

III A Man

To describe man,
You do not study
His world, but his mind,
The organ, generating
Cause setting forces.

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III A 1 Remarks

1a) Initiation

Man, as individual or small group, exists out of components and not as a single, defined, finished object.

1a1) Components are originator and expressions.

1a2) Essential parts are the indispensable conglomerate components: physiological base, freedom, development and conviction.

1a3) Intent of the essay is to give a succinct description of man and an evaluation over his past, present and predictable future on a global, historical scale.

1a4) Observer's position is reflective, defensive, hopeful, literary participation.

1a5) Definition of truth for the essay is: Have all components and essential parts been considered?

1b) Self-preservation

The human intellect has developed out of evolutionary forces over geological time spans with a universal genetic code, genetic variability, multicellular organisms with specialization of functions, forming out a multifarious plant and animal life. The human mind is tied to life in cosmic time and location, planetary and local environmental conditions and physiological functionality. The physical, chemical and biological dependencies and capabilities render support of its base a precondition of the human mind. The foundations of life yield self-preservation, foresight and the values of human dignity, truth and unity of mankind with the tasks to serve and amend.

1c) Emancipation

1c1) Man is centered in his convictions, delineating his intentions, conceptions, mental operations and responsibilities, means, results in relation to himself, society, nature and the infinite.

1c2) They aim in telos of mind at moral utopia, ethical awareness in natural-social life. Through enlightenment of public comprehension, man is able to discern, describe, evaluate his conditions and endeavors to act with self-determination, -preservation, -interpretation and -realizations for cosmic survival and a future for man.

III A 2 Standards

2a) Human dignity

The foundations of life, physical, chemical, biological dependencies and capabilities, demanding self-preservation and foresight, are guided by respect for the integrities of nature and life.

Man adopts for free self-interpretation as self-set defining, comparing value and standard: human dignity, being universal, invariable, inalienable, codifiable, falsifiable and livable.

2b) Values

Values give a direction to the course of action, not to fall back on themselves.

They aim at the betterment of man and his race with objective, predictable, common benefits.

They apply to all objects moldable by human communication and action in freedom of choice with positive or negative consequences.

Scaled up intent is to expand sound theology's, maturity's, reason's and ethic's freedoms.

2b1) Universal values apply to the past, present and predictable future on a global, historical scale.

They apply to all people as a common base, irrespective of origin, race, culture, age or gender.

There are no political, regional or discipline specific values, which cannot be deduced from the dignity of man, being otherwise fractional, partisan or dominating an universal one.

2b2) Value scale

Values are ordered hierarchically according to significance and range of validity.

They are connected by an unbroken interlinked tree structure.

First values guard basic existentials of life. Lower order ones become increasingly item specific.

2b3) Primary universal values

b2,1) Primary universal spiritual value is love, being kind, patient and protecting. It abhors violence. It extends to the low (Mat 25,40), lost (Luk 15,4) and hostile (Mat 5,43).

b2,1) Primary universal human value is dignity, extending equally to all, disregarding origin, color, gender, age, position, culture and faith.

b2,1) Primary universal natural value is integrity of nature.

2b4) Secondary universal value

Secondary universal spiritual, human and natural value is truth. It abhors deception.

It extends to all objects as far as self-awareness, curiosity, imagination and ambition do.

b4,1) Truth is found by cognition, first by an intruding, observing, questioning, investigating search, exhausting available means to generate knowledge.

b4,2) Truth in its narrow content means congruence of a description with its object in one to one accuracy from property to term to sign to communication.

b4,3) Truth in its wider content means a complete description of an object in its full range in pursuit of all lines of consequences and in a balanced context of the dimensions of God, nature and man.

b4,4) Investigating an object, truth is in respect to God a comprehensive analysis towards innocence, in respect to man and nature a comprehensive analysis in spirit of man and in integrity of nature.

Their research adding each other, they stand on a linked, equal, balanced and cooperating level.

2b5) Tertiary value

Tertiary and primary value for society is unity of mankind. It abhors segregation.

As existential value it is based on equity and justice with the rule of law.

2b6) Forth and humanitarian values are freedoms, emancipation and common welfare.

2b7) Professional standards are guidelines of state of the art field knowledge and performance.

2b8) Item specific standards are bench marks of item specific properties.

2c) Advancement

Values are always in conflict with 'statesmanship', regarding power tools as the only reality creating, molding, controlling and securing means of an historic achievement. They are advanced in

2d1) Public, in languages of His Word, spirit of man and integrity of nature, in the humanities the first form being poetry, in the natural sciences being mathematics.

2d2) Humility, intending to serve, to conciliate and to amend.

2d3) Esprit to publicize, explain, enlighten and to wake hope over darkness.

2d4) Fearlessness against corruption, which represents most objects as the opposite to facts.

III A 3 Components

3a) An originator can be a natural, legal or virtual person.

A human originator as artisan of his work initiates out of various intentions and conceptions an expression as a cause setting force with its result, for which he signs responsible, not society at large.

Needs and drives build up to motivations in psychic reality, where they evolve by psychic-mental processing into a conscious intent, a decision and a pre-planned, defined design of expression.

They initiate at any starting point from lower instincts to higher hopes and proceed in any direction, variation, modus and intensity. Beaming with life as well as being vulnerable, they grow and decline, reach out to all objects of imagination and drive on with zeal inexhaustible to excess. Demanding ever new stimulation, satisfaction and expansion, they transgress with administrative-technical tools, deception and violence the boundaries of man and his environments. They do not rest until self-destruction.

Growth of physical-psychic-mental capabilities depends on an array of intervening epigenetic and acquired, phase specific and continuous, unconscious and conscious factors in a process of life long self-society-nature-God interacting self-realization.

3a1) Physical growth proceeds out of evolution determined traits of geno- and phenotype, onto- and phylogenetic factors together with nutrition, exercise, environmental conditioning and selection to form out morphology, anatomy and physiology over a life cycle of six stages from zygote to embryo, infant, youth, adult to death and a sex cycle of three stages from germ cell to karyogamy to mature sex organ.

3a2) Needs and drives

Needs and drives are various internal stimuli and external incentives to form a motivation towards action. They desire a state of wellbeing and achievement and organize themselves into a hierarchy.

a2,1) Spiritual needs and drives address all phenomena

a2,1,1) Faith is given by God and accepted with a set of religious statements.

a2,1,2) Man is centered in his convictions, a concept of life in self-determination.

a2,1,3) Values define a common benefit for a specific object.

a2,2) Mental needs and drives thrive with eg curiosity, variation, experiment and result, seeking eg

a2,2,1) Free mental-physical movement and control.

a2,2,2) Information, experience, knowledge and know-how.

a2,2,3) Identity, independence, self-determination, -reliance, -realization and -presentation.

a2,2,4) Improvements of existential, social and environmental conditions, first in putting off death, alleviation of diseases and reduction of restrictions, contingencies and energy requirements.

a2,2,5) Reduction of complexities to simplicity, transparency, accessibility and functionality.

a2,3) Social needs and drives thrive with eg communication and socialization, seeking eg

a2,3,1) Immediate social environment in a small group with common language.

a2,3,2) Reproduction of the immediate surroundings, social group and species.

a2,3,3) Social identity with name, self-esteem and -respect.

a2,3,4) Collective identity with chosen association, participation, culture and norms.

a2,3,5) Production of social structures, order, coordination and organic growth.

a2,4) Emotional needs and drives comprise eg feeling, mood, sentiment and passion.

a2,5) Biological needs and drives thrive with eg resources and consumption, seeking eg

a2,5,1) As absolute necessities existence, self-preservation and provisions for the near future.

a2,5,2) Indispensable privacy, rest and recreation.

a2,5,3) Urgent protection against natural and human threats.

a2,5,4) Required physical maintenance and excitement of life's basic actions.

a2,5,5) Livelihood above marginality with youth, well-being, ease and comfort.

a2,5,6) Self-development of biological, emotional, psychic, mental and spiritual capacities.

a2,6) Lower instincts mostly lead to self-usurious archaic desires for

a2,6,1) Prestige, seeking eg excessive recognition, preferential treatment and glamour.

a2,6,2) Power, seeking eg excessive means, control, dominance and penetration of all facets of life.

a2,6,3) Possessions, seeking eg security, control, increase, diversity and demonstration.

a2,6,4) Pleasure at the expense of others, seeking eg gloat up to sadistic delight.

