

-ecology - 19th c term - investigation of interrelationships between animals, plants, and their inorganic environment - dynamic balance of nature, interdependence of living and nonliving things. vs environmentalism (natural engineering)

-social ecology - dialectical unfolding of life-forms from simple to complex. (history of phenomenon is the phenomenon itself) human-made universe is 'second nature'. society = institutionalized communities. philosophy of evolution. must synthesize these 2 natures into a 3rd. process of achieving wholeness by means of unity thru diversity, complementarity (vs homogeneous monocultural oneness of cap).

libertarian municipalism - confederalist Commune (communes artistically tailored to their natural surroundings, l&r popular face-to-face control over material means of life -- land, factories, transport, participatory democracy, high measure of self-sufficiency (->self-empowerment). "The world's future has to be managed, but this management would not be just like a game of chess -- more like steering a boat." (analogue vs digital, Charles Elton, *The Ecology of Invasions by Plants and Animals* (NY John W Wiley, 1953, p101)). -must merge organic ecological process-oriented sensibility with our prevailing analytical one, transcending both sensibilities in new way of thinking and experiencing. goal of pre-Socratics to Hegel - ontology - description of reality not conceived of as mere matter, but as active, self-organizing substance with striving toward c. reality as process.

-nonhierarchical. everything has its place, mostly closed (except for infinite solar power) system, cyclical (tho changing over linear time (vs time as quality ie, don't age in thought at the same rate as in body, cyclical orgasm is transcendence of linear time)). ranking species in an ecosystem is anthropomorphism (using concept of hierarchy). our closest evolutionary cousins, great apes - gibbons have no apparent ranking system at all, chimps have fluid stratification, orangutans don't even have dominance and submission relations, mtn gorilla little stratification, bonabos... Northwest Indians not class societies but chain-like links between individuals. people, things, relations in terms of their uniqueness rather than superiority/ inferiority (h is insight - prelogical, nonlinear). preliterate lack an 'I' vs 'we'. our language permeated by historically charged euphemisms that acquire reified life of their own. Obedience vs allegiance, command vs coordination, power vs wisdom, acquisition vs giving, commodity vs gift. stake out their claim to totality of social life. not 'have' but 'live with' or 'share'.

-vs systems theory - quantitative reductionist theory of energetics vs recognition of qualitative descriptions of ecosystems. life-forms as mere consumers and producers of calories.

-legacy of freedom/ domination. double helix

-preliterate 'organic society' - animistic - principle of irreducible min, commitment to usufruct rather ownership of property, ethics of complementarity vs morality of command and obedience - must integrate with rationality, science, technics to promote humanity's integration with nonhuman world. not New Age romanticism, eco-animism, biocentrism vs anthropocentrism, unfeeling Malthusianism, ecofeminism, misanthropic anti-humanism, postmodernism (no need for coherent and rational body of ideas, introverted subjectivism => defeatism (vs Islam)

-capitalism now society, not just economy - grow-or-die mentality, chaos of mktplace, hierarchy, war -> family, personal sexual, religious and community relationships (egotism, consumerism, careerism, mutual suspicion, transitory human intercourse) -> fragmentation as ideology

-hierarchy (Greek - priestly forms of org) exclusively characteristic of second nature. (conspiracy embedded in hierarchy). 'dialectical unfolding of hierarchy involves domination via ethnic, gendered, age, vocational, urban-rural forms (molded into 20th c grand conspiracy) -Marxian engine of conspiracy - change of technology/ forces of production -> (surplus) ->change of relations of production culminating in cap/ class society. but hierarchy more subtle - bio + social/ national/ political (bureaucracy). proletariat not adequate/ only force of change

-mistake in Marx - defining nature as realm of necessity, nature as stingy - punishment for malfeasances of Adam&Eve. domination of nature -> domination of humans by humans. this 'realm of necessity/ freedom' is product of 2nd nature (conspiracy against nature). for Marx, 'good life' required domination of first nature via mobilization of labor (exploitation but hopefully minimized/ ended via rev)

