereignty cannot decree charge exemptions or privileged withdrawal conditions. The *unfair* ⟨modernisation⟩ stage, entailing the EU face to economy globalisation constraints, replicates with critical

effects, involving the *global village*, due to ecology globalisation demands. In the time to come, if sustainable growth planning makes sense, the aim of *fair* <political cohesion> clashes against the concept of split-sovereignty, because no one is <certainly> safe, face to the earth <natural capital> management, done elsewhere in bio-sphere. We shall later come back on the question, outlining the (hoped) <cognitive> revolution, adding to the <agricultural> and <industrial> ones, to rebalance the <natural capital> exploitation, consistent with principled tenures. The survey, now, goes on summarising some backdrops, affecting the human life-quality course.

### 3 Managing the Tangibles

The progress continuance requires consistency of the wealth creation process, viz., steady regularity of the surroundings, from where withdrawing the indispensable resources. The proposition might appear obvious, and it is pleonastic, if we believe in the science models and in the man ability to be actor of his wellbeing. In reality, we may trust the consensus about (timely accepted) <natural laws>, and we can check the effects of their application. But: is scientists' shared accord sufficient for the <laws> (absolute) truth? The question is often bypassed, as irrelevant. Moreover: do exist outer objects (as independent items), or are they merely concepts, with attached <names>? In biology, do <species> exist (with real diversity among the living beings), or the classified variety is just theoretical construct? In social sciences, do collective assemblies (companies, mutual groups, etc.) have autonomous rights/duties, or the only individuals are responsible entities? The answers go beyond the survey limited purposes, and we move further according to plain <realism> [25], [26], [27], [28].

The <realists> believe that items exist, because they share the <real> property of the being; the <anti-realists> deem that the concepts that distinguish objects are just mind categories, assigned by the observers (with shared conventions, after educated instruction). The realistic economists care for corporate responsibility; the anti-realistic ones look only after the manager liability. The <semantic realism> is equally complex: is the principled truth <universal>, or does it depend on the shared conventions (recognised culture and accepted ethics)? So, persons of unrelated culture/ethics shall follow their righteous demeanour and cannot be blamed (punished) for that. Can (or cannot) have juridical self-consistency, concepts, such as: multinational corporation, social class, etc.? The

plain <realism> simplifies the frames, itemising the <reality>, if useful.

On those assumptions, the <agricultural/industrial> revolution transformations differ on the tied entropy, due to the animate or inanimate main tracks. As already noticed, industrial revolution permits *man-made* creation of prosperity, by <artificial energy>. The conformist source resorts to the earth fossil stocks (and, lately, fissile ones) piled up during the past eras. From these stocks, controlled thermal energy is obtained, and (partially) transformed into (mechanical and) electrical energy; the process downgrades the original stocks into waste/pollution and (directly/indirectly) raises the world temperature.

Accordingly, the <artificial energy> option progresses, with the burning-up of <non-renewable> resources, since the production of the looked-for prosperity implies over-consumption and over-pollution, compared with the earth native recovery prospects. The <renewable> resource limitation means looking at <artificial energy> only, obtained by *alternative* sources: sun radiation, wind/river streams, etc., already enabled at the earth surface. The conversion to *alternative* source options, brings to drastic drop of <artificial energy> availability, at the present state of the art. The sustainable growth requires a novel revolution.

The ground-breaking innovations, with plain <realism>, suitably shall consider [29], [30], [31], [32]:

- computer tools, to help monitoring, checking and appraising the on-the-go resource handling;
- bio-mimicry tools, to diversify and expand applicable life-based paths, with controlled outcomes.

The <realism> aims at inventing artificial agricultural-like procedures, appropriately expanding the biological world in emulation of the primeval farmers, in keeping with industry-like effectiveness, correctly combining artificial energy management. The innovation practicality is technology challenge, rooted in how <>true> the <natural laws> are, how <trustful> the human observers are, and how <reliably> the human actors operate. In most current readings, plain <realism> enjoy the consistency, delivered by the in-progress civilisation trends. The subsequent section provides additional hints on the mental guesses. The previous section has already pointed out that the eco-sustainability needs to be enabled at the global village range. The deployment of suited culture-and-ethics instruments goes beyond mere technological innovation. Thus, a further section follows, to shortly review the human adventure

«exceptionality».

