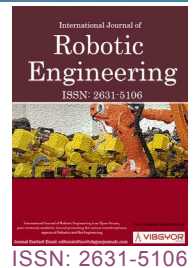


Anthropic Advances: Global Robot-Driven Rescue



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Abstract

The civilisation is unique attainment, created on earth by <intellect> inventions, altering the natural trends, by anthropic improvements. The changes are the result of <knowledge formation>, with fallouts of culture and ethics by-products on the collectives. This discussion presents a <relational> account, in which the <mind>, by interpersonal inventions, creates multilevel <closed societies>. The <relational> picture identifies the key functions of *communication* (language), *trade* (market) and *authority* (government) and describes example layouts, when the overriding tracks are result of total *a priori*, or of contingent *a posteriori* constructions. The analyses bring to figure out the privileges of the <sovereignty>, notably, face too the extant <ecology> requirements. The discussion provides insights into how intellect shapes civilisation, subject to constraints, when dealing with the material world. The <relational> hypothesis is efficient way to describe the robot-age developments, with unified accounts of the <artificial life/intellect> tools. The present discussion limits to give hints on the validation of the <political setups>, by timely adapted <knowledge> inventions.

Keywords

Anthropic progress, Relational modes, Sovereignty, Uniformity, Regularity, Sustainability, Global robotics

Introduction

The <knowledge> is outcome of minds, which interact, using the perceived inputs with agreed encoded interpretation. The integration needs incremental coherence, addressing shared canons and yielding to spoken/written languages. The set meanings identify series of *sounds* (words) and *symbols* (graphic entries) understood by the group, clan or tribe. The encoding is a meaningful process, when a relevant community shares the resources as mental wherewithal. The approach leads to specific seman-

tic traits of the encrypting. These provide language instances when fused to express thoughts, with assessments and doubts. The language invention typifies men as compared to other living beings and is the way by which scholars build <knowledge>.

The language formation is collective result with semantic choice and thought construction: The symbolism exploits links; the sentence construal follows *grammar* and *syntax* rules, which define at interpersonal range. The <knowledge> is individual duty of representative scholars, prospecting

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interpretation syntheses, implementing justifying theories or providing creative innovations to the extant arts and crafts settings. The blends show the clans' capabilities: The civilisation builds on the linked mental wherewithal or intellectual resources. They, practically, provide our science and our comprehension, justifying the course of the events, by theories. The *language-to-knowledge* track proves the existence of *relational* modes in the intellectual activity; parallel to the *cognizance*, the *business (market-to-finance)* and the *authority (headship-to-governance)* mind's styles prove the presence of *relational* modes, showing that the anthropic changes profit of *cognizance*, *business* and *authority* talents, with typifying interpersonal traits. The *relational* modes are mind construal, or have *inner/upper* origins with *cosmic* rationality or *heavenly* wisdom. Six points follow:

- *Relational* talent, showing the intellectual ability to create abstract actualities;
- Authority spirit, managing overriding dominance by potentially *a priori* leads;
- Running options, using the top-down *absolute* authority, for unifying controls;
- Multiple-management, recognising *split-sovereignty* of existing nation-states;
- The effluence stooping and recovery imperatives, facing ecology drawbacks;
- The shock of globalisation, dealing with the coupled impacts of rival societies.

Without *inner/upper* controls, the human intelligence is enough to implement rational and wise behaviours, even if at *contingent* range only. The *total* setups justify self-sufficient autonomy and rival solidarity. The closed-society regularity allows efficiency by split-sovereign nation-states. The open-rally uniformity with altruism aims at sustainable advances for rescue demands. Exhaustion and contamination are worldwide stipulation foe ecology. The globalisation needs revising the political organisations, due to dependence and cooping drawbacks. The following cues introduces example topics, describing the process, via *relational* model description, leaving undecided, if the apparently anthropic civilisation is contingent issue, or if it enjoys total *inner/upper* causes. The topics are premise of ideas, object of books [1,2], giving hints on the coming globalisation.

The Intellect's Wherewithal

The progress is mental wherewithal's design, by human <knowledge> giving clever organisation and appropriate education. The three language, business and authority *relational tracks* gran that the interactions are clever accomplishments, with intellectual, economic and political by-products and with effects enhancing the clan/nation's life quality, under mandatory responsibilities. The cogent mind behavioural patterns allow effective arrangement of the individual life practices. On the earth, the role played by humans is recognised central, accepting the fact that different tribes establish self-sufficiency habits and self-governance, identifying *reserved* locations, assigned as nations, with land, homes and villages. Nomadic clans, also, aim at standards, i.e., *relational* ways, tied to communication by idiom, trade by buying/selling and government under official authority. The changes create abstract marks, encoding mental concepts, with purposeful usefulness, i.e.:

- Language, to support detailed sharing of culture/ethics thoughts and notions;
- Trade, to establish fit barter/market exchange, at the community practicality;
- Governance, to institute apt organised political/administrative infrastructures.

The relational modes are community deployments, needing well-paced cooperative effort, to conceive and implement the complex details of the structured/organised mutual speech, shared business and joint management. Connections establish at various levels, with different connecting conditions. Mainly, we identify these connections:

- Volunteer contacts, based on *friendship* agreements and unpaid covenants;
- Contractual links, presuming *private law* obligations and promised leaflets;
- Imperative bonds, rooted on *supreme edicts*, already engaging every ones.

The third range has the force of *public law*, affecting all citizens on *total* rules: The personal links remain subjective, perhaps, including at the (marginal) third level, the mandatory duties, but, also now, leaving free choices. The other two levels are wholly creative, with voluntary goals or

agreed plans. This decisional autonomy is shared quality, typifying the human sorts. The *freedom* defines moving from the comprehension of extant circumstances and including the faculties to select safe paths. Our \langle knowledge \rangle is tricky, including backing science and task-planning/execution abilities: It is hard to say, if these are truths or hopes; definitive proof may follow from the described process, assessing our \langle knowledge \rangle by science settings and technical issues, i.e., showing the effectiveness of our supposed talents.