-his language tainted by Promethean, often crassly bourgeois images ('liberate' use-values from 'earth-sleep' of nature. not William Petty's 'marriage' between nature and labor, but a coercive patriarchy, a license from Yahweh to place all of reality under iron will of male elders. still rooted in concept of property. (vs Romantic movt - production as symbiotic, not antagonistic process, labor as midwife and tools aids in delivering natures offspring: use-values)

-but nature not intractable, but fecund, marked by differentiation. regarded as 'realm of nec' in terms of senseless 'needs' it is expected to satisfy. but needs are highly conditioned by society (2nd nature). not stinginess of nature but stinginess of people (elites ruling thru social conventions)-not rescue 'savages' from nature/ ignorance (-> support imperial agenda of cultural and industrial iv)

-also incipient class/ hierarchical forms -> (surplus) -> change of prod forces (dom(ination) of humans -> dom of nature). ie, culture vs technics, hierarchies vs classes as motive force in dev(elopment) of capitalism. first domination was man by man rather than of nature

-Freud and Marx make self-reproduction and self-discipline the historic knout for achieving mastery over nature - dom indispensable phase in dialectic of civ(ilization). but reproduce opp(ression)/ exploitation - terms reproduce and discipline used by elites to condone exploitation - extension of class opp(ression) into self-opp(ression).

-subjectivity turns organisms into active force in their own evolution, not merely passive objects of natural selection. but to use such ecumenical words as humanity implies social setting. proclaiming we are all 'equal' ignores the hierarchical relations embedded in society (embedded inequality of 'equals') vs the preliterate/ paleolithic/ organic/ nonhierarchical equality of unequals (where compensation for the stigma of natural 'privilege').

--separation and otherness human facts of life because of consciousness (c) (recapped in Jewish experience). but otherness not mean enemy/ domination. differentiation, complementarity.

-animism a form of solicitation/ cooperation with nature rather than coercion (lure prey to accept hunters' spears). openness of American Indians to Europeans confirms this. our abstractions were substance to preliterate mind (soul is one's hand, heart, spirit one's breath). Greeks had animistic outlook and secular reason - world as alive/ organism/ animal, reason embedded in myth

-Hebrew transcendentalism distinguished 'eternality' of Nature' from 'mutability' of society, thereby opening society to possibility of radical rev change for first time in history (yes, Apocalyptic, linear history (Frye, Noble)) freeing human thought and practice from necessitarian world of Nature, its domain of eternal recurrence (but Bookchin says Nature has inherent the dialectic of increasing complexity -> c, implying that Nature is not just eternal recurrence, but has its own linear trajectory. [maybe he means Js first articulated the linear part of Nature's complex dialectic through their excessively alienated tribal social formation]. Frankfurt School 'high-culture nihilism' p62 vs Gaia hypothesis, which sees the planet as a single organism. dismisses all religions which have not 'created an ecologically humanistic society' p63 "Hebrew patriarchs required no heaven or immortal soul, for both of them existed in the physical reality of their sons." (p191)

-Odin god of wisdom, son Thor god of order (obedience to treaties) but discord, corruption -> Ragnarok - death of gods in great conflict before Valhalla. reflected real process - hierarchies erected by valor being eroded by systems of privilege based on wealth.

--Hegel's 'The True is the whole' and 'whole is the True' meaning the true lies in the self-consummation of a process thru its dev, the flowering of its latent particularities into their wholeness (tho a seed can easily lead to stunted growth or premature death). immanent dialectic within phenomena. Alexander to Lenin - where forced social changes not nourished by educated and informed popular c, they were eventually enforced by terror. tragic fate of modern socialism - language of freedom becomes interchangeable with that of domination.

-humans have potential of self-c - society unfulfilled in its dialectical dev until it realizes this thru overcoming hierarchy and domination, going beyond justice to freedom. we are the very 'knowingness' of nature, the embodiment of natures' evolution into intellect, mind and self-reflexivity. p104

-degeneration of Greek democracy -> competing elites vying for support of public - the 'right' to participation choosing the tyrant who will rule them. seeming heterogeneity, displacement of public virtue by personal rights (identity politics, atomistic society -> 'there is no such thing as society') -shift to agr - shift of social imagery from m hunter to f food-gatherer, from predator to procreator, from camp fire to domestic hearth.