3a3) Psychic realities

Psychic realities are higher concentrations of habitual, self-aware, formulated needs and drives. They erupt like hot spots out of a broad, mostly unconscious psychic base as temperament, inclinations, interests and motivations to stir emotional, mental and spiritual attention. They

- a3,1) Can wander across the neuronal network in the brain and reorganize themselves.
- a3,2) They form out a flexible, functional, renewing, self-identifying inner reality.
- a3,3) Grow towards engagement of an issue with conscious intentions, conceptions and knowledge.
- a3,4) Inhibited psychic activities can lead to eg counter-action, aberration, burn out and depression.

3a4) Motivations

Motivations are motives out of a need, drive and goal in psychic reality, ready for a decision. Like a hot spot just before eruption, a psychic force, a volition, is activated towards implementation. To satisfy innumerable desirables, their major characteristic is flux. They organize themselves, expand, retract and interact with endogenic dispositions and exogenic conditions. They can eg

- a4,1) Organize themselves by combination, overlapping, separation and displacement.
- a4,2) Expand with experience, knowledge, self-realization and aspiration.
- a4,3) Retract with self-questioning, reflection and correction.
- a4,4) Interact with inner psychic, emotional, mental, spiritual impulses.
- a4,5) Interact with outer environments like opportunities, advice, en-discouragement and obstacles.
- a4,6) Apply various tactical and strategic means like patience and surprise attack.
- a4,7) Reach out over long distances, times and circumstances after one desirable goal.
- a4,8) Be satisfied by duty to the Lord or happiness or bagging in a profit.
- a4,9) Remain unsatisfied but to rest, revive, pursue, aberrate and overextend.

3a5) Mental Activities

The mind is the decision making organ of needs, drives and goals, psychic reality and motivations, responsible for all man made actions and phenomena.

- a5,1) Mental growth, predetermined by evolutionary forces, forms out the functions of the autonomic, sensorimotoric enteral, peripheral and central nervous systems. More than 10^{10} nerve cells, a neuronal network of bio-electro-chemical information generators, transformers, transmitters, processors, receivers and storage units, channel in- and external neurological signals towards the desired result.
- a5,2) Productivity of the mind requires physical-psychological-mental-spiritual teaching, studying, training and experience to acquire expertise in language, thought and behavior with soft, social and technical skills and knowledge, capable of circumspection and workmanship. Productivity ranges from constructive curiosity to hot air to chaos to destruction.
- a5,3) Processing products direct inner neurological functions and outer, object related activities. Task specific inner processing products are cognition, conception, intention, memory, mental operations, reflection, combined intention-conception and a resulting design of expression. Task specific outer activities are expressions by communication and action.
- a5,4) Human growth towards a defined object 'man' remains an open 'fiction'. He is measured by his expressions according to a standard of conviction.

3a6) Mental processing products

Mental processing products are subjective, conscious, organized constructions of mental tools to generate, focus, coordinate and apply a biotic medium of comprehension to an objectively placed item.

Preforms remain on the stage of eg infantilism, primitivism, naivety, cliché, impulse and blind imitation. Evaluation is by adequacy, productivity, dynamics, balance, cohesion, merit and restraint of individuality. Basic cultural prerequisites are cognition, language, mathematics, logic, method and data processing.

- α) Language see 3b2) Communication.
- β) Mathematics are the study of quantity, structures and their changes. By counting, measurement, calculation and deductions from a set of appropriately chosen axioms and definitions, it arrives at qualitative-quantitative descriptions and predictions of forces, appearance and behavior of objects.
- γ) Logic is accountability of identity. It derives from two basis statements through material and formal reasoning along a relationship and a standard of comparison a follow up statement, a conclusion.
- δ) Methods are standardized steps to perform routine tasks of observation, investigation, description, interpretation and evaluation of an object, - short of an in depth inquiry.
- ε) Electronic data processing in multi media, in worldwide networks with microprocessors programmed in the digital code, assists in all computational and communicative tasks of mental activities.

a6,1) Cognition

Access to all objects is by cognition, transferring forms of being into forms of consciousness.

Starting from questioning, its criteria are applied sequentially to the object, relation and subject.

Desired result is to shed light on an object, to render a representative description and to investigate further for a more complete description.

a6,1,1) Objective criteria are focus, observation, denotation, description, deliberation, interpretation, evaluation, documentation, propositional support, publication, public discussion, problem solving and development.

a6,1,2) Relation criteria are relations, information, transmission and medium.

a6,1,3) Subjective criteria are onto- and phylogenetic development, the senses, emotions, mental capabilities, experience, way of life, self-understanding, historical factors, schools of thought, present day trends, institutional factors, codetermining factors, inhibiting factors and ethics.

a6,2) Conception

Conception constructs a conscious mental image of an object out of cognition, memory or phantasy.

a6,2,1) As content with meaning it stands at the center of mental and physical processing.

a6,2,2) Visualizations range from a void to objects of any class to the limits of imagination.

a6,2,3) It is extremely vulnerable to distortions by inhibiting factors from all sides.

a6,2,4) Desired result is knowledge within a mental horizon, a public, representative, unprejudiced collection of facts from verifiable sources. As palpable background knowledge it represents the present state of affairs, historic record, world view, sky of aspirations and contributions to human convictions, standards, prospects and hopes.

a6,3) Intention

Intention is the cause setting force of actions, refusing to be penetrated by other chains of causality.

Goal orientated it achieves subjective true processing for a workable mental design of expression and object true processing for a workable physical implementation.

a6,3,1) It collects, weighs and orders internal stimuli from needs, drives, goals, psychic realities to motivations and external activities from planning, deciding, organizing, marketing to rerepresentation step by step along the intentional connective chain.

a6,3,2) Modi can be individual-collective, cooperative-aggressive and short-long term.

a6,3,3) Every step is address to orientation and redirection according to chosen criteria.

a6,3,4) Acid tests move the sequence backwards to infer from motions, behavior, context and reason the intentions, conceptions and potential future actions in the mind.

a6,4) Memory

Memory stores information for reproduction. It instantly reproduces a stored conception of an object in the 'Present' of consciousness. Information of any class in large volumes is

a6,4,1) Collected from the senses and physiological-psychological-mental-spiritual stimuli.

a6,4,2) Neuro-physiologically encoded, channelled, processed, stored, consolidated and retrieved.

a6,4,3) Held over time in an ultra-short sensory, short working and long time memory.

a6,4,4) Stored with explicit meaning, episode, circumstances, autobiography, implicit procedures and prospective intent.

a6,4,5) Retrieved intentionally on call for attention, cognition, recognition, orientation and further mental processing or aroused unconsciously by associations.

a6,4,6) Lost by forgetting, repression, decaying health and damage to the brain.

Memory is evaluated by its capacity, accuracy, reaction time and conditioning.

a6,5) Mental operation

A mental operation visualizes an object over a span of attention to be fixed and molded in steps.

a6,5,1) Initial step is determination of an item's qualitative and quantitative properties.

a6,5,2) Second steps are putting forth the operation's goal, association or dissociation of an item, their comparison and final conclusion.

a6,5,3) Third step is registration of the result for further operations and future reference.

a6,5,4) Single and conglomerate operations are eg assertion, negation, inversion, substitution, description, calculation, narration, interpretation, estimation, evaluation, criticism and correction.

a6,5,5) Molding of a chain of images can be guided by criteria from truth to fiction.

a6,6) Emotions

Emotions as atmosphere of being constitute a distinct un- and conscious psychic reality.

They accompany, anticipating to trailing, synerg- to antagonistically, human motivations and activities.

They are controllable, trainable, manipulable and vary in intensity and perceptivity.