The appraisal of a «real» worth, to be allotted to the *artificial* progress, is a consequence of the man centred bias, which marks our position face to scientific knowledge and governance authenticity. These issues are, perhaps, gobsmacking. We are well aware that our planet is totally negligible at the cosmic scale; the earth life and intelligence are insignificant, when assessed at universe's calibration; the mind construal (unless God's disclosure) only undergoes human checks; and so forth. Yet, most of us deal with the «nature» laws, classic cosmology or quantum mechanics, as if they were «truth» of a fixed order, out of personal liking. In adjunct, (surely) abstract theories (mathematics, etc.) happen to support models permitting experimental forecasts; our «rationality», then, feels safe using the «falsification principle» as worthwhile cure-all.

Indeed, the awareness about the successfulness of our mind worlds deserves trust. Even keeping on with factual pragmatism, we are assertive, when preferring anthropic life-quality and rebuffing savagery. Lately, the scientific relies on an «observer» makeup. The investigator is shown looking, e.g., at a chess game; after a while, he understands the rules, and can become player (with useful upshots). The human observer builds «models» and identifies «laws», empirically assessed by the «falsification principle». The observation window and acquisition/processing means supply snapshots, with consequent reliability of the inferred forecasts, but dependable on human horizons. In the planning, the handy technology and equipment entail a narrow set of tasks, in line with the detected cause-effect relationships. The position of involved *observers/actors* is restricted to engineer's jobs, with diffident ambition of scientist's speculation. The guesswork is necessary complement for modifying and improving the state of the knowledge, adding new discoveries and letting fall defective frames [33], [34], [35], [36].

When we look behind at past events occurred on earth, two conclusions are evident: the all facts are totally insignificant, in comparison with the universe implications; the man civilisation covers a tiny span of such a trivial framework. We may conclude that the man adventure is «grandiose» from our viewpoint, but, as just above noticed, it very little affects the cosmos. Thereafter, the quarrel about the spotted «laws» moves idle questions, being rather strange that «intelligent» *observers/actors* of peripheral corners could play valuable roles. Thus, the accomplished examination remains localised at man-centred range, and the tied outcomes imply

success or failure within anthropic spheres. Accordingly, man civilisation «greatness» is comparative appraisal and, as such, is used to qualify the already available attainments as a proof that (at least, till now) the progress has provided better life-quality, through wider richness and more comfortable habitats. The performed management of the natural resources has been winning challenge, until when the ecology has required monitoring the bio-sphere health.

The monitored upshots have been shocking: the «artificial energy» option cannot grant sustainable growth, if confined into the industrialism we exploit. We find comfort, maybe, in the earth weight irrelevance at the cosmos level. At this point, a different «modernisation» stage has to be forecasted, with fitting technology innovation and appropriate socio-political organisation. The divide has already been identified as «cognitive revolution»: we shall look at «robot age» know-how and equipment; we shall adopt political cohesion rules at the global village extension. The latter challenge deserves widening the investigation about the human knowledge course.

#### 4 Managing the Intangibles

In our models, usual severance distinguishes the inanimate, from the animate worlds. The latter is ruled by «evolutionism», steered by «natural selection». Along that line, an empirical evidence shows the «mind», in union with the «rational knowledge»; the process is (symbolically) described as *memetic evolution*. If we can be dubious about the «real» existence of the material world, the entire «mind» complex certainly reduces to concepts, with attached «names». We need, nevertheless, to establish general statements, endowed with acknowledged consent, to make possible a common understanding. Unfortunately, a self-reliant reading is today lacking. Some clues might be devised, putting together «mind» and «conscience», and trying to figure out where the «rationality» develops [37], [38], [39], [40].

