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Research Article

FEASIBLE PROGRESS: EFFECTING & RELATIONAL METHODS

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RINALDO C. MICHELINI DI SAN MARTINO

DIMEC - UNIVERSITY OF GENOVA - ITALY

ABSTRACT

The human civilisation is impressive falloutt, replacing wilderness by technical inventions and political setups; culture/ethics artefacts are issue of useful effecting and relational methods, enabling individual and collective upshots. The trend is men centred: it addresses contingent paths, leading to provisional advances: we are aware of the earth anomalie: life and intellogence. The progress links to the (knowledge), allowing accounts and judgments, to qualify the corporeal courses; it typify, distinguishing effecting and relational ways, to define technology revolutions and collective breakthroughs. The attainments of the <human intelligence> let infer faiths in the <cosmic rationality> or <godly wisdom> backing by total immanent galactic information or transcendent holy ruling and leading to progress. If right, we discern true physical laws and can plan total advances. The collective breakthrougs bring to globalism, when men operate at worldwide extent, with exhaution and comtamination effects. At globalism, the total improvements are hepful; the said faiths are apt backdrop; othewise, we may look at factual advances, if the <human intelligence detects plausibly total (knowledge), acknowledging the inherent coherence of the galactic information. Such factual advances provide sustainable growth, resorting to interplanetary feedings and disposls, without affecting the environs due to the earth/universe disparity. The natural coherece asks apt

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cognitive integration, displying causl links and fit consistency of the marerial courses. The progress continuty is reasonable guess, at least, if the universe staediness appears proved by the presece of the galactic information coherence.

KEYWORDS

Civilisation: Technology Innovations, Social Implementations - Actuation And Effecting Ways: Technical Progress And Entropy Political And Relational Ways: Localism/Globalism Setups - Growth Sustainability: Safety, Robotics - Recovery: Steady, Prospects.

Introduction

Our planet seems odness in the universe, chracterised by biology phenomena, providying forms, agentive processesses, capabilities, thinking competences and judging proficiency. The colossal galactic surrounds appear huge marvels, with coherent causal staediness and rational reliable sensibleness, but witout awareness of enjoying wise or logic awareness. The non-attendance of mindfulness is obvious, as the cognizance is function of third bystaders, wwtching the materis emviroms. Moreover, apt observers only judge about godly wisdom or cosmic rationalty of the physical reality: these postulates are possible guesses or faiths, figured out by men, when discovering the amazin theories, describing the overall galactic

systens, down to the derails of the subatomic statustical mechanics.

The idea that the astonishing cosmology and nuclelear microscopic models are not physocal truth, rather human fancy inventions, looks implausible, after repeated checks on the coherence of many middle tests. If truths, the extant wisdom or rationality denotes the existence of goddly reality or the presence of cosmic information. which iustifies the astounding consistence of events and facts around uss, as if holy rules or strict causes desscribe the all. The faiths in upper reality or in inner information seem realistic; the alterate ideas are too sound for imaginary conjectures. The spiritual reality or the cosmic coherence

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makes simpler our justifying the ostensible upper wisdom or inner rationality by a priori reasons, acknowledged as truism, once the human cognizance establishes. The approach, mostly, operates accepting the reliability of the physical models and the truth of linked results; then, it developis scientific forecasts, with absolute worth. Indeed, the presence ifinner cosmic information rationality is gratuitous assumption not less than the existence of upper spiritual reality: our faiths ask further details, before acknowledgment of one or the other model, or rejecting the tow.

The human civilisation is documented progess from wilderness, detailing improved comfort and enhanced safety, by technical innovations and political implementations. The cosiness and wellbeing perform changes of the rough backdrop, offering suited communal institutes and supplying manmsade shelters and objects. The alterations are conceived processed, denoting that, on the earth, the moves follow purposeful plans, compared to the dtermimis tramformations umdergone by the universe. The local swithes need proficient andaware actorts or machines, trained men or planned robots:

- The personal aptitudes, supplying handling and manufacturer effecting and accomplishment;
- The collective abilities, allotting social and relational grouping and cooperation effectiveness.

The single and shared ranks are inborn or evolution results, with improved technology innovations and political engagements. The on earth deteced foundations recognise local biology self-agentiv beings and confined cognitive thinking or reasonong faculties. The lfe gives autonomy from surroumd dererminism; the knowledge assgns meanongful qualitie to the otherwise undefined material stuffs. The allotted autonomy and qualification are baffling claims, possibly formalised as (dualism), if the material reality has spiritual replicas. allowing explanatory readings. For sure, the extant reality does not need explanation or, even, proviso: the (monism) limits the all, to material stuffs, with, maybe, describing qualification by human cognition. The <knowledge>, thus, is odd stipulation, which reveals as mind world byproduct; it is, further perhaps existent (dualism) as spiritual entity, or perhaps present as implicit quality (monism). The first is

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contingent estimates: the other two are total data. based on faiths on the previously outlined models.

The <knowledge>, consequently, allows critical analyses, distinguishing the three situations. The existence of the spiritual spheres uses the transcendence to justify the human anomalies; the immanence of galactic information helps qualifying the detected details as implicit aspects of the mater qualities. The two results allow explaining the human anomalies as godly on natural attributes of the extant reality. The elucidations by holy wisdom or cosmic rationality sanction the plausibility of total worth of the detected (knowledge). The analyses consent interpreting the progress by technical inventions and by political arrangements; they, then, allow describing the growth sustainability conditions, with closure prospects on the globalism defies and the ecology challenges. Looking at the progress, men and robots equally affect the deplyments limked to the personal and collctive rank anomalies: the investigations, thus. generally omit the resort to synthetic hands/brain, as if only human hands/brain operate, whenever further tools/comutation layera add [1-11]. The adroitmess includes

dexterity and accuracy enhacers; in parallel the intelligence, also, incorporates artificial efficacy and proficiency, when the case exists.