They generate physical feelings, psychic passions and spiritual compassions.

a6,6,1) Physical feelings arise with basic needs as basic emotions out of signals from within the body and from the environment in appraisal of the physical situation, inducing attraction or rejection.

a6,6,2) Passions unfold out of individual and collective psychic, social and mental needs in orientation in the physical-social environment, expressing themselves as self-esteem, mood, temperament, affection, longing, ambition, risk taking, inducing interest, withdrawal or counter-action.

a6,6,3) Compassions reinforce individual and collective spiritual drives towards independence, self-emancipation, standards and enlightenment, expressing themselves as fear of the Lord, love of God and man, care for the low and lost and opening of new horizons across artificial borders.

a6,7) Reflection

Reflection distrusts a thought, emotion or expression.

a6,7,1) Perspective is from a point set back, severed from its environment and unbound for a full scan to gain more accuracy, objectivity, creativity, reliability, scope and balance.

a6,7,2) Tools of cognition are reapplied to retrieve mental processing, retrace physical implementation, exhaust possibilities and search for disregarded factors.

a6,7,3) Desired result is a more comprehensive description of an object, but not to run into a dead end despite self-crucifying contemplations.

a6,8) Mental draft

A mental draft fuses input from all mental processing products.

As a constructed working frame of consciousness it holds content with meaning in psychic reality.

a6,8,1) Input stands on call from processing products in the neurological network of the brain.

a6,8,2) Collected are simple and conglomerate objects with their properties.

a6,8,3) Operational processes run through consecutive drafts and redrafts towards a better representation of the sought for result. Description, weighing, ordering, comparison and conclusion can proceed in patchwork of a crazy idea or in ordered trains of one intention-conception-operation.

a6,8,4) The mental draft serves as interface of internal conception and external presentation, mental image and term are functional in the mind and a competent language.

a6,8,5) Desired result is in basic form a list with headline and defined line items, their characteristics and relations, spread out as concept, topic, theme or issue for communication.

a6,9) Design of expression

A design of expression fuses a mental draft with a draft of implementation into a final blue print.

Productivity combines factors of subject true treatment with object true treatment.

Visualized is the complete intentional chain from conception to decision to result with the

a6,9,1) Factors of decision: planning, calculating, considering of place, time and circumstances.

a6,9,2) Factors of implementation: organization of human, knowledge, material and financial resources, compliance with sound principles, praxis and regulations.

a6,9,3) Desired result of an intended, envisioned functional and aesthetic product.

a6,9,4) Evaluation of mental products by accuracy, significance and ethos; of physical products by performance, cost and merit.

3a5) Object true treatment

Object true treatment centers on molding of the object according to object related criteria. It entails cognition of the object, approach by its class and realization according to the desired result. Productivity is gained by sound principles and praxis in all three steps.

It crosses subject-object relations over the range of non-expression, expression and expression roll back.

a5,1) Cognition deciphers an item with its properties to make it palpable for mental-physical handling.

a5,2) All items can be placed into one of three classes or templates of in-common properties for one-like-all approach to art typical cases, though all items show at least one aspect of all three.

They can be further placed into sub-templates as categories with major aspects.

They open up rooms of freer movement with corresponding class boundaries, which cannot be transgressed without faulty results, failures and conflicts.

a5,2,1) Spiritual objects

Spiritual objects are grasped in faith and sound theology. Its categories, rejecting violence, are

- Determination of the Will of God.
- Address of major issues.

a5,2,2) Natural objects

Natural objects are explained in reason. Its categories, rejecting contradiction, are:

- Quantity by unity, multitude and all.
- Quality by reality, negation and limitation.
- Relation by inherence and subsistence, cause and effect, interrelation between objects.
- Modality by possibility - impossibility, existence - non-existence and necessity - chance.

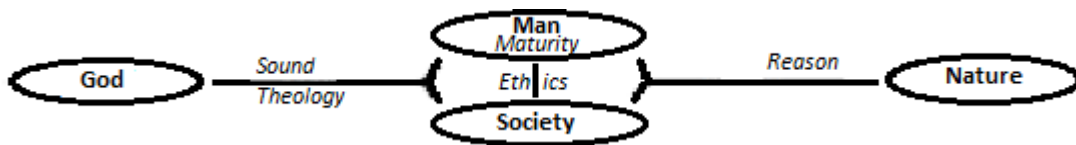
a5,2,3) Human-social objects

Human-social objects are understood in maturity. Its categories, rejecting omission, are:

- Content and appearance.
- Place and time.
- Presentation in public discussion for decision and realization.
- Medium, situation, context and environments.
- Rooms of movement, capabilities and boundaries.
- Non-knowledge, uncertainties, risks, dangers and possible damages.
- Inhibiting factors.

a5,2,4) Class boundaries of sound theology, reason and maturity are standards of compatibility.

Sub-class boundary between man and society is ethics.



a5,3) Realization

A desired product can be spiritual, natural and human-social in combinations.

a5,3,1) Spiritual products as speech, text and picture spring out of faith, study and contemplation.

a5,3,2) Natural objects as physical bodies are molded out of knowledge, material and financial resources with physical-chemical engineering.

a5,3,3) Human-social products as regulations of inter-human relations are organized and directed out of knowledge, human and financial resources with administrative structures and processes.

a5,3,4) Evaluation of realization is by merits of the product and its lasting consequences.

3b) Expression

Expression by communication and action is a basic, universal human activity.

An originator's decision out of need, drive, motivation, intention for an expression is the basic human force to realize along a relation a desired result. It has established by construction, restraint and destruction all man made phenomena and is able to advance, sustain or destroy man, society and nature.

Expressions are highly complex in their combinations, chains, ramifications, long term consequences and cannot be calculated in advance in all possible effects or strictly classified. They will always remain the raw mass of daily usages, where its factors are also determined by various conditions and multiple unique circumstances. An expression is first described in its major lines of acting forces

3b1) Generation

b1,1) Preconditions are autonomy of body and mind.

b1,2) An originator generates a design of expression, mainly out of intention and conception.

b1,3) Point of inspiration can lay in past, present or future.

b1,4) Force and desired object can be spiritual, natural and human, relative to the originator class internal, self-referential or class external, foreign referential.

b1,5) Desires explore possibilities, maximise results, minimize efforts and remove obstacles.

b1,6) Responsibilities achieve a qualitative jump by applying a higher standard.

b1,7) A planned 'vector package' comprises all steps of implementation from conception to result.

3b2) Progression

b2,1) Implementation proceeds along trials, errors, set backs, restarts, receptions, reactions, ramifications, chances, complications and changes to arrive at a result.

Mixed are communication and action with silence, non-action, body language, accompaniment signals, symbols, icons, gestures, laughter, crying, proxemics and environments.

Modi are eg place, time, direction, path, speed, degree, gradient, intensity, vitality and dynamics by eg growing motivations via addition, multiplication, synergism, spill over and spin off.

b2,2) Base pattern comprises originator, desired object, communication, action, administrative organization, technical device, relation, medium, recipient, situation, environment and boundaries.

b2,3) Base process comprises initiation, progression, reception and termination.

b2,4) Extension over space can cover a point, region, the globe and the cosmos.

b2,5) Continuation over time can cover a point, generation, millennium and an astronomical span.

b2,6) Augmentation of means can be achieved by administrative organizations and technical devices.

b2,7) Penetration of complex systems is measured by the scope of impact.

b2,8) Changes and deviations occur permanently due to a multitude of varying drives, motivations, intentions, communications and actions. They range from cosmetics to qualitative jump.

b2,9) Interruptions by break of an element in a causal chain occur due to eg absence, mal-function, -quality, -supply, -service, -proportion, -linkage, -control, -adaption, -acceptance and accident.

b2,10) Interactions range from union to cooperation, evasion, adaptation, competition to conflict.

b2,11) Complexity increases exponentially, as the number of possible interactions I in a constellation of n persons P with transmitted properties x at a point in time is: $I = (3 (P_n - 2))^x$ with $(n > 2)$.

3b3) Results

b3,1) Expressions run to first, intermediate, side, lasting effects and far off consequences.

b3,2) Major phenomena with local-global and past-future interactions demand general recognition.

b3,3) Lasting results can be classified as mental-human-natural products in combinations.

b3,4) Unfolding realities are eg psychic, mental, physical, historical with claims ranging from existence, necessity, virtuality, potentiality and possibility, to be verified as valid or illusionary.

b3,5) Training is from childhood on, followed by schooling and study in a professional field.

b3,6) Preforms remain on a stage of eg attempt, test, patch, fragment and blank imitation.

b3,7) Limits to physical expression are set by possibilities of existing energy, matter, space and time.

b3,8) Limits to mental expression are set by capabilities of imagination, formulation and reception.

b3,9) Evaluation of causal lines of forces as traceable indicators of intentions and conceptions is by man's overall responsibilities towards himself, society, nature and God.

