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THE ROBOT AWARENESS SUSTAINABILITY

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ABSTRACT

The study describes the human civilization as by-product of political and technical inventions: these appear manmade acts, switched by collective break through so by technology revolutions, which alter the original wilderness, to conscious civic life quality. On the earth, the progress trims the galactic environs, based on communal organizations and aware enhancement of current and future wellness. The political and technical devices act as human intelligence contingent results, built on the developed knowledge, invention of local ensembles of watchers/actors. They can be, perhaps, total issues of cosmic rationality or heavenly wisdom, believable inner/upper causes, already present as galactic information of the reality and widening the <knowledge> trails to total alternatives. Then, the cognition trails are common to men and robots, synthetic hands/minds running political deployments and technology innovations. The broadening is critical opportunity at the globalism breakthrough, with the impending ecology constraints, due to the over-depletion and over-pollution of the earth: manmade and synthetic ways are equivalent, when aimed at wellness and progress or sustainability and rescue. The, ecologic safety may also ensue from robotic aids, using intrinsic or absolute <knowledge>, via galactic inputs, maybe, without men aware cooperation.

KEYWORDS: Civilization Awareness - Cognition and Communication-Human Intelligence. Cosmic Rationality/Heavenly Wisdom - Robot Technology - Artificial Energy/Intelligence and Synthetic Hands/Minds.

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INTRODUCTION

The human civilization is peculiar achievement, paralleled to the extant environs: it is negligible event, in the huge galactic setting; the universe follows deterministic courses, while the men perform aware acts and judgments. The mindfulness assigns symbols and explanations, defining the on-going facts and phenomena. Portrayals and reports are intellectual construal of current happenings by justifications that avail of abstract marks or codes. This encrypting is contingent

appraisal, but we may expect that images and narrations link to total items and laws in the reality, so that their invention connects to real facts. The mental bases entail:

- the worth of the human accounts and models benefits from assessments at the galactic range;
- the role of the human knowledge and design enjoys truth cosmic or godly founding validation.

These conjectures are dreams or bets and seem elucidating why the progress is coherent happening, with causal backing in galactic information, already present in the universe. The civilization achievements, thus, have origin, further than the human intelligence, in the cosmic rationality or godly wisdom, as explicit aids or fanciful metaphors, even without explicit assumptions. The cues show that our civilization is astounding cognizance construal, adding intellectual traits, to the material environs. The knowledgeable trimmings, if dependent on the human intelligence only, are spot passing issues; if backed by cosmic rationality or godly wisdom, they build as galactic overall effects, with permanent worth. The alternatives show the relevance of the <knowledge>, perhaps defined as men's invention, perhaps existing as galactic quality or holy entity. The civilization, thereafter, collects contingent undertakings, pace wise performed by men, or it meets total accomplishments, originated by inner or upper causes, with natural or spiritual sort.

The civilization, in conclusion, follows knowledge-driven attainments, with the creation of ordered setups and exploitation of material resources. The human <knowledge> promotion, as noticed, allows contingent achievements; it appeared prospecting the <progress myth>, when considering the planning:

- the human intelligence operates by abstract means, adding social tips and designed changes;
- the enabled transformations, each time, can select fit improvement and avoid all downsides.

The ecology obliges revising the progress myth>: the intelligence is mental skill, acting on tangible stuffs; the material transformations follow physical laws, with entropy growth and cumulated damages. Simply looking at what occurs on the earth, the men designed and performed changes modify the natural trends:

- the earth's sources are finite and the progressive depletion brings to complete exhaustion;
- the earth's surface is limited and the transformation fallouts lead to the land uncleanness.

Such alterations do not affect the whole universe, but merely our negligible earth. We may term brief event, the civilization, having start and end. We can expect that the occurrences have galactic origin and we shall further investigate on the just outlined happening sequence:

- the cognizance peculiarities, with the generation of accounts and models of the reality;
- the civilization expansions, with creation of political setups and technical attainments;
- the growth sustainability query, with recognition/barring of conceivable galactic links.

The study develops along the latter line, opening questions, more than providing answers, because, since the first listed happening, multiple statements are possible, depending on chosen paradigms.

ACCOUNTS AND MODELS

The cognizance particularities belong to duplicating items and facts by identifying them through accounts. The narrations are mental versions of what sensed and interpreted. We cannot confuse reality and readings of it; the understanding implies shared appraisal, bringing to agreed <knowledge>. The result is possible if:

- the cognition has galactic footing; all local readings shall converge to that total standing;
- the cognition is human selection; we have spot readings, to modify for wider agreement.

The lack of proof of galactic standing, we look at bottom up cognition shaping for spot sharing of details, data or warnings, figures or feelings. The communication involves encrypting wording/written symbols, say, the selection of modulated sounds or focused drafts, having agreed meanings. The words/signs carry right import within each interacting communities; outside, the coding meaningfulness wanes. The discerned (and encrypted) items or aspects show that what collected by different communities converge on two facts:

- the reality around is multiply connected galactic context that, properly, offers very tiny access;
- the reality appears undergoing steady changes, according to even laws, by mostly causal trends.

The two facts assign worth to the detected <knowledge>: it may resort to different languages; it actually describes the same reality and physical laws. The common contents explain the shared understanding: this is starting point categories cognition, reasoning and communication. The amazing coherence of the locally agreed <knowledge> leads to figuring out <galactic information>, with total worth providing:

- <monism>: immanent qualification of all the material phenomena: stuffs and transformations;
- <dualism>: transcendent ruling for separate spiritual government of the material phenomena.

These rulebooks need modifications to assign the human <knowledge> roles: they need to stay implicit or distinct from the devised galactic information. Actually, we do not know what such concept mean: matter qualities of <monism> either spiritual reality of <dualism> are choices to prove. Presently, we are bystanders of the universe, enduring determinism evolution; the conscious thinking is anomaly, unless spirituality has dual consistence, matching automatic fruition. For sure, the debates on the original <galactic information> or about the <monism> vs. <dualism> dilemma seem questionable: the justification of our <knowledge> and civilization attainments needs the previous consistency estimate or the figured out extricated issues. The analyses goon suitably linking consciousness anomaly and modelling dilemma, detailing:

- the possible human cognition/communication mechanisms along bottom up construal;
- the feasible models supplying total galactic information backing, to human knowledge.

