Living Better in a Better World: An Ecosystemic Approach for Development, Sustainability and Quality of Life

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Abstract
Quality of life, natural and man-made environments, physical, social and mental well-being are currently undermined by all sorts of hazards and injuries; political, economical, social and cultural disarray normalise atrocious behaviours and violence throughout the world, in a context of dehumanisation, depersonalisation and reification. A theoretical and practical multidimensional ecosystemic approach and planning model is posited, intertwining, as donors and recipients, four dimensions of being-in-the-world: intimate, interactive, social and biophysical. Events are not reduced to fragmented representations of reality, but considered as configurations, resulting from a dynamic field, expressing the connections and ruptures between the different dimensions. Instead of being directed to the bubbles of the surface (reduced, taken for granted problems), projects of change contemplate the dynamic configurations formed by the intersection of the different dimensions "inside the boiling pot".

Key-words : culture, politics, economics, environment

Résumé
La qualité de vie, les environnements naturels et construits, le bien-être physique, social et mental sont actuellement sapés par de multiples agressions et risques; les structures politique, économique, sociale et culturelle normalisent des conduites destructrices et disséminent la violence à travers le monde dans un contexte de déshumanisation, de dépersonnalisation et réification. Une approche multidimensionnelle, théorique et pratique, et un modèle pour la planification sont posés en vu du développement d'un modèle eco-systémique de culture, enchevêtrant, comme donatrices et receveuses, quatre dimensions d'être dans le monde: intime, interactive, sociale et biophysique. Les évènements (réduits aujourd'hui à des représentations fragmentaires de la réalité), sont considérés comme des configurations résultant d'un champ dynamique tenant compte des connections et des ruptures parmi les différentes dimensions. Le projet de changement considère les configurations dynamiques au cœur du «pot en ébullition» et non les simples «bulles de surface» (les faux problèmes).

Mots-clés: culture, politique, economie, environnement

Can we imagine a world in which wise and impartial international regulators would have the authority to implement the right set of norms and policies to safeguard humanity's cultural inheritance, natural and built environments, aesthetic and life saving values for future generations? Creating transnational governance systems to deal with these multiple issues constitutes one of the greatest challenges of our times.

Contemporary problems are closely interconnected and interdependent, they cannot be understood and solved within the present context of weakening social bonds and cultural, political and economical disarray, usually a generous ground for market-place's interests, publicity-oriented behaviour, fragmented academic disciplines and misguided government policies (Elohim, 2000).

To cope with environmental collapse, environmental justice should be extended beyond national boundaries, beyond political and economical interests of malicious consortia and

corrupted or lenient governments, which easily comply to ill-intentioned propaganda and lobbying by influential groups and questionable business organisations, always wishing to control public affairs and promote their private interests[1].

Different movements and civic stances should work towards a "new global covenant" (Held, 2004), emphasizing social justice, physical, social and mental wellbeing and the equilibrium between natural and built environments. The conceptual direction and the legitimacy of development strategies should be based on a comprehensive framework, instead of surrendering to specialisation and fragmentation.

This means that the environment should be examined in view of a critical assessment of environmental information and issues from both a biological, chemical, physical as well as sociological and economic perspective, including human development, economy, culture, environmental law, ethics, environmental policy and environmental management tools.

Deforestation, desertification, global warming, biodiversity losses and other extreme events are linked to the action of powerful economical and political interests, which try to legitimise business expansion in terms of "development" models based on consumerism and abuse of natural resources, notwithstanding its failure to face the increasing inequalities, violence and poor quality of life throughout the world.

Changing the current "world-system" is mandatory[2]; the environmental crisis "stems from the prevailing power-driven ethos, the anomic individualism, which divert human concern into technological invention, scientific advancement, and unlimited material consumption and production" (Orhan, 2003). The focus should not be on the "bubbles" of the surface, but on the configurations deep inside the boiling pot (figs 1, 2).

The present ecological crisis reflects a prior disordering of thought, perceptions and values (Orr, 1994), and is a sign of the severe cultural crisis of our times, which break through the core of societal institutions – education, justice, governance – already impaired by the maneuvers and collusions of political and economical dominant groups, by the stronghold of national and international corporate interests[3].