ACTUATION AND EFFECTING WAYS

actuation and completising methods, The according toproficiently designed aims, typify the agentive and manufacture abilitiesa of human inndividuals. The dexterity and inventivemess allow conceiving new things and performing tranformations, modifying the natural stuffs. The complexity of work plans may entail team cooperation, after job allotting. The execution and effecting are object of investigation in biomechanics, neuroscience, psychology and artificial intelligence, due to hands and brain coupling. The personal dexterity and alertness link to handling, accuracy and adroitness, specialising motions and applied rigging. The cooperation and emulation, with outcomes checks, are learning and training ways, to define cycles and schedules. The analysis of the hands/brain coupling helps understanding the actuation and fulfilling skills; they provide new item designs and application developments, based on previous successful achievements; they modify the natural trends by men conceived and made objects and facilities.

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The technical innovations find origin in the hands/brain skills and effecting methods; the cumulated expetise and knowhow, morever, suggest scientific models and theories, from which inferring technlogy revolutions. The progress seems following the (learning by doing) trail, starting at the personal level and assembling collective knowhow to stat new processes and work organisations. The customary descriptions recognise as revolutionary that men are living beings building artificial body shelters (dresses and homes), exploit ruled breeding husbandry and organise synthetic hands-andbrain for wok completion effectiveness. The revolutions have spot start, giving local benefits:

- effecting methods typify The by manufacture proficiency aimed at art and crat facility;
- The agrarian advance widens to new biology areas the manmade productive effecting;
- The industrial improvement brands by controlled efficiency of the activity organisation.

Astounding apparels and headstones are marks, left bypast civolisations, when and where designed. The homemade creations prospect

improvments, compares to the earlier conditions, personal and collective fallouts. The by manufacture methods given by hands/brain talents modify the material surrounds to acquire benefits, if suited hanling follows design:natural stuffs provide clothes and dwellings, if tranformed. In the ensuing revolutions, the innovations enable foodstuff supply by the planned explotation of animals and crops; thrn, they create synthetic hands/brain to run the scheduled mamipulation and design tasks. The innovations do not add processes; they exploit natural courses, under planned control, for human benefits. The effecting and designed schedules are revolutionary aspects, integating fit biology processes (agrarin revolution) or suitedo robots and computrs (industrial revolution), according togaimls and advantages selected and ruled by men, which modify the original sequence of the natural events. The purposely planned interactions with the the surrounds, in the present interpretation presume the effecting and design autonomy of men. The postulation requests justifying corroborations or plausble evidences; they look at the effecting methods, trying the hands/brain ensemble. The later revolutions show the consistency of the

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undergone trails, indorsing performed activities, detected knowledge and devised theories.

The actuation and effecting analyses aim at describing the personal behaviours by agentive abilities andg job accomplshment aptitudes. The inventions are technical achievements, leading to manmade artefacts, not exuatibg in the natural backgrounds. The garbed society has proctical effectivenee against the climate variations; the domestic setups allow specialising spaces and furnitures, for the sinle and shared comfort. The supply andendowment establishes on made-up guesses: the modelling and specification of the job implementatio depend on the recognition of reliable logics, justifyong sequences and obtained results; the schedules need having underlying causality and following decision plans. Job accomplishment has to follow effecting and biomechanics paradigms, typifying series of topics

- Operation specification of the artefacts: conception and implementation functional design;
- Manipulation and work cycle definition, with hands/brain coupling for efficiency/accuracy;

- planning/execution, Iob upshots evaluation, error checks, end approval and yield setting;
- Front actuation authentication, schedules drawing, tools/rigs design and power supply aids.

The example activities have meaningfulness allotted by the achieve results: dexterous handling, efficient planning, effects valuation, etc. depend on the returns obtained by the availability of clever artefacts. The progress is outcome of biology processes or hands/brain acts, under intelligent steering. Thus, the men discoveries and ruling are essential promotion: the human choices are efficient support; the instrumental performance can integrate parallel upper or inner aids, with autonomous consistence [12-41].

TECHNOLOGY INNOVATIONS

The technologies are <knowledge>, providing actuation and effecting ways to transformations with value added upshots. The watching and comprehension of the environs are preliminary evens; the effecting and recognition of the improvements is subsequent result; the all belongs to mind worlds, with thoughts and judgments. The design and implementation bring

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back the material items, not before existing in the natural reality. We have singled out noteworthy revolutions, yielding impressive alterations:

- The <clothing revolution>: men are animals, tallying wears and apparels for daily comfort;
- The <agrarian € revolution>: men systemically accomplish farming and breeding operations;
- The <industrial revolution>: men organise the activity schedules, under aware task control.

The garbed societies are awkward innovations: dresses and houses are manmade changes: they request creative resourcefulness and ingenuity; the improvements are pace wise wide-reaching skill at personal range. The rural societies are astounding discovery: men control and rule the animals' breeding and crops' farming; the husbandry leads to land tenure, labour specialism and produce trade. The industrial societies are amazing role switch: the activity conception and control remain distinguish its effecting, moving actual implementation to auxiliary processes and programmed tools. The parting of skilled societies tells effecting and producers apart from results and consumers: the implementations start

as homemade courses, parallel to the original natural progression. The living beings need foodstuffs from what offered by the surrounds to properly survive; the men need widening the available resources, by expanding yield ways and adding new products. The producer/consumer separation becomes vital options, with critical amount distributions of the needed items; thus, the progress amplifies the requests' list to the many homemade inventions.