The cognition brings to the chiefly immaterial domains of thoughts: these coherently assemble views and feelings, building the mental spheres of each individuals; the men quickly need facing the queries: mutually, to give worth to the detected views and feelings; absolutely, to assess if the data consistency leads to the <galactic information>. The initial requests aim at educating and training the thoughts, interactively stating agreed encrypted symbols, readily taught/learned for the mutual understanding of the group's members. The human <knowledge> looks at the data, assessments or emotions, exchanges. The final entreaties enjoy of extended databases and use the stored <knowledge> to imagine inferences and to work out theories. We recognize that data and ideas, expressed in different idioms (and resorting to dissimilar codes) have shared connotations, making feasible extracting total facts and aspects of the extant reality out of the human views and feelings. This brings to believe in the original <galactic information> and to devise models and schemes, justifying the interpretations and sciences/doctrines.

The <knowledge> formation seems being earth's peculiarity, supplying communication options by encoded messages. Data transmission allows the exchanging ideas and judgments: this is evident for men; it appears unidentified elsewhere in the universe, which undergoes priori allotted and unaware trends. The limited to men consciousness is farfetched privilege; suggesting that the <galactic information> is plausible original entity or quality, characterizing the universal cluster. Hence, the all-material stuffs have parallel spiritual ruling units (dualism), or, in alternative, they have intrinsic attributes, providing coherence and shaping the evolution (monism). Thereafter, we have to deal with the <cosmos>, which differs from the <chaos>, having <godly wisdom> or <cosmic rationality> to allot consistent progression, due to fit discern ability. The visibility links to accounts and models that define and justify the event courses by tales and metrics. The interfaces are puzzling dealings, leading to abstract intellectual domains, [1]-[18], formalizing apt communication and assessment options, or parallel routines operated via transcendent or immanent instructions; the brief cues avail of personal views concerning the data detection and processing instrumental flows.

COGNITION

On our earth, the life and the intelligence are oddities, giving starts to activities, done by agentive stuffs, and to consciousness, enabled by thinking beings. The biology and the cognition are helpful descriptions, typically, resorting to gene evolution and to meme fruition schemes. The latter one combines two steps:

- personal discernment classifies the feelings and allots vocal/graphic symbols, with meaning;
- Ensemble-learning needs shared agreement on the selected symbols and allocated meaning.

The discernment encoding mostly follows parental transmission, by emulation training ways. The babies acquire grasp and vocabulary at elemental range; the schooling, then, supplies suited ensemble learning, today, basically, oriented towards the split-national cultures. The cognition combined-steps show existing personal aptitudes (abstraction and discernment) and collective competences (encrypting and teaching). The cognition is intellectual process, leading to the creation of individual <mental worlds>, where storing the spotted <knowledge>; however, the <knowledge>

exists, if shared, having communal meaningfulness. Then after, the personal <mental worlds> can have duplication in <databases> of computers or other data-handlers. The spotted <knowledge> can engage several carriers and it be object of printed books. We can design devices (robots) spotting and processing <knowledge> along the combined-step course;

- abstraction stage: the acquisition/discrimination resorts to usual data-mining processes
- encrypting stage: the encoding can use standard machine language, to binary formats.

The cognition entails operating on intellectual concepts, in lieu of tangible objects; the ideas are original statements, replicating the notions that identify the happening items or facts; these concepts ask formats, with physical carriers and spotted details. The carried figures can resort to analogue (continuous) or digital (discrete) layouts, intentionally selected with conventional meaning. The agreed imports are free choices, but the spotted details, once identifies, provide consistency to the information. The sketched cognition mechanisms, already, seems enjoying example discrimination options:

- ensemble teaching, typically, started by parental training and fulfilled by schooling aids;
- diversified setting, mixing human and machine languages, with meaningful outcomes;
- general construal, using translation dictionary and information permanent constancy.

The first discernment encoding is typical human ensemble learning, leading to contingent knowledge. The second discrimination aspects mix human results and instrumental findings: these are analogue signs or signatures, extensively used in the past for the processing of time-varying signals and today still used for visual applications, but also the linked time-series noise reduction and natural language processing. The last mechanisms standardize the recourse to digital processing of data; the resulting <knowledge> consistency shows its independence from the timely selected encrypting ways, with, in progress, restitution of the true galactic information. The first options are men centered: they avail of native language communication with tied lexicon. The second ones use extended dictionaries, adding special symbols for dynamic signatures, graphic patterns, and other directly encrypted data. The last ones unify the encoding formats to the binary layouts: these are staring ways to build parallel databases, with differently coded information-

The remarks tell that we need discriminating items and qualities to become spotted <knowledge>, readily communicated and understood. On the earth, the encrypting courses are men's invention, leading to many native idioms. The data acquisition and processing have parallel human/instrumental paths: the diversified setting, profitably, mixes words and ciphers or signs, with improved issues; the general construal, skirting or not the many native idioms, appears authorizing the <global village> conjectures: after that, notably, we have reliably identified the true physical laws, abstract canons, ruling the material universe. The deduction is not obvious: the upper spiritual sphere or the inner galactic information is total truth (not dependent by men). The parallel ensemble learning, working on the same data, do not add biasing errors; the averaging just improves the final estimates 'accuracy. The diversified setting, by human idioms and analogue signs, tells the human <knowledge> is consistent with the current reality. The general construal, by the systematic comparison of databases, advises believing in the galactic information and trusting in the

experimentally detected <knowledge>. It, further, tells that human and machine languages are equivalent: men or robots' cognition do not distinguish; manipulation or intelligence can have artificial performers. Mixing human and machine encrypting, the diversified setting prospects that automatic information restitution is reliable cue. Moreover, for example, we expect conditions under which mixed learning, used in visual systems with lot or graphic signs; also, deep construal may be more beneficial than a single encoding or classifying way.