3c) Communication

Communication serves the transmission of information. Language, text and picture stand at center of human praxis as means of conception, interchange, spread of knowledge, socialization and discussion of issues. A message about an object connects a signal with content, potential and actual sense with faith, understanding, explanation, interpretation and evaluation in context of situation and environments.

Phonetic signals are universal, resourceful, flexible, practical, obstacle safe means to reach through air the acoustic sense, undergoing in flow from originator to recipient several transformations in appearance.

3c1) Communicator

c1,1) Communicator can be eg speaker, singer, author, publisher, editor, agent and moderator.

c1,2) Number of speakers range from sole person in monologue to a heterogeneous chorus.

c1,3) Collective communication ranges from community press release to interactively shouting down.

c1,4) Intention ranges from investigation to description to manipulation to psychic violence.

c1,5) Prime intent is to carry information about an object O from A by an accurate phonetic term P to B in a fragile neurological-physiological-physical chain of $1:1:1:1:1:1$ representations from O to A's Perception and Conception to P's Expression and Transmission to B's Perception and Conception.

c1,6) Planning ranges from emergency call to circumspection to calculated event.

3c2) Language representation

c2,1) Objects of any class can be represented by language, an audible, articulate, meaningful, conventionalized system of sounds with vocabulary, phraseology, pronunciation and grammar.

c2,2) Terms are by semantic being eg constative, representative, regulative or expressive, by semantic function eg explicative, expressive, instrumental, moralistic or evaluative.

c2,3) Text is out of phonemes, morphemes, lexemes, syntax, pragmatics, semantics and linguistics.

c2,4) Paralinguistics are eg sound, volume, intonation, pitch, range, rate and body language.

c2,5) Stylistic levels are eg secret code, slang, casual, professional, formal and artistic language.

c2,6) Stylistic frames are eg political, professional, social and local.

c2,7) Stylistic colours are eg humorous, confidential, dry, antique, insulting and degrading.

c2,8) Vitality can be eg natural or artificial, traditional or avant-garde, free or censored.

c2,9) Common speech forms are eg sales pitch, small talk, argumentation, negotiation and instruction.

c2,10) Artistic forms are eg short story, novel, epos, poetry, drama, song, chant and opera.

c2,11) Forces of creation, usage, change and extinction of language over generations arise mostly out of adaptive needs and rhetoric of social forces, being described by history of language.

Mass applications are by eg education, advertisement, media rhetoric-propaganda and staged shows with effects on eg standards, usage, educational level, predominant reality and world view.

PC multi-media promotes a to the point clear, structured style with visual, user friendly navigation.

c2,12) 1500 families and more than 3000 languages and dialects exist today worldwide. They are classified as analytically, agglutinating, inflecting and incorporating term building languages.

3c3) Text representation

c3,1) Any articulate sound can be represented by a semiotic figure like a letter in written text.

c3,2) The Latin alphabet contains 26 letters with indefinite combinations to express any complexity.

3c4) Picture representation

c4,1) Objects of any class can be represented by drawing, picture and sculpture.

c4,2) Common and artistic forms are eg sketch, painting, model, prototype, collage, architecture.

3c5) Physical representation by technical devices

c5,1) Collection of data by eg scales, sensors, microscope, microphone and scanner.

c5,2) Storage of data by eg text, paper, print, tape, slide, video, film, disk and electronic devices on data sheets, in libraries, data banks and information systems.

c5,3) Duplication by eg copy, lithography, performance, slide, disk, video, film and electronic copy.

c5,4) Processing and evaluation by eg editor, calculator and electronic computer software.

c5,5) Search and retrieval by eg indexes, catalogues and search engines.

c5,6) Transmission by eg mail, transportation, projection, phone, fax, radio, tv, e-mail and internet.

Data flows from eg source to encoder, emitter, channel, receiver, decoder to recipient.

c5,7) Mediums of suitable, capable and correct transmission are eg air, vacuum, fiber and cable.

3c6) Legally it relies on realizable guaranties for free flow of information, freedoms of movement, speech, assembly, religion, the sciences, the press, the arts and profession without censorship.

3c7) Inhibiting factors are eg technical defect, language barrier, inaccuracy, shift of context, shift of reality, misuse, deception, violence, image fascism with destruction of language as tool of fact finding.

3c8) Evaluated are communications by merits, exactness, representativeness, consistency, sincerity, necessity, coordination with action, independence and multi-media-artistic concept.

3d) Action

An action realizes an object by human hand. It constitutes a basic social fact.

It is the causal psychic-physical force to take an effect on a human being or a material object.

A human force is described by its factors of expression and its ensuing reception and reaction.

A physical-chemical force is described by its energy, application and ensuing change of state.

All forms of life interact by information exchange and action, their causal chains propagating along a connecting relation and mechanism within their immediate situation and environments, often undergoing several transformations in appearance. It variety unfolds with core elements, roles, types and ranges.

3d1) Acting person

d1,1) Acting person by role can be eg private individual, blue or white collar worker, sales person, service person, supervisor, investigator, inspector, regulator, comptroller, negotiator, representative, plenipotentiary, arbitrator, free-lancer, player, coach, inventor, reporter, commentator, adviser, teacher, consultant, contractor, specialist, manager, executive, executioner and owner.

d1,2) Number of acting persons in a case ranges from sole person to community of nations.

d1,3) Collective action ranges from situational confusion to political-social crusade.

d1,4) Intention ranges from suppression of action to help, construction, maintenance, service, decoration, regeneration, regulation, manipulation, restriction, destruction to crime.

d1,5) Prime intent is to mold an object according to the conception of the originator.

3d2) Types

d2,1) Typical behavior can be eg role, usage, praxis, tradition, etiquette and life style.

d2,2) Non-typical, stigmatized behavior, can be eg drop-out, draft resistance and whistle blowing.

d2,3) Uncontrolled mass behavior can be eg mass prejudice, craze, run, riot, flight and panic.

d2,4) Common characteristics are eg real or virtual, certain or probable, factual or symbolic, one person or population wide, singular or systematic, particular or universal, short or long term, fast or slow, flexible or rigid, simple or complex, unchallenged or contested, unregulated or regulated, open or hidden, observed or unobserved, visible to the eye or not and non- or for profit.

3d3) Tools

d3,1) Sensual actions comprise perception by the five senses.

d3,2) Bio-mechanical actions comprise all physical activities from movement to manual labor.

d3,3) Mental actions generate a design of expression for translation into language and action.

d3,4) Administrative actions comprise all schreibetisch tasks from documentation to projection.

d3,5) Technical action comprises all devices utilized for a specific application.

3d4) Processes

Processes like all human expressions run along initiation, extension, continuation, augmentation, penetration, changes, interruptions and interactions towards a result.

d4,1) Planning proceeds by eg information gathering, blue print, modelling, simulation and calculation.

d4,2) Decision grows out of eg perspective, goal definition, determination and circumstances.

d4,3) Initiation can be eg a first move, final ripening and removal of a barrier.

d4,4) Goal orientation pursues strategic-tactical lines, control of factors and feedback evaluation.

Strategies as in all professional fields set down objective, factors of production and frames of action.

Tactics pin point situational, operational actions, counter-actions, tools, modi and circumstances.

d4,5) Structure control can be by eg division of labor, networking and hierarchical layering.

d4,6) Process control can be by eg sequencing, repetition, pattern, looping and revision.

d4,7) Event control can be by eg staging, maneuver, ploy and plot.

d4,8) Resource control generates eg human soft and professional skills out of the labor market and materials out of fauna, flora, gases, liquids, solids in the natural environment.

d4,9) Social environment control, turning oppressive into advantageous ones, can be by eg party program, public relation campaign, action committee, lobbying, bribery and compellence.

d4,10) Termination can be by eg diffusion, erosion, cessation, abandonment and interference.

3d5) Legally a right to action relies on guaranties for security, physical inviolability, property, non-discrimination and freedoms of movement, information, profession, access to resources and markets.

3d6) Inhibiting factors can be eg lack of intent, knowledge, resources, adequate environments, frameworks, also restrictive regulations, irrationalities, profiteering, corruption, deception and violence.

