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AWARENESS-RAISING, TRAINING AND EDUCATION

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The Contracting and Signatory States to the European Landscape Convention are invited to examine the present report in order to formulate the general conclusions.

I . INTRODUCTION

1. Threats and opportunities in the crisis of the European landscape

Although European landscapes are increasingly appreciated as leisure commodities, they are facing a considerable crisis.

In less accessible and remote areas, land abandonment continues, leaving behind deserted villages, useless infrastructure and overgrown land. Often two options seem to remain in these areas: the establishment of nature conservation areas on the one hand or large-scale mono-cropping areas, the latter with a range of negative effects on the regional ecological diversity, soil and water qualities. Both options imply minimal management requirements, the one by a hands-off strategy, the other by means of radical mechanisation. In neither of these options the landscape is very much appreciated as such; neither the aesthetic nor the ethical dimensions are actually experienced by the country's population. The one tends to produce mainly pictures in magazines and videos (virtual quality), the other to produce only bulk commodities (quantity).

Opposing the mentioned trends in the countryside, there is a clear demand for sustainable rural development, focusing on the careful cultivation of the regional identity of European landscapes (Wascher, 2000). The French notion of 'terroir' integrates the landscape's cultural and natural features in the aesthetic sense mentioned above. With the European Landscape Convention, the Council of Europe fully accepts the considerable challenge to contribute to the sustainable development of landscape on all relevant scales, as it states in its policy: *"Landscape management" means action, from a perspective of sustainable development, to ensure the regular upkeep of a landscape, so as to guide and harmonise changes which are brought about by social, economic and environmental processes* (Art. 1).

In a historical perspective, urbanisation can be seen as a way of emancipation from the overwhelming forces of wild nature within and around, an emancipation that inevitably was paralleled by people's disconnection and alienation from their local and historical roots. Freedom and independence had their costs, but also their unique benefit of making people aware of their responsibility for 'the others': socially and ecologically, in urban and rural areas. This awareness is a prerequisite for people's commitment to participate in the development of better ways to manage the landscape, fit for a sustainable future. Bos (2002) specifies several subsequent steps in involvement, comparable to those developed later in this paper. However, the awareness of landscape often slumbers unaware in people's minds.

The concept of landscape (as opposed to "nature") is only evident from the moment one realises that it forms one's everyday environment, that it is part of one's culture, there and then. Whereas nature conservation tends to focus on species and ecosystems, which are perceived as part of the world outside of us, landscape management concerns us more directly. It is therefore also less of a purely academic question. The awareness of this concern with landscape is part of our human development. Participation in landscape development can thus be seen both as a human right and a social responsibility. Not so much the formation of new experts is at stake, but rather the development of human capacity toward responsibility, in a humanist sense.

Ways to introduce the above notions into all levels of education should be developed, to make society at large sufficiently aware of the qualities that landscapes should provide to society in order to warrant people's healthy development (Luginbühl, 2001). And in our opinion, this again is a prerequisite for a sustainable development of the landscape people need.

2. Objectives and structure of the paper

This paper is the result of discussions during the first Conference on the European Landscape Convention in November 2001, and during the Workshop on 23 May 2002, both in Strasbourg. It is extended with information additionally provided by participants of this Workshop, and by literature survey.

The aim of this paper is to enhance the future implementation of the European Landscape Convention by discussing the main problems and opportunities in awareness raising, training and education on the landscape as mentioned in Art. 6A and 6B of the Convention. Thereby, a basic idea is that those who were and still are in charge of landscape management have largely determined the actual landscape based on *their* awareness and appreciation of the landscape (Pedroli, 2000). Consequently, when today another landscape quality is wanted, an appropriate change in perception and the awareness of the landscape is needed, together with the relevant rulings of the responsible authority.

In the following, we discuss concepts of landscape education, wherein education is seen at large, including awareness raising and training for various youth groups and adults. Then, we discuss concepts of landscape and the related practices of landscape management. Subsequently, we consider practical consequences of the presented concepts with proposals for action. A synopsis concludes the paper.

This paper is meant to stimulate the discussion in the 2nd Conference between the member states and other involved parties to commit themselves to actions related to the intentions of the Convention. As soon as the European Landscape Convention comes into force, this should allow the immediate endorsement according to a clear work programme for this theme with well-defined actions including milestones and deliverables.