The analyses become intriguing when used to justify thorny effects based on: \langle knowledge \rangle (at mental consistency) by intellect deployments (with operational reliability). The extant \langle knowledge \rangle denotes intellect's data encrypting and handling; minds active, when thinking or processing ideas. The crosslinked clans share culture and ethics values and canons: The result unifies idiom, fuses the selection of science ideas and the coherent choice behavioural habits. Parallel groups may exist, each with different culture and ethics, metrics and ideals, unless the crosslinks become compulsory, due to a ruling supremacy. Recent history distinguishes, at least, alternative paths:

- The autonomy, using the efficacy rivalry, towards competing \langle nation state \rangle ;
- The dependence, expanding the uniform consistency, to the \langle global village \rangle .

The paths distinguish on series of options, backed by alternate *relational* modes, if bottom up *contingent* construal, or top down *total* settings with *inner/upper* origins prevail. The analyses look at interpersonal communication (language's invention), business (market's discovery) and authority (governance's creation), to discriminate if only manmade, or promote by *inner/upper* causes. The three ranges show volunteer links, private connections and official courses, which prospect formal *relational* modes, typifying *intelligence* wherewithal, either *cosmic* rationality or *heavenly* wisdom potentials. The \langle knowledge \rangle , instead of mental issue, transforms in absolute immanent quality or transcendent entity of the reality, with the reliance of the natural laws and the ethical rules.

The *relational* modes are *dependence* path, in the human \langle knowledge \rangle building via explicit data. The *human* intelligence provides bottom

up mechanisms to implement *civic* orders for the groups. The *cosmic* rationality or *heavenly* wisdom affords top down rules to build *social* orders, which cover the same duties. The switch, from *contingence* to *total*, exploiting the construing of cosmos information with *inner* instructions, or resorting to spiritual options with *upper* worth. The change describes *implicit* (by natural encrypting) or *absolute* (by holy appraisal) \langle knowledge \rangle , if we keep the same word to define the coding of the date exchanged to define our readings and feelings. The cultural and ethical values convert the intrinsic qualities or spiritual traits of the reality, in *science* or *religion*: These are apparent *truths*, not to be confused with human *conjectures*.

The intellectual abilities link to the *relational* talents; in first instance, we explain these, using *intelligence* by-product, as if, on the earth, the *human* start, after the *life* one, entails fulfilling apt singularities. We, in parallel, acknowledge that our progress is so puzzling attainment, to require bigger potentials, not just conditional humanoid chances. The parallel hypotheses bring resorting to *cosmic* rationality or to *heavenly* wisdom as the origin of the civilisation, established on natural or spiritual dispositions; the latter is *faith* in transcendence, with the *holy* reality granting absolute improvements; the former *believes* in immanence, with intrinsic information yielding to scientific laws and permanent truths. The creation of idiom, invention of market and discovery of headship are astounding accomplishments, mostly implausible, unless *inner/upper* inspirations supply base hints, towards the connected findings; the deductions on how building syntaxes, realising trades and implementing governments follow rational and wise principles, having universal and absolute details, difficult to conceive on merely anthropic bases.

The Over-riding Autonomy

The *relational* modes originate the political setups, in which coexist *civic* and *social* orders, if we cannot distinguish what founded on *human* intelligence, from what inspired by *cosmic* rationality or by *heavenly* wisdom. The three *relational* levels differently affect the domestic, administrative or governmental spheres. The authority spirit is particularly relevant in the highest sphere, when regulations entail leader-

ship and sovereignty details. The discussion on the political setups goes on properly addressing these topics.

The earth's society builds, supported by the national spirit, enhancing the home-grown culture and ethics metrics and ideals to become characterizing quality of the given country. The outcome, possibly, comes on the upturned hypotheses of inborn self-sufficiency, turned in self-governance and leading to the *sovereign* <nation-state>. The postulates explore the ethnic origins and refer to the homeland language, to specify the courses, bringing to the self-directed fatherland. The ethnic premise should bring to several peoples or races, each one with own *genetic* patterns. The idiom basis suggests several tutoring and training lines, each one with grammar and syntax specialisation to assure the fluent control of the particular verbal/written message passing. The spoken tongue is indorsed *national* mark, with acknowledged writers and newspapers, promoting current changes. The speech, doubtlessly, is essential *relational* means: Dialogs and dialects are the beginning of the clans and the basic start to form the parental education of the leading families.

The spoken/written languages are aggregation method of individuals understanding each other, in view of creating more solid collection setups. The accumulation proceeds, if the *relational* ways deepen, providing tools for structural assets and administrative tasks. Typical ways cover:

- The agreed protocols, binding the individuals through undersigned conventions;
- The compulsory bonds, tying the country's citizens, by regular *public law* rubrics.

The course follows structural conditions, under self-rule organised accretion and self-sufficiency administrative ingenuity. Arrangements and coercions assure the county's legality, once the <laws> follow recognised *modus operandi*, when declaring the *sovereign edicts*. The lawfulness entails the promulgation routine; the authenticity concerns the compulsion endorsement, as it needs to apply out of explicit individual decision (and consent), because inspired by *general* tenets. The enforced directions, logically, can ensue from several mechanisms, making resort to:

- Agreed plans: The bargain involves each <closed society>, with global decisions;
- Inner causes: Fixed <natural laws> exist and men shall follow the given restraints;
- Upper motives: <absolute truths> endure and men need to adopt the guidelines.

The discussion applies to the concept of <sovereignty>. The absolute reading refers to <the king by grace of god>, to manage *total* qualities without the requirement to prove them. More recently, the Darwinism-style construing looks at <genetic optimisation>, with *natural* supremacy, similar to see, in the lion, the monarch of the savannah. The resort to backdrop <natural laws> is, also, more cutting-edge. The recourse to cosmos' information, with <inner formulae and theories> enjoys big interest, as if the inborn logic of the universe is safe premise for the mind suitable rationality. The <natural laws> help understanding the universe, via cosmology or atomic physics and apt rules may apply to the civic accounts, to cover the political current happenings, via *sovereign* <nation-state>.

The anthropic reading aims at <democracy>, with people's ballots and governing majorities. The <constitutions> define the reference legitimation, included the enacting and ruling of <sovereignty>, by *a posteriori* endorsement from the *people*. The practice has varied interpretations and, as well, it has mixed elucidations, when the agreed plans inspire to inner cause or upper motive ideas. In the analyses, the *faith* in *total* qualities, notably, in the <natural laws> existence is widely followed. The human <knowledge> happens rebuilding the cosmos' information, perhaps, by pace wise trials and checks. The trust in *absolute* truths encourages dealing with inner causes or upper motives, to model our culture and ethics implements. The habits aim at beliefs or hopes with reliance, mainly when the in progress acquired awareness supports the devised asymptotic principles. The concept of sovereignty builds this way, and the third mechanism officially converts in the manmade stake, without losing the total virtues of the other two. The mix of the cosmos' information in the men's <knowledge> is relevant fact, again further considered in relation with the <natural laws>.