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[1] Characterized by large differences in power between individuals and companies (natural persons and legal persons), "asymmetrical societies" (Coleman, 1985) permit business corporations to have a substantial influence on State affairs and public policies and to diffuse responsibility, in a limited way, along their hierarchical structure, preserving their shareholders, considered as mere investors by the financial markets. A second element that the current global corporate economy has brought is the World Trade Organization's subordination of "environmental standards to what are presented as "requisites" for "free" global trade and proprietary "rights"; privatization and deregulation reduce the role of government, especially at the national level, and hence weaken its mandatory powers over environmental standards" (Sassen, 2010). As a consequence, we have a lack of accountability in public and private affairs, absence of civic engagement and institutional monitoring, politically connected opportunistic earnings, state corruption, nepotism, irresponsible public policies towards natural and built environments and a consumer culture using up, burning, wasting, and decaying.

[2] "A world-system is a social system, one that has boundaries, structures, member groups, rules of legitimation, and coherence. Its life is made up of the conflicting forces which hold it together by tension and tear it apart as each group seeks eternally to remold it to its advantage. It has the characteristics of an organism, in that it has a life-span over which its characteristics change in some respects and remain stable in others. One can define its structures as being at different times strong or weak in terms of the internal logic of its functioning" (Wallerstein, 1974: pp. 347-57).

[3] Political ecology exposes the flaws in the dominant approach to the environment favoured by corporate, state and international authorities, showing that present conditions are contingent outcomes of the undesirable

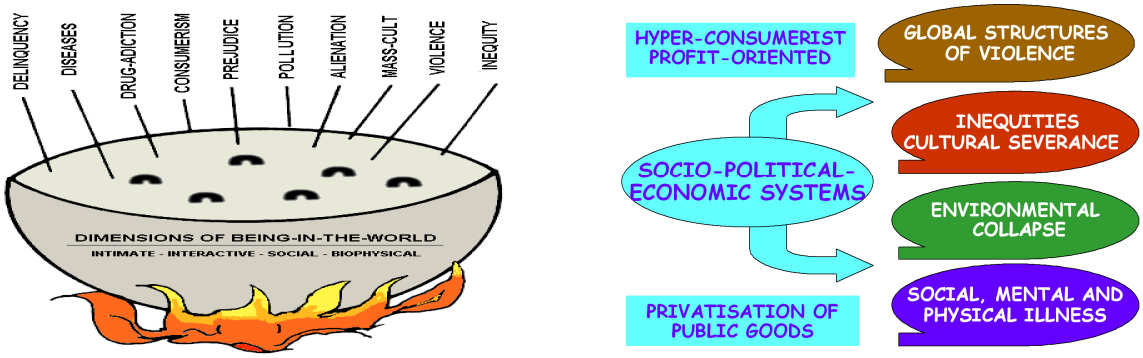

Fig. 1 The real problems lay deep inside the boiling pot, not in the superficial bubbles (consequences).
Fig. 2 The impact of current socio-political-economical systems are detrimental to the quality of life.

The role of law, the work of attorneys and judicial courts is frequently hampered by the very system in which they have their insertion, "legal" and "illegal" strategies are mixed together in the assemblage of current political and economical interests; powerful lobbies, deeply ingrained in the public administration, favour mega-projects with intensive use of resources, rather than the appropriate technologies.

Legal procedures will not forestall neither the *planned obsolescence* of products designed for the dump nor the *perceived obsolescence* fostered by propaganda induced consumerism, which, among other psychosocial strategies, arise in people the sensation that products should always be substituted by new ones, buying and disposal converted into rituals of a culture that makes consumption a way of life.

In many problem-ridden, economically unequal and intrinsically violent megacities of emerging countries, most people become uninvolved in civic life due to the outspread criminality (Baiocchi, 2005): while some enjoy life in fortified enclaves most of the city dwellers live in makeshift slum housing, without the basic social services (health, education, police authority) and dependent on criminality for survival[4].

Teaching ethics do not thrive in highly corrupt societies[5]. Beyond profit-searching motives of business corporations and other vested interests, transboundary issues like human rights,

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impacts of overall policies and market conditions (Robbins, 2004). Some currents ask for a paradigm shift from thinking in terms of state steering and governmental practices towards the analysis of multi-actor, multi-level and multi-sector governance. The question is: how could these multiple variables and often contradictory interests be put together, in order to have a common ground and a minimum equilibrium?