The cognition, personal discernment and ensemble learning, is essential requisite of communication, to give worth to <knowledge>, supporting science and awareness of possible benefits. The parental teaching characterizes culture transmission, formalizing local traditions and peculiarities and creating ethnic orders. The <knowledge> has divisive cognition, with communication restricted to local groups or native countries. On the earth, the cognition is human pursuit, with the ensemble backing of the agreed idiom and database, which are peculiar choice, with contingent worth. The vocabulary and encrypting procedure are subjective; we have only notice the interest, in diversified setting, to keep the an a logic signs, when mixed encoding is feasible and the advantages, in general construal, to parallel idioms/dictionaries, for the unified restitution of what spotted in the reality. These two outcomes suggest deepening the reasons, if any, of that union.

MODELLING

The cognition by parental teaching and ensemble learning is inventive doings, leading to original idiomatic signs, with shared meanings. The language creation, whether or not object of upper/inner stimuli, resorts to locally agreed terns and ciphers, fixed by marginal fantasy. The outcomes are domestic or national idioms, overall defined by factual dualism, because the <knowledge> has meaning at parental teaching/ensemble learning range. Moreover, cognition, with diversified setting and general construal, faces the quirk that, in the restitution trials, some pre-set codes match better than the agreed idiomatic signs. These are necessary in the communication between men and at instrumental lines: given restitutions ways seem enjoying total, rather than contingent, worth. The description of the reality and narration of what happens in the environs are not only men's fantasy: the spotted <knowledge> tells all items or qualities of the material reality, i.e., the galactic information, but the details appear with local views and invented formats.

The galactic information is qualifying aspect, saying that the material reality owns shaping formats and follows courses that have time accounts: this differentiates cosmos from chaos, allotting rational changes, with inner causal consistency. Alternatively, the behavior all coherence follows upper control, ruled by the dual spiritual reality. In lieu of the <factual dualism> model, the <forged monism> or the <godly dualism> one is possible choice. From these hints, the spotted <knowledge> allows devising true theories: the cosmology, to the causal details in the surrounds, together linked to yield the physical laws. The discovered sciences (biology, chemistry, physics, etc.) seem testifying total truths, by twin effects on men (or their <knowledge>) and on nature (or its galactic information) that get qualifying historic records. The twin upshots don't exist in the <mere monism>, when the qualifying narration are absent. The <knowledge> is odd invention, adding abstract qualifications to the material realities; the monism/dualism dilemma leads to four models:

- <mere monism>: the matter aspects, if existing, are not apparent information, with thinking setups;
- <godly dualism>: the mental thinking inspires to transcendent spiritual reality, sharing godly merits;
- <forged monism>:the matter qualities are information, sensed and encoded as implied knowledge;
- <factual dualism>:the mental intellection foresees cyphers and data, giving <knowledge> estimates.

The matter qualification by information is puzzling query: open quiz with mere monism; holy entity with godly dualism; intrinsic aspect with forged monism; fancy guess with factual dualism. That qualification is not necessary: the universe progresses steadily, without menthe query is manifest, when onlookers and judges are present, giving narrations and interpretations, as far as their conscious understanding rises. The all, yet, does not modify the current trends undergone by the galaxies. The observations and findings are; may be, feature of the material backdrop (monism), maybe, the spiritual entity ruling the matter (dualism). Without watching and detection of events, we have mere monism. The intrinsic discrimination gives forged monism, when the <knowledge> remains implicit feature of the material reality. The dualism sets thoughts and reasoning as spiritual reality, overseeing the material one. The human imagination can figure out how perceiving and encoding the galactic information qualifying the material stuffs or the godly controls of the same stuffs. The previously outlined two step cognition suggests that the men fantasy follows upper/inner inspiration, making understandable how the <godly dualism> and the <forged monism> direct the <factual dualism> towards total discoveries. By these models, findings distinguish from tangible frames, even if only implicit qualities show. The <knowledge> separation avails of transcendence, immanence or fancy devising, through distinct holy ruling),implied steering or prospected goals. The galactic information independence, thereafter, authorizes godly wisdom or cosmic rationality as a priori chances, and it allots total truth, notably, to the discovered physical laws. The cognition is men's anomaly, creating mental worlds; the parting has phony sort with <forged monism> only, needing implicit restitution, for the overall coherence.

The monism, in principle, prefers alternative readings: perception and intellection create encoded details; the resulting reasoning leads to design and to implement clever improvements of the life quality. Without the <data/haulers> parting, the cognition detects <knowledge> as neuronal network states; the sharing aims at other databases (storages, books, etc., with more or less permanent material carriers, while the instant derails are implicit processing qualities. The transcendence and spiritual reality vanish, the mental words being just temporary neuronal nets, which carry <knowledge>, timely copied and shared by other storages and instrumental aids. The cognition goes together with communication with agreed readings, leading to shared culture and interactive teaching/learning technical and political upgrading. The <forged monism> joins to <factual dualism>, with central to the human <knowledge>, providing data on how exploiting the surrounding tangible sources and on how organizing the communal interactions.

The actuation and thinking courses affect the wilderness: the civilisation ensues from mixing the upshots of manufacture and relational modes, to boost pleasantness and comfort by technical items

and political orders. The <knowledge> has exchanges to devise and to implement the progress and social life. Today, men have robots replacing activity and thinking sequences, via synthetic cognition and artificial energy aids and equal or higher results of the computerized word processors and manufacturing lines. Innate/taught abilities are not exclusive, but shared with devices: the artificial energy and synthetic cognition widen human actuation and reasoning skills. By <factual dualism>, their origin exclusively is intelligence, ending in contingent advances. The <godly dualism> looks at the spiritual reality and enjoys of absolute <knowledge> to civilisation by images or findings that distinguish from material frames. The explicit discrimination of information from matter entails dualism: the godly dualism, separating the spiritual reality; the factual dualism, separating the intellectual worlds; we, actually, remain in the ephemeral human frames, with the thinking and fantasy forecasts. Without discrimination (mere monism), the watching and detection of acts and events cannot occur. With intrinsic discernment (forged monism), the awareness of spot qualities or changes is implicit function or hidden function, viably communicated within mental worlds.