-scarcity - biological impact, but socially induced scarcity embedded in culture -> fetishization of commodities AND fetishization of needs (in effect, becoming a force of production autonomous of human will - desires). needs should be formed by c and choice, not just environment (both physical and social). wealth defined as individual creativity, not things. not increase needs (cap) but choice (anarchism)

-early surplus - dispose sans transgressing community's norms of usufruct, complementarity and irreducible min - disaccumulation (potlatch), leveling mechanism to inhibit aggrandizement by ind or special groups preventing technical advance and class formation (-> pyramids in class society). industrial wealth suspect (Faust) breaches blood ties/oath obligations. wealth must be used to reinforce or expand social relations, not weaken them. (Islam codifies this)

-origins of class in hierarchies (age, sex, religious, political). domestic economy/ family and m hunter/ guardian groups dev as social/political facts.

-patricentricity (m traits courage, strength, self-assertiveness, decisiveness, athleticism) and matricentricity (nature and sustenance). patriarchy but no matriarchy (because domination didn't exist for preliterate). transform traits nurturing to renunciation, tenderness to obedience,

courage to aggressiveness, self-assertion to egotism, decisiveness into repressive reason, athleticism to war and plunder. unity of human/human, human/nature broken and power/dom emerge -> yearning for freedom (return to lost unity thru wholeness permeated by reason)

-hierarchy - elites have varying degrees of control over subordinates sans necessarily exploiting them. both social condition and state of c. in organic societies 'unity of diversity' not hierarchies. not only discipline of work but of rule demands repression of internal nature today. can eliminate classes and exploitation but hierarchy and domination remain. exorcize spirit of gain from psyches but still burdened by gnawing guilt and belief in vices of sensuousness (organic soc(iety) - no guilt, crime not committed if not noticed, rather personal sense of shame, try to hide 'sin'=antisocial - h acts vs institutions).

-guilt and repentance replace shame and practical need to redress effects social transgression with emergence of morality - prophet/ priest and with the more rational/social ethics - philosopher and political thinker (egalitarian, unified system of behavior upholding harmony of group -> mystified/abstracted as good/bad, helping to obscure contradictions emerging in social realm).

-first hierarchy - age - grow old => acquire distinct interests not 'natural' but rather social. create institutional roles to ensure survival (child care, magic, medicine, rituals, religion, wisdom, tribal history) -> de-emphasis on eros/ body -> willful aggression and Thanatic death wish. m violence, f nature, shaman fear (incipient State personified) heightening aggressive/ violent elements of patricentric community, feeding it with mystical sustenance and supernatural power.

-epistemologies (ways of understanding) rule - we are prisoners of our language in our understanding (guilt, renunciation, obedience, command, dom/power vs shame, nurturing, tenderness, coordination, courage/self-assertion etc). reason as tool to achieve ethical goals vs reason as inherent meaning of these ethical goals (consp(iracy) of means vs goal - with hierarchy, consp takes hold of the shaping of both means and ends. rationality subsumed/ perverted -> anti-rational reaction (romanticism-> NewAge), surrendering mind to intuition, rationality to mere impulse, coherence to eclecticism, wholeness to mystical 'oneness', actually reinforcing the legacy of dom because we reuse to dispel it with rational analyses). Greeks replace principle of epistemology based on faith in ruler with ethical principle based on reason (reason embedded in myth/animism) - nature tamed by man infused with reason; love of human body/ athleticism but denigrated trade and pursuit of gain (mktplace threatened to undermine Hellenic ideal of self-sufficiency, balance, and limit

- kosmos undermined by chaos when vigilance of reason relaxed). Aristotle 1/ imbalance and dependence/ 2/ subversion of form without which identity dissolves (into quantity). need orderly arrangement of dualities nature/society, work/free time, sensuousness/intellect, industrial/community. already hierarchical epistemology with underlying slaves, foreigners, freedmen, women excluded. Plato argued differences in individuals stem from differences in souls (gold (phil-rulers), silver (warriors), bronze/iron (farmers, craftsmen, merchants - realm of necessity)

-blood ties replaced by civil ties.