[4] "Nothing more visibly reveals the overall decay of the modern city than the ubiquitous filth and garbage in its streets, the noise and massive congestion that fills its thoroughfares, the apathy of its population toward civic issues and the ghastly indifference of the individual toward the physical violence" (Bookchin, 1979). "The more the city concentrates the necessities of life the more unlivable it becomes. The notion that happiness is possible in a city, that life there is more intense, pleasure is enhanced, and leisure time more abundant is mystification and myth" (Lefebvre. 2003).

[5] Within one generation many people lost two value systems: religion and ideology. This gap has not been filled by an alternative value system yet. We live in transitional times in search for new value systems. This goes along with turmoil, uncertainty, lack of confidence, fear and impotence (Rotmans and Loorbach, 2009).

pollution, deforestation, drugs and criminality impose a significant reconfiguration of state control and political authority, in which power must be shared on ethical grounds in a transnational basis, by transnational organisations.

The emphasis on human rights, rather than collective political action, only reiterates individualistic approaches (Harvey, 2005). The fundamental change is economic, social, cultural and political; priority should not be given to growth, but to sustainability, human development, order and stability in civil society: if one group gets richer, others can be used and discarded and will not share in the wealth (Bown, 2007).

Growth, power, wealth, work and freedom must acquire new meanings (O' Sullivan, 1987). The accumulation of wealth to the exclusion of other components of the development process (safety, health, education, equity, ethics, justice, beauty) has led to overwhelming natural devastation and severe social and cultural impacts, with high levels of crime and violence[6].

"Social inclusion" only accommodate people to the prevailing order and do not prepare them to change the system (Labonte, 2004); once "included", a new wave of egocentric producers and consumers reproduce the system responsible for their former exclusion, increasing the abuse of nature in the name of the so-called "progress" and irresponsible consumerism.

"Sustainability" approaches, based on capital and technology, cannot be a substitute for the wealth of resources drawn from the natural world: "strong sustainability" entails containing population growth and curbing consumption, meeting the needs of the current generation as opposed to their demands and living within the productive capacity of nature (Layzer, 2008).

Ecologically sustainable behavior is linked to positive social involvement: in contrast to "extrinsic" goals, like money, image and status (which are means to other disputed ends), "intrinsic" goals are inherently gratifying to pursue, like self-acceptance (growing as a person), affiliation (having close, intimate relationships), community feeling (helping the world be a better place) (Kasser & Ryan, 1996).

Technological "solutions" often ignore the social, cultural and environmental impacts, development proposals, which reinforce the current reckless way of life, repeatedly demand even more resources and increase pollution and waste, without changing the irrational system of production, transport and consumption that plagues the globalised world[7].

[6] The environment should be examined in relation to environmental law, environmental policy and environmental management tools, encompassing criminality, ethics, economy, development, psychology, culture; "quality of life, whether in the developed world or in developing societies, is conditioned by the quality of the environment being built around us by others - increasing the sense of individual alienation" (Yang, 1998).

[7] "Promoters of multi-billion dollar development megaprojects systematically misinform parliaments, the public and the media in order to get them approved and built; they often avoid and violate established practices of good governance, transparency and participation in political and administrative decision making" (Flyvbjerg, B., Bruzelius, N. and Rothengatter,W., 2003). "Private consumption at the cost of amenity and future is by no means a necessity of nature as consumption is to a large extent a cultural activity"; it is linked to the emergence of the knowledge economy, "with returns increasingly being in the form of profits instead of wages" (Huppes, 2008).

Human scale development must be based "on the satisfaction of fundamental human needs, on growing self-reliance, on the construction of organic articulations of people with nature and technology, of global processes with local activity, of the personal with the social, of planning with autonomy, and of civil society with the state" (Max-Neef, 1991). A proper cultural environment, a common ethical ground, is more important than the best legal prescription[8].

Cultural and educational public policies succumb to the prevailing political and economical interests, converting the population into consuming subjects, appropriating their thoughts and bodies and transforming them into the property (commodities) of influential people and questionable business corporations, which use propaganda, lobbying and corruption to intensify profits and secure their hegemony over public affairs[9].

Cultural, educational, social, economical, environmental and health problems cannot be sorted out by segmented projects; without considering micro, meso and macro relationships. Like bubbles in the surface of a boiling pot, segmented problems are symptomatic of the assemblage of political, economical, social and cultural variables that should be dealt with altogether[10].