The <factual dualism> is not dualism, unless transcendence is faith, giving rise to immaterial reality, where holy wisdom reigns. The <forged monism> is not monism, unless the cosmic rationality is faith and intrinsic information implies immanent coherence, with deterministic evolution. The incorrect situations enjoy fancy or fictional holiness (imagined spaces), either implicit reasoning or understanding at mental ranges (trusting in galactic reliability). The human intelligence is awkward change, having mental worlds with thoughts and conscious judgments and designs. In current readings: cognition starts thinking and explicit <knowledge> so contingent teaching/learning allows bottom up advance; intrinsic discernment yields implied <knowledge>, i.e., detected quality of existing environs: the feature/matter separation does not occur; the spotted hints are intellectual dependent figures or implicit <knowledge>. The hybrid ways merge intrinsic discernment and human cognition: if we have faith in it, direct access to galactic information exists; if not, the entry asks trial and .fancy. The up to now given models aim at better defining the properties of autonomous agentive and cognitive processes, which parallel the galactic environs. The actuation ways lead to life; the cognitive ones, to intelligence, i.e., to abstraction and encrypting. The description and elucidation previously require recognition and comprehension; the devising and transformation need cognition and awareness. Then, the dualism prospects, singling out autonomous <knowledge>, seems providing meaningful explanations; the monism forecasts are hard routes, with chances when implicit <knowledge> could appear, at least as passing or side effect. The outlined models help defining alternative options, when we try justifying how the human civilization may instigate and progress.

AWARE HEADWAY

The factual dualism is usual approach, describing the civilisation issues, replacing wilderness by more men friendly settings. These are contingent layouts, moving from singularities, lie and intelligence, which seem have started agentive and thinking beings, with watching, transforming and reasoning skills. On the earth, the biology, replicating life expectancy, and cognizance, reproducing knowledge formation, say that actors and onlookers add, to the extant backdrops, new artifacts and social orders. The earth events and changes are negligible, compared to the overall

universe frame: they are thrifty noise, in the steady galactic trend, so that the humankind history develops along bottom up lines, without affecting the material backstage. The reverse top down way is, mainly, different: the godly dualism avails of spiritual government by absolute knowledge; the forged monism tracks cosmic rationality makeovers by (implicit) total knowledge. The faith in upper/inner ruling laws modifies our civilisation readings, via, perhaps, presence also of a prior miracles or automatism. These alternative analyses remain open in this initial survey on human advancements; the contingent, men-centered style is typical way, for <knowledge> driven designs and implementations.

The progress way, chiefly, explores social organization and technical innovation plans, to turn wilderness in more friendly surrounds. Both devices have origin in fundamental opportunities, which take benefit from the thinking and actuation skills of the human species:

- the relational modes, fostering communication, trade and governance capabilities;
- the manufacture modes, enhancing design ingenuity and productive effectiveness.

These modes characterize the earthy events: it is incorrect generalizing the sequel, but only an example of aware planning and intelligent accomplishing. The relational modes lead to invent political organizations, at matching consistency of the individuals and population, inhabiting the globe:

- <scattered populations>: nomadic tribes, changing homelands, aiming at foodstuffs;
- <settled countries>: split-sovereign <nation states>, fighting for conquest/supremacy;
- <earth fullness>: uniform contacts and trades <global village>, under ecology checks.

The free wandering of dispersed communities ends some clans settle, claiming the country possession as <nation state> of the ethnic grouping. The spot-autonomy and split-sovereign create privileges these start to be critical, barriers are necessary to avoid the people migration, discrimination the wealth distribution. The globalization advises that a new <collective breakthrough> shall happen, after the <nation state> season. The parallel technical innovation trail, as well, breaches into typical ages:

- <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.

The <technology revolutions> give centrality to the assessed theories and knowhow, from which devising fit profitable actions. The primitive acts lead to personal artifacts, dresses and homes: manmade helps add the natural stuffs. The basic undertakings aim at controlled food production by arranged biology processes to breeding and husbandry. The forward-looking activities point at expert effectiveness of means, methods and processes. The <collective breakthroughs> and <technology revolutions> show how far the social setups and technical revolutions ask upturns: the progress requires facing critical situations: the breakthroughs or revolutions give hints on how dealing with arising dangerous settings. The political orders and technical designs belong to the intellectual spheres, assigning the behavioral legality and scientific suitability. The two pathways need now practical details on their joined relevance. The relational and manufacture modes are,

both, personal virtues, denoting, the ones, how the interactions shall organize for better communal life and, the others, how the material sources can provide helpful advantages. The linked outputs are political either technical achievement of the human <knowledge>, [19]-[48], at least, when usual analyses describe what seem happening around us. In the following, the hints limit to remarks, based on personal studies.

TECHNICAL HEADWAY

The technology innovations are amazing developments, without apparent previous canons, already used to get the useful outcomes. The knowhow is simulation and emulation result, but inventions or discoveries seem presuming earlier principles and results, making reasonable the devised actions. To that purpose, the resort to <manufacture modes> opens to possible inner/upper inspirations. The revolutions are, in all cases, local discontinuities, characterizing epochs and populations. The stone, bronze and iron ages did left behind several peoples (Aztecs, Incas, etc.), otherwise effectual. The invention of twisting and weaving machines or the design of arches and vaults modify the working potentials with fabrics or ceilings, out of natural habits. The textile and building skills join dexterity and design in the old revolutionary breaks, giving men's unicity. The concurrent ideas of sowing and breeding practices for efficient farming, to become revolution, need the localism collective breakthrough of settled societies; it, most likely, comes to end with the globalism collective breakthrough, when people are everywhere and the control on the production efficiency cannot give reliable way-out. The technology revolutions are standard pictures, to set steps in the history of men. The parallel progress avails of suited technical <knowledge>:

- the manufacture modes typify by personal proficiency aimed at art and cart dexterity;
- the agrarian advance widens to new biology areas the manmade productive effecting;
- the industrial improvement brands by controlled efficiency of the activity organization.

