

Robot-like Construal and Civilisation

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Abstract

The cognizance is foundation of the human civilisation by *relational* modes and *ensemble* construal, through technology innovations and political deployments. *Human* intelligence and *contingent* knowledge are base references, by bottom up wellness and life quality improvements. The ecology and globalisation make questionable the progress sustainability, unless *total* knowledge and *upper* wisdom or *inner* rationality provide top down alternative ventures. The safety might ensue from total upgrading, having spiritual origin or intrinsic backup, through robot-like aids, bestowed as *heavenly* wisdom or *cosmic* rationality effects. The alternative *relational* reading develops from *globalisation*, by growth/cognition fusion. The study delves *ensemble* construal, including *absolute* or *intrinsic* knowledge references, to deal with sustainability based on frugal alternatives.

Introduction

The human civilisation on technology innovations and political deployments, apportioning life quality enhancements, compared to the wilderness. The alterations concern individuals and assemblies, resorting to technical inventions and collective settings and making evident that the *relational* effects are essential at the interpersonal range, for the plus-value creation. The improvements oblige comparisons, judging prior and later worth or assessing local and global boosts. The humanity typifies by activity and reasoning skills: the

former ones track *gene* evolution (according to Darwinism) and the latter, *meme* fruition courses (along with interpersonal patterns). Agentive and thinking abilities allow interaction and design, using classing and learning trials, based on fancy and mimicry, for shared modelling and communication.

The technology innovations exploit the causal backdrops of the physical reality, to devise and implement rigs and helps, for the personal comfort, for the food provision and for the efficiency upgrading. The issues have timely success by the clothing, agrarian and industrial revolutions, Fig. 1, with production of personal artefacts, discovery biologic multiplication and activity organisation effectiveness.

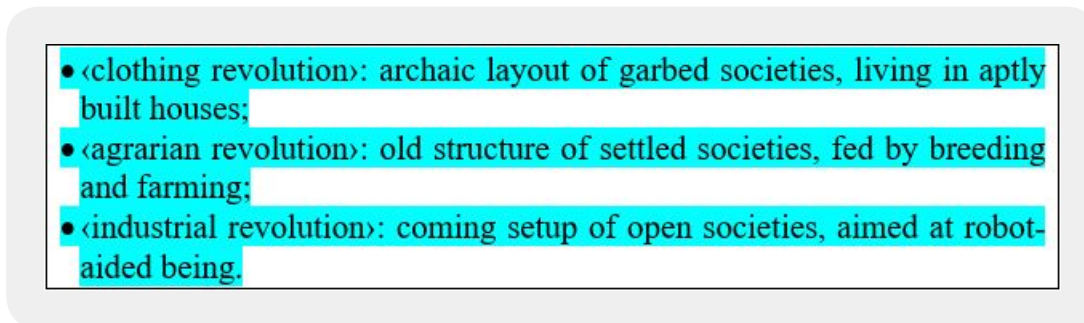


Figure 1: Typifying technology revolutions.

The political deployments exploit the *relational* frames enabled by *meme* fruition courses at interpersonal range, to create *civic*/social orders, ruling the assembled communities. The enacting of lawful behaviours is questioned result, resorting to *godly* or *natural* obligations ether to *communal* agreement. Moreover, the lawfulness appears having to operate in different contexts, switched by collective breakthroughs, Fig. 2, as growing populations have to share the earth, taking resource and rejecting exhaustion. The middle step is the regular layout of the relational frames, with spontaneous, professional and governance layers.

The technical and political changes entail awareness of the environs, selection of profitable activities and assessment of the outcomes. The mindfulness appears promoted by the *human* intelligence; however, it is thinkable that *upper* or *inner* reasons actually drive or inspire the fruitful accomplishments. The *heavenly* wisdom or *cosmic* rationality is option, which justifies events' consciousness, design usefulness and results' worth. The *upper* or *inner* reasons are non-accessible to the *human* intelligence, if belonging to holy reality, or because the non-contradiction of the theory cannot have self-sufficient proof (Gödel's theorem), being tautology: transcendence and immanence are *faiths*, with no proof, using human consistent reasoning. The cognizance, now, does not create on bottom up *relational* modes; it is, instead, in-built execution, which uses top down *ensemble* construal, with robot-like wakefulness. Worldliness

- <spread breakthrough>: scattered populations of nomadic tribes of garbed societies, looking after spontaneous food;
- <nation breakthrough>: regular societies in territorial settlements, with agrarian/industrial economy and competing;
- <global breakthrough>: uniform communities of the global village, supported by robot-like progression and rescue.

Figure 2: Typifying collective breakthroughs.

The human progress is, however, impressive attainment and the contingency of the *human* intelligence appears inadequate to defend the technical and political improvements, actually, developed. We shall turn our attention to total frameworks, showing whole foundations, because of the transcendence of spiritual forces, or of the immanence of natural drivers. The technology revolutions tell that the *human* intelligence avails of physical laws, correctly expressing cosmos' information; the collective breakthroughs tell that the relational frames properly state management and administrative settings, to rule the communities. Physical laws and relational frames, most likely, express absolute links, not dependent on *human* intelligence; they, better connect to *upper* wisdom or *inner* rationality, if we expect transcendence/immanence credible.

Bottom Up Grids

The analyses of the human civilisation start, resorting to the *human* intelligence and using bottom up way, to deal with the *relational* modes, Fig.3. The communication by languages uses manmade vocabularies and syntaxes; the market and business operate under enacted legality; the governments work with endorsed headships and authorities. The three *relational* ranges seem require men-adapted substitute controls.