-shaman tries to mediate with nature. his failure is technical -> replace. but later, institutionalized religion shifts the blame to more failure of community (a la today with banks vs indiv guilt for eco collapse) -urban life began with altar and mktplace. temples testimony to sacralization of accumulated wealth. clans power of blood oath, priest power of ideology, warrior power of coercion. beyond clan.

-woman, embodiment of fecundity has no symbolic place in stark universe of Bedouin except as vessel to produce sons, herdsman, warriors. -> monotheism and harsh expression of m will (and cruel negation of nature?)

-by Jesus's time, Pharisees reworked Deuteronomic Code into most humane in ancient world. 'eye for eye' replaced by monetary compensation and corporal punishment restricted, debtors and slaves treated better (Essenes and James Jerusalem Church) Hyman Maccoby *Revolution in Judea* (NY Taplinger Pub, 1980)

-lingering memory of egalitarian order where work pleasurable and playful (-> pleasure

principle) and usufruct/ irreducible minimum still determines allocation of means of life (-> reality principle). separate these aspects of organic society, where they were once embedded for all. same with dom/freedom legacies. -> Hobbes's 'state of nature' as inversion of reality reflecting epistemology of rule as domination. 'brutish mob' is result of civ, not organic society. the elites save the 'pleasure' for themselves and the 'reality' for the rest, the elites' aggressiveness threatening to extinguish 'civ' through their bureaucratic institutions and ruling father figures.

-rise of state (coercion+ distribution, leg/exec, governance/admin) -> accounting, efficiency as political morality replacing informal 'inefficient' forms of freedom (direct demo, consensus, self-administered 'justice', decentralized ad hoc admin and governance). Hegel State as realization of society's ethical idea

-direct action not just means but an end, empowering individual to take pol(itical) responsibility. need to make jump from inertia of legacy of dom (guilt, coercion as psych element of hierarchical order we live in). cap negates direct demo by giving eco and mkt (pure quantitative rights) total control of pol/soc life. but Aristotle called for containment of capital and market as dangerous. buyer-seller relationship becomes all-pervasive substitute for human relationships at even personal level. everyone rivals for other's 'goods'. extended family -> nuclear family -> singles dating clubs and testtube babies, with hollowing out of personality itself. turning back natural evolution towards simpler forms, including inorganic personality (we are our IDs) and totalitarian social forms. our complexity strictly technical, not cultural, individual is more neurotic and psychopathic, reason becomes 'efficiency of dom'/ rationalization.

-lack of distinction between 'freedom' and 'domination' leaves organic society unguarded against hierarchy and class rule - innocence exposes the community to manipulation by elders, etc shifting in emphasis from particular to general, from specific animals to their spirits, from zoomorphic to anthropomorphic deities, from usufruct to communal property, from demonic treasure to kingly storehouses, from gifts to commodities, from barter to elaborate mktplaces. -expelled from Gdn of Eden is condition for return on a level that can resolve the paradoxes of paradise.

-loss of preliterate innocence -> 1/ vision of lost golden age, forward-looking utopianism, and between them, religious/ anarchist movts trying to balance sharing/ self-discipline, freedom/ coordination & responsibility 2/ justice (social and individual) as surrogate for lost freedom where freedom interpreted as happiness (Marx) and pleasure (Fourier) 3/ labor as necessity (vs play) 4/ nature as separate from humans. must reassemble these aspects into meaningful ensemble sans hierarchy. -freedom from vs freedom for. freedom a voyage of discovery that begins with early practice and limits in organic society, its neg'n by hierarchical and class civ,

and its partial realization in early notions of justice.