3d7) Evaluated are actions objectively by merit, necessity, adequacy, performance, cost, being often standards of accountability, and subjectively as success with a gain or as failure with a loss.

3e) Administrative organization

An administrative organization is a N persons configuration, grouping under one head people, information, materials and money as collective driving force with mental, psychological and physical functions.

Most motivations seek in expressions support of operational, administrative means. They augment mental-physical capabilities of human endeavors on the meso- and macro-scales.

They assist social and technical tasks to manage human factors of goal attainment.

They are directed by meta-programs for growth, concentration, mobilization, administration, integration, coordination, diversification, reform and regeneration to perpetuate themselves.

They coin political-military-legal-economic-social environments out of their political position, propagating eg a religious teaching, constitutionality, laissez faire, system theory, ideology or fascism.

They are described by sociogenesis, sociology and the sciences of the other professional fields.

3e1) Functions

e1,1) Main intent is to provide an accessible, accountable service to the general public

e1,2) Main conception is a contribution to life while refraining from political excesses.

3e2) Growth

e2,1) Growth forces are those of an originator, social forces and inner dynamics of self-motivation, -formation and -organization, starting from a historically given to hypothetical point and proceeding into various directions. Growth processes are eg duplication, repetition, formation and addition of base patterns, differentiation, specialization, association, formalization and institutionalization.

e2,2) They proceed one by one. Macro structures change as a whole only by collapse or revolution.

e2,3) They form a multitude of embedded, autopoiesic systems with regulative impact on a variety of public to private, open to hidden, soft to forcing circles of relations.

3e3) Appearance

e3,1) Appearance is formed by eg identity, self-awareness, function, means, constitution, stratification, radius of activities, public image and common symbolic systems like status, money and culture.

e3,2) Their constitution identifies the organizational form and political-social character with representatives, objectives, structures, processes and means within an environmental framework.

e3,3) They act as informal to formal public units of action like eg a social network, contest, market, company, institute, trust, network, party, state, nation and block.

e3,4) They show a high traffic density, occupy a point to territory and operate locally to globally.

3e4) Structures

e4,1) Organized are resources with eg personnel, tasks, stations, equipment and supplies.

e4,2) Introduced is one hierarchical vertical-horizontal level in a meso configuration and several hierarchical vertical-horizontal levels in a macro configuration, setting the degree of order.

e4,3) Tightness ranges from open forum to regulated body to closed system.

e4,4) Inner freedoms are described by eg culture, creativity, flexibility, vertical, horizontal internal and external mobility and allowance for rooms of privacy, retreat, anonymity, restraint and asylum.

3e5) Processes

e5,1) Organized are resources with eg flows of man power, information, materials and money.

e5,2) Introduced are consecutive, task divided steps of action, timely integrating operational functions of eg planning, research, design, testing, decision, implementation, financing, marketing, public relations, events, negotiations, evaluation, corrective action and termination.

e5,3) Set up are in- to external, point to broad, regular to privileged channels of communication.

Population contact is measured by eg market share, constituency and registered citizens.

3e6) Interrelations range from independence to coexistence, competition, conflict to annihilation.

3e7) Interdependencies exist between eg resources, markets, systems and environments.

3e8) Acceptance depends on private, public, local, regional and foreign evaluation and reaction.

Vital are contributions by the public with eg feedback, counselling, canvassing and volunteering.

3e9) Public oversight is by eg internal - external, proprietary - public, specific - general, national - international investigative control mechanisms, demanding eg transparency, statement of activities and public forum discussion with corrective action. They are the first to be corrupted by eg profiteering.

3e10) Excessive goal attainments are eg globally inequitable division of labor and distribution of income.

3e11) Inhibiting factors are mostly misuses of power, supported by irrational media images, eg instrumentalization of social formations by special interest groups, determination of political events by political-social programming and non-action on pressing social problems like environmental damages.

3e12) Administrative organizations are seen like social forces by their actions and merits.

3f) Technical device

A technical device is a man made object, utilizing a material, floral, animal or human force against a counterforce for a specific application.

Most motivations seek in expressions support of operational, technical tools. They augment mental-physical capabilities of human endeavors on the micro-, meso- and macro-scales.

They assist social and technical tasks to execute material factors of goal attainment.

They are a mass motor in the professional fields. Demands for ever new applications foster innovations by scientific-technological research and development and have brought a series of industrial revolutions from the steam engine to electricity to digital data processing to genetic engineering.

They coin human living environments, man made products having supplanted natural surroundings. Increases in performance in power, speed and accuracy accelerate the pace of life and reduce barriers of place, time and mass and the planet to a global, complex, vulnerable, multi-interdependent techno-city.

They extend the radius of action into the micro-macroscopic, over ages and advance the frontiers of the thinkable, calculable, do- and usable. Man has with A-B-C-R weapons the capability to mass murder billions of people up to the extinction of mankind.

3f1) Forces

f1,1) Force as eg nuclear, mechanic, chemical, electrical, optical, physiological and genetic.

f1,2) They are generated, amplified, transformed, transmitted, stored and applied.

3f2) Innovation

f2,1) Use of technical devices is only limited by free imagination, available forces and mechanisms.

f2,2) Resources are scientific knowledge, technical know-how, soft skills and raw materials.

Raw materials can be primary natural or secondary man made, half finished goods.

f2,3) Basic steps are study of force and effect, engineering of function, medium and operational mechanism, supply of power, safety precautions, production, test and market introduction.

3f3) Base patterns

f3,1) Integration links two machine operations sequentially by administrative arrangement.

f3,2) Automation links two machine operations sequentially by a technical control mechanism.

3f4) Appearance

f4,1) Appearance can be eg stationary or mobile, hand-held, fixture- or self-supported, mini, medium or large sized, manual-mechanically or -electronically operated.

Digitalization is by multi-media, a combination of technically engineered, display designed, page by page navigable texts, pictures and sounds with resources and task sharing interfaces.

Cyberspace is an artificial, projected 3D panorama, an imagery of objects of all classes, reality duplicating, manipulating and fantasizing, shielded from natural surroundings with real time sensually perceptive and active - electronically receptive and guided interaction.

- Hardware comprises eg central processor, bus, cache, memory, in- and output devices.

- Software comprises eg machine-programming languages, operating system and apps.

- Processing is by digital, binary-boolean signals in semiconductor circuitry.

Miniaturization reduces the size of devices often under visibility of the eye as in eg surveillance.

Micro-chip devices, implanted, embedded, integrated, automated and linked, handle every by discrete numerical methods stable, fast representable, calculable, processable and displayable task.

Nanotechnology allows engineering of materials and machines on the nano-level of 10^{-9} m.

f4,2) Present day trends are expansion, differentiation and specialization of professional fields.

Information has become a vital production factor. Growth of knowledge is exponential.

3f5) Joined administrative-technical means allow eg modernization, rationalization and globalization.

3f6) Required are impact statements of possible risks, dangers and misuses for man and environment.

3f7) Required are standards, regulations, instructions, training, knowledgeable behavior and supervision.

3f8) Inhibiting factors

Technical devices foster illusions of human capabilities and convenience, disregarding fall back effects.

Mass applications lead to a massive burn up rate of resources with environmental damages.

Modern tools of deception, misuses and destruction severely transgress human boundaries.

Warfare with high tech weapons of mass destruction is equally self-destructive with global pollution, climatic collapse, devastation of natural land, destruction of build land and eradication of billions of people.

3f9) Evaluated are technical devices by merit of intent, function, result and further consequences.

Function is seen by professional standards of performance with fixed, operating, environmental costs.

Observed is the full range from the small and difficult to detect to the many and large.

3g) Inhibiting factors introduce man made barriers by causes of error and intent. Their origin, causal chains and effects can be mostly uncovered, but not always traced back or predicted with certainty.

3g1) Errors are deficiencies in intellect, spreading by eg tradition, culture, teaching and ways of thought.

g1,1) Thoughtlessness, because of eg indifference, leads to eg superficiality.

g1,2) Non-knowledge, because of eg lack of cognition, leads to eg false description.

g1,3) Mental mistake, because of eg faulty operation, leads to eg miscalculation.

g1,4) Irrationality, because of eg illusion, leads to eg an unattainable goal.

g1,5) Large scale errors lead to pseudo mental products and misdevelopments.