Where from does «conscience» start? The unconscious aggregation of flexible cortical maps might be first step of brain towards to mind, diffused over the whole neuronal nets. The cluster of extraneous (compared with the brain hardware) facts and events assembles what is perceived. As second step, it switches on the brain mechanisms of making out the «qualia»: feeling of pleasure, of pain, of fulfilment, of disappointment, etc.). This is neuronal process, which becomes apparent, third step, when the views add, recognising the self; then,

fourth step, the mind establishes, as in progress cognizant sequence of statuses, ending, last step, in the self-conscience. If the individuals communicate and compare their <qualia>, with other people, the <conscience> establishes shared <knowledge>, and the individuals are ready to look to culture and to ethics, i.e., too bring forth (man relational) intelligence [41], [42], [43], [44].

The sketched sequence is rough account: it does not explain the human oddness. It is known that our DNA (viz. brain) does not differ too much, from the one of living beings, which never invented spoken/written languages. Indeed, the odd man <intelligence> describes with a set of features:

- the ability to obtain, assemble and categorize the images (inner model) of the world;
- the ability to select and order relationships, choosing and fixing accepted laws;
- the ability to devise progression forecasts, by simulation with the inner model;
- the ability to decide suited discernment patterns, consistent with models and laws;
- the ability to acknowledge the learning progress, exploiting conscious introspection;
- the ability to check-out theories, through the co-operative recognition of scientists.

The set of mind features (*inner model, accepted laws, simulation, discernment patterns, introspection, co-operative recognition*) is hard to conceive on merely <bubble-up> sequences, decomposing complex layouts into mute randomness steps; the upshots cumulate, until when preferential strings start repeating; these become <first choice>, and the <replication> turns out as standard routine (if outer setting does not change). The above features, on the contrary, figure-out <trickle-down> schemes, whether self-consistent plans allow organising the build-up of knowledge and the cataloguing of behaviours. The entropy principle opposes to the change of randomness into standard routines. Relatedly, <intelligence> generates operation sequences, because of their (invented) consistency. The <trickle-down> standards shape reasoning as if a design project is steering the thinking. The <intelligence> oddness is mostly contained in that mismatch: we cannot predict results, but we organise our actions, as stated by pretended *rational* scopes. The incongruity does not apply to the central processor (of a computer): it does not know mathematics and executes algorithms, without understanding them, but a programmer and an operation system exist, steering the design project.

The mysteriousness of the mind is documented

by the *invention* of languages. The happening connects with the archaic <social breakthrough>, to supply messaging means within the groups, to organise cohesion and guard. Most animals communicate by sounds, but, so far, no <bubble-up> way endowed them with speech. In truth, the articulation of noises into words is decipherable if it follows a syntax. The <syntax> is ordering prerogative of all human idioms, exploiting conventional patterns, ruled by <trickle-down> way. The coding is puzzling outcome; the <Babel tower> tale shows that intelligible messages need vigilant lucidity. Besides, several *orderings* have been invented: the Indo-European syntax: subject-verb-complements, has different structure in the Chinese idioms (also the speech timber/tune modulation follows unlike forms). All variants are, of course, consistent with the man anatomy (and brain hardware), and the each other understanding is welcomed, after decoded the established guides.

The <relational intelligence> oddness begins yielding stagy changes with the archaic <social breakthrough>, through resort to <collective order> synergies. The effectiveness is reached by crafty setting: co-operation among fellow citizens; rivalry against foreign assemblies. The trend goes on, until <nation-state> formation and split-sovereignty issues. Successful competition could lead to deceptive upshots, if the society enslaves man to vanity, believing to be all-powerful, as if the achievements are total merit of the country superiority. Upright outcomes follow, if the society teaches the citizen to be *rational*. The latter tuition starts from the man's capacity for <empathy>: his ability to feel what another feels. The *rationality* goes together with the appreciation of the <utility> at the individual and at the communal ranges [45], [46], [47], [48].

Yet, <rationality> requires <empathy squared>: his ability to sense what other men feel about him, putting himself in the shoes of other men putting themselves in his shoes. The *civil* education is complete, when a person chooses the *ideal* shoes in which to put himself: i.e., those of a <fair spectator>, who considers our conduct with the same indifference (impartiality), with which we regard that of other people. The <meme evolution> foreshadows <rationality>, stepwise educating the civic mindedness at the right cohesion.