I. AWARENESS RAISING, EDUCATION AND TRAINING FOR LIVING LANDSCAPES

1. Connection with and commitment to the landscape

The landscape of today reflects the way society has taken care of the landscape. Accepting this as a fact, we also realise that education and training with special reference to the landscape issue are crucial to whatever improvement of the landscape management we want to achieve. In section II.2 this is elaborated from a theoretical point of view. Many activities can be imagined to promote the proper approach in awareness raising, education and training (see section IV.1).

To provide for an integrated comprehension of landscape, on the level of the physical appearance, the organisation, and the character / identity, key words in awareness raising, training and education are in our view:

– personal connection with the landscape, and
– personal commitment to the landscape.

Only the personal connection with the landscape can allow people to know their landscape in depth, including its opportunities and threats, and base their actions and activities on knowledge of the landscape in all its complex relationships. The personal commitment or engagement with a specific landscape can guarantee the sustainable development of the old landscapes into new living ones, taking into account the values of the former ones.

1.1. Education and training

Much literature is available on education and training referring to environmental awareness (on the level of Europe, see e.g. Wascher, 1996). For landscape, the objectives might be quite parallel, and a first line of thought could be described as follows.

In primary schools, where children look for examples given by their educators, it might be promoted to go outside with the children and show them the beauty of the landscape. People active in the landscape, like farmers, rangers and volunteers should tell the interesting stories about their landscape, and children could thus become aware that landscape is something more than just nature.

In secondary schools, the children can become active themselves in the landscape in camps and practical exercises. They could be taught about relationships between history and present landscape, between man and nature, and they could learn how and why different landscapes differ. They could adopt certain aspects of practical landscape management, and learn to see the landscape as something they can care for and they can identify themselves with, e.g. by spending a week on a farm or estate with special attention for landscape values. In the later classes this awareness of responsibility may be extended as far as the notion that almost every action in modern society has its consequences for the landscape: from buying milk or wine and travelling over the highway, to letting your dog out in the city park (not in your own garden of course!) or spending your holiday in a landscape far away.

In high school and at university level, students can then concentrate on the problems in the management of landscape, to be able to positively contribute to their solutions. But also here, the basis could be enhanced by a thorough knowledge of the landscape, acquired primarily by direct experience through walking, smelling, listening, looking, and only secondarily by measuring and observing through instruments. A phenomenological approach, including exercises as sketching the landscape and telling its stories, might increase the students' openness for the character and identity of the place. Contact with residents and others involved in the landscape is crucial to remain within the realistic dimensions of what is possible in the living landscape.

In fact, the same applies for training of specialists in landscape management and policy. They will be taken serious by the people in the landscape only if they can show that they know the landscape by own experience, that they understand the problems of the people in the landscape and that they really are ready to help them solving.

1.2. Awareness raising

Awareness raising is a very wide topic, since it covers a range of activities from the information leaflets in a nature reserve, through visitors centres and landscape management camps to broadcasting series on radio and television. It concerns children and adult landscape users just as much as officials and politicians. The message to be conveyed is clear: landscape is something which needs care and which, only seen as a commodity good, will inevitably loose its value and also its attraction. In the following a systematic approach to education and training is elaborated.

BLEIJENDIJK LANDSCAPE WORKSHOPS

"Bleijendijk (a small estate near Vught in the south of the Netherlands) has an atmosphere evoking a special consciousness. High beech trees line the central lane, meadows and forest lots are nicely spread over the estate, and the manor and some farm houses are harmoniously embedded in it. Here the people committed to the landscape are associated with the estate for years, in continuous conversation with nature, by basing their activities on phenomenological observation and meditative connection. That is what you can perceive in the atmosphere. Many schools bring their children here to experience the seasons in the landscape on one day in each season. The younger children may rather play whereas the older ones do guided observations or participate in landscape management

activities. Bleijendijk can stimulate the commitment to the landscape of people otherwise ignorant of the importance of landscape values."