When the political, economical, cultural and ethical disarray normalises and condones inequities, transgressions, violence and atrocious behaviours, the "philosophical" questions of ethical, moral and overall civic education are frequently left aside, information and communication technologies being presented as a panacea, not as a resource or an instrument.

Whole system change depends on developing a sufficient critical, collective and connective intelligence in view of systematic and systemic aspects of organisational change: “there is

[8] Present ecological problems cannot be clearly understood or resolved without dealing with deep-seated problems within society and the structurally amoral political-economical system thst drives it (Bookchin, 1982).The nature, scope and implications of current events “no prior age could even have imagined" (White, 1999); scholars speak of “the suffocating political and cultural forces that blunt our response to the growing complexity of our ecological catastrophe” (Buell, 2003); of a "total risk of catastrophe" (Ewald, in Godard, O. and Long, M., 1997); of "systemic risks" (Giddens, 2001), of "global catastrophic risks" (Bostrom, 1997), of "simultaneous crisis formation" (Harvey, 2006), of a "general disaster" (Massumi, 2003), of the "worst imaginable accidents" (Beck, 2007), of "global" or "integral" accidents (Virilio and Turner, 2005), of “development as plunder” (Trainer, 2000).

[9] “Environmental culture boldly unmasks the institutional and systemic violence of our culture and reveals how our culture's life-destroying practices and ethical and spiritual bankruptcy are closely linked to our failure to situate ourselves as ecological beings” (Plumwood, 2002). Privatisations, deregulations, sweeping market-oriented reforms, resulted in relinquishing state's control to the huge power of private sectors; in this context, new technological waves will not rescue a devastated environment, nor relieve the effects of inequities, uprootings, displacements, hunger, violence, ecological insults and deep social division in contemporary society (American Anthropological Association, 2005).

[10] “Weak public institutions and deeply entrenched networks act together to prevent accountability, funneling finance and influence along unofficial channels for the benefit of corrupt groups; political people participate in governmental processes primarily to secure and retain access to personal enrichment at the expense of the public good” (Whitton, 2009). “Transboundary and global environmental harm present substantial challenges to state-centered (territorial) modalities of accountability and responsibility; the globalization of environmental degradation has triggered regulatory responses at various jurisdictional scales to address the so-called “accountability deficits” in global environmental politics” (Mason, 2008).

always a tendency for significant challenges (such as education for sustainability) to be understood and accommodated within the norms of the existing system - rather than change the system to be congruent with the challenge" (Sterling, 2009).

Preparing people to assume their positions in society, both as professionals and citizens, cannot be reduced to ritualistic actions, such as voting or paying taxes, nor can it encourage an uncritical ideological allegiance to the "free-market", transforming schools in training centers for compliant egocentric producers and consumers, instead of centers of critical inquiry and institutional change[11].

When pressures on systems steadily increase, "catastrophic bifurcation" can appear without obvious early warning signals, and the resulting changes are always difficult to reverse; understanding how such transitions come about in complex systems such as human societies, ecosystems and the climate is a major challenge (Scheffer et al., 2001).

Advances in applied ethics should be made "by thoughtful and innovative thinkers in any activity area; specialists of several professions who work together, within a multidisciplinary approach, must base their action on some common principles of ethics and on an understanding of each others' obligations, responsibilities and professional standards" (Soskolne, 1997).

The Ecosystemic Approach to Education, Culture and Quality of Life

What are the prospects of education as a whole, and environmental and sustainability education in particular, regarding the severe threats faced by today's world? Identifying complex configurations or conditions that predict particular outcomes asks for an integrative trans-disciplinary approach, in terms of multi-way, nonlinear interactions among variables[12].

Teaching for meaning in a cultural context that values only information transmission is one of the main challenges for education in our times (Boostrom, 1997): "in order to salvage the realm of character and moral development, the present ethos should not center on individual good and individual value alone, but on the environment and the public space, as a global system".

The objective of the educational processes is not to solve taken for granted problems, but to develop capacities to unveil and work with the dynamic and complex configurations in the core of a "boiling pot", considering individuals, groups, society and environments as donors and recipients, as active components to promote the desired quality of life.