Pseudo-mental products are eg dogma, meta theory, ideology, fractionalism and secret policy goal.

Primitive aggrandizements are eg world, fate, fame, glory, beauty, happiness and sex appeal.

3g2) Intentional damages are defects in drives, mentality, intellectuality and spirituality, originating out of hate of man, criminal inclinations and archaic notions of prestige, power, possessions and pleasure.

They defile human dignity and as protected human standards impair legal rights.

Acquiescence, subversion, corruption, deception and violence are the means to avoid a loss or achieve a gain at the expense of the natural environment, another person's object and another person himself.

Targets of gain are mostly self-image, language and social reality, political power structure with resources and advantageous political-military-economic-financial-social dependencies and disparities.

Targets of elimination are first political-social opponents and watch dog organizations.

g2,1) Acquiescence by eg way of least resistance leads to eg social stupor.

g2,2) Subversion by eg undermining of values and value scales leads to eg excesses.

g2,3) Corruption by eg profiteering leads to eg privileged classes.

g2,4) Deception by eg tools of misinformation manipulate human perceptions, understandings, intentions, communications and actions.

g2,4,1) Public opinion control by eg manipulation of content, context, style and image by eg appeasement, diffusion, deflection, distortion, misinformation, omission, elimination, perversion, ridicule, entertainment, glorification, irrationality leads to eg a social class with privileged information.

g2,4,2) Justification control by eg propaganda for a political system leads to eg dogma.

g2,4,3) Motivation control by eg stirring of lower fears and desires leads to eg brutality.

g2,4,4) Reality control by large scale, systematic deceptions leads to devastating misdevelopments.

g2,5) Violence against an object by misuse, tempering and destruction causes eg dysfunction.

g2,6) Violence against man by denial of a right, misuse of a civilian professions and injury with a civilian or military tool of destruction impairs inner and outer freedoms of movement.

g2,6,1) Denial of ownership by eg theft leads to eg loss and follow up expenditures.

g2,6,2) Harassment by eg infringement of civil liberties leads to eg disenfranchisement.

g2,6,3) Exploitation by eg coercion of economic behavior leads to eg economic strangulation.

g2,6,4) Subjugation by eg elimination of self-determination leads to eg slavery.

g2,6,5) Discrediting by eg destruction of reputation leads to eg exclusion.

g2,6,6) Degrading by eg surveillance leads to eg sodomitic atrocities.

g2,6,7) Impairment can be eg physical injury, disease, change in level of a physiological, neurological, genetic capacity, altered growth and differentiation of a physiological trait.

g2,6,8) Bestial impairment by eg torture leads to eg shooting up of hate.

g2,6,9) Murder leads to eg vendetta, civil war and war.

g2,6,10) Life control by large scale, systematic violence seeks equally programmatic deception.

g2,7) Combinations of deception and violence

g2,7,1) Prestige craving leads to image fascism.

g2,7,2) Power craving leads to totalitarianism.

g2,7,3) Possessions craving leads to order fascism.

g2,7,4) Pleasure craving leads to hedonism.

g2,7,5) Large scale combinations lead to criminal social weights, terroristic organizations, hegemonic policies, clandestine and open political mass murder and mass human-social devastation.

g2,8) Today the major powers' hegemonic policies are defined by secret policy goals for global political-military-scientific-technological-economic superiority. A worldwide system of labor camps realizes facades like constitutionality, gapless surveillance, elimination of dissent by deterring torture, social programming by manipulation of individual psychological, physiological, neurological and genetic processes and in planning of demographic structures of entire populations.

III A 4 Essential Parts

4a) Physiological base

4a1) The physical cosmos is qualitatively and quantitatively depictable, causally explainable and in its development predictable. Researched and described by scientific methods are the appearance of the physical and chemical magnitudes, the geometry and topology of space-time and the laws of nature. - However, beginning and end in infinite time are entirely and present extensions largely open. An eg 10^6 increase in resolution of measuring devices will still leave man's knowledge through reason, experience and theoretic modeling insignificant against the magnitudes of the universe.

a1,1) Cosmogony describes by reconstruction through backward extrapolation the earliest physical conditions of the cosmos. From a singularity at a finite point in space-time about 14×10^9 years ago, a state of extreme density of radiation energy, approaching Planck's time t_h , it exploded, cooled and developed into the present geometry with a multitude of material formations.

a1,2) Cosmology

a1,2,1) The macro-cosmos is a coherently gravitation bound, isotropic, homogeneous, accelerating inflationary Riemann geometry with asymptotic Minkowski properties towards infinite. It developed stable groups of galaxies, single galaxies, clusters, nebula, stars and planetary systems.

a1,2,2) The meso-cosmos constitutes the validity range of classical, non-relativistic physics, its phenomena of abiotic matter being described by physics, chemistry and their specific fields of study.

a1,2,3) The micro-cosmos enfolds according to the standard model out of 3 classes of elementary particles, point like spin $\frac{1}{2}$ particles, field particles of the 4 forces and Higgs particles, preserving symmetries. It is ruled predominantly by strong, weak and electromagnetic forces, unified in a single theory. It is described by Quantum Mechanics, Quantum Electro-, Chromo- und Flavordynamics.

a1,3) Eschatology describes by projection through forward extrapolation the future physical conditions of the cosmos for the next 10^{27} years as a continuing, entropy gaining, spatial expansion, dispersion of matter and emission of radiation to leave black dwarfs, neutron stars and black holes.

4a2) Forms of life on earth developed out of evolutionary processes, their underlying evolutionary drives, establishing genetics as base discipline of biology with its ensuing fields of study.

a2,1) Biogenesis was first a chemical, abiotic evolution, taking place in the oceans about 3.7×10^9 years ago. Formed were mixtures of amino acids, proteinoid microspheres with rudiments of a membrane, metabolism and growth by budding.

Biological evolution with nucleic acid chains capable of reproduction progressed in self-organization of matter with the basic forces of evolutionary drives. Formed were protobiontes, containing a short DNA strand, which differentiated stepwise an improved metabolism, protein production and a multifunctional membrane. The first prokaryotes of blue algae and bacteria appeared.

Following in the first evolutionary line were eukaryotes with differentiated organelles within the cell and a membrane enclosed nucleus, containing a chromosome set to control cell division by mitosis (start of phylogenesis). The spreading one cell organisms took up mainly carbon and hydrogen containing molecules in exchange for nitrogen and oxygen to radically change the composition of the atmosphere, starting 2×10^9 years back, into the one we know today.

During the Upper Precambrium of about 9×10^8 years ago the evolutionary rate of the diverse aquatic one cell organisms accelerated, forming multi cellular eukaryotes with specialized cell functions. The branches of plants and animals separated about 1×10^8 years back, introduced was sexual reproduction, further accelerating the evolutionary rate, and set up was a heterotrophic food chain with plants at the base, before the first forms of plant life appeared on land.

a2,2) The first evolutionary drives of one cell organisms in broad genetic variability were simple base pair changes. In higher eukaryotes on the level of genotypes, the drives are: mutation; hybridization, a recombination in sexual reproduction; gene migration; gene drift; genetic correlation; genetic homeostasis; on the level of phenotypes in variability of forms and functions they are: increase; spread; migration; mixture of populations; adaptation to environmental changes and natural selection.

a2,3) Development of genetic material, its proteins and ensuing forms of life is continuously traceable throughout the evolutionary line. The polygenetic tree delineates copy true the evolutionary tree of comparative anatomy of all plant and animal species, stating a common ancestry of all living organisms in the genetic code, the bio-synthesis of proteins, the bio-chemical building blocks with requirement of water, the catalysis by enzymes and an energy metabolism with glycolysis to leave the difference between man and animal merely a gradual one. The phylogenetic theory of descent serves as a guide for description, denotation and categorization of all organisms, establishing as taxonomic categories four kingdoms: one cell organisms, prokaryotes, eukaryotes and mushrooms.