Here, the <sovereignty> permits defining the political autonomy of the extant <nation-states>.

In the country's formation, the *relational* assets include idiom, trade and authority. The initial stage concerns the understanding and the establishment of friendly and responsive dealings; the second one involves the bilateral connections, in which the legality entails shielding the personal freedom and belongings; the third sphere looks at top-down rules, to force the uniformity of the citizens in front of governments. The administrations establish on distinct hierarchies; the management has to recognise *total* control in the <nation-state>, with power self-sufficiency of its leaders. The *king* and the *reign* enjoy *supreme* authority: The control autonomy is automatic fulfilment. If in parallel, several *kings* and the *reigns* establish, the *top* sway repeats, notably, if the control applies to their citizens. In return, the citizens ought to recognise the *sovereignty* of their given *reign* and to ignore the parallel *reigns*. Today, the standard requires being citizen of a <nation-state>; or else, refugees or asylum-seeking migrants exist, mainly, outlawed, deported or displaced.

The standard lists series of developed or under-developed <nation-states>. They distinguish due to the *welfare apparatus*, with benefits and facilities in help of the inner citizens. The *tax scheme* is congruently heavy, since the control autonomy structure covers many duties, moved to the *public* sphere and charged as *private* levy. The series of duties, tolls and tariffs make the state's makeup very expensive; in like time, they create several administrative jobs for the inner bureaucracy. The many <nation-states> have century-old layouts, with domestic traditions including language and epic *independency* wars against parallel countries. The Europe offers example situations, in which the given homeland quickly builds walls between one-generation-old vagrants. The strong divisive education develops via the teaching of the partisan history, in conflict with parallel annals, telling the grand narration of the competing countries. Only recently, the country's autonomy is object of discussion, especially, in reason of the comparative profits that the division rivalry authorises. The debate brings to the European Union, EU, merging sets of settled countries, opposed to itinerant people. The close, for now, demotes the stateless expatriates and prizes the <nation-states>.

The quoted conclusion needs explaining how qualifying the local *reigns* and how justifying the repeated <sovereignty> option, each time, with allotted autonomy. The elucidation follows agreed plans, moving to a different context the inner cause and the upper motive options. The creation of the <nation> is tangled prospect, requesting the accomplishment of typical functions, namely:

- The administration: Clerical tasks, for the inward prepared steering of the citizens;
- The governance: Control operations for the cross and inside nation's management;
- The supremacy: Hierarchic directives, under kingship or representative authorities.

The functions are *relational* specialisation, occasioning bureaucracy, organisation and decision-making performances, after exclusive accounting, suited officialdom and executive authority. The three *relational* ranges, through *agreed plans*, permit forming activities, job places and leadership officials, with outcomes in the countrywide structures that *rationalise* the extant civic services. The clerical tasks have easily recognised *mimicry* foundation; the control operations get *meme* fruition investigations, which show the factual usefulness of the architectures; the hierarchic directives do not discuss until when the emulation/simulation surveys provide *a posteriori* proof of the obtained efficiency. It is hard to say if the three checks will remain successful in the future. The study will go ahead, looking if further evidences or trials are worthwhile and, only afterwards, the discourse on the *relational* topics provide new details.

Empire and Independence

The world's running options, according to past analyses, aim at restricting into provisional and reliant issues, with *a posteriori* assessments, or at devising steady and reliable aftermaths, with *a priori* virtues. The latter approach brings to the trust in <natural laws> as if the cosmos' information carries the inner soundness, which shows the pre-existing order. The universe's trustworthiness is worthwhile, as already pointed out, since the <knowledge> detects cosmos' information, once the human cognizance process starts. The physical laws are unique and the human edicts ruling the political setups shall keep <uni-

formity) the world over, without manmade interpretations or local optimisations. The transfer allows modelling our surrounds, with twin falloffs:

- The steadfast forecast of our backdrop's changes, on daily/yearly projections;
- The keen planning/enacting of administration/governance/supremacy edicts.

The faith in the spotted <natural laws> is fine: What we discover uses light, detecting matter and ignoring antimatter; our physics disregards non-discerned details. The trust in the devised <human laws> increases, if we believe existing *a priori* inner causes or upper motives. Then, the selection of kings and the design of reigns have to follow akin courses, greatly widening the options, to create countries, empires, self-governing districts and self-sufficient territories. The idea that <natural> or <human> <laws> have *total* soundness or *separate* substance, when matched with the mind worlds, makes easier such widening: In particular, the <sovereignty> is notion simply linked to *a priori* inner or upper origins, adding, each time, *separate* or *total* niceties. To such purpose, the conception of authority, as already noticed, typically enjoys alternative prospects:

- The *a priori* inner or upper statutes, here connected to the <empire> civic organisation;
- The *a posteriori* relational construal previously linked to the <nation-state> controlling.

The latter is manmade style reading, but the absolute one keeps big weight. The <empire> puts together several nations; the unifying precepts distinguish structured order, from uncouth chaos, or civic association, from barbaric lack of management. The idea to repeat <nations> and <orders> finds the reason in the <language>; otherwise, the difficulties in inventing alternative guidelines are hard task. The *relational* tracks, through <language> and <nation>, are outlined hypothesis; the idea that the human destiny somehow enjoys cosmos' information and matures keeping inner or upper steering, is constant concern: It suggests looking at different tracks. The <authority> layout on just *a posteriori* guess is empirical cue; the <gene evolution supremacy> or the <God's grace monarchy> are evocative suppositions, which are objects of beliefs, in modern and past epochs. These courses justify <empires> with *a priori* foundation, critically opposing *order*

to *chaos* or *civil* plans, to *coarse* schemes. The <empire> has a founder and, normally, a leading dynasty, which assures continuity to the founder's hegemonic settlement, according to the *original* inner or upper propositions.