The technology innovations tell that man's design talent is suited to devise progress and to avoid regress, by clever choices. The ingenuity handles ideas, giving intangible wealth with applied utility. The discoveries widen the supply chains with manmade products (wears, etc.), stocks (crops, etc.) and gears(work ways, etc.): the natural courses do not include these objects, processes and enhancers and we move from frugal, to affluent societies, making use of technology innovations and looking after the improvements purposely achievable by exploiting the design innovative material transformations, timely, dealing with:

- the clothing revolution, covering bodies by dresses, followed by sheltering people by houses;
- the agrarian revolution, managing domestic wild species, for men controlled food providing;
- the industrial revolution, improving supply chain efficacy, by work plans and robotic tooling.

The technology innovations describe many changes in the building of the human civilisation, inventing tools at the Stone Age and metallurgical processes. We limit to three revolutions, to acknowledge epochal shifts, defining wholly different societies, with overall shared improvements:

- 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 organize the activity schedules, under aware task control.

The garbed societies give start to home economy, performing many accomplishments by diversified expertise clans, living assembled as self-sufficient communities. The agrarian societies promote steady arrangements, parallel to home economy, with work plans on lands or specialized resorts, in progress turning nomadic tribes to standing activities, with marginal complements (mining, metallurgy, etc.). The political setups seem aiming at localism, with regular societies, showing fit cognition, trade and authority relational layers, in which the implementation of <nation states> allow right efficiency, with the permanent ground ownership. The industrial societies are new option, fixing specialized workflows in suited shops. The scientific work organization uses hands and zeal, with optimal productivity work cycles; the automatic rigs, then, replace on line workers, wholly distinguishing productivity, from market. The separation of the work cycles from the customers' requests and actually sold products, debatable for agrarian paths, is baloney when the we pretend dealing with self-referenced workflows are. The industrial revolution requires fully revising the work organization schemata, rethinking the integration of the progress-driving activities.

The technology innovations, indeed, motivate how setting the industrial revolution effectiveness. The industry, from the initial zeal, incorporates manufacture, business, engineering, administration and trade aspects that assign competency to simple diligence. The fitness allocation moves along several steps:

- <industry first step>:the on line hands dexterity has to perform optimal work schedules;
- <industry second step>: the full mechanization runs according to the highest throughput;
- <industry third step>: synthetic hands and minds adapt delivery, to customers' requests;
- <industry fourth step>: the robotic solutions apply to all, management/practical, duties;
- <industry fifth step>: the robot-like accomplishment/control runs under eco-constraints.

The civilisation, rather to the human activities, is analyzed on the needed schedules, which do not limit to mere manufacture, asking engineering and management jobs, but suitably typified through what done by hands and minds or equivalent synthetic gears. The <industry third step> sees robot entree; the next ones relevant completion, providing the background for subsequent advances with artificial energy/intelligence in lieu of the limited actuation/reasoning abilities of men. The technical discoveries allow effective use of the material resources of the surroundings, started at bronze/iron ages, consolidated with biology-based cultures and enriched via robot-driven kits. Innovations ask creative intelligence, to prospect effects from hints: we can teach inference reasoning and transfer it in computer procedures. The arts and crafts are individual abilities: training and specialization are personal skills, transmitted by family, clan and tribe, but, as well, transferred to suitably designed robots. The industrial revolution explicitly distinguishes hands and minds proficiency from men, to program me efficiency: this, consistently, leads to the robotics, initially, in the manufactory domain, later, on many other engineering fields and all other areas, which take profit by the work organization.

POLITICAL HEADWAY

The political setups are astonishing organizations, without thorough earlier standards, rather inventing legality and authority on, apparently, pace wise built prospects. The situation repeats the one found with the technology innovations, worsened because, here, we cannot find scientific frameworks that actually justify the experienced physical lows. However, we may survey the social organizations, as done with the technology innovations. Again, we discover typical discontinuities, named <collective breakthroughs>, as already said, which deeply changes the course of the events. Again, moreover, it is possible defining suited collective <knowledge>, which seems being foundation for the social arrangements:

- the relational modes typify by personal profanely aimed at the community integration;
- the legality advance establishes unifying roles for trade, business and industry actions;
- the authority setting institutes distributed hierarchies and interconnecting regulations.

The relational modes appear as innate personal skills, motivating the cognition and communication aims and, then the collective disposition of men, to assemble and to collaborate, with shared interests and goals. The interpersonal contacts, certainly, establish with different strengths and depend on the peculiarities and allotted tutelages: the individualities and schoolings shape the societies, apportioning legality and authority principles, to fix the trade rightfulness and governance efficacy, along to three relational ranges:

- the personal communication sphere allows civilian understanding and interacting;
- the indorsed law fullness rank allows transactions, keeping right business dealings;
- the pubic headship layer brings in the operation autonomy of nation assemblies.

The relational modes are intriguing not less than the manufacture ones. The gene selfishness, to survive and to reproduce, transforms in individual egotism, for the group success, and the nation self-interest, for supremacy; the brain-like reasoning is natural feature, linked to cosmic information or godly wisdom. At the different levels, contrasting effects repeat, with egoism or altruism aims, to have application in the trusted benefits. The relational frames reflect the dilemmas each time, to propagate trustfulness:

- the interpersonal obligations, collected as private rules, for the impartiality regulation;
- the economic foundation, inventing market and trade options, to simplify goods' supply;
- the headship establishment, prospecting government effectiveness by sanctioned rules.