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[11] Institutions provide the rules of the game in society, the humanly devised constraints that shape human interaction (North 1990), they stabilize the behavior and interaction of agents, create predictability and decide how authority is constituted, exercised, controlled, and redistributed (March and Olsen, 1989). Institutional change is defined as "a great transformation from predominantly relationship-based regulation systems to impersonal institutions and formal rules, creating trust at systemic (versus idiosyncratic) levels and allowing huge reductions in individual marginals transactions costs; institutions for risk-sharing at a systemic level decrease individual risk and allow longer time horizons" (Meisel, 2004).

[12] "Trans-disciplinarity does not only combine views or merge ideas. The trans-disciplinary discussion allows questioning the "givens." It forces one towards "detachment" from ones' familiar discipline, culture, and belief. Detachment it is not a denial of your initial identity nor complete attachment to the alternative. It is a new awareness, distance from the world that comes before any type of analysis you may wish to undertake" (Takashi, 2010) .

Environmental education cannot prosper in a context of social fragmentation and weakening social bonds: creation of choices, generation of capacities, development of motivations depend on cultural, social, political and economical aspects; the quality of institutions and incentive structures are more critical than the quality of individual motives and morals (Krol, 2005).

Beyond the objectivistic description of facts or dissemination of information to the public[13], the design, development, and utilization of concepts, tools and practices to enhance the quality of life must take into account the collective forms of being-in-the-world[14], in order to make the necessary changes in the current non-ecosystemic model of culture[15].

Creation of choices, generation of capacities, development of motivations depend on complex configurations encompassing the four dimensions of being-in-the-world (intimate, interactive, social and biophysical), as they induce the events (deficits/assets), cope with consequences (desired/undesired) and contribute for change (Pilon, 2003; 2009).

Analysis of assumptions, contentions, consensus and conflicts are essential to the comprehension and definition of the problems and new paradigms to live better in a better world[16]. In the socio-cultural learning niches[17], cultural and epistemic backgrounds and

[13] Regarding the media, "popularizers" could draw attention to frame issues on environmentalism and culture as significant and important, by dramatization in symbolic and visual terms, emphasising different incentives for taking positive action, and getting institutional support to ensure both legitimacy and continuity in the process" (Hannigan, 1995).

[14] "Being-in-the-world" takes precedence over merely *living in the world*, it encompasses four modes of existence (Binswanger, 1963): the intimate dimension (man's relationship with himself or *Eigenwel)*; the interactive dimension (man's relationship with his fellow beings or *Mitwelt);* the social dimension (man's relationship with the overall society or *Menschenwelt)*; the biophysical dimension (man's relationship with his environment or *Umwelt)*.

[15] "Cultures shape the public knowledge of the past, and the public expectations for the future. They shape individual and collective identities. They affect the impact of innovations and social change in communities and institutions, they construct the social meanings of technologies, they create also new "boundaries", new forms of social exclusion and marginality. They are both ends and means in the society-building process, they frame our very experience of space and the place in everyday life, as well as individual and collective identities" (Sociology of Culture Conference, 2010).

[16] Diagnosis and prognosis of current problems must take into account the connections (assets) and ruptures (deficits) between the different dimensions of the world, as donors and recipients: *Intimate Dimension*: cognitive and affective processes, existential control, resilience, cultural and educational development; *Interactive Dimension*: social networks, community building, groups' dynamics, bounds and bindings; *Social Dimension:* political, economical, social and cultural aspects, public policies, law enactment, health, educational and environmental programmes; *Biophysical Dimension*: biological endowment, natural and built environments, life spaces, neighbourhoods and settlements.

[17] "A niche is a new structure, a small core of agents that emerges within the system and is seen as the incumbent for innovation. Emergent structures around niches stimulate the further development of these niches and the emergence of niche-regimes" (Frantzeskaki and Loorbach, 2009). In order to have a congruent understanding of things, a population must occupy a "semiotic niche" and be embedded in the same "semiosphere" (Kull 1998),

Table I
Dimensions' equilibrium in the ecosystemic model of culture

	Donors			
Recipients	INTIMATE	INTERACTIVE	SOCIAL	BIOPHYSICAL
INTIMATE	Creativity	Support	Services:	Vitality
INTERACTIVE	Altruism	Teamwork	Alliances	Niches
SOCIAL	Citizenship	Partnerships	Organisation	Spaces
BIOPHYSICAL	Care	Defence	Sustainability	Equilibrium