-dialectic of social justice - equality of unequals - sharing, gifts, plunder, exchange - -> individual justice and denial of society. automatons. equivalence fn usufruct and equality of unequals - spirit of calculation -> inequality of equals

-preliterate - freedom from starvation, freedom for worship/play.-equality of unequals -> charity, freedom -> right. -to be called a merchant an insult to Odysseus, men of his class exchanged goods ceremoniously or took them by plunder

-Freedom (equality of unequals) requires social Justice (fighting the inequality of 'equals') not just Justice (Janus, scales, formal equality)

-Bentham's calculus of pain and pleasure ultimate reduction of social life to quantity - ethical atomism

-happiness - realized in contemplative mind and ethical mean that rises above excess (Aristotle) vs Bentham (tempered by law of dim marginal utility. ethics as practical utility, expediency, cost-benefit and risk calculation - justice's denouement

-dialectic of freedom - freedom first appears in Sumerian cuneiform 'amargi' (return to mother, ie, matricentric ambiance or nature as bountiful). in Christianity - humanity's future redemption via Augustine's linear evolution. history imparts to faith a logic and intelligibility that inspires hope, meaning and action (ie, not just passive acceptance). overcome the split between heaven and earth in secular justice and democracy (or Islam). -slave's dream of freedom to make master into slave. Christianity/ Islam use authority, laws to buttress fallen humanity individuality and universal humanity. consumerist vs productivist concepts of freedom (latter rational use of labor) -gnosis (knowledge), wisdom (sophia), reason (nous)

-gnosticism's commitment to 'goodness' and physical indulgence - ecstatic union of spirit with body - union of worshipper with deity. transfigure one's encounter with reality, create a transmundane reality of 'goodness' that is close to a communion with the true God (not demiurge of world - Yahweh). permanent state of desire rather than mere need, of passionate perception of the world rather than one deadened by custom, routine. but this presupposes humanity/ ind transformed from condition of sin to grace

-earliest expression of freedom within realm of unfreedom - popular attempts to restore irreducible min and circulation of wealth frozen in temples, manors of ruling elite. freeing surplus

via

1/ plunder/ slave/peasant uprisings (black redistribution) - consume but also demystify institutional fn of wealth as force for domination (ie, destroy it and records of contractual use of it)

2/ ascetic and hedonistic/ communistic/ libertarian movts in Christianity (deriving from Jamesian Church in Jerusalem vs Pauline Church in Rome). Roman church 'give to Caesar that which is Caesar's' and purges NT of radical ideas and millenarian fantasies which became allegories and for Augustine Second Coming essentially arrived with establishment of Church (vs Quran) and emphasized miracles (vs conflict with authority) and relegating paradise to heaven, suppressing heresies, accommodating feudalism and cap (Jesus trades in souls and markets gospel)

-anticlericalism of Voltaire a blow against repression and denial of individual competence to manage his spiritual affairs -> civil insurrections (vs Islam and stability of Islamic society) and symbolist/ surrealist/ counterculture movts (monism, unity of nature/ humanity/ God). Luther heavenly freedom in inner life, Calvin works -> bourgeois freedom

-asceticism 'poor man's pleasure' -> hallucinations (saints) vs rich man's pleasure principle (sinners) (60s drug culture was radical but from 70s+ drug culture a strategy for attuning individual to consumerism - cap perverts even counterculture drug use).

-Q: what is the historical subject that will create a free society? -for Marx, cap -> socially induced scarcity => working class since we are forced to define relationship of ethical life to material. via class concsciousness. but every appeal to c is an appeal to creativity of mind and an expression of belief in human virtue. Marx materialist, Hegel idealist, Kropotkin ecologist, Fourier utopian all embarked on same voyage of hope (he leaves out Mohammed prophet). all grounded in reason - shape material life that is ecological, rational, artistic, spiritual

-technics - modern affluent vs classical balance/ limit -> approaches to technics (inorganic ensemble of room, tools vs organic inclusion of social/ ethical context (not only how a use-value produced by why (Aristotle) - master workers act with an insight and ethical responsibility that

renders their craft rational). -organic society labor process not production but reproduction/procreation - sexual activity between human workers and earth (Eliade - or grows in belly of earth and humans as midwife, singing and praying as part of 'work'). worker more than midwife, tho, he is also one of nature's productions, part of nature's fecundity. Eskimo ask tusk what image hides in it, listens to voice of substance, synchronicity of subject and object. organic logic - a 'Way' about ivory/ horses which they must understand and to whose claims they must respond with insight and awareness, an ensemble of qualitative features.