The *judicious* competition is not overwhelming abuse and good dispossession plundering. The nation-state lean utility is meaningful settlement, when defined on impartial agreements, transposing the civic rights of the individuals to like privileges of each country. The course from *gene* selfishness to *group* egoism (and to nation-state self-interest)

modifies the public spirit, towards <empathy> and <empathy squared>. So, the *rational* behaviour aims at consistent and stable well-being, requiring civic-mindedness, as self-centredness is unreliable. The political cohesion edging is, possibly, instrumental settlement: the conscious arrangement of efficient public spirit cannot cross bloody borders, with *gene* selfishness of family clans. It moves to wide governance resolutions, with *country* self-interest, optimised by citizen's loyalty.

The term <empathy> suggests that we enter in the emotional state of another, and we share his feelings. In fact, every human being takes on the role of another, to consider that person's thoughts, behaviour and intentions, in view to decide fitting reactions. The *reading* of others, in order to establish social relations, is <cognitive> activity. The cognition plays vital steps: the emotional sharing of others' feelings is accompanied by a cognitive assessment of the others' actual condition, and followed by an engaged response to attend to their needs and to help up-grading their status. The mood sharing is relational intelligence discernment phase. The empathy illuminates the utility of fair demeanours, because of balanced reciprocity and mutual concern advantages. Hence, the <ethics> dimensions (further to the <culture> ones) are incorporated by the <relational intelligence> outcomes, along with the *meme* evolution (and out of the *gene* selfishness). This is the same of saying that the *group* and *country* divisions are contingent stages, ruled by timely recognised <utility>: the <fair> conduct *convenience* ensues from collective synergy effects, and the *assembly* size is just <provisional> input.

## 5 The Altruism Passage

The progress has been said to be critically tied to wellbeing that can be enjoyed. The prosperity, however, is *artificial* construction, carried over altering the natural surroundings. The picture involves the exploitation of natural/human resources by value-added transformations: the agricultural and industrial revolutions are well known backing. It implicates, moreover, the deployment of financial/technical resources, concurrently employed, to make effective the value-added accomplishments. For sure, the narrative is man-centred: no civilisation is conceivable otherwise; still, we conventionally refer to four assets: *human*, *natural*, *financial* and *technical*, to express the fact that the improvements require balancing the four sources. The statement is obvious, but often disregarded, with grim drawbacks, when waning the

*natural* capital by poisoning and spoil, or when misconstruing the <modernisation> lines, especially, by treacherous affluence-and-influence manipulation [49], [50], [51], [52].

If advancements are man success, shortcomings are man failure. For sure, extant outer conditions alter the headway; still, the planning has responsible performers, which ought to attend as recognised *observers* and reliable *actors*. The statement is equivalent to say that changes to better are viable and that operators need programming the business according to suited rules. To sum-up, the given clues advise assuming:

- the growth adventure of the human species, through <modernisation> steps;
- the consistent availability of <natural capital>, to be transformed in apt riches;
- the wise resort to <human capital>, to help fostering fit socio-political frames.

Our *intellectual* bias adds the <financial> and the <technical> capitals, to offer *rational* evidence to the fancy man civilisation, by <trickle-down> schemes. The technology innovation role has clear-cut visibility: since remote time, the terms <ars> or <techné> are used to symbolise the intentional *discoveries*, making feasible the <improvement> of the unaffected surroundings. The <excelsior> phantasy well describes the faith in the technical and scientific knowledge, permeating the modern western life-style. The finance prompting bears similarly convinced discernibility, to express the relational context that support the affluence and influence frames of our <advanced> world.

We have mentioned the languages as human characteristic oddity. The <trade> is not less astonishing: no animal discovered how to organise a market, and to exploit the primary needs within planned <utility> of third operators. The <money>, soon, becomes manifest supplement; the institution of <authenticity> rules is appendage, with the related sovereignty and legitimacy specifications. All measures might look amazing, but it is difficult to imagine factual wellbeing, without those proficient constituents. We conclude that the resources exploitation, with value-added production, is not conceivable out of <authenticity> frames. In our *rational* (cause-effect) schemes, the inference is academic, but cannot be suppressed.