Table II
Dimensions' disruption in the non-ecosystemic model of culture

	Inflictors			
Victims	INTIMATE	INTERACTIVE	SOCIAL	BIOPHYSICAL
INTIMATE	Solipsism	Subjection	Neglect	Harm
INTERACTIVE	Egotism	Fanaticism	Co-opting	Dispersal
SOCIAL	Abuse	Corporatism	Tyranny	Extinction
BIOPHYSICAL	Injury	Damage	Spoliation	Savageness

Table III
Intertwining the four dimensions of the world in the diagnosis and treatment of the problems

Stages of Process	INTIMATE	INTERACTIVE	SOCIAL	BIOPHYSICAL
Diagnosing the Events	Subject's Cognitive and Affective Status Existential Control	Dynamics of Primary Groups Communities' Organisation	Cultural Aspects Social Structure Public Policies Services	State of the Natural and Built Environments Beings and Things
Eliciting Favourable Changes	Subjects' Cultural, Emotional and Educational Development	Improving Relationships Social Networks Community Building	Public Policies Law Enactment Social Control Civic Action	Improving the Quality of Natural and Man-Made Environments Beings and Things
Evaluating the Process of Change	Well-Being Awareness Resilience Creativity	Proactive Groups Community Building Cohesion	Social Movements Well-Fare Policies Social Trust Citizenship	Level of Equilibrium Between Natural and Man-Made Environments

subject-object relationships are unveiled in a specific space-time horizon of understanding, feeling and action[18].

All dimensions of being-in-the-world should be considered altogether in view of an integrated approach to public policies and research and teaching programmes. The equilibrium (table I) or disruption (table II) between the different dimensions are linked to opposite models of culture (ecosystemic or non-ecosystemic); the process of change encompasses a synchronized work with the four dimensions (table III; fig. 3).

To develop awareness and capabilities beyond the traditional schemes of thought, feeling and action, subjective and objective realities should be entangled, creating an "excess of meaning" (Gadamer, 1977), encompassing the alien that we strive to understand and the familiar that we take for granted, a process encompassing socialisation, externalisation, combination and internalisation (Nonaka and Konno, 1998)[19].

[18] The interative dimension encompassses the concepts of group and grid: the former refers to the clarity of the boundaries around a group to which people belong; the latter to the strength of the rules which govern how people relate to one another: hierarchical societies with strong ties score highly on group and grid; individualist or market-driven ones are weak on both (Douglas, 1996).

[19] 1) *Socialisation:* sharing tacit knowledge (internal knowledge, skills and insights) with others by mentoring, imitation, observation and practice; 2) *Externalisation:* converting tacit knowledge into explicit knowledge, through images or words (conceptual knowledge), as a result of a dialogue; 3) *Combination:* knowledge conversion by exchanging and combining different types of explicit knowledge of different sources. 4) *Internalisation:* converting explicit knowledge into tacit knowledge in people's minds, which is represented by mental images or models ('learning by doing').

	INTIMATE	INTERACTIVE	SOCIAL	BIOPHYSICAL
DIAGNOSIS OF THE EVENTS	SUBJECTS' COGNITIVE AND AFFECTIVE ACTUAL STATUS	GROUPS 'AND COMMUNITIES' DYNAMICS AND COHESION	PUBLIC POLICIES LAW ENACTMENT CITIZENSHIP PARTICIPATION	NATURAL AND MAN-MADE ENVIRONMENTS BEINGS, THINGS
ELICITING NEW EVENTS	DEVELOPMENT OF SUBJECTS' EXISTENTIAL SELF-CONTROL	DEVELOPMENT OF GROUPS AND PRO-ACTIVE COMMUNITIES	DEVELOPMENT OF PUBLIC POLICIES AND CITIZENSHIP	PROMOTION OF NATURAL AND MAN-MADE ENVIRONMENTS
IMPACT ON EACH DIMENSION	ENHANCEMENT OF SUBJECTS' WELL-BEING	ENHANCEMENT OF GROUPS AND COMMUNITIES	ENHANCEMENT OF POLICIES AND CITIZENSHIP	ENHANCEMENT OF OVERALL ENVIRONMENT

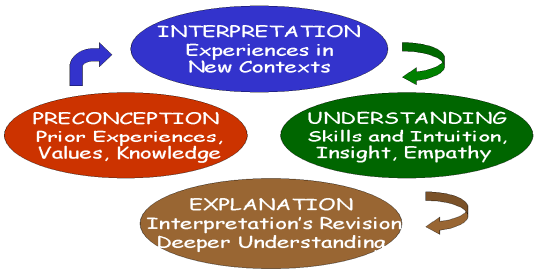

Fig. 3 The process of change encompasses a synchronized work with the four dimensions.
Fig. 4 From preconception to explanation: heuristic-hermeneutics in the socio-cultural learning niches.