-vs modern science - assumes nature orderly but without meaning and can be understood by human reason alone. nature mute, unthinking, blind, sans subjectivity or rationality in human sense of self-expression. but subjectivity in sensitivity of all animate beings and in reactivity of inorganic world (Diderot). [also beehive c, electromagnetic wave linking of 'souls' across oceans and homeopathy, resonance of molecules - understand each other - other forms of 'thinking' besides centralized human brain]. define human subjectivity as very history of natural subjectivity (including all earlier forms of subjectivity). 'wisdom of body' 'revenge of nature' more than mere metaphors.

-from order to reason to meaning, from mythic Way to knowledgeable Way (Tao). Hegel's reason (inductive-deductive reasoning, empirical verification and proof) vs understanding (speculative thought - imagination, art, intuition)

-mkt vocab penetrates our deepest interrelationships (input, output, feedback). how to contain technics in emancipatory society? Eskimos crafted carvings so carefully because they have a high sense of care for each other - libertarian community

-political structure part of technics administering/ mobilizing/ supervising labor/ material surpluses -> factory and corp (just as labor is part of nature, one of its gifts, not just a force opposed to it). liberatory technology presupposes liberatory institutions/ sensibility. BFuller's spaceship mentality and now-to-do-it catalogues exhibit unsavory readiness to make pragmatic compromises with hierarchical pol technologies without changing them (but could there be a critical mass -> process of change?)

-pre-industrial technics adaptive rather than innovative with rule that they must be integrated into existing social institutions. innovation in response to major climatic changes or violent invasions. 11th c+ innovation (greatest since neolithic 'rev'). Europe relatively decentralized (vs Islamic world and Asia). Christianity esp Calvin contributed (but even more Judaism which

Bookchin ignores p338). "free-floating ego, divested of all community roots, became its ideal of individuality and personality." p341. divest technics of community matrix (-> innovation)

-freedom not affluence but personal autonomy, empowerment over life (vs empowerment over things), emotional security deriving from nourishing community life (vs material security), not res temporalis, a quantitative thing, but qualitative state of mind (all your time should be free), not freedom from labor but freedom for creative work, not tramp's aimless, spontaneous but unformed, easy-going but structureless, poetic but irresponsible alienated freedom. must recreate and foster daily the activity of being free within one's social matrix

-technics as ecosystem, not merely cost effective devices based on renewable resources. must use organic systems to replace machines (shade, recycling, fertilizer, filtering, heating) as part of sensitizing mind and spirit to nature's own powers of generation, to sense the subjectivity of 'natural resources'.

-must redeem the gain that inheres in every loss - the sociality latent in solidarity of kinship, the rationality in primal innocence, the ideals in social conflict, the willfulness in patriarchy, the personality in individualism, the sense of humanity in parochial tribal community, the ecological sensibility in nature idolatry, the technics in shamanistic manipulation. p357 need new kind of imagination, new sense of social fantasy to transmute the often oppressive archaic contexts into emancipatory ones.

-objective reason expresses the logos of the world (Horkheimer) vs human reason - final mentality guided by operational standards of logical consistency and pragmatic success, a mere technique for advancing personal opinions and interests, instrumental, not defining our interests in terms of ethics and social good (Horkheimer's subjective reason). but H's subjective reason ignores the subjectivity inherent in nature, subjectivity not wrong (tho in cap context it is reduced to shallow mkt-driven materialism/ egotism). Ahab: All my means are sane; my motives and objects mad. -under cap, dom and freedom interchangeable terms in common project of subjugating nature and humanity - the driver become part of the machine. subjectivity is the history of reason - substance actively fns to maintain its id, equilibrium, fecundity and place in a given constellation of phenomena (cooperation, subjectivity even at molecular level)

-must elaborate ecological ties via an instrumental reason that remains in the service of objective reason (which has moral/ethical norms built in - recycle, symbiosis, mutuality, unity of diversity and spontaneity, evolution toward ever more complex forms, human activity as

facilitator/ respector of this process, life/ nature as process vs things). law of thermodynamics 2b - in living ecology given external energy source, reversal of entropy law. Entropy only one feature in a larger cosmic metabolism with life as its anabolic (synthesizing) dimension.