- the language: the interpersonal communication codes of the clan's members;
- the trade: the good/service interchange's outlines, to manage the community;
- the governance: the control and legality patterns, to lead and rule the nations.

Figure 3: Humankind relational modes

The *civic* orders express the view that *human* laws are enough to run the assembled communities by rules granting lawfulness and protection of individuals and collectives. The approved laws, Fig 4, have different origins, in common opinion: the holy origin implies that their infringement asks penalties; the natural one entails forceful application; the human genesis means passing worth, with updating options. For sure, when enacted whichever the genesis, the lawfulness sanction is equivalent. The *civic* orders, only, know the last situation; the other two situations denote the *faith* in transcendence (also, authorising religion wars) or in immanence (perhaps, leading to racial conflicts), using imperative truths.

- absolute laws, assuming trust in the *upper* reality, where total truths exist and govern;
- natural laws, believing in *inner* cosmos' rules running every things, mankind included;
- human laws, indorsing principled formats, to manage/administrate the communities.

Figure 4: The origin of the passed laws

The *relational* modes, developing by bottom up paths, show pace wise trends, as if each step adds after having tested the benefits. The communication by wholly comprehensive idioms, provisioning by defined markers and governance by regulated headships offer efficient interpersonal advantages, even when the end attainments are hard to forecast. Several parallel developments may start, leading to native idioms, homegrown markets and local nations. The setting out brings to split-sovereign nation-states, which need to collaborate or to comperere, if their autonomy has recognised means. The resulting model is moderately satisfactory, with the separation of *meme* fruition, from *gene* evolution: the adaptive genetics operates on subsequent lifeforms, always keeping deterministic sort; the reasoning mimicry follows mental course, at interpersonal rank, with assessment, judgment and decision steps. This separation denotes *dualism*, with, however, the cognitive track confined into imagination worlds, out of the physical ones.

The cognition by bottom up *relational* processes builds, using abstraction and encrypting stages, in which the information is detected with assigned encoding format. Thereafter, the data handling, transmission and sharing can undergo transductions (changing the tangible support), without altering the carried knowledge. The communication by spoken/written languages follows abstraction/encrypting stages, agreed at the local group/nation levels; thus, many choices are possible and the earth becomes multi-lingual domain, since the practice has bottom starts. The symbol and graph processing goes together with knowledge classification and learning, as understanding and narrations build on abstraction/encrypting procedures. The perception without encoding and restitution measures does not create cognition and cannot support communication: the knowledge requires prior education, with shared agreement of cyphers and their readings.

The *human* knowledge, apparently, develops this way, equally doubled by computer or graphic processor that converts perceptions in symbolic formats. The robotic duplication, simply, adds awareness, supplied by the abstraction/encrypting programmes: the knowledge requests conscious usage for teaching/appraisal purposes. The robot, merely, is aware actor, with allotted knowledge and tasks, according to agreed codes. The bottom grid dispenses alertness and responsiveness directives, when motivations exist; the generation of *relational friendship/professional/authoritative* links are premise of the assembled collectives. In coarse views, the bottom up model assumes *meme* proficiency and focussed education, enhancing suited *friendly, expert* or *influential* conducts; the instruction and tuition are enough, to establish proper civic orders, based on self-governing settlements. The democratic consent establishes on the approval of the involved citizens and it is has bottom up foundation, without absolute truths.

The explanation of the civilisation achievement through the *human* intelligence by bottom up designs and implementations is *contingent* view, just, assuming local and instant decision skills, to choose advances and to reject regresses. The depiction may develop via *human* knowledge and, also, robotics, transferring suited learning, data handling and reasoning in programmed equipment, owing to intelligent designers and rulers. We cannot exclude that *total* knowledge and *upper* wisdom or *inner* rationality provide top down alternate ventures, affecting the all universe, thus, including, as well, the remote planet earth. The civilisation, then, is not far-off peculiarity, rather global occurrence, prospecting the shrewdness and sagacity of the environs as if *upper* or *inner* driven trends are in-built facilities. The proposition postulates that the progress is not provisional, but permanent development and the spiritual courses or natural evolutions are inherent routes of the universe. Chemistry, informatics and physics, with entropy, seem excluding everlasting progress and we shall look at holy backdrops or akin potentials, to imagine transcendent ways out.

Top Down Grids

The human civilisation develops on complex technology inventions and on elaborate political structures, difficult to conceive, just, using past experiences. The events denote the necessity of absolute truths, with the force of natural laws, to rule the tangible universe and with the power of ethical imperative, to govern the human behaviours. The compulsion, properly, leads to alternate inevitabilities: the *cosmic* rationality and the *heavenly* wisdom; the two approaches grant top down, complementary certainties. In fist instance, the one model, by immanence, assumes the individual *gene* selfishness and the adaptive evolution brings to specialise *friendly*, *expert* or *influential* bonds; the other one, by transcendence, aims at spiritual reality, with *a priori* allotted *relational* structures. The collective setups, Fig 5, enjoy specialise *social* orders having already inner or upper assigned architectures.