The resort to *original* laws are object of myths, from Middle East empires up to the Alexander's conquest, through the Roman Empire and the Islam hegemonic ruling, with the China's empires to include dynasties of Mongols and Manchus. The recent history has to deal, as well, with the British Empire: It shows factually *global* exposure; It repels the order bill of a *global* union. In the previous instances, instead, the union law is progressive requirement, aimed at the global extension. In this survey, thus, the <empire> is structured order, with *global* union demand and schedule, according to inner or upper principles. The backdrop doctrines mix inner causes and upper motives, altering the prevalence of the one or of the other, also, along the same institution. Example situations are well known: They have suggested the present model of <top-down> imperial power.

The Roman Empire starts, joining the supremacy of the <romana gens>, with a *leading dynasty* to invent the structure; three centuries later, the God's sponsorship emerges; the fusion, then, is starting a drift, in which *heavenly* or *superhuman* phenomena are (defined) prodigious or (named) exceptional. The situation is similarly complex along the millennial history of the Chinese Empire, with the entangled difficulty on how to construe prodigious or exceptional occurrences, perhaps, without the transcendence. In China, indeed, the religion connects to the Taoism or to the (Indian) Buddhism: The former, a behavioural philosophy, suggest a life methodology, in which the *celestial* emperor belongs segregate spheres, with honourable prerogatives; the latter is moral doctrine, in which the religious canons, more than theology dogmas, develops current principled aphorisms, with plausible practical suggestions. The transcendence has limited appeal in the Tao's theology and the *Celestial Empire* moves along the centuries properly connected to terrestrial events. The Buddhism does never interferers with the empire's official structures.

The recalled analysis seems telling that the empire's force is extensively due to inner causes, as if the social organisation with hierarchies and su-

premacies deserves *natural* dispositions. In such context, the establishment of authority, governing and administrative tasks requests, at least, two implementation levels, to make possible fellowship and cooperative planning, namely:

- The *agentive* enactment, promoting survival competition by *gene* selfishness;
- The *cogent* cooperation, aiming at poised social teamwork by *meme* altruism.

The former level develops along *gene* evolution patterns, showing the forceful goals of the life species, with cross-control managed through greediness and self-centredness; mankind is the only species without automatic predatory balancing. The latter level allows *meme* completion, adding the interpersonal emulation and simulation by-products of the social coordination and collective shared construal. The empire's authority, governing and administrative order supplies makeup's worth; the homeless' independence cannot explore co-work and mimicry ways, transforming the mental riggings, in spendable money. The human people, mostly, collects in families, clans, tribes and the likes, with leaders and shared rules and procedures; the independence of each assembly is understood fact, unless further grouping establishes under distinctive headship. In the survey, the aggregation has links with the *cogent* cooperation, however, distinguishing how the course starts:

- If a *natural* penchant exists, making permanent effects, yielding *total* bias;
- If *provisional* options form, building local drifts, with *contingent* upshots.

The former course is, here, seen accepting steady <natural laws>, including the pace wise image of <authority>, <govern> and <administration>; the latter tells that such institutes are men's design and rather different accomplishments are possible. For instance, the <empire> is, surely not, single enactment: It might repeat or transform in different organisations; the *cogent* cooperation is just contingent choice, readily modified. The inner causes or the upper motives are beliefs, more than deterministic or heavenly proclivities. For sure, the <human laws>, once enacted, exist; the empire may accept tax-paying citizens and ban nationless immigrants. Today, the problem of migrants or evacuees or exiles

arises, opposed to inhabitants enjoying nationality; the residence is not *natural* or *divine* right; it is otherwise managed by each country. An individual has no <independence>; this is mark of the community's self-sufficiency and self-governance, allotted by international treaties. According to the present survey, anyway, the <empire> alters the currently passed <human> laws to share <absolute> rank: This allows the independence or self-governance of the institution; then, the acknowledged qualities generalise, transforming in (authorised) *official* <sovereignty>.

The independence or self-government of the <empire> is factual truth. Its proof does not need theology; it limits to ask *priori* foundation, opposing *order* to *chaos* and demanding the prodigious recognition of the emperor's appointment. The *independence* compares with addiction or craving, saying that the emperor and the tied lineage are free from the surrounds and can programme the jobs to perform. Besides, the situation is never straightforward: The independence does not affect an individual, but the function, through the empire and the self-government involves the territory, more than the people; thus, several emperors originate from barbaric legions in Rome and foreign dynasties exist in China. The role of *independence* to run the imperial <authority> again surfaces in the planned order to deal with the *global* union, managed by inner or upper forces. The <empire> union is implicit demand and schedule, even when the self-government separates the territories, e.g., the Eastern and Western Roman Empire or the Mongolian Celestial Empire with Turkish and Tatar expansions the Asia over and Eastern Europe. The latter *global* union, however, could not survive, when the Islam religion proselytised the territories outside China, towards regional units.

The Split-Sovereignty Idea

The *a priori* faith in the <authority> is paradigm difficult to accept, even by people, which do not object trusting in the <natural laws> pace wise built by empirical tests. The analyses do not exclude that the cosmos' information exists, but no direct exchange provides data or hints about the all. If we just praise the *human* intelligence, without behind *cosmic* rationality or *heavenly* wisdom, the <uniformity> shall look at the different <regularity> of anthropic locally optimised political setups. In con-

clusion, we shall move to the ‹biology› and ‹cognition› peculiarities, to consider:

- The operation ability, starting *agentive* routes, by *gene* evolution, to creatures;
- The cognitive talent, doing *cogent* constructs, by *meme* fruition, to knowledge.

The former tells that the ‹biology› brings to life-beings and life-cycles, taking out individuals and showing two mechanisms: Growth and evolution. The latter says that the ‹knowledge› is man-built *mental* assembly, based on two inventions: Abstraction and mimicry. The *growth* assigns the birth-death cycle, with initial development and final decay. The *evolution* states the gradual adaptation of the lifeforms to the surrounds. The *abstraction* asserts that the men's brains convert in minds, to create and to process thoughts. The *mimicry* affirms the ‹relational› skill, assigning meanings to brain's views on interpersonal span, so to make emulation and simulation feasible. The imitation is message-passing system, if the community encodes and standardises the chosen imagery by voice words or graphic signs. Indeed, animals perceive and value views, noises and feelings, but just men extract mental concepts, with interpersonal senses, shared by the group, due to learned codes.