-nisus - self-organization/ self-creation - inherent in nonhuman phenomena which play an active role in their own evolutionary processes (from animism - spirit inherent in nature). eye evolution based on developmentally immanent traits. emergence of mind is part of larger landscape of subjectivity itself. our ethical claim to (higher) rationality derives from participation of human mind in larger subjectivity of nature, a fn of form, integration, complexity. not strive for domestication of nature (wolf/lamb). not Marcuse's nature that has not been "recreated by the power of Reason" (liberatory' mastery of nature - still nature as object). rather reintegration with nature, to some extent pacified/ shaped in light of human reason based on ethical rules determine in light of objective reason.

-science as instrumental system of control/dom vs means of knowing. Aristotle - emphasis on substance, form and development - qualitative - more organic vs quantitative matter and motion of modern science. for A natural causality not exhausted by mechanical motion. Causation involves the very material, the potentiality of form, the formative agent, and the most adv form toward which a phenomenon could dev. a phenomenon was drawn to actualize its full potentiality for achieving the highest form specific to it, the formal self-realization of its potentialities. causation not billiard-ball mechanical but developmental, self-realizing. matter is latent with potentiality (a la Eskimo), its material cause. The form that is latent is the formal cause.

-The intrinsic and extrinsic forces that sculpt the dev (sculptor) are efficient cause. The form that all these aspects of causality are meant to actualize is the final cause. to imply a sense of direction in causality (why) is redolent of theology. But science itself is now a theology, humanity and nature instrumentalized, threatening to divest both humanity and nature of their subjectivity. A's social ethics becomes Hobbes's social science. enchanted/ ethical/ passionate nature becomes dead objectified nature. only 'attraction' and 'repulsion' terms in electromagnetism remind us of nature's passion. -causation is creative, self-actualizing.

-natural art - steer natural processes in favorable direction, utilize natural powers stronger than possessed by individual to remedy disasters afflicting agr/ health. must act at 'correct time' in

synchrony with natural cycles. crafts less important than natural arts (hunting, agr). life a calling which rests on combination of craft and nature we call art. crafts intended to imitate nature (glass beads to imitate precious stones or imitation gold not fraudulent - they had use value as ornament vs some inherent 'value'). sparkle of gold/ glass suggests substance has 'vital spark', spirit. artificial crafts of artisan not much better than work of hired hand - both worked to satisfy needs of others, not their own, ie, not free. "Those who labor in the earth are the chosen people of God, if ever he had a chosen people." (Jefferson "Notes on the State of Virginia" 1785). -autonomy of yeomanry basis of US republic, with autonomy of eco basis of US nation -> contradiction as US had to dev its own industrial base -> exploitation and dom.

-towards new understanding of freedom. freedom based on interdependence within social network. 1/ the rationality of 'otherness' is symbiotic. libertarian rationality - observation located within ethical context that defines the 'good' and is structured around a self-detachment (Hegel) that leads toward wholeness, completeness and fullness with unity in diversity. unity is the form/ pattern that gives diversity intelligibility and meaning. overcome 'other' as antagonistic (J). rather 'other' is nonantagonistic relation. humans provide voice of nature's internal rationality.

2/ rediscover concrete/ qualitative uniqueness of ecosystems and reality, not just abstraction of matter/motion causality.