SOCIAL	ORDERS:	AUTOMATIC
ADJUST/CONTROL/LGALISE BEHAVIOURS	THE	COMMON
⟨FELLOWSHIP ASSEMBLY⟩: TO FOSTER INDIVIDUAL INTERPERSONAL AWARENESS		
⟨TRADE COMPANY⟩: TO GRANT BUSINESS PROJECT'S CONTRACTUAL OPERATIONS		
⟨NATION-STATE⟩: TO CONTROL LAWFUL RIGHTS/DUTIES POLITICAL ALLOCATIONS		

Figure 5: The relational bases of the collective structurers

The recourse to *total* laws is old practice, with headships because of ⟨God's grace⟩ kings or because of genetic superiority. The political deployments profit of holy or natural certainties, to withdraw ambiguities and the *social* orders preserve the steady *regularity* of split-sovereign nation-states. The parallel technology innovations benefit of absolute physical laws, with the causal backings, to grant all forecasts. The *relational*

modes appear having top down structural design, since the collective organisations have to uphold allotted *upper* or *inner* rules. The transcendence sanctions unravelling the intangible sphere or spiritual reality, from the tangible one. Thoughts, ideas or intellection and reasoning are incorporeal occurrences, without bodily existence: they belong to spiritual or heavenly domains, or, perhaps, to the mental spheres, but not to the physical reality. The dualism distinguishes two realities: one of the material events and one to rule, monitor and acknowledge the corporeal facts. The immanence admits only the tangible reality, with each details carrying the information to manage the current progress or regress: *cosmos* distinguishes from *chaos*, since the evolution is rational, perhaps, deterministic, with embedded stochastic singularities. The *mere* monism never discloses the undergone transformations; the *forged* monism reveals the on line history, if detection mechanisms give the access to the intrinsic information, say, to the spot qualities of the material reality.

The *total* laws belong to the spiritual reality; otherwise, they are intrinsic qualities of the material reality. They fit in *heavenly* wisdom or in *cosmic* rationality. The *human* intelligence runs elsewhere, unless bonds allow the access to the spiritual domains or the detected information, i.e., the contingent knowledge turns in absolute or intrinsic knowledge. Without completing the general discussion, the focus on the *relational* modes, Fig 6, suggests further specifying the details of interest. The personal communication, professional framework and official engagements differ, moving from spontaneous or arranged, to compulsory links. So, the backdrop legitimacy needs adaptive regulations, from contingent or agreed, to enforced, modifying the *relational* ranges even if no explicit connection to upper wisdom or inner rationality appear.

- outgoing dealing, involving friendship agreements and informal covenants;
- contractual links, presuming private law obligations and promised leaflets;
- imperative bonds, rooted in supreme edicts, engaging the all communities.

Figure 6: *The relational ranges of the social orders*

The top down grids govern the communities, without explicitly involving the *human* intelligence, needing, instead the *heavenly* wisdom or the *cosmic* rationality. Then, if top down grids appear operating, we have an implicit message that *upper/inner* causes give the impression to be active, show the existence of *total* inputs. The situations become tortuous, because, this time, the *heavenly* wisdom or *cosmic* rationality does not replace the *human* intelligence or equivalent robot-like functions, but it is autonomous performance, driving the earth's surroundings along suited sustainability paths, without the explicit men's programming. The situations, intricate, but plausible, tell that the earth's surrounds are negligible (they cannot affect the universe); moreover, the humankind is side-question of the whole reality (no anthropic principle applies). Instead, wisdom or rationality qualifies the events' courses and the overall backdrops establish, keeping suited capabilities and purposes, inclusive of awareness and levelheadedness (with or without men). If the framework is believable, the *human* intelligence is simple result of *heavenly* wisdom or *cosmic* rationality,

without autonomous import. The basic qualities (wisdom, awareness or rationality, levelheadedness) are automatically present, without men's design and planning, because provided by the background as spiritual or natural makings. The top down grids operate by wonders or by intrinsic platforms.

The ecology opens new prospects to the human progress, with the exhaustions and contamination trends as mark of critical continuance: the technical aspects have clear-cut motivations in the entropy principle. In parallel, the globalisation proposes drastic changes in the political features, ensuing:

- ‹global communication› with recourse to the *world wide web* in interpersonal practices;
- ‹global economy› with *world over* markets, allowing interactive managing and business;
- ‹global cogency› with *uniform* administration, requiring compulsorily equal obligations.

The globalisation praises collective, before individual features. The ensemble qualities show collaborative chances, when groups or nations organise, aiming at competitive efficiency. Rival regularity turns in shared uniformity, when top down constraints do not allow the individual creativity. However, if spiritual courses or natural evolutions are in-built options, the accord on top down opportunities finds great interest, since it means the continuation of the human adventure, with *total* reasons. Ecology and globalisation have worth via synthetic figures, with average classifying measurements and ensemble acknowledgments, simply not linked to single individuals.

Ensemble Handling

The civilisation requires dealing with conscious knowledge, when the perception entails picking, classing and encoding the sensed item, Fig. 7, using agreed graphic/spoken symbols and meanings. Signs and noises have to combine a complete semantic system, to code objects, actions, feelings, etc., to grant handling and transmission of knowledge. The formal culture is synthetic construction, with cyphers and connotations, to obtain communication and cognizance organisations and accommodations.

- the picking, with selection of images, sounds, actions, feelings, etc. as noteworthy items;
- the ranking, with identification of the singled items, assigning category, class and quality;
- the encoding, linking items and (spoken/written) words, with the sentences' preparation.