The political setups developed, along the ages, consistently to organise nomadic, agrarian and industrial societies. The arrangements, each time, followed bottom up habits, with links to the situations, currently affecting the involved populations. The interpretations look at dominant human species, started in East Africa and moved to Europe and Asia, then, to America and Australia by progressive migrations of tribes. The nomadic peoples need nonstop surrounds' renovation, to exploit wild lands: the adventure to remote spaces is necessity, requiring safe cohesion and charismatic leadership. Holiness and sovereignty prospect transcendent orders, out of the current jurisdiction. Religions and hierarchies have spiritual foundation by obvious automatisms, based on the belief in divine laws, parallel to the physical ones.

The agrarian societies start settling within suitably compact and sheltered estates, moving the roaming folks to more loose grounds. The wandering tribes have necessity to find out all wild remains: the itinerant group have to cross inhospitable environs and huge oceans, before getting safe friendly surroundings. The relocations of folks, later, become emigration/immigration problems of singles or clans, no more forming closed societies; the closed assemblies, instead, have territorial references, the nation states, or work aims, the agrarian and industrial societies, with the activity organization of the involved individuals. The bottom up social arrangements evolve towards specific closures of language, trade and state:

- the colloquial society, when communication is fundamental interpersonal link;
- the business society, when economics is dealt with, by legal trade regulations;
- the political society, when government requires enacting fit official protocols.

The agrarian societies deeply affect the political setups with the land ownership; the industrial one, then, epitomize the work organization efficacy goals, apparently giving whole reliability to nation state self-rule. The industrial societies acquire pervasive relevance, moving from the manufacture fields, to all activities, when the <industry fourth step> opens to robots accomplishments. The localism bottom up trail completes the relational modes construction of political setups, with split sovereign autonomies:

- the sociality constraints, prospecting right behaviors and wicked activities;
- the economy aims, detailing market regulation and defining finance courses;
- the official onuses, stipulating lands' exploitation and crafty empowerment.

The three relational layers keep independent roles, distinguishing low cognition and communication, from middle interpersonal guidelines and from high government headings. The faith in divine laws simplifies the architectures; otherwise, the free autonomy shall belong to single citizens and democracy, by polls, selects headships and governances. After the <scattered populations>, effecting in roaming rallies, the <settled countries> explore the localism breakthrough, aiming at split-sovereign nation states, again, operating as if every units enjoy full independence. Finally, the <earth fullness> brings to the globalism breakthrough, with the highly interconnected <global village>, obliged to face the ecology constraints.

The political setups and the technology innovations contribute to civilisation, having, both, peculiar raises, the relational or manufacture modes, which seem having transcendent or immanent incentives. However, the evolution courses readily differ; because shall we trust in divine laws, before in physical ones. The faith in total truths leads to the <godly dualism> either to <forged monism>

VIABLE RECOVERY

The civilisation pathways, today, facing thoughtful obstacles, with globalism breakthrough and ecology constraints and, when the social organizations can no more avail of free independence grouped clans or single citizens, but the needed resources involve over-exhaustion and over-contamination, due to the reduction of available sources and the increase of wastes. The critical

figures affect our little planet and become serious drawback, stopping future progress. The social globalism, instead of localism and ecology thriftiness instead of economy affluence are abrupt changes, hardly understood, resorting to the up to now followed trends. Actually, the two shots appear dissimilar alterations, offering upturns and slumps:

- global communication: the worldwide web allows universal contacts and connections;
- global transaction: collective links promote widespread business and managing tasks;
- global exploitation: over-exhaustion/contamination entails the earthy eco-regulation.

The worldwide web establishes shared virtual/material contacts, broadening interaction spheres without barriers. The worldwide depletion/pollution lessens the available food and friendly comfort. The ecology is alteration of the affluent societies, without original wilderness potentials, instead forbidding efficiency, if synonym of dangerous fall offs. The wellbeing looks after awareness, carefully monitoring results and side effects: the civilisation future asks viable recovery. The open query moves from clear conditions:

- the earth fullness: worldwide web linked peoples do not find free spaces on our planet;
- the sustainability: depletion and pollution need recycle and rescue for thrifty headway;
- the ecology constraints: current social setups require uniform global village structures.

The globalism breakthrough, rather than web option, is supply and collective constrictions, which request fit ecology safeguard, say, compulsory reverse logistic and forbid profit with spread out harms. From the earlier localism, building bottom up political organizations by three-layer relational modes, the globalism breakthrough seems just addressing the single <global village>, with the switch:

- social regularity: the collectives or individuals enjoy autonomy that manages sovereign setups;
- social uniformity: the global village assembles open society's citizens, under ecology restraints.

The progress myth developed, joining <knowledge> created advances by manufacture and relational modes; each new steps ahead add, with aware choice of benefits and rejection of hitches. The intelligent reasoning is self-sufficient steering of free and autonomous operators. The trend, recently, only, modifies, questioned by ecology and switched in the green conservationism lore. The lack of sustainability joins:

- the earth narrow bounds, limiting the available of raw sources and safe disposal litters;
- the universe entropic progression, with the build-up of big decay and permanent snag.

The former drawbacks affect a negligible planet, leaving unchanged the galactic environs; the latter ones mark the tangible (matter and information) structures, possibly, opening queries. The separation of thoughts and reasoning, from happenings and alteration is quizzical hypothesis: by dualism, we allot distinct actuality to the physical reality and to the linked information; by monism, the information is intrinsic aspects, passing tied to matter: the implicit <knowledge> follows undecided roles. The separation allows conjecturing a spiritual reality of an intellectual world,

parallel to the tangible setting, stating the godly and factual dualism, so to have abstract descriptions, parallel the tangible transformations. Then, the inherence coherently deals with cognition explicit absence: the aspects timely allotted to the changing reality, possibly, have puzzling emergence by imbedded assessment, as if intrinsic appraisal is expected occurrence. The automatism leads to forged monism, when parallel information and matter have joint consideration: the implicit separation seems, however, nonsense, with hidden outcome.