The welbeig increases if the producers goods, with ddeliveries and quantities satisfying the all consumers. In parallel time, the communities shall orgsnise, inventing trade, legality and authority, by politicial choices. if we focus th analyses on the enabled trchnology innovtions, we defie the above defined series of jumps:

- <clothing revolution>: archaic layout of garbed societies, living in aptly built houses:
- <agrarian revolution>: old structure of settled societies, fed by breeding and farming:
- <industrial revolution>: coming setup of open societies, aimed at robot-aided being.

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Local groups start each jump, giving competitive superiority on the other earthu inhabitants by, as sid, garbed, rural, and industrial societies. The innovation way see several other steps: the idea defining three revolotions is arbitrary, practically, connecte to the start of new productive institutes:

- The clan economy. exploiting manufacture methods, typifying all human inhabitants
- The land economy, resorting to proficient stock and crop growing, over committed grounds;
- The shop economy, playing on the work organisation efficiency, within purposeful plants.

productive organisations progressively formalise more businesses and occupations, diversifying the products and enhancing theefficiency or accuracy of the deliveries. The technical progress uses bigger data, better models and improved theories, to describe the physical phenomena through the detected scientific laws. The *(economy)* originally assesses the local ruling of community wealth, mostly, of house dwellers. The clan economy shows the relevance of the effcting and relalatinal methods, owned by human species: since earliest tines,

team work characterises the wandering tribes; then, also allows devising and assemling garbs and houses; the word (economy) joins oikos, home, to nomos, rule, to express that clans identify by inhabited spaces. Thereafter, shop economy separates effecting from dwelling and of residences. developing factories out Thereafter, the economy becomes standard, with redundancy in land economy when is trustworthy improvement, as breeding and farming move food supply, under human planning.

The operation grouping into purposeful spaces and allices typifies men. The union is common preparation among the living beings; the group hunting is exercise known by other animals, but men validate clan run, to face the very long baby nursing and teaching: the children education profits by village and, helpfully, nation languages. The local wealth ruling, or *(economy)*, is early civilisation rehearsal. for improving productive settings: the agriculture obliges working on lands; the technology exploits fitness to promote wellness. The <nome economy> is milestone of the productive organisations, when the effecting methods are shared resort. Indeed, the *(economy)* ordering starts with the producers' parting, if extra items remain and trade

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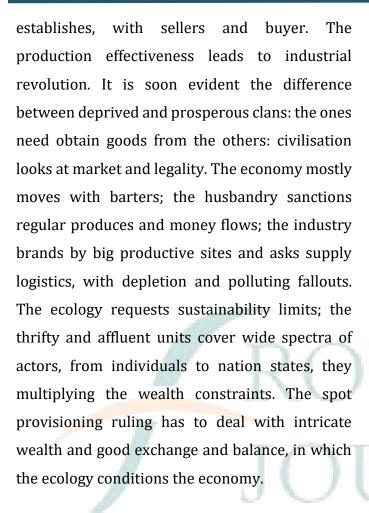








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TECHNICAL PROGRESSION

The effecting tasks asure the availability of clothes and abodes for sheltering purposes. The productive business starts being relevant with the (land economy), withe producers given by the rural societies. The progress needs parting the (operators), from the generic peoples; this lets defining work cycles and productivity, even while such figures are standard with the industrial revolution only:

- The passing undertakings of garbed societies inhabiting dwellings and settlements:
- The systematic execution of manmade biology courses. for foodstuff multiplication;
- The effective activity control of balanced programming, aimed at unreservedness.

The artedets need action and team proficiency to conceve and dulfil crafty jobs. The rural labourers ask hands on lands, with off-process plans and controls. The <shop economy> starts by offprocess brain and artificial energy: the productivity easily is enhanced if the work site are duly rigged and the workers act as standard Then, the <industry machines. progressively typify:

- (industry 0), with productivity obtained by manmade energy, with automated control;
- (industry 1), with making given by on-line workforce and scientific work organisation:
- (industry 2), with throughput settled by fixed automation and special purpose trapping;

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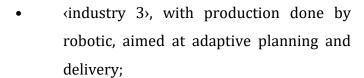








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- (industry 4), with provision of products, functions, services or any other robotic deeds:
- (industry 5), with running of all tangible supplies, under eco-sustainability constraints.

The workforce is action fixture and shall perform the allotted schedules. The scientific work planning aims at maximal throughput with the available manufacturing resources; otherwise, the hardware investments have partial reason. The (industry 1 and 2) express this diligence setting, full plant exploitation. The mass upshot is penalty, if the output is unsold, transforming raw supply and piling no-use items. The (industry 3) states flexible schedules, ruled by robots. The intelligent work planning aims at diversified products, at the customers' satisfaction. We shell go back, from (shop) to (home economy), now, with unknown buyers; the scientific planning, just, looks at mass delivery, as if unlimited purchasers exist. Up to (industry 3), the work organisation applies to manufacture domains, having their start from the produces logic of

aiming at mass optimisation, inherited by the affluent (land economy). At this step, the (scpe) approach substitutes the (scale) one, to look at the customers' requests. The <shop economy> turns soon questionable: the huge plant, integrating complex final products, splits to intermediate provisions, easily to assemble according to the client's diversified wishes. The flexible production shall incorporate in the industrial settings, not just manufacturing, but the different business functions, into autonomous sections and yards, carrying the fit administrative, to sale purposes.