Figure 7: Conscious formation of knowledge

The communication facilities need encoding/decoding conventions, with the allocation of meanings to the singled aspects. The procedure imply abstraction, since the results are designations with agreed readings, not depending on the material supports. The mind constructs follow interpersonal decision and teaching, if they

become accepted the standard. The abstraction is free to imagine encoding/decoding standard, as the fantasy hunts; the construal of the semantic systems depends on the enjoyed communication facilities and potentials (vocal capabilities and symbolic taxonomies). Both facts have biasing effects: the modulation of sounds has physiologic limitations; the organisation of databases echoes the encrypting classes. The effects appear as synthetic figures, keeping memory of their generation and of the ensemble cypher combining the data processing routines. Communication and cognizance yield *human* knowledge, with explicit availability of how civilisation progresses. The biasing effects automatically include, stabilising the overall results.

The relational modes implies the interpersonal spheres, if communication and cognizance limit to human intelligence; they involve universal compasses, if contact and knowledge expand to involve *upper* wisdom or *inner* rationality. With the *global village*, Fig. 8, the new collective breakpoint occurs, replacing *regular* societies of split-sovereign *nations*, by worldwide uniform communal entity. The municipal evenness avoids the previous political regularity of rival *nations* with native idioms, by the self-ruling administration open society and obliged devising cross-community politics, accordingly changing the *relational* modes. The end of the *regular* societies is open query, as the switch to *global village*. The ecology *vs.* economy requests are clear alarm: the nation states elimination is much more problematic or the replacing of explicit *human* knowledge by *spiritual* wisdom or *natural* rationality is not obvious.

- *communication* layers: interpersonal connections avail of the *worldwide web* facility;
- *market* regulations: everyone enjoys equal opportunities, with no political privileges;
- *managing* setups: *big-data* *inner* coherence offers cogent steady ruling assessments.

Figure 8: *Worldwide web: global village unifying aid.*

The exclusive officialdom of equal opportunities politics and decision-making offices allows merging the legitimacy of the business and trade transactions. The *big-data* *inner* coherence implies the cogency of driving information schedules. The scenarios involve robotic awareness as if *imagination* intelligence could operate, as *big brother* issue bypassing the abstraction of human *knowledge* and combining concepts or judgments as situational feelings, with selective storage and retrieval mechanisms. No cognition parting happens, *web* teaching is standard option and rationality has automatic *relational* evenness. The decision-like outcomes follow process-embedded directions, but remain in ambiguous position, since the individual freedom, responsibility or willpower need queries and investigations. The lawful business and communal administration become implicit requirement, instigated as net-backed consensus equity and organised on social grids' agreed headships.

The *global village* deployment is puzzling result, with removal of *regular* societies, because of new cross-personal connections, communal arrangements and endorsement layouts. The globalisation modifies the

local bottom up rules, by open and unbounded social grids, with, perhaps, transcendental inclusive spiritual backings, or immanent inborn confirmation instructions. Worldwide web learning/teaching, ecology checks and imperatives and 'big data' guide and approval are conditions out of usual forecasts. The facts seem prospecting *total* top down *godly* dualism or *forged* monism as conceivable references, better showing the universe's story than *contingent factual* dualism. The *absolute* knowledge and spiritual wisdom or *intrinsic* knowledge and natural rationality are potential events, around which implementing contrasting theories. The alternatives summarise by:

- 'knowledge' total worth, giving *autonomy* by transcendent/immanent opportunities;
- 'big data' *automatic* coherence, authenticating sustainable advances by basic plans.

The *total* lines avail of *upper* scheduled miracles or *inner* encoded instructions. The scenarios involve theoretic and applied alterations. In theory, consciousness needs *aware* and *creative* courses, i.e., robot's skills, with abstraction and encrypting or equivalent steps, generating cognizance and granting coherence of behaviours. The robot's consciousness has situational feelings, routinely driven, perhaps, by social grids or central nets. The web's learning/teaching and netting's steering/control shall be automatic coaching and compulsory conduct, maybe, under holy regulation or stochastic innovations, previously encrypted cosmos' data. The net's indoctrination can be standard choice and we move to the automatic accountability of the robot-like guiding means, promoted by upper wisdom or inner rationality, inspiring our actions.

Robotic Construal

The 'big data' coherence or robotic *total* 'knowledge' is, perhaps, spiritual or natural feature, included as galactic wisdom or rationality, which anticipates the human intelligence, causing, however, similar issues; our men's centred views propose series of implementations, such as:

- 'monitoring aid', to obtain data making awareness and consciousness possible;
- 'synthetic hand/arm', to design mechanisms, allocating suited agentive abilities;
- 'artificial intelligence', to design rigs for problem solving and decision keeping;
- 'artificial life', to invent equipment for enabling synthetic genomic procedures;
- 'artificial men', to discover devices, supplying synthetic life/intelligence skills.

The novelty has, now, to deal with *total* understanding, handling and advances; the headways, actually, ought to have *inner* or *upper* causes; the *factual* way, just, aims at *contingent* outcomes. The conversion of *contingent* in *total* alterations needs leaving out human centrality, thinking that the reality directly affects earth's events: these stimuli are *absolute*; they have *upper* or *inner* causes; they appear robot-like effects. The civilisation is outcome of men's agentive and intelligence; the novelty changes men in robots and these have *upper* or *inner* reasons, out of human jurisdiction. The ensemble handling and net-backed consensus are decision mechanism. The embedded 'cognizance' establishes *false* flow, central help in robot shape, if data agendas, for planning, control and alteration are standard reference of the transformations. Indeed, the data disinterest distinguishes mind worlds from reality (in *factual* dualism), but the 'knowledge' marts, as well, the spiritual

spheres (in *godly* dualism) and it shows implicit *inner* automatisms (in *forged* monism). The *«cognition»* can follow several trails: the *«big-data»/«big brother»* one is just example option; the many *«knowledge»* forms have already given the way to relevant results, linked to the *«galactic information»*:

- *upper* total origins, under godly rules, promoting the human *«intellect»* and *«free will»*;
- *inner* total causes, showing *«natural laws»* control, with detection of the extant reality;
- *contingent* routes, specifying *«life»* and *«intelligence»* singularities and human progress.