- 4a3) Environments are long term variables, comprising natural and man made living areas
- a3,1) The Heliosphere, a star of medium size and luminosity, about 4.5×10^9 years old, generating by nuclear fusion electromagnetic radiation, a gravitational and geometrical center of nine orbiting planets, allows a long, stable developmental time span for evolution of organic life. Planetary preconditions to support life in a moderate climate are: α) an adequate mass, size and structure, β) an adequate distance to the source of radiation, γ) an approximately circular orbit, δ) an approximately perpendicular rotation axis, ϵ) a medium rotation frequency, ζ) a chemical composition, containing all essential elements, η) a magnetic field and atmosphere, shielding high energy radiation.
- a3,2) The Biosphere describes all single factors enclosed by the atmosphere.
- a3,2,1) The atmosphere of the earth, reaching about 10 km upwards, consists out of 78% N_2 , 21% O_2 , 0,03% CO_2 and in its lower layers up to 4% of H_2O_{VAP} . It dampens by circulation temperature and pressure differences, carries precipitation inland and serves as a metabolic fuel.
- a3,2,2) The hydrosphere in forms of gas, ice and liquid, found to 99,7 % in the oceans, supplies with sweet water the largest component of plants and animals and is indispensable in their metabolism.
- a3,2,3) The lithosphere, the outer, firm, plate layered mantle of the earth, reaching about 100 km deep, has as its crust the pedosphere with rocks, stones, sands and soils of various qualities.
- a3,2,4) The biotic environment includes all living organisms in water, land and air.
- a3,3) Ecology describes individual, population and environmental abiotic and biotic forces, requirements and conditions for life with their multifaceted interdependencies in the development over geological time spans. A local ecological environment often forms out a self-organizing, semi-closed system with an energy and metabolic cycle along an ascending food chain in a dynamic, labile balance.
- a3,4) Man causes major, often irreversible environmental changes, substitutions, destructions and climatic shifts through persistent, large scale technological applications with pollution of air, water and soil and eradication of entire biotopes and species.
- 4a4) Boundaries are universal natural, mental and spiritual limits between man, society, nature and God. They can be expanded with improved cognition by contemplative, artistic, scientific research and applications to open up new fields of study and correct, refine, add to and spread present knowledge.
- a4,1) Natural conditions
- a4,1,1) Man is extremely vulnerable in his natural environments, health and by hostile impairment. Traces of natural and synthesized germs, viruses and toxins, not visible to the eye, can be lethal.
- a4,1,2) Limits of action are set by the possibilities of existing energy and matter. Man can utilize and alter conditions, but he cannot create out of his own new physical forces.
- a4,1,3) Natural conditions are improved by social forces by reason, research and development.
- a4,2) Mental conditions
- a4,2,1) Man is born in the original and common state of non-knowledge and over centuries acquired knowledge constitutes only a drop out of an ocean.
- a4,2,2) Limits of free phantasy exceed factual knowledge by leagues. Below limits, inspiration abounds, but rarely approaching extremes or grasping basics comprehensively.
- a4,2,3) Mental conditions are improved by social forces by maturity, research and development.
- a4,2,5) Theological teaching is advanced by spiritual forces by faith and sound theology.
- a4,3) Class boundaries are sound theology towards God, reason towards nature, ethics towards society and maturity towards man himself. They cannot be transgressed severely without recoil at oneself.

4b) Freedom

Freedom, man's ability of movement in human, social, natural and spiritual dimensions is a basic and universal requirement of human activities. Every movement in any environment requires freedom. It is a state for being, encompassing passively absence of intrusion and non-use, actively liberation, use, expansion and also transgression of boundaries, which recoil on themselves.

4b1) Liberation

b1,1) Submission leads to physical enslavement, mental stupor and often extinction.

b1,2) Liberation from political barriers is won by awareness, will, resources and often conflict.

b1,3) Liberation from idolatry, superstition, illusion are won by sound theology, reason and maturity.

4b2) Use

b2,1) Use is first of natural freedoms by nature given rooms of individual and collective movement.

b2,2) Common characteristics are eg major or minor, actual or potential, stable or fragile, seen or not.

b2,3) Modi of movement of a person and object are given by their direction, degree and path.

4b3) Expansion

Expanded can be natural environmental freedoms through man made civilizational freedoms by eg adaptive, social, educational, administrative, technical means, change of location and conditions.

4b4) Individual freedoms are possibilities of physical, mental and spiritual activities of a person.

4b5) Collective freedoms are individual freedoms in collective endeavors.

They enclose set up, maintenance, expansion, alteration, regeneration, reduction and termination of relations for eg information, assembly, association and activities in all fields of life.

4b6) Basic freedoms of privacy, security, movement, speech, action, assembly, education, property, profession, culture and religion with their limits are constitutionally codified as inalienable human rights.

4b7) Inner freedoms comprise eg internal, conscious neuro-physiological processing.

4b8) Outer freedoms comprise external, conscious bio-mechanical-vocal expressions.

4b9) Truth's freedom allows unrestricted research and description of God, nature, man and society.

4b10) Ethic's freedom does not allow a major inhibiting factor to run to its self-destructive end.

4b11) Historical freedom is a state of affairs with minimal causal dependencies, where not imbalances, disintegration, destruction, collapse or catastrophe determine public actions.

4b12) Cosmic freedom prevails over longer periods, where causes of historical developments with their large number of factors are not any more predictable by laws or theoretical approaches, but are subject to chances. Achievements of later born stand in alternatively open and equivalent time.

4b13) Overall freedom is the sum of singular freedoms, their combinations and interactions.

4b14) Combinations of freedoms join to a larger room of movement as often required for an enterprise.

4b15) Interactions of freedoms

b15,1) Singular freedoms of several persons, acting in the same direction, often in association, eg overlap, supplement, relate, combine, enlarge, multiply and reinforcing each other.

b15,2) Singular freedoms of several persons, not in interaction, coexist with each other.

b15,3) Singular freedoms of several persons, acting in opposite directions, often with bundled forces, eg level, compete, retard and conflict with each other at the expense of the other party.

4b16) Balanced freedoms grant a maximum of freedom to each individual and group within a larger community of people, delineating obligations, rights, limits and reconciliation of conflicts.

Values are deduced from the dignity of man and not a political-social one to dominate the value scale.

4b17) Limits of freedoms are natural or man made physical restrictions or sanction enforced guidelines of behavior like a social classification, statute, norm, usage, etiquette or tradition.

Common characteristics are eg resistant or ductile, enforced, circumvented or disregarded.

Their range can be given by eg shape, extent, awareness and conditions like rules of accessibility.

4b18) Inhibiting factors are restriction, bondage and incapacitation by mostly pretended justifications. Today, common practice worldwide are arbitrary private and government restrictions to privacy, travel, migration, choice of residence and work, property and movement of ideas and goods, free speech, assembly, religion and access to communication. Means of enforcement range from social sanctions to sublime oppression to data based rooms of surveillance and administration to deception and violence.

4b19) Evaluated are freedoms by the state of affairs

b19,1) Rooms of movement are seen by eg awareness, potential, reality, use and misuse.

b19,2) Restrictions are seen by positive sources like ethics and negative sources like arbitrariness.

4c) Development

Development of man made objects out of natural and human resources is in continuation of expression a universal human activity. Molding an object, it aims at an improvement in realization of human potential. It is initiated by spiritual, mental, psychological, emotional, biological and bio-mechanical forces in combinations. Only limited by imagination, it reaches across all layers of reality.

4c1) Required is a spectrum of freedoms to arrive via preforms, designs, attempts, variations, alterations, trials, errors, setbacks, restarts, hurdles taken and tiny advancements at an achievement for man.

4c2) Supportive are positive codetermining political-economic-social environments.

4c3) Goal orientation centers the object for in depth attention. Maximum productivity is achieved by adhering to the steps of subject and object true treatment.

4c4) Means are scientific, artistic and contemplative research, soft and technical skills, experience, knowledge, labor, natural resources and financing.

Soft skills are inquisitiveness, imagination, experimentation, ingenuity, diligence and perseverance.

4c5) Steps of R&D are eg literature search, field search, formulation of question, hypothesis, experiments, data collection, data evaluation, conclusion, propositional support, publication and discussion.

4c6) Creative development generates improved existing, innovative, speculative and visionary objects, which did not exist before in construction of future living environments.

4c7) Systematic development expands human freedoms, capabilities and radius of action into the micro-macroscopic, over ages and with it the frontiers of the thinkable, calculable, do- and usable.