Source: interview with L. Nusselein by L. Kelder in: Beekman et al., 2001

See also www.louisbolk.nl www.petrarca.info

2. Education and training as human resource development

2.1. Filling the bucket or lighting the fire

When education and training are at stake, one approach is to "change the format", that is to provide the pupils and trainees with updated and revised information, referring to the newest findings of research and the latest positions of policy. Using the language of Heraclite, a philosopher of ancient Greece, this would be a kind of filling the bucket anew. He himself however recommended that teaching should be more like lighting a fire than filling buckets, meaning that learning should be more a way of finding, sharing and evaluating ways to solve problems, practical ones as well as theoretical ones. This in contrast to a so-called knowledge transfer from "high" (research) down to practice and training ("low"). In the fire-lighting approach, learning about the learning self goes hand in hand with learning about the topic of interest, exploring the self as the ultimate research instrument to learn about the world around, in this case the landscape (Bockemühl, 1997). Here, experts of education and training like Bawden *et al.* (1984), Forsythe (1984), Rushby (1985) and MacRae (1989) agree with earlier experts like Bloom (1956) and psychologists like Maslow (1970) arguing that the most humane education contributes to the students' free and autonomous self-development. For the European Landscape Convention, a "fire-lighting" approach of education and training would be appropriate, that can also be indicated as Human Resource Development in its true sense (Van Mansvelt & Kólster, 1990; Van Mansvelt, 1990). Emancipation and empowerment are leading criteria in this approach, that addresses the intellectual education (knowledge oriented: cognition) as well as the emotional education (finding out about the feelings & values: affection) and also the motorative education (knowing about doing, how to practice: conation). In the mentioned literature these levels are referred to as cognitive, affective and conative (Bawden & Valentine, 1984).

PISHWANTON. A LIFE SCIENCE CENTRE FOR LIVING IN COMMUNION WITH THE LAND

Pishwanton wood, Gifford *is situated in the Lammermuir Hills in Southern Scotland. 20 miles east of Edinburgh, 12 miles from Dunbar and overlooking the Firth of Forth. Rather hilly, abounding in springs and crossed by two small streams. It was once a rich, worked wood with massive trees. Passing through was once a well-worn track beside a marsh and a mill lade linking one prehistoric place to another. Atop the hill sat an ancient burial ground. Today Pishwanton wears an air of dereliction but, behind this, the visitor is enchanted by a multiplicity of places, of plant communities and of potential here for plant, animal and human involvement. Given the "marginal" nature of the land and the relative abundance of indigenous representational southern Scottish flora, our research has revealed this place to be of considerable educational value and highly suitable for our activities.*

The Life Science Trust *is a Company Limited by Guarantee with Charitable status. It aims to explore the relationship between human beings and nature through art and science and their integration with one another. Our work is based on a"gently empirica" scientific method known as Goetheanism. This approach, now widely practised throughout continental Europe, is ideally suited to the study of life. It investigates and unifies the physical attributes of an organism, the processes by which it grows and evolves and its spiritual characteristics. Through the work of the Trust people are given the opportunity, perhaps for the first time, of letting nature speak within their souls. This can lead to a deep inner experience of "being at one with" rather than "separate from" the natural world and the landscape.*

The life science seminar *is a mobile, educational project active throughout the British Isles, since 1990 providing short courses from one to three weeks on a wide variety of subjects.*

www.anth.org.uk/Science/lstrust.htm lstrust@gn.apc.org

2.2. The cognitive domain of education

Regarding the cognitive domain of education 6 steps can be differentiated, leading from a relatively passive memorisation of facts ("Knowledge") to full understanding of the facts in their methodological context ("Evaluation"). They can be characterised as follows:

1. Knowledge = facts/data to be memorised and reproduced on demand.
2. Comprehension = simple "if...then..." connections between the data, direct associations.
3. Application = useful application of abstract regulations and prescriptions in a well-known context.
4. Analysis = explicit determination of different structural elements in publications/situations, recognise intentions / manipulations etc.
5. Synthesis = reconstructing or reorganising all kind of given situations, trials, explanations; reviewing, planning and explaining clearly / convincingly; formulating laws of nature etc.
6. Evaluation = getting explicit hold of essentiality, realistic judgement of real values / ultimate quality requirements; summarising the essential points of a paper / case / situation.