The *«galactic information»*, by the first, is spiritual allocation with wise governance rules; by the second, it is natural quality, perhaps, allowing stochastic events, switching current trends; by the last, apt *adaptive* innovation exists, with revisions of the detected images by collective readings. The *upper* wisdom or *inner* rationality trusts in already settled transcendence/immanence *«cognizance»* sequence; the human trail uses *«cognition»* via *«meme fruition»*, to figure out the abstract encrypting of data. The imaginary supplies *fancy* dualism by mind worlds of the last situation; yet, the *fake* parting of attributes from supports gives *untrue* monism, when the goal is software specification or data processing. The explicit accounts and information handling deserves remarks on the *«monism»* vs. *«dualism»* dilemma: the separation of qualities and names from material items, or descriptions from objects, needs *«cognition»* via *«intelligence»* or equal classifying procedures, supplying *«reasoning»* skill and *«consciousness»* of the current situations: the *implicit* or *explicit* *«knowledge»* availability is crucial prerequisite. In *«monism»*, the information is *quality*, requiring abstraction and encoding procedures, suitably done by men or by computers and any other data acquisition devices. The data acquisition and processing is hardware duty, never asking spiritual or fancy restitutions, unless the *«knowledge»* is judgmental figure in the processing task. Computers and robots are coherent with monism, if merely deterministic transformations operate; not if creative decisions have to occur

«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;
 «industry 3», with *production* done by robotic, aimed at adaptive planning and delivery;
 «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.

Figure 9: *The «industry steps» from zeal to aware «cognition».*

The robot track is stereotypically *«knowledge»*, enjoying the creative interpretations; such meaning is useful, in view to acknowledge aware *«cognizance»* procedural modes, aimed at progress. Robotics enables the paradigm shift of the industrial revolution, from deterministic zeal, to aware adaptive efficiency. The systematic planning and exploitation of proper developed intelligence management leads to fit *«industry steps»*, Fig. 9. The manufacture is starting domain; the *«industry 3»* fulfils the robot integration, with scope economy consciousness; in the following, the many technical, administrative, business or service jobs have robot management, when focus on work organization is main query. The sustainability becomes necessity,

for the times to come: <industry> peculiarities entail the current life of people, managing all actual deeds in terms of efficiency and side effects, when the quotidian transformation are accomplished.

The <industry 5> step is extreme changeover in the collective actions, since the responsibilities involve each individuals with personal obligations face to the surround' safeguard. These collective behaviours are compulsory, established by *inner* or *upper* causative reasons; the <society> follows logics object of a *priori* consistency at the <global village> range: the *relational* modes confer the clan *intelligent* education, seeking the <social> uniformity or political partnerships, since unvarying protection has to embrace the humankind. The <globalisation>, moving from worldwide communication and trade options, to all-inclusive companies, let discovering that selfishness and competition are perilous policy; instead, altruism and cooperation are potentially safer ways, according to modified *relational* coherence. The known a *posteriori* intelligence logic uses localism, with ethnic idiom, home economy and nation-state sovereignty, to aim at struggle profits; the possible a *priori* wisdom/rationality logic shall use globalism, with computer communication, universal trade and <global village> uniformity, to aim at the ecology sustainability of the performed transformations. Indeed, the <civic> a *posteriori* outcomes are amazing, unless we prove the appropriateness of autonomous nation-states. Alternatively, we aim at possible a *priori* <social> setups, with *faith* in *godly* wisdom or *cosmic* rationality, which simplifies our comprehension on how the human communities shall behave and organise their political architectures. The <total> views cannot have practical proofs: the trust in one or the other scheme avoids centring the *relational* model on the human <intelligence> and on the <knowledge>, creation procures; the <social> orders have top down <galactic centred> derivation, typically, having inner or upper causes.

Ecology Constraints

The *relational* modes, apparently, develop by bottom up ways, inventing the native language, combined market and political setting on *contingent* layouts. In lieu of localism, with globalism, the *relational* modes, by top down ways, inspire processing instructions, unified bargains and ecology requirements, having *inner* or *upper* causes at the galactic levels, as cosmic or heavenly projections, thus, based on *total* layouts. These ways are parallel, resorting to human <knowledge>, when it starts, or expending galactic information, when total effects apply: indeed, dissimilar upshots verify when local communities create <nation states>, or if the <global village> expands the earth over, all over taking resources and rejecting litter. At first, fit autonomous rivalry, appear to be chance; then, exhaustion and contamination rise to critical levels: the detected data show the occurring globalisation, giving awareness of lack of the growth sustainability.

The localism *vs.* globalism ways, however, opposes bottom up to top down approaches or it contrasts the timely detected <knowledge>, against the a *priori* <galactic information>. The last entails the existence of *total inner* or *upper* causes, imposing the globalisation, so that the *relational* modes aim at robot-like rigs, or synthetic hands/minds, aptly acting on the universe. The invention of language, market and sovereignty is transitory outcome, marking biasing effects of passing layouts. The *relational* mode separate *contingent vs. total* setups: the former typify bottom up procedures, of <nation breakthrough>, when idiom; legality and sovereignty are dependent choices; the latter promoted by the <ecology breakthrough>, specifies the existence of cosmic rationality or godly wisdom, allocating *total* consistency to computer encoding, outright fairness

and ecology restriction. The former situations need <knowledge> flow, to intricate *civic* layouts; the latter ones assume galactic information to the *social* orders of the <global village>.