The ‹biology› and ‹cognition› are earth's singularities, or they belong to a total theory, keeping the ‹natural laws›. The dilemma does not exist: With *a posteriori* building of the ‹knowledge›, the *a priori* existence of the ‹science› is meaningless. The cosmos' information may be permanent prodigy or pattern, possibly, experimentally detected as marvels or practices. At this point, we do not look at truths, but accept guesses, recorded as wonders or anomalies. The ‹biology› has steady reading through Darwin's models and *gene* evolution. The *genome* decoding offers data describing the main life changes. The ‹cognition› does not yet possess readings on why men's brains turn in minds (and not the, e.g., the orangutan's ones), by child's parental teaching. This variation, also, opens queries about its hardware/software/firmware kind, being tough deciding the new *items* or new *ideas*, when the intellect develops or acknowledges innovative scenarios. The above-sketched ways of ‹biology› and ‹cognition› have complementary outcomes:

- The creation of individuals, up to men, moving from the living beings of many species;
- The establishment of awareness, up to culture/ethics codes, from knowledge design.

The fashioned individuals, at the end, are *active* and *intelligent*: They can accomplish tasks and decide their plans with responsible consciousness. The framework implies suited picks, to enable the factual creation of interactive minds, endowed of learning and operation talents, since:

- The *intelligence* skill allows to choose among (inter-legere), using personal freedom;
- The *relational* ability supports interpersonal conception, by mental cross processing.

The interpersonal understanding and the free choice are intellectual aids, which supply benefits when the selected techniques and orders deliver proper provisions. On these lines, the *intelligence* and the *relational* innovations permit the human *civilisation* build-up, by means of a set of changes in the civic behaviours of the organised communities, through:

- Technology revolutions, devising productivity techniques, with value-added boosts;
- Social breakthroughs, implementing political orders, which will grant effectiveness.

The intellect deployments ineludibly involves clans, groups or nations, which start assembling, with common government into ‹closed societies›. Then, when moving on strictly *a posteriori* way, we again entail the ‹social breakthroughs› of organised assemblies: At governmental range, these involve ‹closed societies›, i.e., typically ‹nation-states›. The *a posteriori* analyses, however, repeat the construction for any organised community, converted in ‹nation-state›. The change confers the authority to the government, for organisation and administration functions, i.e., it awards the ‹sovereignty› on the ‹closed society› and on the territory. The *a posteriori* established ‹authority› builds on ‹democracy›, using ballots and referendums and justifying the ‹legality› by ‹constitution laws›, enacted to state the ‹will of the people›. This is the *relational* route, idiom/trade/govern, by which the ‹closed societies› affirm their self-sufficiency.

Apparently, the discussed <sovereignty> alternatives limit to:

- The <empire> officialdom, linked to fit *a priori* inner or upper foundation reasons;
- The <nation-state> organisation, connected to *a posteriori* relational construction.

The first does not need being justified, because it outcome of faith in the *foundation* cause. The second assumes that the collected <closed societies>, when self-sufficiency, are, also, autonomous and self-governing. The second motivation is, typically, by-passed, by traditions: God's grace or the inhabitants' exclusive language. Thus, until today, the <split-sovereignty> situation does not ask apt defence, having recourse to *a priori* (upper or inner) foundations. The approach is odd: It simplifies creating the SN, Geneva or the UN, New York; it sanctions acknowledging the independence of any territory, if voted by the inner people, with no consent or control of the other peoples; and so on. The *nation* identifies by the spoken idiom or dialect, or cultural/ethical habit, or religious tradition. Thereafter, the independence specialises the portion, with benefits, not shared by other countries, at least in the extant frames. Then, the <split-sovereignty> is contingent achievement, in which the self-government does not enjoy absolute foundation, but it aims at provisional rehearsals.

The independence of parallel <closed societies> is occurrence of primordial ages, when isolated tribes organise on separate territories. With the agricultural revolution, inhabitants and lands link on the tilling cycles: This starts the geography, the country's parcelling; the building of homes and hamlets; the allocation of estates and domains. The human history is known (not repeated): The *private* law is enough, to run the interpersonal duties; the <closed society> affixes the governance complement of the <sovereignty>. The <nation-state> becomes reference model, with the language as symbolising element. The period characterises by the leadership of the European countries, by collecting the same-idiom groups and converging towards industrial manufacturing technologies. The two issues link, assuring the highest adeptness by productivity and homogeneity, as:

- The industrial revolution boost throughput by artificial energy and work organisation;

- The union of peoples by spoken idiom increases the blending and collaboration spirit.

Multiple <sovereignty> typifies the epoch; the pattern is basis of the <colonial empires>, built by the European <nation-states> subduing territories some were else in the world. The defeat wrights are combined matter: The involved countries are god's grace kingdoms; bilateral treaties, only, are needed. The multiple <sovereignty> is trick of the domination of the industrialised countries, which join effectiveness and influence, for the officialdom of the current control's distribution. The end is a set of world's wars for the supremacy: It, instead, destroys the power unbalanced of the earlier industrial setting; it, further, expands the <split-sovereignty> to many new countries, claiming their independence, when freed from former rulers. The industrial revolution affects, to different levels, the developed and the developing countries; the pollution trends, with colossal (e.g., China) show serious drawbacks; the self-sufficiency (and self-government) of parallel <closed societies> is *truth* asking revisions and making critical the <split-sovereignty> practice.

Theoretically, nothing distinguishes <split-sovereignty> from multiple <sovereignty> and the two formats have equivalent problems. Yet, the former designation has strictly *a posteriori* foundation and deserves examinations. These inspections, for sure, concern the civic/ethnic makeups of the singled out assembly, compared to extant populations; the critical assessments, moreover, affect the eco-planning, to grant the correct recovery and recycling, without local failure or biasing. The <sovereignty>, in fact, is nonsense in front of the ecology: The earth is too little to think that unsafe behaviours do not distress everyone.