4c8) Qualitative development achieves a qualitative transformation of a human drive into a mental-human-natural product with merit by applying standards of sound theology, reason, maturity and ethics.

Qualitative results are

c8,1) Mental products give a contribution to the canon of knowledge.

They are gained out of neurological data processing.

Their finished state is described by eg definition, characteristics, relations and classification.

Example is Archimedes' principle, he (BC 287-212) discovered while playing with soap in a bath.

Today, development of a mental product often requires a large scale project.

c8,2) Mental-human products give an administrative contribution in service to man and environment.

Steps in molding of human resources are eg suggestion, initiative, decision, implementation, trial phase, evaluation, discussion, reform or restart.

Their finished state is described by eg content, function, scope, norms and provisions for reform.

Example is public trial by state authorities in cases of capital offense to break through cycles of savage blood revenge, as expounded by eg Aeschylus (BC 525-456) in his 'Eumenides'.

c8,3) Mental-human-natural products give a technical contribution in service to man and environment.

They are gained out of molding of natural resources.

Steps in a product cycle, measured in months, are conception, design, planning, decision, trial, prototype, optimization, production, marketing, maintenance, service and restart.

Their finished state is described by eg appearance, function, performance, quality, practicability, efficiency, specialization, differentiation, communication and energy consumption.

4c9) Large scale and long term systematic, institutionalized developments have generated a multitude of differentiated, specialized professional fields and niches. Generated is a highly complex civilization with mass mobilization, modernization, urbanization, commercialization and globalization.

They cause longer, faster, scaled up, more varied, interwoven, interdependent, complex chains of actions and also miniscule, far off, hard to detect, unregulated, incalculable areas.

4c10) Interaction of concurring, opposing, past and foreign developments can lead to eg revival, combination, supplementation, dynamic balance, coexistence, competition, eclipse and conflict.

4c11) Excesses occur through eg run-aways, large imbalances and short cuts like ideas for cash.

4c12) Inhibiting factors are eg lack of will and knowledge, counter-forces and recoil of consequences.

4c13) Evaluated are developments by their immediate effects and further reaching consequences by universal to item specific standards, eg merits, co-determination of affected parties and overall costs.

4d) Conviction

Man is centered in his convictions. They are the pivotal, deciding point.

4d1) Emancipation springs out of human drives, bundled in intentions, conceptions and life experience as motivational engine in a causal chain across the breadth of human, social, natural and spiritual dimensions and in depth from conception to realization to coin the political-social character of the times.

They form out an individual identity with independence, self-understanding, -reliance, -determination, -presentation and -preservation.

d1,1) It enables to look, think and act for oneself to mold an object of choice in any environment.

d1,2) Self-preservation attends to standards, components and essential parts of man and society.

d1,3) A universally definable, finished object man or society does not exist.

d1,4) It carries forward a natural-human-spiritual hope over successive generations.

4d2) Conviction springs out of faith with a set of religious statements or an understanding about life.

It forms out a concept of one's life work with personal and collective goals as a contribution to life.

They are self-defined, conscious, visible, transparent, livable goals.

They integrate emancipation of man as man and mind as mind,

They strive for an overall comprehension with knowledge about God, nature, man and society, a personal responsibility, enlightenment and its desired result.

d2,1) A responsibility is chosen as content of one's life work in stewardship of the creation.

d2,2) Enlightenment are the means of realization with the tools of language, task, value, regulation and supervision. They overcome with spiritual-political-social will any hostile, inhibiting factor.

d2,3) Result is a qualitative transformation of a human drive into a product with lasting merit.

Example is Athanasius (AD 293 - 373), who fought life-long for recognition of the Nicene creed.

4d3) Increase in comprehension spring out of the spirit of man.

Anthropological behavior patterns evolve into emancipation-comprehension based behavior patterns.

It is the only path of man in telos of humanity and mind towards moral utopia: ethical awareness.

d3,1) They are achieved stepwise by research, administrative-technical means and education.

d3,2) They advance the frontiers of the thinkable, calculable, do- and useable.

d3,3) They expand boundaries of man versus man made and natural living environments.

d3,4) They lead to long term self-preservation of man in cosmic responsibility.

4d4) Inhibiting factors spring out of illusions of capabilities and convenience, deception and violence.

Illusions are pseudo-mental products like a cyborg or a chimera with augmented capabilities.

Political-military-economic interests strive for physiological performance, an outer freedom, by 'human hand directed, accelerated evolution' by electro-magnetic-mechanical and bio-chemical-genetic means.

d4,1) They are violations against the dignity of man, autonomy of mind and body, inner freedoms of movement, integrity of health and genetic code and his naturally given equality with all mankind.

d4,2) They are violations against human emancipation, comprehension and responsibilities in line with nature given forces, but are driven out of prestige, power and profit against nature.

d4,3) They are violations against transparency of intention, conception, language, action, administrative and technical tools, but hide integrated, manipulable, AI programmable control mechanisms.

A cyborg-chimera with his technical capabilities can only be identified by a barcode scan app.

d4,4) Manipulation of identity and health can only be realized by massive public opinion control.

Acceptable incisions remain diagnosis, prostheses, production of medication and somatic therapy.

d4,5) Misdevelopments with risks, dangers and misuses lead to a human catastrophe.

Today, military B-C-R weapons manipulate billions of psychologic-physiological profiles worldwide.

4d5) Evaluated are man's conviction, faith, understanding of life, vision and hope by the questions:

Are his steps on solid grounds? Are his long term prospects reasonably justified?

Questioned are individual and social forces, responsible for the present state of political-social affairs with their mental-human-natural products by self-set, objective and spiritual standards on a comprehensive, global, historic, cosmic scale as achievements or failures.

d5,1) In free imagination and self-interpretation, man adopts a value as standard: human dignity.

d5,2) Objectively, expressions and results are seen by universal, class-interrelation, subclass-relation, professional and item specific standards of merit and accountability.

d5,3) Spiritually, expressions and results are seen by the demands of God on man and society.

III B 5 Summary

Man is a mental, functional, multi-dimensional, complex, regenerating form of life, reaching from his human center, conviction, into the extremes of life. He is in all aspects depictable. He is independent and social, abstract and concrete, dynamic and passive, free and submissive, reflective and thoughtless.

5a) Achievements

He has made huge progresses over the last three millennia in the humanities, natural sciences, mathematics, logic, collection and spread of knowledge and technological applications with expansion of his radius of action and production of wealth. His environments are dominated by man-made products.

5b) Failures

He does not practice cognition to see himself, his intentions, conceptions and expressions with their positive or negative consequences. He does not know how to overcome inhibiting factors. He does not extrapolate himself into the future, combining a spiritual hope with a real prospect in cosmic dimensions. Basic utopia is ethical awareness. His aspirational red thread is constitutionality. 'Act justly and love mercy...' (Micah 6,8) is a spiritual principle in opposition to a human or theoretical one. Man is guilty in millions of cases per year of hunger, epidemic, inequity of wealth, overpopulation, environmental destruction, exploitation and, by image fascism covered up conventional and B-C-R micro weapons of mass destruction, of human rights violations, subjugation, degradation, physical injury, rape, torture, mass murder, civil strife and war.

The Chimney
To my friend Hannah Ungar

Daily behind the barracks
I see fire and smoke abound,
Jews, stoop down your necks,
You will be gased and burned.
Don't you see in the haze
A torture torn face?
Doesn't it call with derision:
Five millions already devoured.
Auschwitz is held in its vices -
Everything, everthing is cinder.

Ruth Klüger (1944)
(abr. trans. by U. F.)

Daily behind lighted ads
Silenced are exhorting voices
Against torture and autocrats
In whimpers and silent cries.
They are being called to order
By collapse and secret power.
Docs, lawyers break for pause,
A few drops for a good cause.
Millions sent to their last refuge,
Always, always the bells accuse.

Udo Frentzen (2014)

5c) Planetary catastrophes

Man has allowed to let himself be prostituted by his lower instincts of prestige, power, possessions and pleasure to fall in his freedoms indefinitely low, if not arrested. After colonialism and two world wars, employing new mass murder technologies, the sum of multiple, escalating gross corruptions in excess of boundaries will lead inevitably to planetary catastrophes and self-extinction of mankind.