3/ reinfuse artificial crafts with natural arts by bringing natural processes back into techne, not just integrate agr/industry, but change concept of industry. our 'goods' are denatured. a car is a Datsun, not vehicle produced from ores etc. we must know how things are produced, produce to last and impinge min on nature and fulfill legit need. now we along with 'goods' are denatured, objectified. Techne as mystery returned not as mystically enchanted process/ interaction with nature, but as cold alienated object. Industrial society interposed itself between human rationality and nature's fecundity. Factory not to bring labor and machine together, but to rationalize/ objectify the labor process (cottage industry weavers could play and then work hard to meet a deadline), bringing proletariat to condition of powerlessness in face of capital. industrialization an insult to human physiological rhythms.

4/ question the very structure of industry itself, question each substitute for the exquisite biotic machinery that we call food chains. bacterial/ algal purifying/ detoxifying water, convection of air by solar heat, solar greenhouses, small, variegated veg plots. by returning to biotic from mechanical, making ecologically/ philosophically meaningful statement. must arrest destruction of human spirit. resolve ambiguities of freedom existentially -- by social principles, institutions and an ethical commonality that renders freedom and harmony a reality. domestic solar energy system not a mere component of home but the entire house as organism interacting with nature. render nature more fecund, varied, whole and integrated - the hidden desiderata of natural evo. 'good' is diversity, wholeness, a nature rendered self-c; 'bad' is homogeneity, hierarchy, society whose sensibilities deadened.

-reenter natural evolution via human c(onsciousness) as part of nature's c, guiding evolution with man integrated in nature (good conspiracy). humanity is nature rendered self-c (Fichte) but this is only a possibility. make the implicit meanings in nature explicit, act upon nature to enhance its inner striving toward greater variety. dev conceived as wholeness involving society and nature conjointly (nonzero sum game). nature's law of return. human nature biologically rooted process where cooperation, mutual support and love are natural as well as cultural attributes, given prolonged process of physical maturation. now that social ties decayed, can see that individuality involves not (only) a struggle for separation but a struggle against it (in pursuit of richer and more universal consociation than primal kinship). move from blood oath, sexual division of labor and age hierarchy to free ecological society (recaps transition from J to Christian/ Muslim spiritual path). hierarchy -> interdependence, freedom not in opposition to nature, individual to society, choice to necessity. its outer surface of 'inequality of equals' today reverts to 'equality of unequals' (still are societies where loyalties freely given without expectations of recompense, distribution sans rules of exchange). not wrestle with nature but coax it.

-Fourier - physical world not governed by Newton's law of universal gravitation by his 'law of passionate attraction'. cosmos vast organism suffused by life and growth. life offspring of progressive elaboration of the passions. societal adv not in terms of sublimation of eroticism but its release and full expression (Marcuse's 'from Marx to Fourier'). removal of rep in society concurrent with removal of rep in human psyche. stability thru variety, freedom to choose and to will. William Morris (*News from Nowhere*) libertarian but technically medieval evocation of crafts, small-scale agr and simple living. libertarian institutions are peopled institutions - face-to-face not representative, anonymous, mechanical relationships. direct action not mere tactic but sensibility, vision of citizenship and selfhood that assumes free individual has capacity to manage social affairs in direct, ethical, rational manner. active citizenship (tho can be degraded into aggressiveness, arrogance terrorism. but 'anarchist' terrorist such as Paul

Brousse can flip into supporter of authority a la neocons.

-humanity has soared into radiant heights during great periods of social reconstruction, thought and art despite burdens of dom and egotism.-ecol ethics - distinguish which actions serve the thrust of natural evolution and which impeded it.

-ideas make us c of what we already know unconsciously (Marx); history can teach us forms, strategies, techniques and failures in trying to change world/ ourselves.

-Big Bang - cosmic breathing. parts of cell originally separate structures which dev in cooperation with others -> more complex organisms. mutualism, not predation, guiding principle for evolution of highly complex aerobic life forms.. fittest species the one that most helps another to survive. herbivores -> soil fertility, seed distribution, carnivores keep animal populations under control. aggressive not mean dom/ hierarchy. suffering and cruelty due to hierarchy (poverty is relative). not natural selection but natural interaction. Cartesian/ neo-Kantian dualism leaves nature mute and mind isolated from larger phenomenal world around it. 'civ' more blind than the elemental forces it professes to control.