The Ecology Requirements

The <split-sovereignty> is social organisation, which presumes that any <closed society> is *free* to claim self-sufficiency settlement and to acquire self-government. The civic institutions, currently, refer to <democracy>: The power resides in the citizens, which elect the parliament, by timely polls; the parliament appoints the government, the all subject to enacted laws and main constitution via *a posteriori* routines. The citizens shall observe the indorsed rules and institutes,

but, logically, the parallel <nation-states> shall ratify the consistency of the cross-links. Without *a priori* foundation, the <sovereignty> cannot be *absolute*, but *contingent* only; the ratification path should involve the earth inhabitant's totality. Today, the country's *autonomy* allows profiting of the higher efficiency and managing the supremacy for political leadership. With the present critical pollution, the earth cross *dependence* becomes manifest; the use of the energy needs to include the needed recovery and recycle undertakings; the decay requires rescue and revival rewards. The ecology shows that:

- The *autonomy* is men's centred guideline, aimed at <nation-state> challenges;
- The *dependence* is earth's centred doctrine, within unifying <global concern>.

The link <citizen/sovereignty> is odd guess, using men's based endorsement, with hyper-survey of the *self-sufficiency* planning of *rational* aims. The *self-direction rationality* builds, maybe, shared skill of the organised communities, surely not of the single persons, if we expect that the approval of the mutual control leads to *self-sufficiency*. Such sanction just brings to acknowledge the worth for the concerned community, not the *absolute* value of the decision-making machinery. The link establishes *contingency* reviews: The <rationality>, under the collective control of the rallies, bends the choices towards agreed boards, with cogent worth; the <society> picks *self-direction* targets, built on *meme* fruition procedures, on just exigency inputs. The men's centred <knowledge> keeps *conditional* force, even when it seems tackling *total* <cosmos' information> drive; then, the <natural laws> are, possibly, pace wise discovered through provisional frameworks.

The earth's centred data are <cosmos' information> figures, freed from men's views. The details belong to <natural laws> spheres: when accessed, they involve the whole humanity; the division in <closed societies> does not modify such fact; notably, the <split-sovereignty> cannot confer licences to some <nation-states>, if these damage other earth's inhabitants. In other words, the *autonomy* cannot exist and the *dependence* becomes manifest, when the ecology acts on the <global village>. The <sovereignty> is conceivable belief through <god's grace> patterns or through

Darwinism faith in the <*gene* evolution> to the *supremacy* selfishness, leading to *total* bias towards the hierarchic civic societies. The latter inspires to the former, if growth bypasses the *entropy*. Alternatively, the <sovereignty> is conventional label, with limited meaningfulness. The last remark authorises using <split-sovereignty> and multiple <sovereignty with *loose* import> and the practice helps accepting the idea to allow many *sovereign* <nation-states>, keeping tangled prospects.

The ranked societies create, also, in parallel, *relational* implements; the outcome involves the multiple patterns, with interactive capabilities, at voluntary, business and directional ranges. The arrangements follow the interpersonal courses of: The exchange of images; the picture coding by symbols and sound; the creation of markets' structures; the formation of hierarchical control by representative authorities; and so on. The configurations summarise by the known interactions:

- The friendship steering: The links develop on the companionship of the citizens;
- The trade management: The control operations ensue suited business set-ups;
- The clerical supremacy directives: The duties involve representative institutions.

The idiom, trade and governance are the acknowledged <intellect> inventions, established at the *relational* level of interactive people. The done analyses tell of the <mind> effecting the <brain> and enabling abstraction and mimicry transforms towards the mentioned inventions. These do not transmit at birth and no other animals share them; they require parental teaching and tutoring. They suggest that simulation and emulation create the many marks to instigate the civic actions of the organised societies, with <*rational* mind> Focus on the men's skills stresses intellect features, say, <knowledge>, with culture or scientific findings and ethics or social setups. Focus on surround safeguard shows the pollution drawbacks and rescue necessities; alternative lines exist:

- Men's inventions: Efficacy by technology revolutions and social breakthroughs;
- Earth's conditions: Ecology defence by resource recycling and supply recovery.

On these lines, the *relational* innovations and the *ecology* negatives provide sets of technology directives, for the *civilisation* safeguard. The creation of the «nation-state» is, possibly, unchanged; but those directives come before the «split-sovereignty». However, the word «sovereignty» cannot signify the «autonomy»; to purport the truthful «control». Actually, from «citizen's sovereignty», to «nation's sovereignty», the concept deals with the «control» on the entailed people, but under total «dependence» on the ecology constraints. With resort to the «sovereignty with loose import», the «control» can be conventional reference, when discussing the governmental setups of the nations in their totality. In the debate, alternatives situations empirically happen:

- Split-sovereignty, under hierarchical control: The directives apply by ranked way;
- Empire, with asymptotical supremacy: The instructions guarantee total coverage.

The ecology requirements are technology figures, which rest on the programming of our future safe recovery and repossession and on how carefully such planning has implementation. The two situations see similar purposes, the one with doubled ranks (executer/controller), the other with integrated approach to *global* union paradigms. The *ecology* constraints link to the *economy* plus and this measures the efficiency of the civil society, with the extant political setting and technical advances. The analyses, typically, recall the «technology revolutions» when an upturn occurs and a bond starts a new age, from the past one, incorporating the innovations namely:

- *Agrarian* age, when the natural life is exploited by designed breeding and farming;
- *Industry* age, when the productivity is boosted by artificial energy and work plans;
- *Cognizance* age, when rescue and re-claim exploit synthetic life/intellect tools/aids.

The *agrarian* age is, basically, conservative, with the programmed exploitation of the lands and iteration of the privileged useful harvests. The *industry* age is, unhappily, wasteful, with stock spoil and surround pollution. The *cognizance* age (to come) should aim at the habitat refurbishment by direct or implicit resort to artificial life/intellect processes. The two civic situations differently face equivalent ecology

requirements, which apply everywhere on the earth. The resort to «technology revolutions» is possible, because the models built on our «knowledge» provide wrathful hints about how the «natural laws» work; this permits devising applications and forecasts. The inventions add *creative* ideas and devices, not previously existing, i.e., the riches are widened and the sources to supply provisions are multiplied. The human «progress» exactly summarises these bonds.

The «progress» does not interrupt the «entropy» law. The transformations happen, leaving after decay and the «decline», not the «progress», is current result. The «entropy» trend affects the entire matter, not the «intellect», when dealing with the thinking activity or knowledge mental handling. In the area, the «entropy» distresses brains and individuals or people and surround: The «decline» marks the material makeovers, with the odd fact that, on the earth, the men *create* «knowledge». The «progress» is, perhaps a myth; otherwise, the «intelligence» belongs to an intangible sphere, out of the material world. The *a posteriori* analyses of the men's *creative* capabilities advise saving the «progress» options, imagining that the «entropy» drawbacks might have reparation up to given limits by intangible means. The «civic order», «work organisation», etc., are example insubstantial riches, which add, when the civilisation develops: The «progress» is, thus, combined issue, in which apt intellectual achievements enable the current wellbeing, based on the updated techniques.