The *relational* models allot consistency to top down *total* <social> orders: the situations presume *inner* or *upper* instructions, assigning changes to develop physical details and to implement political arrangements. The bottom up <cognizance> alternative offers pace wise interpersonal progressions with local attainments, say, grouping dialects, spot dealings and nation states. The analyses depict unbalanced layouts, with the huge galactic *universe*, passively following mainly deterministic courses and the negligible planet *earth*, on which starts *active* <biology> and *thinking* <cognizance>: from the anomalies, *agentive* options may enable local drifts and *coherent* <intellect> may allot observation, control and headship functions, with thought and design talent. At this point, the <globalisation> offers the top down *total* <social> alternative, with, as well, <ecology> imperatives, telling that our *total* future is, quite credibly, safe, if we believe in fit miracles of the *upper* wisdom, but not sustainable, if we only need trusting in *inner* rationality.

The <ecology> and the uniform society of the <global village> are open queries. In the picture, the deterministic progressions supplies partial accounts, parallel to narrations, implied by facts classified at marginal consistency, but involving <human knowledge>. The <ecology> drift affect the trifling earth, not the huge universe: the trifling anomalies have ends hard to prospect; the <galactic, information> is *inner* quality of the material reality: trends' deciding is hard, even when identified <natural laws> have proved constancy, allowing true forecasts. Besides, the <galactic information>, obviously, steadily applies, since <natural laws> and *inner instructions* are part of the cosmos; we shall distinguish between two situations:

- current trends: the extant physical laws seem assigning steady deterministic approaches;
- stochastic events: the timely anomalies might occur at allotted probabilistic occurrences:

The natural evolution follows known paths, under independent rules; the singularities can be robot-like devices, with allotted tasks and behaviours. The progress and linked added-value transforms are manmade; the reverse logistics and rescue aids shall trust in robotic plans. The ecology restraints for viable growth has to follow known courses: the <knowledge> creation is essential feature to innovation by value-added steps out of deterministic transforms. With *forged* monism, the <knowledge> is quality of given matter carriers, supplying implicit *total* worth to cognizance management. The <knowledge> autonomy, here, is oddity, to mitigate by robotic mechanisms, accomplishing the scheduled <data processing>, to make apparent the innovation flow. The <cognizance> does not follow interpersonal courses; it becomes done with the help of robots, in which the <knowledge> flow accomplishes automatic sequences, without involving interfaced individuals. The reverse logistic includes instructions, showing the inborn cosmic rationality.

The <ecology> constraints, with *forged* monism, avails of implicit <knowledge>, accomplishing inherent <cognizance>, with integrated robot-like recovery doling out. The robot knowledge remains understood quality, carried by the appropriate processing hardware. The <industry 5> step sees on-process robots, which perform series of administrative, business, manufacture, service, etc., jobs programmed by men or already planned, with instructions having *upper* or *inner* origins, the analyses suggest distinguishing:

- *upper* total wisdom: *faith* in *godly* dualism allows miracles, progress and whole recovery;
- *inner* total rationality: *trust* in *forged* monism makes the earth trifling, face to all galaxies;
- *contingent* intelligence: *factual* dualism tolerates bounded growth, with *frugal* strategies.

The interest in *total* prospects is obvious. The entropy piling up in the merely material reality makes unrealistic infinite progress; however, the immeasurable galactic space leaves clear-cut conclusions open. In conclusion, the globalisation, also, middle relational model deserves considerable attention, to investigate the linked sustainability potentials. At last, the *contingent* intelligence model obliges revising the ideas on fit human progress, inventing the policies of thriftiness or frugality, as civilisation safeguard. The 'ecology' constraints' removal, in general, cannot happen: the 'global village' uniformity has to replace the sovereign 'nation state' architectures: this shall happen even if the *faith* in *total* chances cannot develop.

Thrifty Courses

The thrifty courses are in all cases ecology imperatives, whether or not the *relational* modes bring to the collective breakthrough of the *globalisation*. At the point, the analyses need mixing the data processing, if done by men's designed robots or by cosmic rationality driven robots. The falloffs on the supply chain have equivalent structures, nonetheless leading to quite different outcomes, its *total* backdrops develop, based on *upper* or *inner* causes. The topics are actual uniqueness, because the robot-like data handling and grid computation with 'big data' effects are recurrent, made evident by globalisation by the said facts:

- the robot-like data processing, when the galactic information enjoys direct access;
- the global ecology necessities, with the exhaustion and contamination demands.