The sustainable headways, with viable recovery, if not swatted progress myth, desires optimistic readings in the globalism breakthrough possibilities or faith in the existence of inner/upper potentials. The two lines are object of recent investigations, [49]-[72], notably, limiting to personal contributions. The <global village>, with the ecology constraints, are new social uniformity arrangements to complete and formalize, once the lack of autonomy of peoples and individuals is spot-on fact. The former line trails contingent contexts, using human intelligence to devise and planning the improving changes; the latter one, believably, has access to total backdrops, directly supplying cosmic rationality or godly wisdom, either, indirectly infusing artificial intelligence in the overall space aimed at the earthy recovery.

SOURCE WIDENING

The contingent improvements trails do not have simple definition, since all alterations include drawbacks and betterments; besides, the initial settings seem following steady courses, with unknown effects, on the future, but both, current backing and empirical advances, operate on pace wise tests:

- conscious exams: the job's accomplishment joins empowered and thoughtful schedules;
- abstract construal: the headway accomplishes by mixed manufacture/relational modes;
- experienced results: in previous trials, the benefits leave minimal unwanted side effects.

The outcomes build on series of experiments: the event progression is clear on a posteriori readings; only models and theories provide consistent narrations, justifying the marked facts. The science prospects spot useful hints: the localism/globalism switch is, certainly clear changeover, but it shows progressive widening of solidarity, from closed societies, to the open communities of the extant inhabitants. The team spirit does not establish against foreigners, but for commonality or altruism, modifying base spirit:

- the marginal self-sufficiency: with roaming tribes, establishing detached leaderships;
- the split-autonomy: with formation of competing closed societies, aimed at headship;
- the global liability: with similar self-rule citizens wholly exploiting earth's resources.

The relational modes do not seem repeating selfish gene patterns, rather widening parental care traits, as if the commonality broadens with contact act and communication, along worldwide web aids. The uniform <global village> shall replace three-layer regularity of split-sovereign nation state, via border fading and legal unity. The governance layer does not need bottom up construal, having suited self-reasons:

- the interpersonal improvements, applied as instant rules, for technical and cultural aims;
- the economic foundation, inventing market and trade options, to enhance goods' supply;
- the ecology establishment, prospecting recovery and salvage jobs, by standard schedules.

The worldwide market and sustainability restraints are open challenges, unless the ‹global village› starts. The ‹global village› concepts and paradigms are far from unquestionable: the regular competition of free citizens and sovereign countries oppose to the uniform assistance co-of conscious operators and collective institutions. The social arrangements replicate the eco-constraints as shared duty of the individuals, under joint responsibility. The headway to freedom and affluence, aimed at new goods and large spoils, shall turn into awareness and frugality, aimed recycled items and careful rescue. The economy/ecology model shift shall deeply modify the political setups, totally avoiding spot optimizations and supremacies. The ‹global village› uniformity, replacing ‹nation state› regularity, needs theoretic and practical elucidations

For long whiles, localism and evolutionism suggest self-sufficiency and competition, allotting the citizens to rival nation states: the progress seems implying diversity, at least, if backed by marginal autonomy. The split-sovereignty setups keep fit efficiency with global economy and reverse logistics for ambience safety. However, the operative uniformity is awkward result. The ‹global village› affects the civil societies' growth and tells that cross-falloffs overwhelm the consistency of separate gains. The steps allow devising:

- marginal autonomy, with conscious citizens emulating each one safe rescue/salvage habits;
- global economy, with voluntary institutions controlling the issues' suitability and uniformity;
- ‹global village›, with unified authorities enacting shared instructions, following agreed official targets.

The political headway is, besides, critical conjecture, founded on human ‹knowledge› and intelligent cues. The ‹knowledge› objectivity is result of shared understanding, proving that plots and models have origin on same items, acts or facts: the outcomes authenticate abstraction and mind's worlds. After series of tests, the recovery, revamping or salvage options build, with reliable efficiency. The social organizations, global economy or global village›, are open picks: we need to broaden the raw sources or recycled items, with apt control on litter; these objectives do not affect the political setups, but forbid rival improvement. The ‹global village›, layout, then, is tacit conclusion, with linked social uniformity. The concurrent technology innovations follow the ‹industry fifth step› trends, with emphasis on robotic devices, operating in hostile environments (interplanetary, deep ocean missions, etc.) out of the human possibilities. The ‹industry fifth step›, surely, opens fruitful new ways, considering that our planet just creates insignificant troubles and, via robots, we have the galactic space to offset all nuisances, when critical level exist.

TOTALPROSPECTS

The total improvements trails add, to the intrinsic complexity of defining the civilisation elements, the apt a prior aspects of the reality, say, the cosmic rationality or the heavenly wisdom. The fancy conjectures are optimistic readings, which try to justify the human intelligence, through some

already existent inner/upper traits. The definitions are not obvious, but it is plausible just providing operative elucidations:

- rationality backstage: evolution steered by inner reasons, possibly, on synthetic bases;
- wisdom conditioning: advance driven by upper causes, perhaps enjoying absolute worth.

On these premises, the intelligence allows getting rational/wise results, due to immanent or transcendent reasons. The cognition, communication and understanding operations are unnecessary redundancies: the natural sequences are rational or the godly choices are wise, because of inner/upper checks. The human reasoning, perhaps, may reach similar performances, replicating natural rationality or holy wisdom. These ideas, traditionally, enjoy consent, for instance, when fixing the local sovereign institutes:

- the natural causation: immanent control applies, deciding out Darwinism leaders;
- the holy lineage: spiritual rulings affect the souls, with guides for each community;
- the self-ruling: democratic poll assures representative governance to nation-state.

The first two rules are indisputable; third one require believing that the citizens are equal and free, even if we notice individual dissimilarities and personal biasing traits. Indeed, the establishment of leaderships and governments seems deserving well-founded <natural> acceptance or <godly grace king origin. Therefore, the nomadic tribes, nation states or <global village> will automatically find proper governances:

- the peoples have intrinsic governmental structures, with legitimacy and kingships;
- the countries enjoy hierarchical supervision, with planned manufacture directives,
- the citizens benefit of unified management by operational authenticity officialdom.