The <collective order> formation is remarkable fact, with the surprising consequence of *social* value-added and *political* organisation, both *artificial* configurations, made-up to improve people wellbeing. It is difficult explaining how the arrangements wrap up. A transcendental or an immanent motivation can be simple way out. The

«nation-state» has well-defined «authenticity» due to «king by grace of God» sovereignty, or owing to «race homogeneity» of the citizens. The pictures are well-liked, when eminent leadership is in-force glue, or when direct exchange fosters close cohesion. No pragmatic evidence shows the soundness of one or the other assumption, unless as a result of well-timed value of the provisionally gathered executive assemblies. In our view, no inherent or inborn «collective order» pre-exists; the formation is acquired result, subsequent to decision-making procedures [53], [54], [55], [56].

Today, in fact, we credit the «constitutional» sovereignty, especially, conferred after plebiscite and ruled by (parliamentary) democracy. Accordingly, recent «modernisation» up-turns characterise by a set of quibbles not really entailing ground-breaking changes, more exactly looking after:

- the provisioning profitability, by the resort of advantaged supply chains;
- the country competitiveness, by establishing hierarchical dominances;
- the industrialism effectiveness, by widening throughput and market share.

The industrial revolution avails, as said, of «artificial energy» opportunities; the raw materials are supposed to have withdrawal without limits; the manufacture business positively ends at the point-of-sale; tolerable concern affects the scrape and sewage management. We have clearly pointed out that the ecology entirely modifies the listed postulations. However, the up-turn needs to be imagined, when also the other two rules are no more operative. Continental size of the country is crucial prerequisite of supremacy; buyer's fullness imposes *scope*-manufacture (in lieu of *scale*-supply). Together, these two facts are handled, recognizing the *economy* globalization effects, but the actual issues happen to be doubtful.

The millennium sets-up huge suspicions on the firmness of business transactions, based on entwined debts, each one supporting the trustworthiness of the construction, placing out *virtual* wealth (which subsists, on condition to keep expanding the chain). The indebtedness is invasive ploy of individuals, which enjoy goods, facilities and amenities repaid by future gains; it is standard practice of companies, which organize business projects around venture capitals; it is shrewd resort of governments, which support current welfare to keep occupation continuity. When the circulated *virtual* wealth clashes against too huge obstacles, certain *virtual* amounts disappear, and the related weaker rings of the chain are swindled. The

steadiness of the whole is tolerable, if the smashes are limited and randomly distributed.

The wellbeing rooted in «financial» capital manipulations is hot potato, because money held by an economic agent is a claim of wealth of an another (public or private) body. Synergic use fosters growth; virtual abuse, even if ostensibly lawful, exploits Ponzi-like plots, to originate concocted assets, scattered with duplicitous issues. The *economy* globalization radicalizes the shakiness. It allows fictitious recovery by indebted parties, but in-progress transfers wealth to blocs with growing GDP, from the ones, soon moved to recession. The growth is obtained by biasing the advantaged supply chains, modifying the flow of the riches. The picture is construed as «selection» process (social Darwinism), through which shaping nation fittingness. The progress is the result of survival conflicts, with defeats and winners.

The *ecology* globalization ensues, showing that the earth «natural capital» is limited and that wastes worsen the bio-sphere at global village span. The conflict winners will share contaminated lands: castling is meagre remedy, with no steady prospects. The *planned* (in place of *natural*) «selection» is, possibly, *realistic*, if the winners will successfully enjoy secure progress; this shall double efforts in the fight, as rout entails passing away. Yet, *planned* «selection» is not *rational*, in case of *over-consumption* and *over-pollution*; the obtained «utility» has disputable worth, under way increasing the total of dispossessed people, besides worsening the communal habitat safety [57], [58], [59], [60].

The *rational* scenarios inevitably aim at *sustainability*, viz., at keeping *stable* source provision and *harmless* environment settings. The shady «utility» of damaging the whole habitat (out of, maybe, castled resorts) is perilous, not judicious. The *ecology* globalization unavoidably requires moving, from struggle, to common security. The «competition-to-altruism» alteration is *meme* evolution stage, once understood that the only harmless policy requires sheltering the entire global village. Then, the wise people need to become world-citizens, rejecting the *planned* «selection» practices, undamaging the communal bio-sphere. The «altruism» *rationality* becomes thoughtful choice, on condition to enable growth continuance, upholding man wealth and health. The steps to come address the «cognitive revolution», i.e., robot age technologies, devising the two scopes: «to dematerialise», with enhanced value-added in intangibles; «to re-materialise», with safety by bio-mimicry reclamation. The bet are left to *artificial* inventions along with the *meme* evolution path.