The industrial arrangements have to cover many men's activities, collected as «synthetic handsand-brain> skills and allotted to robots. The brain's areas. or mental worlds, provide interpretations and explanations of what observed, modified and improved. The narrations are abstracts: they do not belong to the material reality; they are spiritual entities or intrinsic qualities. Both detect information: men or robots (computers) perform data processing and storage. The information requests man or robot brains. Without information, the description and restriction vanish; if detected as <knowledge>, we shall acknowledge its worth or truth. The

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technologies of the technical asset information: if true, if applied, trustful objects/benefits ensue and such outcomes actually happen. Now, technologies coherently justify, if inferred from scientific laws, principles, and these define, using the theoretic development of the human «knowledge». The technical information, besides, do not limit to the manufacturing, rather it cover the many engineering fields with linked business and secretarial phases. The all aspects are men activities, and have to progressively to become (industry steps), equivalently accomplished by robots.

The (industry 4) looks at generalised use of computer routines and artificial intelligence procedures in the administrative, business, clerical and services activities: the robotic data handling and stowing enhance the efficiency and proficiency (<big data>, <big brother>, etc.), compared to the human processing. The inclusion of robots, with allotted repetitive steady jobs, allows the implied effecting of mandatory accomplishments with automatic instructions. The (industry 5) instigates the switch from bottom up (economy), to top down (ecology) ruling, following constraints on the timely

tolerable depletion and pollution. The fact is allows processing too many resources and heedless profit drops out soiling wastes. The final <industry</pre> 5> step is aftermath of the transformations, altering the natural sources in men useful objects, utilities and services. The material transformations happn with *(entropy)*: due to lack of reversibility, all downgrades, with piling up of trashes or unusable stuffs. This universal principle: on earth: the <clothing revolution) is almost neutral linked to the natural trend; the <agrarian revolution is maybe neutral, if biology grants conservative courses; the (industrial revolution) is definitely harmful, joining exhaustion and contamination, with natural entropy. The universal principles, according to our detected (physical laws), to the material reality; the existence of the holy reality should lead to envisage additional «spiritual laws, ruling the intangible spheres, coherently, without entropy. The transcendence consents (miracles), out of physical bonds; the immanence requires investigating if the found universal principles undergo might compensating retrievals, not, today, discovered. Without total <truths>, the contingent <knowledge> may only look at thrifty and temporary growth. Wat

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happens on our planet negligibly only affects the entire universe and we can get raw sources from the galactic surrounds or spread out our litters, without modifying the overall steadiness:

SOCIAL AND RELATIONAL METHODS

Parallel to to the detection or invention of the technical (knowledge), men mature social acquaintance, to manage the cohesive creation of collective setups. The civil societies astounding mental construction on communication, business and governance bonds by idiom, legality and ruling ways. Contact and friendship clash vs bout and conflict, but the options seem coexisting, as the grouping of cooperating clans and tribes fights outsiders and strangers. The localism, by competing closed society parting, appears offering efficient political setups, before reaching globalism, when the humankind has to exploiting the all planet, lading to:

- Randomly dispersed tribes: wandering groups, looking after wild lands for fresh nourishment;
- Settled nation states: self-rule splitsovereign closed communities, competing for leadership;

Unified global village: uniform collection of individuals, knowingly subject to ecology restraints.

The globalism connects to bounds of our planet, when new inhabitants feast the globe over, needing food and asking comfort. The personal and collective peculiarities, typifying men, forcedly, shal face globalism, before, perhaps, galactic further adventures. Leaving ventures out of sight, the group specifies by relational methods, with linked interactive patterns. The grouping addresses dialog, trade and ruling, specialising apt clusters and contacts. The inquiries support gatherings and societies, supplying new political orders, moving from the localism conditions, to new ones. The ensuing relational analyses aim at collective behaviours by frugal mutual abilities and thrifty group managing. The inventions start with rubrics to trade and headships to govern, leading to pulitical setuts, which give acount of the natural surroun effects, not rconsidered. The modelling and detailing of the social officialdom hinge on the mutual conditioning links, affecting contact, business and authority, by coherent architectures and replacing the earlierr split-sovereignty.

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The relational methods tell that interpersonal limks exist, biasing the grouping; paralleled to the effecting ones, they affect individial and collectine depending on the curreng conditions on the phisical spheres: the random clusters, regular nations, global village. The relational methods add concrete facts and adressing abstract conceptts: words and languages, instructions and trades, leaders and managements, no ones existing, unless as ideas, having storage as duly formatted (knowledge), with the codes that the parallel spotted societies select. At first, the parallel choices do mot affect eaach other; then, suited worldwide rules exist, with leading supremacies; at the end, the globalisn shows freechoice is unfeasibility restricted by the ecology decay. However, the relationak methods ebtail critical ranges:

- The understanding talent, prospecting right behaviours and wicked activities;
- The business tasks, detailing market regulation and defining money courses;
- The official onuses, stipulating lands' exploitation and crafty empowerment.

The interpersonal range exists contingent soort, staring by native idioms, whichopen weighting checks, as if actual independence rulles the

parallel groups. Theur autonomy is factual issue, up to industry ases; it lets interating with the extant backdrop, givng officialdom to figures, as ownership or sovereigntt, carrying total soort. The earth saturation implies global range settings. The situations differ, wether the ensuing political setups are are transient human invention, or lasting galactic informa. The, globalism is critical switching:

- The relational methods are supply contingent links, locally organising closed societies:
- The relational methods turn to total links, by communication availing of spiritual ways;
- The relational methods enjoy the total truth, being apt immanent material qualities.