The civilisation seems to develop on cognizance and *relational* modes, by bottom up trends; the growth sustainability seems switching to globalisation, when ecology asks looking after upper or inner options. The 'knowledge', from *contingent*, shall turn *absolute* or *intrinsic*, with spiritual or natural coherence; *godly* dualism or *forged* monism are potential models of *total* views with *spiritual* foundation or implicit data, as *natural* quality of the reality. 'Big data' and holy lucidity or cosmos' *inner* coherence are visions, advising revisions of the human adventure, from bottom up inventions, to top down effects, for which designs and decisions are open query, steps involving judgment and planning. In the known regular societies, agentive and coherent choices have adaptive courses, following clever verdicts or public authenticity and authority officialdom. The split-sovereignty is tricky imperatives, which has duly management by logic enhancement, more than by *upper/inner* dispositions or cogent necessities. The 'knowledge' autonomy is explicit defy, to look at clever innovations, but absolute moods or intrinsic directives may yield spiritual or natural progress, assuming *upper/inner* coherence of *godly* dualism or *forged* monism. The civilisation sustainability, then, is not only human affair, but it involves heavenly or natural reasons, when ecology and globalisation are marks for the years to come. The progress, indeed, combines technical and political innovations, but the backings, Fig. 10, can be robot-like, offering data processing opportunities with holy or intrinsic kind.

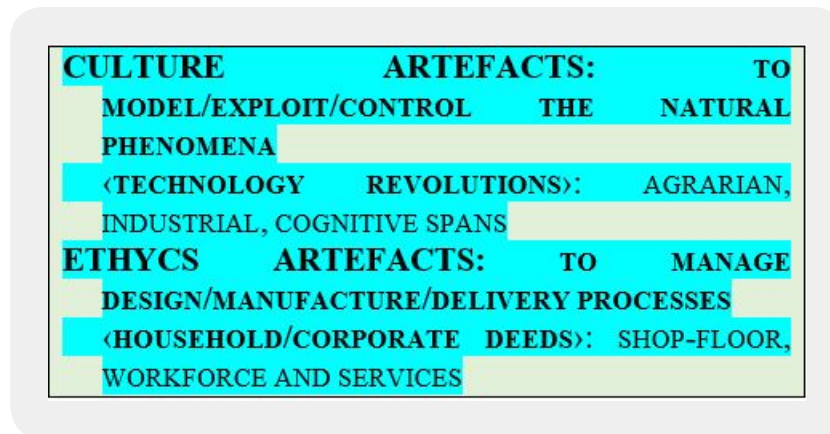


Figure 10: The deployment of the thrifty «value added».

The intelligence and relational modes provide bottom up procedures and equivalent wisdom or rationality and ensemble handling chances are, possibly, available, already present as holy or natural options. The two lines differ, since the former avails of *explicit* knowledge, after cognition courses and the latter follows holy ways in union with meek spiritual reality, or intrinsic rubrics, in coherence with extant information sets. The line exploits *upper/inner* processing: public networks and social grids are critical achievements, if looking at communality's ethics and acknowledging the linked unconscious effects, with invasive spread-outs. Indeed, *factual* dualism deals with the three-level regularity sets of political layouts; *godly* dualism/*forged* monism looks at the uniform coherence of the physical reality, for projections on the progress chances. The former avails of *regular* societies, in which parties manage timely accords, using analysis. In the latter, exposition to the *worldwide web* interactions is undying challenge, if affected by «false news» or «biased truths». The men's headway requires revision, if cognizance and biology merge over, with access to absolute/intrinsic knowledge, bypassing abstraction and encrypting, instead, enjoying *web* indoctrination as standard option of «big data» modes, assuring wisdom or rationality deployments. The swop entails intelligence, replaced by universal themes, wisdom and rationality, having purposeful function of synthetic compasses.

The *relational* model of the «global village», with linked *total* readings, validates the frugality as *upper* or *inner* chance of the galactic ensemble. We are aware that on our little earth the human intelligence happened with *agentive* and *thinking* skill; we shall agree that equivalent occurrences repeat, with similar *agentive* and *thinking* upshots. The global ecology, thereafter, shall enjoys of wisdom or rationality balancing the detected drawbacks. The remarks allow adding obvious comments to the *worldwide* societies.

The «global village» and «big data» ensembles are weird topics of concern, urging the necessity of modified readings of the earth's occurrences. Ecology and globalisation switch to uniformity, removing rivalry benefit and, instead, fostering possibly unconscious brainwashing by *worldwide web* and *social nets*, when consent avoids extant ideologies, to aim at self-ruling «biased truths» on official grids, with global masters. Ensemble approaches achieve inclusive performance by combining individual aims and collective settings.

The *total* line, merging several ensemble classifiers and models, lowers the risk of poor performance. The *godly* dualism exploits transcendence to look after miracles: cognition is spiritual issue, aimed at absolute

knowledge. The *forged* monism enjoys natural rationality, with intrinsic knowledge, as *information* is just quality of *matter*, to which we have access by education and training: cognition is physical process, leading at detecting *pieces of information*. The two models denote challenging steps, as *upper/inner* information involves *total* deterministic steering, in lieu of *contingent* planning. Besides, *worldwide web* transforms in monitoring and control of the linked people and the uniformity is safe option. The <big-data> processing, for privacy protection, should ask suited shelter of identities and individual opinions. However, the net's users leave identifying marks and show feeling, sufficient to obtain personal profiles; these are freely exploited by grids' masters for directing use and selling the data to third operators. The purchasers' orientation and collectives' indoctrination are <big brother> duty, automatically accomplished, using ensemble processing and learning routines.

The worldwide *frugal* society is globalisation coherent result, replacing the many closed societies, asking <state> sovereignty. The economic self-sufficiency is fable or makeup, leading to wars and hierarchy rulers; the worldwide contact-and-trade and population growth aim at over-depletion/pollution practices of the imperialistic countries, with damage of the other ones. The frugality sharing is impartiality goal, stopping illegal privileges of singles or communities, claiming godly grace or racial supremacy or equivalent rights. The <global village> uniformity is reasonable solution; the <big data> ensembles offer hints on how robot-like opportunities operate, giving evidence of *godly* wisdom or rationality supports [1-3].