The uniform open society is spontaneous outcome, if the ecology constraints affect the earth's current resources; the global constraints are collective priori compulsion of our overcrowded planet. The ideas of linking the relational (and manufacture) modes to a priori features allow resorting to natural stimuli or to spiritual spurs and, lately, to collective drives. Which condition the behaviors of the individuals, granting the legitimating and governance steering. The civilisation, if not mere human effect, rather peculiar natural or holy truth, enjoys galactic information or godly insight. The universe laws denote rationality or wisdom, at inner/upper coherence, not dependent on what men conceive, design and implement. The progress or sustainability is total issue, grounded on rationality or wisdom: the optimism is plausible outcome, when globalism moves through collective breakthroughs via robotic paths, availing of big data and big brother.

The total forecasts, as said, symbolize optimism: the universe describes by galactic information, enjoying steady conditions, with coherent physical laws; either, the holy control on the tangible environs practices sage or judicious objectives, granting safe future to the all. Indeed, the human intelligence is just projection of cosmic rationality or godly wisdom: these are a priori qualities, already present to affect the men. The extant features show safety views; we start from what seen by an observer looking at the universe from our earth, or using his abstraction and coding to narrate what watched; then, the scenarios happen as enjoying a priori aspects, say, inner rationality towards

consistency, or upper wisdom towards miracles. The ideas of bystanders do not are tangible items, but they give abstract descriptions of material details.

The hopefulness founded on total prospects builds on the said concepts, with intriguing back surmises. The conjectures have practical assessments if our spotted <knowledge>, after suited checks and inferences, correctly identifies the extant galactic information, making our science true and our models accurate. This brings the <factual dualism> to transform in <godly dualism>, with transcendent absolute <knowledge>, or in <forged monism>, with immanent implicit knowledge. From the <factual dualism>, we do not have proof that the total galactic information exists and be godly entity or cosmic attribute; the guesses, one or the other, once plausible, authorize optimistic forecasts: upper wisdom or inner rationality denotes the high probability of the galactic coherent continuity.

The alternate total conjectures advise that, rather than from the human intelligence, the civilisation builds on true information with cosmic rationality (justifying science), or whit heavenly wisdom (justifying religions and absolute ethical tenets). The actuation and reasoning are equivalently duties of men or robots. The rationality or wisdom aids allot causal logic and total coherence by immanent or transcendent drives: the faith in inner or upper truths is puzzling, but the belief in natural laws and trust in governance hierarchies are unspoken norms, shared to simplify collective contacts and forecasts, or events, with cosmic or godly foundations. Thus, the robots symbolize synthetic hands/minds, controlled by galactic rational/wise gears. The civilisation, past progress and coming sustainability, appears galactic traits, ruled by rightly identifying physical laws. The human intelligence peculiarity is the awareness of the all, built by cognition procedures, which yield to <knowledge>, science and conscious design, but do not modify the galactic information. The culture, in the analyses, is upper spirituality or implicit trait: both have, maybe, code sand shared meaning, making feasible judgments, forecasts and plans. The procedures explain, as well, the robots, say, synthetic hands and mind, doing like accomplishments.

CONCLUSION

The presence of relational modes, from which starting social/political setups, and of manufacture modes, from which creating technology innovation, is guesswork, opening to natural or spiritual a priori features of the galactic universe. Indeed, the huge reality shows the earthy anomaly of active/thinking men, which turn in bystanders and actors, tracking cognition inventions. In the study, we devised the civilisation, upheld by human intelligence; on the earth, the depiction should have start and end, if the sustainable ecology stops. However, if total backing, cosmic rationality or godly wisdom, exists, safe progress may last, enabling:

- scheduled retrieval: recoups develop via planned instructions and training of citizens;
- one-way update: changes directly link to altered downgrading with stabilizing rescue;
- synthetic settings: variations add and programming has inner/upper continuity tasks.

The example helps entail the human font broadening, the natural/spiritual contained corrections or the joint human/robotic effects. The selection of one or the other of the three lines remains undecided here and in linked books, [73]-[77]; linked remarks deal with the roles played by the <knowledge>. The cognition trails start defining how the collective detection and encrypting identify symbols with agreed meanings: the contingent worth of the results brings to many idioms and dialects; then, the designs and implementations go on with dependent goals, never absolute assessments and models. The human <knowledge> invention is localism issue: the first line has very limited paths. The earthy peoples, soon, discover that they could find equivalences or translating, making understandable all narrations, since the galactic information is unifying standard: its presence qualifies the reality and the extant undergoing transformations.

The mentioned galactic information manifestation is not just tricky occurrence: the subatomic to cosmic physics allows models and forecasts, supplying reliable estimates; we found true laws, not fancy guesses. The amazing result lads to a reality, with intrinsic quality (monism), or a tangible setting, with holy ruling (dualism); the latter seems repeating our cognition, with independent thinking. However, the watchers are not necessary and the universe evolves along unknown paths. The presence of men makes the material intrinsic quality manifest, perhaps, implicit imagined <knowledge> or intrinsic galactic information. The three example recoveries show, also, two total lines: via hidden <knowledge> or miracles; via cooperative <knowledge> and robot-like aids. It is certainly realistic figuring out that the universe follows its own safe route, whatever done on the earth by men. Then, from the men's viewpoints, the three examples tell:

- the civilisation is self-ruling negligible event, with, possible passing recovery abilities;
- the universe has overall ruling laws, not modifiable by local drawbacks or progresses;
- the universe has laws and updating facts: the men aware aids are doubtful quarries.

The faith in cosmic rationality or godly wisdom and the plausibility of one the other guesswork do not sensibly modify the conclusions of the study: we need understanding if cooperative planning and work are possible and useful, along, maybe, robot-like devices. The <knowledge> and our awareness are awkward in-between steps of the analyses. Also, the <global village> uniformity

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