The localism/globalism dilemma disappeats with totak bonds, when (knowledge) is holy entity or natural quality with permanent worth as if they operate without affecting their surrounds, , because the reality has upper or inner causal controls with absolute ruling. The ecology discovers the dilemma: cumulated effects of civilisation activities will destroy the earth life expectancy. The caveat limits to what occurs on

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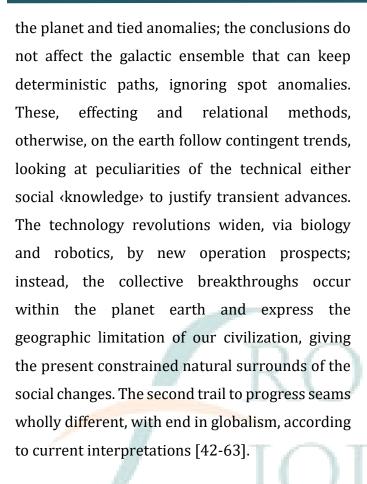








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COLLETIVE BREAKTHROUGHS

The social changes due to the earth geographic limits will create new political structures, worlwide mutual bonds, communal rubrics and shared leadership These restraints. fashon interpersonal arrangements the behaviours according to conventional patterns not naturally existing, but selected and enabled by nen. The inventions hace included languages, markets and administrations, denoting adaptive self-rule:

- Marginal autonomy: with establishment of peoples, performing aware happenings;
- Split-sovereignty: with shaping of rival nation-state. fighting for profitable headship;
- Social liability: with self-ruled countries exploiting shared resources bv conventions.

The words, syntax and grammar are manmade ideas at the clan or nation range, as if that extension has suited meaningfulness; thereafter, the home economy and country sovereignty are bottom up the self-rule frames enjoy autonomous source supply and litter disposal. The tiny earth leads to globalism; the social liability tells that the clan economy and nation sovereignty meaningless claims: the (global village) has limited provisioning and polluting potentials. The collective breakthroughs necessarily lead to:

- Scattered societies of nomadic tribes. changing homelands to look after foodstuffs;
- Country settled peoples of agrarian societies, with worker-centred (industry steps):
- Uniform compatibility, with worldwide contacts and robot-centred (industry steps).

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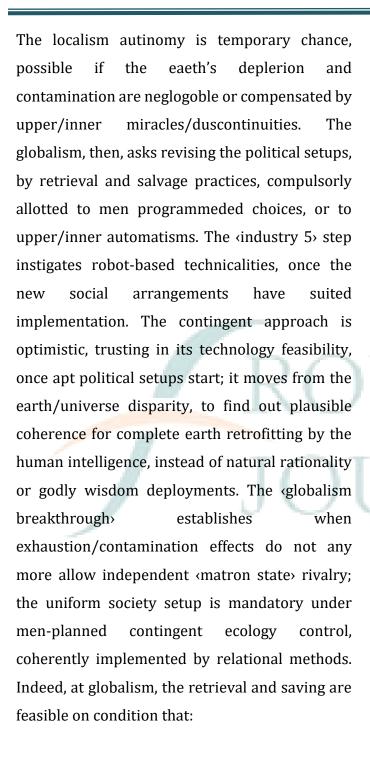








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- Upper/inner controls show the existence of godly wisdom or presence of cosmic rationality.
- Contingent cognition creativity accomplishes rescue advance by factual interplanetary manoeuvers.

The globalism happens at the earth range; actual overriding needs absolute or galactic inputs. With the hopeful approaches, these mark especial options allotted to the humankind for survival. confidence or optimism transforms conjectured possibilities into faiths; the analyses aim at finding if given hopes enjoy reasonable proofs. The inferences differ o the cognition aids. The latter keeps contingency and looks at full human brainpower, prospecting imaginative inventions. The former moves to total <knowledge>, spiritual sphere or galactic information, sometimes postulated completing the material universe.

POLITICAL HEADWAY

The political setups imply communication, trade amd managing aids, rooted on ethucal and legal musts. These areintellectual prinples, differ ringfrom the technica cognition linked to thematerial universe stuff, which provide

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effecting, biology and adeptness data with scientific worth, developing:

- The remote undertakings of garbed societies inhabiting dwellings and settlements;
- The systematic execution of manmade biology courses, for foodstuff multiplication;
- The effective control of activity programming. aimed at balanced unreservedness.

The collective breakthroughs operate on the interpersonal links, inventing contact, trade and headship paradgms, in view to bottom up cohesive arrangements. The relational methods start by communicating with languages, say, voice modulation and graphic encrypting; the invention uses arbitrary sophistication to track details. Then, the markets require legal edicts and economic rules as the productive outputs specialise contacts and suited exchanges along business ideas. Finally. the populations' administration becomes clear concern, initially, moving by the localism rubrics of the nation states' autonomy:

- Sociable intercourse: colloquial links of parental/friendly approachability interfaces;
- Fit trade format: private endorsement of negotiation determinants and statements;

Apt authority setup: official enacting of government regulation, with cogent appeal.

The relational methods are collective competence, which develop when people interact to obtain social advantages, economic certainty and management efficiency. To start, multiple setups establish on three layers: friendly communication, lawful business and public administration. The informal layer selects the national languages; the civic and interstate layers need authentication assessments, opening the course to total upper/inner causes, or keeping contingent localism and democracy bets. These tell that the citizens are free and equal and make the political structures. with sovereignty delegation to the governments; the bottom hypothesis allots factual advances setups, so that the human intelligence is origin of the progress by creative innovations. The globalism destroys men autonomy and progress myth; the earth sources are bounded; the tangible transformations downgrade the environs subjected to entropy. The intelligence is intangible, when conceiving ideas and designs; it generates irreversible decay, when moving to material transformations. The industrial revolution is, thus, basic reason of enhanced decay; the globalism and related

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political arrangements ask updates along the <industry 5> criteria, because the earth boundedness implies warnings have precisely that spurs. The new political setting shall recognise the lack of spot autinomues and shall balance tge eart decay, usubg options with outerspace origins; the matching is possible, without altering the universe, resorting the extant eath disparity.