Here the first steps or levels of cognition require relatively superficial individual involvement in the landscape, as compared with the later ones. They are in general sufficient for those studying for credits, but do not satisfy those studying for interest in the landscape. Therefore, the presented sequence is also a sequence of increasing involvement of the student into the landscape, which is, at the same time, an increasing internalisation of the whole landscape in the student. In this same process of internalisation-by-involvement, the need for an outer authority, to give the necessary help or orders to make things work out, decreases, as emancipation, and the scale of own practicable responsibility, increases.

Whereas with cognition of the type of the lower levels many actions can be taken in an "automatic"/"habitual" way, the higher levels of cognition demand an increasingly constant awareness of the situation and an increasing self-reflection. The division of the scale into steps 1 to 6 is basically comparative and qualitative. Studying any of the landscape's features on all 6 levels or steps, helps to discover and communicate these levels. It is interesting to notice that such discussions exceed the purely technical dimensions of the landscape, leading the participants of the discussion to express themselves more personally, even individually on their concepts and perceptions of their landscape and the research methods used to explore it.

2.3. The affective domain of education

Regarding the *affective domain of education*, 5 steps can be differentiated, starting with a relatively passive / neutral "Reception" of the information to a state of involvement called "Characterisation" where one has become a representative of a chosen paradigm by identifying oneself with it. These 5 steps can be characterised as follows:

1. Receiving = from "untouched awareness" to "controlled attention" or "passive looking for repetition(s) of the event".
2. Responding = from "goody-goody compliance" to "satisfaction in joining".
3. Valuing = from "tentative acceptance of a value in a passive way" (OK, call me a student of landscape science) to "effective commitment to a value in an active way" (let me tell you how wonderful it is to be a landscape ecologist).
4. Organisation = from "ideal conceptualisation of a chosen system of values" to "harmonisation or integration of different complex value systems within one value system".

5. Characterisation = becoming a prototypical representative of a chosen philosophy of life, as a result of its complete internalisation.

Here, as in the case of the different steps in cognition, the first ones require the least personnel commitment, and, going from 1. to 5., the commitment with landscape increases, together with the incorporation or internalisation of the relevant landscape values. Thereby, the third level marks the important transition from being a more or less passive onlooker/outsider, to becoming a convinced participant/insider, through a process of gradual identification with the landscape. But, as this field or domain of affection touches the human being much deeper than the field or domain of cognition does, touching it in a less conscious, and therefore more vulnerable way, its elaboration is a much more sensitive matter than that of the cognitive domain. To be explored in a fruitful way, this domain requires mutual respect among those involved in practical engagement in the landscape.

However, often concern is expressed on the growing disengagement, the lack of interest and, in general, the increasing alienation of "modern" people with regard to landscape. Many point to the fact that all children and students are somehow influenced in their affective field by their tutoring staff. So there is no sense in denying, underestimating or suppressing this aspect of education, on the contrary. By giving it appropriate attention, this field of affection becomes more and more open for self-conscious and self-responsible management. It can be argued that an increasing clearness about one's own attitude towards landscape implies something like emancipation in regard of one's own affections and emotions. This emancipation, decreasing the dependency on uncontrolled emotions, does not at all mean a complete abstinence from all empathy (sym- or antipathy), but rather an increasingly clear awareness if its indispensable signalling function.

Here, it can be realised that, on the contrary, it is precisely the outsider/onlooker situation that leaves a person much more captive of, and dependent on, his own/subjective feelings, which thus tend to fail in supporting a clear, communicative relation with the "others". The implicit, non-communicable socio/emotional dependence of scientists in general was discussed earlier (Van Mansvelt & Kólster, 1990) as a counterproductive, irrational barrier against the acceptance and introduction of innovation in landscape (cfr. Miller, 1984; MacRae *et al.,* 1989; Van Mansvelt & Van der Lubbe, 1999; Pedroli, 2000).