Global Robotic Dependence

The «progress» on the earth is men's construction, which modifies goods and supplies, to adjoin meanings and imports, in view to perform interpersonal ordered contacts and social dealings. The «actors», to accomplish the changes, enjoy *agentive* and *rational* talents, which allot operation skill and aware control. The «progress» tells that the changes improve the surrounds, at least, when we aim at *organised* civic behaviours, based on mental imaginations and contraptions. We expect that the universe owns suited logic, the cosmos' information; on earth, the men, by weird *agentive* and *rational* gifts, adjoin the «civilisation» headway, with changes and advances, applied to the existing setups. The «progress» is, surely, men driven; it is, as well, dependent

on the conditional backdrop. The individual and social planning directly and artfully modifies the current engagements, since:

- The cosmos' information affects by <natural laws>, continuously acting on men;
- The human operation upsets the surrounds, biasing and tainting the eco-system.

There is nothing to do about what written in the stars; the downgrading cannot be avoided. The entropy will cumulate the effects, with overall decline, according to the written rules. Our science, if improved, should support models, to provide us with reliable forecasts and early warnings. The human activity, even if negligible compared the cosmos' imports, needs to be analysed, discerning the falloffs and planning the kind of interference. At first, we may distinguish:

- The biology cycles, with the farming and breeding activities of the agriculture;
- The synthesis cycles, in the mine and manufacture workshops of the industry;
- The cognition cycles, in the artificial life/intelligence doing by data processing.

The biology cycles establish the *organic* order (at least, on the life span) and the planning of the bio-schemata assures recycle and recovery balances. The synthesis cycles deal with entropy surges and the planning needs outer salvage. The cognition cycles are complex options: The information or data processing occurs with increasing entropy; the knowledge creation, only, runs intangible in minds, remaining *contingent* the shared intellect. The *organic* order is factual upshot, exposing the <life> singularity of the earth homeland, with self-planning *agentive* abilities. The *mental* order has conceptual utility: It helps managing the <intelligence> singularity of the men, with the *rationality* of the comprehensive awareness of our civic status. The *mental* order, this way, allocates worth; the imagined resulting <progress>, basically, remains at the intangible range, but the current life-quality is, accordingly, enhanced.

The insubstantial worth, thereafter, ultimately and implicitly enjoys of plus-value derived by fit <orders>, tacitly included into on-going processes (biology, etc.) or creations (cognition, etc.); then, the <progress> is conventional figure, with global

credit. Actually, we know that the *biology* grants *gene* evolution (not improvement) and the *cognition* implements *provisional* intellectual steering to discover <knowledge> or *temporary* culture and ethics topics (not *absolute* figures); the global dependence leaves open the strategy to find out if suited *supreme edicts* actually work with *total* force. Along with the present study, the governmental structures carry alternative construal:

- The *a priori* <empire> architecture, with upper or inner causative foundation;
- The *a posteriori* <nation-state> setting, with contingent factual underpinning.

The *total* force is implicit with the former reading; with the latter, the bedrock entails the given <closed societies>, perhaps, according to clearly biased canons or religions. The global dependence might smooth away the bias, aiming at <open society> arrangements, so that an asymptotic quality becomes spontaneous feature. The switch from *contingence* to *absolute* patterns operates when the group or clan culture and ethics values and tenets convert into *total* issues, defining scientific theories and legal precepts the earth-over, with global strength. The <open society> setup needs to discover the conversion to make spontaneous feature, the *total* force; the unifying consistency of the current bedrock avails of the automatically selected <global land> depiction. The <open society> asymptotic uniformity has high probability to develop, if the dependence is relevant. The reliance induces the bent common to all <closed societies> and transforms it in spontaneous quality, shared by everyone. The diverse <closed societies> do not, anymore, distinguish: The rivalry vanishes; the quorums to extract majorities become questionable or almost meaningless. The picture tells that:

- The self-planning *agentive* abilities support the <closed society> *gene* selfishness;
- The mind aware *rationality* provisions the way to <open society> *meme* altruism.

The *organic* order is the efficient help of the <green engineering>, proposed by topical ecology movements. The *mental* order fosters the comprehensive *meme* fruition, to create simulation and emulation innovative patterns, of the human civilisation. The trend has pace wise contingency; it aims at <open society> options, with the protection of the environment and safe-

ty from pollution. The life quality conditions involve the *global village*, everywhere asking alike safeguard; each one is citizen of the world and refers to a communal legality without borders; the ‹open society› allows including new groups, without modifying the interpersonal reliance. Equally, exclusive *constitution* laws happen having biasing effects and the subsequent solidarity dealings break truthful altruism. In the outlined depiction, *meme* fruition opposes to *gene* evolution; the humanity or philanthropy contests selfishness or egotism, because all the people of the earth are obliged to share the same sort: We cannot avoid the common contamination, unless same safeguard rules apply everywhere. The earth is too little and interconnected. The global addiction does not leaves safe regions, where to castle, when the pollution spread over. A different approach is fully *irrational*.

The ‹green engineering›, via *organic* order, provides procedures, helping ecology remediation. The ‹open society› uniform altruism, via *mental* order, supplies social infrastructures, keeping apt *global village* standardisation. Together, the enabled orders stimulate ‹progress-like› changes (by *gene* evolution and *meme* fruition), generating the human civilisation. The entropy destroys both orders, the former, combining revival into decay, the latter, stopping intangible projections. The men's civilisation is fated ending: The ‹progress› limits to an age of the human parable. Outside it, the advancement becomes fictitious: The contamination is biasing phenomenon, which is required complement, when the technical innovations have useful exploitations. In the sketched hints, the end of the age, further than a technology switch, follows a social breakthrough: The one asked by the *global village*. The ‹split-sovereignty›, based on democratic ‹constitutions›, is arbitrary model, when series of parallel ‹closed societies› might define, with loose distinguishing traits; the spoken idioms are current reference, with education or cultural links, through *meme* fruition, towards the ‹altruism› figures of the *global village* regulation. The global dependence binding all the peoples of earth, justly, smooths away the overriding autonomy of each ‹nation-state›; the crossties, instead, enhance the rationality of the controlled cohesive cooperation.