The ecology describes all earth's inhabitants, with the linked decay piling up, progressively reaching lack of survival. The rescue requests, keeping equal conservation figure everywhere, aiming at village uniformity: the national <global headships do not have authority to alternate the natural sources. The polluting wastes ask equivalent changes, obtained at interplanetary range. The globalism, simply, denotes that the men activities, directly or indirectly, have world over fallouts, yielding sources and litters irreversibility. The upshots may have spot origins and attainments, but the downgrading is <global village concern, putting all earth citizens in equal conditions, with administrative constraints. The globalism breakthrough implies the revision of nation states' sovereignty, without autonomous decisions on their plans, but limiting the related

industrial development, to what timely obtained from the galactic space.

The (global village) is dire breakthrough; the national sovereignty has solid agreements, repeating ideas, existing in the different earth's peoples. The archaic image is «godly grace kingship), with exploitation of the holy indorsement; the immanence, also, recourses to Darwinism, to similar natural hardship. The modern ages, as already mentioned, look at the democratic delegation of the personal autonomy, believed enjoyed by each citizens. The initial citizen parturition into local nations has obvious history, geography and spoken language reasons; this may modify with wars, revolutions and treaties. At globalism, the citizen autonomy vanishes; the nation states cannot claim delegated split-sovereignty; the global village is uniform upshot.

GROWTH SUSTAINABILITY

Growth opposes to decay: it typifies the young life, then, the old age follows, before death. The biology paradigm sims to be side aspect in the galactic reality, which appears evolving according to deterministic staediness, showing causal coherence. Actually, the causal coherence is men

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(discovery), leading to the (physics laws) by cognition procedures, modelling and explaining the universe occurrences. At this point, we may introduce faiths: the presence of galactic information, assuring immanent natural rationality to the material events; the existence of heavenly reality, granting transcendent godly wisdom to the same. These faiths have, perhaps, plausible bases, notably, if life, with effecting and thinking issues are universal results. However, the same bases open to other prospects and interpretations.

Indeed, thr biology offers the way to new resources by the controlled duplicated lifeforms of the agrarian revolution. Moreover, biology does not simply brings to life; with men, notably, it leads to reasoning and to the effecting and relational modes. The life reproduction discovery, then, allows graduating the produces, to needs or to diffferet objectives. Qite soon, the men shall manage foodstuffs and the essential other products, looking at timely storages and providing continuity. The growth, from natural process of biology beings, chanfes in human progress. Production and supply are survival queries, asking careful planning:

- economy, supplying essential Home foodstuffs, personal belongings and basic services;
- Produce stocks exploitation, resorting to harvests and upbringing by agrarian methods:
- Mass production, aimed at scale economy of maxi sing productivity with minimal cost;
- Flexible supply for customers' satisfaction, optimising the return on the investments;
- Frugal growth, for ecology sustainability, compensating exhaustion and contamination.

The stages of the hunan profress starts witth using effecting methods for dress and home building, and, in the following, for agrariak activities. Then, the industrial revolution aims at productivity, by the above listed series of steps, to fulfil economy goals and ecology restraints of the extant societies. The growth qualifying stages presume human autonomy up to the globalism, which shows several facts:

Global communication, based on computer networking and worldwide web facilities;

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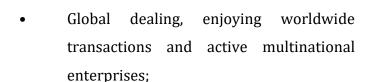






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- Global exhaustion, nonstop request of raw supplies, for added-value transformations;
- Global contamination, ceaseless piling up of unworkable wastes and end-of-life relics.

The worldwide transactions enjoy technology opportunities and face material supply and disposal irons. The globalism restraints have evident origins in the earth limits; the «circular transformations do not exist, always leaving decay and waste; therefore, the bounded earth's resources have finite usefulness; then, the damages heaping fully destroys the planned advances. However, if we look at to all universe, it is manifest that what happens on a negligible does not affect the complete galactic ensemble, which keeps the earlier steadiness. The disparity of the two entities suggests such factual uncoupling: the humankind globalism, including all worldwide facts, remain unknown to the universe; regress after progress are unidentified.

The life/cognition anomalies and tied progrss/regress chances, as alredy notoced, manifest on the tyny earth throgh the <human

intelligence, but they opens the ways to the the <cosmic rationality> or to the <godly wisdom> faiths, galactic assets, conditioning all event of the material reality. The globalism directly and critically affects the contingent description; the total ones resort to then galactic assets, which a priori can offset the localism negative traits. The growth sustainability question, then, is globalism critical concern of the contingent interpretation. It is useful, nevertheless, joining globalism with universalism, and getting galactic compensating ways, by just, resort to the earth/universe disparity.

Indeed, localism and globalism oppose to universalism; in the study, both are contigent bottom up results of relational metods; we have, howover, also stresse on ourfaith in sciene, as if the (physical equations) are total truth, denoting that our (knowledge) exactly copies the galactic information. The trust in the science truth leads includthf absolute portravals of the life/cognition phenomena, as if biology fits in the <cosmic rationality> or in the <godly wisdom> descriptions. Possibly. similar occurrences replicate in several planets, with comparable effecting and relational fallouts: the natural rationality and spiritual wisdom are standard

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projections, which slot in coherence in the galactic behaviours. The incorporation coherent traits in the material universe implies a priori complex assumptions, with cognition and judgment potentials; thus:

- Deep knowledge: monism and galactic information; or dualism and spiritual govwnance;
- Shallow knowledge: embedded intelligence, stabilising pace wise contingent detections.