The methodology is participatory, experiential and reflexive (fig. 4); heuristic-hermeneutic processes[20] reveal reality in a specific space-time horizon of understanding, feeling and action, unveiling subject-object perceptions and contentions (*intimate dimension*), sharing them with the participants (*interactive dimension*) and setting the ground for new paradigms for being-in-the-world (*social* and *biophysical dimensions*).

The present United Nations decade for education for sustainable development emphasizes critical thinking and problem solving, interdisciplinary and holistic multi-method, values-driven approaches, encompassing environmental principles, social awareness, ethical dimensions, economic prudence, confidence and participatory decision-making (Lindberg, 2005).

Besides cross-curricula activities, environmental education[21] requires an adequate learning environment, it demands a knowledgeable and congruent teaching and learning theoretical ground, a core element for comprehension, preparedness and action, to develop the abilities to participate in, influence, share and control the learning process" (Tilbury et al., 2005).

[20]In this scenario, we can use intermediary objects to unveil the different forms of being-in-the-world: 1) Unveiling subject-object relationships and contents in the intimate dimension: circumstantial images or objects selected to catch the eye are passed along between the participants (like bottle caps linked by a string, strange pebbles etc.), who write down their statements in a piece of paper (not identified); 2) Opening new cognitive, affective and conative horizons in the intimate and interactive dimensions: the written statements are shared in the group by distributing them out of sort to the participants, who read them aloud, unveiling the different subject-object relationships and contents in the four dimensions of being-in-the-world (the experience goes beyond individual initial perceptions and is enriched by the different views of the participants); 3) Acting on the expanded cultural and natural milieu (social and biophysical dimensions): current and alternative forms for being-in-the-world are experienced as a product of the forms of being-in-the-world, cultural, social, political, economical and environmental issues are analysed in view of ecosystemic or non-ecosystemic models of culture Other intermediary objects, like cardboard boxes with figures from daily life, chosen by or presented to the participants, can unveil life stories and enable the construction of alternative projects of life, both individually and collectively.

[21] More broadly defined than "environmental education", the term "education for sustainability" (or "education for sustainable development") emerged primarily out of the Earth Summit and includes international development, economic development, cultural diversity, social and environmental equity, human health and well-being. In order to deal with sustainable development in both environmental and cultural terms we need a theory of cultural sustainability, since the concept of sustainability implies a holistic approach to modelling economic, biological and cultural processes (Throsby, 2008).

Although collective practices, according to evolutionary theories of change, are mainly selected by the social environment rather than by individuals[22], cultural evolution is also linked to the role played by human intervention, which entails intelligence, purpose, calculation, planning, learning, arguing, persuading, discussion, and argument (Nelson, 2005).

Beyond environmental education, development education needs the construction of a "new story for mankind", enhancing local and global citizenship, human rights and justice, supporting people to understand and transform the social, cultural, political and economic structures affecting life at personal, community, national and international levels (Irish Aid, 2007).

It includes education for citizenship, which cannot be reduced to formal or ritualistic actions, such as voting or paying taxes, nor can it encourage an uncritical ideological allegiance to the "free-market", transforming schooling in training centers for a compliant work force, which takes for granted the perverse life style of egocentric producers and consumers .

As an essential condition to "moral and democratic education" (Lind, 2003) and "more problematic than the need for a radically different economy, is the acceptance of some values which clash with the Western tradition, notably the present commitments to competition, individualism and acquisitiveness, and the conception of progress" (Trainer, 2001).

It means reorganizing to produce more of the things that people need — like food, shelter, clothing, education, security, health care — and less of the costly things they do not — like military hardware, pollution, traffic jams, useless chattels and crime. Failures in governance at many levels, and the resulting suspicion and mistrust, clearly also play a role in the current state of affairs.