Conclusion

‹Intellect› is odd event, not less than ‹life›, to-

gether supplying especial gifts, in view to award sorts of autonomy and of awareness, notably, to given earth's beings. The gifts entail individuals with *agentive* skill and *rational* wisdom: The *agentive* talent allows enabling sequences of acts; the *rational* wisdom assists explaining the current facts. ‹Life› and ‹intellect› complement each other: ‹biology› and ‹cognition› are justifying accounts, possibly, branches of the ‹cosmos' information› or men's detected ‹knowledge›. The descriptions of strings of events with justifying causes/effects in the above-summarised discussions follow alternative paths:

- Top down course, if the ‹cosmos' information› supplies *total* cogent explanations;
- Bottom up way, when the ‹relational guess› provides *contingent* construal models.

The paths are the object of books (below quoted) on the robotic handing of the ‹knowledge›; the present discussions limit to the ‹civic mode› formation, used by men to create the social and political architectures and behaviours of the civilisation. The pictures avail of the men's ‹relational› skill, which allows creating the interpersonal world of the thoughts, which devises symbols of what seen and felt, with common meanings, to support communication, trade and governance. The two paths differ: The former presumes inner or upper truths, *immanent* or *transcendent* ‹natural laws›, to derive *total* societies and plans; the latter pace wise builds ‹knowledge›, fitting in interpersonal mind worlds, with *conditional* projections.

With both paths, the ‹mind› is ‹relational› issue, making worthwhile the assembly of groups in countries, granting interaction proficiency and hierarchic control. At first, the discussions involve:

- The relational talent, supporting the interactive tools: Idiom, market and authority;
- The top down/bottom up paths, promoting overriding spirit at the country's range.

The formation of social/political architectures/ behaviours of the countries lists a series of ‹civic modes›, to assure unifying communication, market fusion and established authority. The language is known characterising aid, already effective at relative qualification; the market, also, merges the actors by depending interactions. The governance,

instead, has critical demands: The creation of <civic modes> requires exploring helpful setups, with power autonomy clues, factually empowered within <organised societies>. Here, the recalled paths bring to governments ran by *total* setups, or built on *contingent* choices, namely the <civic modes> shall distinguish:

- The *a priori* running options, government via upper or inner imperial reasons;
- The multiple-management, ruled by *a posteriori* split-sovereignty nation-state.

The discussions collect typical ideas, in the past mostly agreed as standard explanations, when looking at governance policies. The ecology is recent impending fact, with rescue duties at global village extension. The changes are compulsory procedures, with worldwide onuses, pushed by the extant damages and governance innovations, driven by the sovereignty myths, i.e.:

- The anti-pollution and recovery measures, in relation of the ecology injuries;
- The dealing with the global dependence and the linked harms/losses effects.

The identified <civic modes> shall adapt. The *relational* guess offers cues: The updating aims at a <collective> *language*, replacing the national divider, or at a <world> *market*, via direct seller/buyer connection; however, the <earth> authority faces the catch of the cited two paths. The bottom up way moves from the village/borrow level and shall select suited regional levels; the top down way does not hold identified localised starts, unless, again, addressing the spread village/borrow level. Then, at the regional choices, both paths may look at networked systems, letting parallel options, which distinguish official, public, bureaucratic, etc. from vocational, private, business, etc. deeds; yet, the activity classing and professional specification request innovating the <civic modes> too, since the hierarchic patterns cannot enjoy inner or upper in-born pre-setting.

The six topics timely discussed require deepening the <intellect> *relational* skills. The cosmos' information is, perhaps, cogent; yet, only if living beings appear with personal activity and create intellectual styles, the <knowledge> starts forming as mental objects, shaped and swapped over at interpersonal stage. The former, maybe, exists

as *total* truth, wittingly detected by the *intelligent* operator, which does not know how the *discover* works and if the <natural laws> share total force. In conclusion, the discussions show how the *relational* backdrop of the <intellect> organises, to promote education, training, dialogue and bargain. The *language*, *trade* and *authority* are basic inventions of interpersonal talent, established when the <mind> starts being active in the men's brains. We explicitly acknowledge three levels: The <idiom> is brainchild of the *family*, fixing the communication by sophisticated words, grammar and syntax; the <market> is invention of the *clan*, performing business to make available the suited goods; and the <legality> is finding of the *country*, appointing ruling authorities for the citizens' government.

The linked <civic modes> follow as *contingent* choices: The spoken language identifies *cultural* traditions, provided by parental teaching; the done commerce provides the home industry and shopping customs; the governance gives the current organisation to the assembled inhabitants, with shared social interests. The parting into families, clans or countries is operation outcome, founded on shared habits and collective practices. The split-up in <sovereign> empires or nation-states, more than *total* value, is factual result, with realistic basis. The ethnic and cultural motives are sound references, if *a priori* causes exist; they enjoy known claims along the human history, used to unify *fatherlands* or to make free some *ethnic* peoples (recent Baltic and Slavish states). In our discussions, the *faith* in total <civic modes> appear replacing foundations that are more scientific. In like time, the multi-ethnic countries result by continuous migrations, deeply altering the current inhabitants of lands (USA do not limit to redskins; Australia and South America have induced homogeneities). Today, an *absolute* ethnic divide is hard to justify.

The multi-cultural countries well describe if *factual* notions organise their traits: The institutes show how hard their autonomy becomes *total* fact. Indeed, the <split-sovereign> is hard to justify, if the autonomy is claim to avoid the ecology requirements; the global dependence is explicit fact, supplying the necessary warning and making absurd any kind of <sovereign>. The human <society> nonetheless, has depictions

through *contingent* <civic modes>, in which the <sovereignty> appears playing consistent roles, if the <relational> guess shall cover governance, further to language and market. The sketched analyses give cues on why <intellect>, by <knowledge>, ripens social and political habits, through *meme* fruition, because of the simulation/emulation skill of the men. The <relational> reading is effective description of the robot-age <knowledge-passing> procedures: It provides fit instru-

mental accounts by <*artificial* life/intellect> tools; when applied to the <*natural* life/intellect>, it is empirical hypothesis to justify the <knowledge> formation.

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