The former lines bring to the known known total faiths. The latter one may resort to human intelligence, performing software/hardware integration with universal worth upshots. The shallow descriptions are odd guesses directly using the acknowledge coherence because openly accessed and assessed. The mind worlds encompass information detection and valuation, when interacting with the environs or other people; the data have encoded formats, whose meanings enjoy the local clan agreement, up to approved restitution. The coherence incorpoation into the msterial realiyu hppens, oncce acknoledged the monism or dualism faiths, unless the straight information integration accomplishes, with direct software/hardware

approval. The cohrence incorporation by <human intelligence> is quizzical option: it shows our ability to detect the galactic surrounds via <cosmic rationality, depicted by the total physical laws of the universe. The puzzling result moves from alternate readings of the globalism description, dealing with contact either ecology:

- Worldwide communication or trade. resorting to innovative information technologies;
- Earth all-inclusive source lessening and waste removal, entailing our bounded planer.

The growth will profit via worldwide web, if new resources and litter spaces are available. These benefits, however, depend on the real presence of galactic information, i.e., the detection of true physical laws. The conversion from contingent to total (knowledge), apt cognition integration, is falsification practice, applied to the perceived data, towards scientific restitution or theoretical explanations. The successfulness follows the acknowledgment appropriate of scientific community [64-85].

APT INTEGRATION

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The presence of galectic information is, most of the tines, implicit hypothesis, factually verified if apt integration has positive accomplishment. The falsification practice requires starting parallel assessments and comparing the outcomes' plausibility. The checks repeat on the different discovered databases, so that our acquired scientific files. The trust about the presence of galectic information in the material surronds is common habit, meanig that we look at the consistent outer cosmos, rather than at the unpredictable chaos, and such idea seems having reliable dependence. The information integration is collective routine, turning the locally devised knowledge into total quality of the material environs. Watching the sky, we create the celestial mechanics; observing the stuff, we design atomic/electrnic prototypes; bodies and fields seem inventios, enjoying true foundation.

The science developments appear providing total models. The progress myth get theoretical foundations from mind worlds' intangible procedures, allowing advances by intellectual innovations, out of the entropic connections. The softwae/hardware separation is enquiring result, looking after encripting and narrations, adding justifying interpreattions, parallel to the material reality, as if the qualifying aspects are native traits. Then, the softwae and the hardware could follow parallel handling, devising nes items or implementig the designed objects. The conception of technical artefacts or political setups is mental activity; the bulding of them entals tangible transformatins. The progress design and producing, but the entropy deacy starts only withn materis phases: the creative and supervision phases are mostly incorporeal. The progress myth aims at avoiding or minimimising yhe tangible manipulatios, by series of tricks, such as:

- Even manufacture areas, developing many instances, unmanned factory included;
- Lifelong maintenance and management of delivered artefacts, by on-process acts;
- Continuous care and repair, with service coverage and repair executive handling;
- Logistic supervision, performing monitored overhaul, with sure peripheral bargain;
- Facility provision and regulation, with real-time supervision and practical controls;

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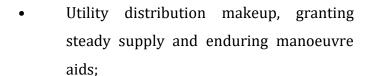






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fulfil Reverse logistic, to circular processing cycles, to zero litter and spoil planning.

The softwae/hardware separation applies, if the presence of galectic information has consistent proofs. These have plausibility if the the physical laws are discovered and accepted true actuality: the coherence is natural quality (not just human invetion). The acknowledgment of the cosmic rationality or holy wisdom is, perhaps, further faith acts, after the factual recognition of true physical laws; in this situation, the humam intelligence is sufficient progress enabler, possibly assuring sustainability continuance, under apt integratio. Therefor, the ensuing growth is not certainty, but factual a posteriori outcome, without steady reliability. In the softwae/hardware depictions the <knowledge> is, conceivably, implicit attribute of material carriers; the detection implies decrypting the digital message or revealing the analogue worth. The detection, thus, has the simple purpose of decoding digital data or rstituting equivalent entities, since the information contents are

already present and corried by the tangible supports. The matterial stuffs carry or con carry qualifying information; the convoyed messages have conventional restoration by samplig and encodipng quantified perceiving. The conservative restituion brings to languages, with vocal and grapic modulated symbols; then, the spoken/written communication becomes clan or nation habit, expressing extant aspects of the reality. The conversion of codes and trasltion between idions is possible, still given the same message; else, alike contents hve seroes of formats and spoken/written readings.

The human intelligemce testifies the presence of galectic information together with the tangibe environs and it asserts the absolut coherence (rationality or wisdon) of the learnt physical laws and causative limks. The discoveries follows apt integration of qualifying attributes (sftware) tied to matter carriers (hardware). The faiths in cosmic rationality or heavenly wisdom can be relaxed, still trusting in the (knowledge) creative potentials, delivered human intelligence, which directly avails of true galactic information. We do not need proving inner levelheadedness of the surrounds; we can enjoy direct access to total details and use them to get out worthy

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innovations and/or effective restorations. The factual advances, typically, look at the overall universe: we can only share the stable sort of it, plausibly discovering growth sustainability measures.

FACTUAL ADVANCES

The factual advances, promoted by the human intelligence, implement technical and political innovations, not before available in the natural contexts. The progress, according to current analyses, makes accessible manmade foodstuffs and objects, which become standard supply for the wellbeing of the civil societies. The series of advances starts with the effecting methods and agrarian skills readiness for creative ides;

- Home manufacture, by means of spread out domestic and local textile and building jobs;
- Country produces, using husbandry and upbringing jobs, as diversified fonts of foodstuffs:

The improvements, then, evolve to industrial effectiveness: at first, aimedg at economy returns, later on, restramed by ecology imperatives. The productive efficiency is critical choice, since each material process joins entropy swelling, with useless residuals. The effecting metods face heavy snags in manufacture:

- Mass production, with economy of scale maxi sing productivity with minimal item cost;
- Clients' satisfaction, enabling economy of scope. optimising the return on investments;
- circular Growth sustainability, with planning, aimed at sources' recovery and depollution.