## 6 Conclusion

The man civilisation is awkward outcome, having man-centred worth, uneasily explained on universe scale. Two oddities occurred in our remote spot: *life*, providing way to local self-sustaining re-ordering processes; *intelligence*, making conceivable autonomous alterations of the intrinsic trends by planned acts. It is hard to evaluate the oddities, and their appraisal is useless, whether communicated at the human range only. So, the civilisation is to accept as *artificial* incident, with beneficial marks on life-quality until now appreciated, therefore to be extended and protracted. The statement suggests revising the course of man weird ability to enable his observer/actor mission. The paper shortly follows the track, with stress on the deliberate kind of achievements, even when obtained without explicit perception.

The civilisation is identified as apparent consequence of culture and ethics, created by intellectual talents. The joint after-effects bring forth <knowledge> founding, sharing and accrual together with <moral manner> detection, appraisal and enacting. In fact, the civic mindedness is necessary step of the progress, with vital role not less relevant than the know-how. Instruction and education fashion the abstract world of the mind, along with communal learning procedures, yielding <collective orders>, basically tied to the man <relational intelligence>. Thereafter, the human progress is communal accomplishment, in-progress incorporating new features, and unceasingly requiring <modernisation> [61], [62], [63].

The (until now) recorded improvements have affected the earth settings (embodying the exploited <natural capital>, and the participating people (epitomising the concerned <human capital>). Significant changes are obtained managing the earth resources, assumed to belong to mankind, and entirely available to work-out value-added transformations. In truth, this assertion is a bit reckless: we cannot know how <real> is what we perceive, and how <>true> is our construal of the outside. The factual assessment of the tangible world has true-life check, through the empirical linking of cause-effect relationships of instant snapshots. Thus, the knowledge building processes are corollary accomplishment. The examination opposes <bubble-up> to <trickle-down> sequences, with, however, apparent mysteries. The <bubble-up> processes have consistent worth, if an inborn selection mechanism is proved to exist, leading to ordered set-ups, from the pre-existing randomness. Now, we do not know which value the <natural laws> possess, still clear evidence exists for the

<entropy> decay, making unbelievable to move the chaos, to regular systems. The <trickle-down> alternative is not less questionable. Its consistency has simple defence, assuming an outer causative origin. If both, the immanent and the transcendental reasons cannot be persuasive at our state of the arts, we shall try to find out plausible ways to acknowledge the organised lay-outs on merely *a posteriori* testimony [64], [65], [66].

The <truth> of the obtained evidence is, of course, restrained. Moreover, the duty is somehow made easier, exploring together <relational intelligence> peculiarity and <man civilisation> strangeness. The analysis has ground to consider: communication, spoken languages plus syntax; trade, individual utility plus organised market; lawfulness, indorsed authority plus authenticity; and so on, always recognising <trickle-down> logic as enabling rational. The *meme* origin of the interpersonal abstract build-ups is accepted, using the term as symbolic description of factual happenings out of the single individual sphere, hence beyond clear-cut *gene* origin [67], [68], [69].

The whole pictures are background of the increased concern about the man civilisation stable continuation. The sustainability of the growth is impeding threat, produced by the *ecology* globalization, viz., the vibrant alarm about our biosphere reliability, today mistrusted, e.g., bearing in mind the climate change trends. In truth, several reasons exist for fear about future growth, especially, if considering the, so named, *advanced* countries, too much used to sink into undiscerning faith about financial instruments. So, the *ecology* comes to be sharp intruder in the *economy* globalisation prospects, worsening the already actually serious events. The analysis, without hiding the critical character of the challenge, is somehow comforting. The progress, if organised on merely *a posteriori* rationales, will persist, on condition of ground-breaking discoveries of the man intelligence. The <cognitive revolution> is a devised up-turn, offsetting the current industrialism over-pollution and over-consumption, by means of the <to dematerialise> and the <to re-materialise> routines of the robot age technologies.

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