Conclusion

The *relational* modes are interesting investigation tool, further than behavioural traits, typifying singles and collectives. Along the ages, we assisted at pace wise a *posteriori* implementation of three *relational* layers of explicit <knowledge>: the architecture characterises by localism and contingency, by native idioms, private dealings and sovereign countries. Today, the *globalisation* shows wholly different equiposes, acquiring *total* worth to communication by formal computation language, absolute impartiality trade and steady uniform relationship: the *relational* modes establish unconditional links, no more biased spot and temporary ethics, but fully open to universal contacts, transactions and establishments. The *total* reading of the *relational* modes progresses together with top down procedures by growth/cognition fusion into ensemble dealing out; the information processing avails of <big data> options, with implicit <knowledge>, if *forged* monism applies, or absolute <knowledge>, with godly dualism.

The *globalisation* and the top down grids are challenge to come; the <global village> and <big data> are awkward attainments, when we try to figure out how their operation management actually occurs. The monism states that the reality is corporeal stuffs; the *information* is *matter's* quality. The dualism states that we have parallel material and spiritual realities: one, with tangible changes, described by physical laws; one, with abstract courses, styled by holy rules. The accounts are intangible, with thinking onlookers men or robot-like devices that, by dualism, enjoy spiritual statuses and; by monism, are intrinsic function, even when apparent restitutions offer cognition-like outcomes. On earth, the cognition is men activity, keeping, perhaps, upper or inner origins; however, different other cognition-like processes may exist, due to galactic laws. The human perception needs abstraction and encrypting stages: input sensing and identifying cipher allocation to the feelings. The encoded script is message: in dualism, readily meaningful; in *forged* monism, asking suited carrier, because the handling and restitution happen in hardware.

The analyses operate on explicit <cognition>: the monism without onlookers and <knowledge> remains undistinguished from determinism; we transom given tangible pieces, into different ones, following clever designs: beginning, process and result describe by data, which gives the instant attributes of singled out carriers. The account is hybrid, showing information detection and flows, parallel to matter processing: the all is *forged* monism; it is essential defining details recognition and treating. The civilisation entails progress and design aims at innovating, compared to the deterministic galactic background. The *cosmic* rationality implies access to *real* information (*implicit* <knowledge>); <big data> and <*synthetic* hands/minds> grant added-value transformations, followed by rescue and salvage, when the earth's figures should approach critical conditions. The <cognition> and <consciousness> are essential makings of civilisation: the aware and explicit management of the tackled <knowledge> is fundamental requirement,

The dualism always deals with watchers, distinguishing the spiritual reality and the mental worlds, from the material reality: the understanding and explanation are intangible descriptions out of corporal items. The incorporeal contents assemble ideas, concepts, judgments and narrations, say, the mental domains of <knowledge>. The soul or *anima* belongs to spiritual spheres and the *animals*, living beings, enjoy of the spiritual abilities of thinking and reasoning; this construal is deceitful: soul and spirit, perhaps, remain in holy spheres; thinking and reasoning are mental functions of the physical reality. With that reading, judgments and accounts with all other intellectual activities do not need spiritual endorsements and they moves to *contingent* domains of human intelligence. The soul and spirit, only, are transcendent parts, with absolute <knowledge>, defining the *total* spheres of the *goody* dualism. With it, thoughts have access to the spiritual reality, with *total* divine and physical laws. The *factual* dualism replaces the spiritual, by the fancy mental worlds, having *contingent* <knowledge> and fantasy interpretations of the observations, followed by the abstraction/encoding cognition steps.

The mentioned, *forged* monism, *goody* dualism and *factual* dualism are mutually exclusive models. The last is realistic bottom up description of what sensed at the different steps, via empirical checks; the views are passing and contingent, with serious queries on the future progress, even adopting frugality schemes. The middle model presumes the *faith* in transcendence: then the universe has law already *upper* written, with the possibility of miracles, totally correcting the extant trends. The plausibility of *upper* or *inner* driving causes is constant human demand, starting many possible enquiries; the first model presumes the *faith* in immanence: the *cosmic* rationality is conditioning cause, for the coming events. Monism is initial downside, bypassed by *forged* monism, by inherent <cognition>, making possible the use of implicit <knowledge>. The issue brings side results: the *synthetic* hands/minds offer plausibility to robot-like rigs, having instructions already in the galactic database. Then, <big data> and <*synthetic* hands/minds> are good cues to hypothesise rescue and salvage chances for growth sustainability purposes.

The study goes around how *contingent* <knowledge> can become *total* <information> and reliably used to build wellness and improvement. We have belief of the absolute worth of the acquired physical laws and of the results of our technologies, thus, our scientific <knowledge>. In old ages, men conceived the *faith* on the spiritual value of the thinking and reasoning talents: the *godly* dualism, easily, divides intellect from matter and it gives way the share heavenly <knowledge>. in modern ages, we become aware that the mind worlds boils by abstraction/encoding routines, with tangible carriers, having local and passing picks: we accept the cognition function, but we add the *faith* in direct access to true galactic information by *forged* monism. The

ideas on *natural* or *spiritual* «cognizance» find foundations in amazing facts, commonly recognized (physical laws trustfulness) or timely asessed («big data» or «*synthetic* hands/minds» effect). The study introduces to the topics, when the ecology obliges revising many accepted truths and the globalisation seems offering start to a new collective breakthrough.

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