Further drawbacks establish in generic effecting and handling operations, when the merely machining and assembly are not main concern. The industrial work organisation is essential feature, having efficiency and reliability fallouts, which, notably, affedt the globalism breakthrough susequent steps:

- (industry 4), when the worldwide web allows managing contacts tasks and controls everywhere;
- (industry 5), when exhaustion and effluence need cautious running and supervising endeavours.

The globalism paradoxes join the bottom up unified links by computer technologies, and the

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top down sources bondedness of our planet. We ehjoy complete visibility and control of every specifics and we are aware of the current lesseming and destroying of safe life conditions. The (global village) brings all people to relish on similar opportunities, but force every ones under strict thrift behaviours; in lieu of competitive profits, the uniform frugality compels communal standards. As already noted, the earth/universe inequality allllaws transferring resources and litters between the two, without noticeably modifying the cosmic order; we can restore the earth to safe condition, with negligible effects on environs. Then the growth galactic the looks interplanetary sustainability at matter/energy exchanges, with the suitable planer rescue.

The sustainable growth look at planning factual advances within <circular ecology> outlines; the progress is residual balance between «circular economy and «circular ecology» if the former leaves out benefits. The words ecology and economy have similar structure, but the involved citizens' concern home or homeland as local either global assemblies, within which uniform legality applies:

- <ecology>, home account, where the oikos has globalism import entailing the global village;
- (economy), home ruling, where the oikos has localism definition: clan, tribe, kinfolk, nation.

The relational methods turn to top down constraints, when the safeguard of the earth's spaces needs impending reinstatement. The intelligence ingenuity and inventiveness engage in *(circular ecology)* aims generalise reverse logistics rescue with worldwide effectiveness; the <circular ecology> targets necessitate looking at the balancing soutce measures for our planet. The outcomes presune the galactic stadinedd, if onlythe backing intellect supplies the right creativity suppled directy by men and, perhaps by robots.

The proper recovery requires intelligent programming, once the current decay has full visibility and suitrd survey. The <industry 4> steps include suporintending managing robots. forward productive and backward recovery transformations, with automatic effecting methods' running and results and fallouts' assessment. The robot centrality is evident at the subsequent (industry 5) steps, when the growth

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sustainability figures need exact implementations and checks. The forward and backward logistic has inherently deterministic statistics, strictly allotted by the current ecology restraints; the managing robots' automatism transfers the all accomplishments to (global village) routines, unmodifiable by front-end actors. The thrifty progress has to follow compulsory records, efficiently granted, if transformed in official practices.

Conclusion

The growth sustainability is open auerry, deserving plausibile optimism, if proper conditions apply. Tthe progress is astounding attainment of the human intelligence, which denotes individual awarness and collective accountability, so that we may look at total foundations, say, cosnic rationality or godly wisdom of the extant reality, these bases, without proof, are hopeful faiths; conversely, the amazinbg civilisation achievements remain hard to justify, if only issues of contongent human imagination, but not not linked to absalute natural details. The cognition procedures, moreoverm appearm converting the contingent human (knowledge) into scientific models and

theories, after repeated trials and falsification checks. The science, notably, leads to true physical laws: we remove the real/visionary dilemma on men detected (knowledge) by science, most likely, finding the causal coherence of the galactic information an allotting the results to total domains in order to concretely link the human intelligenc. to the unoverse consistency.

The empirical connection bypasses the explicit faiths in inner rationality or upper wisdom: we avail of the empirical sensing and appreciation of derails. with shared iinterpretation and acknowledged reliability, to change personal visions, in agreed certainties. The experimental approaches practically builds pace trustfulness; however, at the end, we know true physical laws, and can reliaby use then, to plan the fitting advances. The picture proposes the (progress myth), selecting improvements and rejecting hitches. The trend develops on scientific prospects, prising the aids of intangible intelligece and omitting the existence of entropic globalism, after localism, drawbacks. The modifies the capability of open providing and littering toards impending restrictions; these, actually, show contradictory outcomes:

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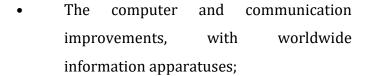












The earth boundedness, implying the local source lessening and waste removal restrictions.

The (global village) has the worldwide web welcome with the (industry 4) and (industry 5) robot-based developments; however, soon, the growth sustainability queries start, from local contamination, to global pollution. The globalism immediately becomes negative verdict, since the earthly homeland weakening and corruption leave permanent marks. The spot condemnation, initially, follows gradual trends, becoming critical conviction at globalism, unless active regaining operates. The recapture

- The combined decay monitoring, with adequate recovery and safety figures planning;
- The on-line automatic implementation of right retrieval and salvage transformations.

The growth sustainability regire running forward and bacwarg cyckes, resorting to wastes as subordinate sourcees or, at least, convering the

residuals to stady and safe trashes. The safety recourses to unthinking and programmed rescue; the automatism enrails running (industry 4) and (industry 5) robot-based plans to satisfy the ecology restraints, under implicit imperatives. The safety by human intelligence enjoys factual accomplishment, only needing the mentioned earth/universe disproportion, when suitably programmed robotic equipment adds. The spontaneous or implied rescue resorts to (industry 4) monitoring data and it fulfils the (industry 5) the ecology restraints with onprocess managing robots, properly encompassed as (global village) directives. The globalism impending decay and guilty verdict follow sidestepped courses; the managing robots work in line, avoiding the danger of critical situations by interplanetary measures by apt forecasts and effective dealings.

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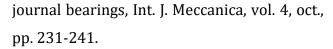








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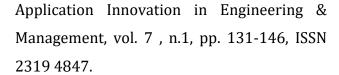








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