"The industrial culture divides the person into parts and the world into fragments, but the environment is one whole, it is not cut up into specialties, disciplines and departments" (Drengson, 1995). Problems require "boundary-crossing skills, abilities to change perspective, to cope with complexity and to synthesize knowledge of different disciplines or areas of expertise in a critical and creative way" (Fortuin et al., 2008).

"Environmental awareness is not simply awareness of the natural environment but also of social, economic, cultural and other dimensions; it requires 'dynamic' skills to discover and study the environment and find solutions, capacity to discern the relevant dimensions of a situation, readiness to accept responsibility, initiative taking, independence, commitment" (Hugonnier, 2008).

[22] "Education as a whole, and environmental and sustainability education in particular, are limited in their ability to make a positive difference to assure a more sustainable future" (Sterling, 2003). "Whilst environmental education in schools help to normalise environmental values, children will take cues for appropriate behaviour from the media, peer group and society as a whole" (Bedford, 2002). It is generally accepted that cross-cutting programmes on sustainable development imply a worldwide change of focus and procedures in different areas of production, distribution, consumption and discard, reducing consumption, reusing products, and recycling materials. This is not only a matter of education, but of governance and societal organisation.

A process of change must be associated with the development of an ecosystemic model of culture[23] leading to public action to transform current development policies and structures that wipe out biodiversity, destroy natural and built environments, abuse landscapes and resources, demolish living-spaces and generate unmanageable refuses that menace the future of life on Earth.

Acceptance of ethical norms, peace building, environmental equilibrium requires a whole host of ethically interpreted and ordered social experiences, a capacity to develop morally relevant interests as the bases of rights-bearing, a broad, universally rationalised cultural knowledge, an empathy with people, including those regarded as alien, or even hostile (Znaniecki, 1935).

Despite the number of institutions addressing issues of environmental degradation and sustainable development, environmental problems have been exacerbated rather than solved: «this is mainly due to the fact that international environmental governance lacks co-ordination and is at odds with other areas of global governance, notably economic and development governance» (United Nations University, 2010).

University teaching is vital in maintaining a social conscience based on self-awareness and self-transformation, for preparing people to assume key positions in society, both as professionals and citizens, the discussion of current problems should transcend traditional disciplines and national boundaries, in light of global perspectives, international cooperation, transdisciplinary research and teaching programmes.

Findings and policy lessons

The ecosystemic approach to live better in a better world encompasses different domains – environmental sciences, social sciences, politics, economics, anthropology, psychology, education, public health, governance and ethics - and entails an integrated holistic theoretical and practical approach, which can be applied to different problems of difficult settlement or solution in the contemporary world.

In view of the development of a genuine and endurable quality of life, planning and evaluation of public policies, community projects. teaching and research programmes should intertwine the different dimensions of being-in-the-world, strengthening their connections and sealing their ruptures. The analysis of the events in different domains (environment, culture, education, health, quality of life) should:

• define the problems within the "boiling pot", instead of reducing them to the bubbles of the surface (fragmented, taken for granted issues);
• deal with the events as products of a dynamic field, intertwining the four dimensions of being-in-the-world: intimate, interactive, social and biophysical;
• assess the deficits and assets of the dimensions as donors and recipients, in view of their relationships in a mutually entangled web (configurations);

[23] An ecosystemic model of culture takes into account the configurations formed by four dimensions of being-in-the-world (*intimate, interactive, social* and *biophysical*), as they combine to induce the events (deficits and assets), cope with consequences (desired or undesired) and contribute for change; an ecosystemic framework for the development and evaluation of public policies, research projects and teaching programmes should be applied, considering the ensemble of the four dimensions (Pilon, 2009).

• protect the singularity (identity, proper characteristics) of and the dynamic equilibrium between (reciprocity, mutual support) all dimensions, strengthening connections and sealing ruptures;
• contribute for the development of an ecosystemic model of culture, in view of new paradigms of growth, power, wealth, work and freedom, as an essential condition for consistency, effectiveness and endurance.

As by-products of the prevailing models of culture (ecosystemic or non-ecosystemic), ethics, education, culture, natural and man-made environments, physical, social and mental well-being should be supported by the societal structures and integrated in an overall project of quality of life (not treated as separate objects of segmented programmes).

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