2.4. The conative domain of education

Now we come to the *conative domain of education* (Bawden & Valentine, 1984) which refers to the implementation of a kind of knowledge, in a certain affective state, through handling, into the practical living landscape where doing is essential. Referring to literature (see Van Mansvelt 1990, 1992), several levels of autonomy in handling can be distinguished, ranging from the initial imitative acting, to acting out of a free fully self-conscious dedication to the landscape. These steps are defined as follows:

1. Imitation = On all levels of education, the first steps in handling/manipulation require an example to be imitated. Among adults this may be somewhat masked, but the example of trend-setters continues to act as a major incentive for action. In any case, *learning practice in practice* is still the most effective start, though still often neglected. Of old, apprenticeship started just here: "don't talk (so much), just look and do like I do". Here it should be noticed that, although the reflex-like urge to imitate is borne deep in the subconscious, the choice of whom to imitate in what aspects is basically determined by the inner structure, the personal sensibility of the student. With age and levels of education increasing, the "want to mirror" becomes more an option for explicit evaluation.
2. Handling = Whereas on the first level the example should be physically present to be continuously observed by the student/imitator, on the second level "skilful handling", a sequence of manipulations is available in the student, to be applied according to clear instructions. This level ranges from "dutifully adjusting

complex manipulation" to "personal concern for flawless performance". The example is present in the student's mind, imaginary but efficient. This level complies with the "mate/journeyman" in the old guilds, or the traineeship in landscape design and management offices.

3. Mastering = On this level, the craft or art is mastered, meaning that the student is now ready for independent self-employment after the outer authority has become sufficiently incorporated. At first this appears mainly as a freedom from outer control and interference. Subsequently a gradual transcendence into freedom for individual motivation may develop, based on increasing experience and a widening world-view. Here the development of the "master" starts, where supervision may still be adequate.
4. Engagement = Once experience is gained in autonomous mastering, the challenge might be to perform increasingly creative, perfect and outstanding in the profession itself. This demands an ever-increasing engagement with and into the relevant landscape(s). At the same time, the socio-cultural conditions (and constraints) of the landscape development become more and more obvious, leading to increased engagement with other people, team-work, teaching, lobbying and harmonising. Fine-tuning of the individual capacities and performance to those of the colleagues becomes predominant over individual acts. On this level intervision is a tool to warrant ongoing self-education, e.g. in professional organisations.
5. Dedication = Continuing the development of the motorative-conative capacities as indicated above, it becomes more and more possible to act according to the demands of the situation as a whole: eco-environmental, socio-economical, and cultural conditions of landscape development are now fully taken into account. Appropriate identification with the essence of the chosen landscape leads to convergence of the own interests with those of the partners at stake: human and natural, individuals and entities. The responsible and self-conscious individual gradually replaces the self-centred ego.

In the sequence presented above, the level of pure motoration gradually transits into conation, as the amount of consciousness and effective responsibility on all actions, gradually increases with the years of individual, autonomous experience. Where the discussion on education of the affective domain was already obviously at stake in recent decades, the explicit education of the conative domain is essential for the century we now live in. The famous French philosopher (also minister of cultural affairs) André Malraux stated in the mid-eighties of the previous century: the 21st century will be the century of ethics or it will not be at all. Just like before, here again it must be argued that by not explicitly including this realm into educational objectives, and be it only provisionally, can no more be justified once one recognises that implicit ethics are incompatible with human emancipation. The success of this type of education will be reflected in the landscapes of the 21st century.

Using the degree of emancipation and internalisation of the cognitive, affective and motorative-conative capacities as a key to their comparison, Table 1 gives an attempt to integrate them.

Table 1: Scheme of the steps in three psychological domains of human education

Domains → *Levels↓*	*Cognitive domain*	*Affective domain*	*Conative domain*
Pre-emancipatory levels: emphasis on Staff-initiated education ↓	1. Knowledge	1. Receiving	1. Imitation
	2. Comprehension	2. Responding	2. Handling
	3. Application	3. Valuation	3. Mastering

of learning ↓ Emphasis on student-initiated learning on the post-emancipatory levels	4. Analyses		
	5. Synthesis	4. Organising	4. Engagement
	6. Evaluation	5. Characterisation	5. Dedication

It must be stressed that a scheme like this should not be taken as a strict, one-way, exclusive approach. It is meant as a tool to increase the awareness of gradients in the process of learning, as a tool for understanding various levels in learning. This could structure human resource development education and training in such a way that it includes teaching both *theory* and *practice* in a way that includes the training of the *affective* domain. Especially the latter domain is important in landscape awareness, while concerning the *real* landscape of section II.2.

II. INTERACTING DIMENSIONS OF LANDSCAPE

1. Landscape, a young concept for understanding and for management

History of art shows that landscape has been a beloved subject of pictorial study since the renaissance. But the awareness that landscape is something that needs care has only recently developed (Zehnter, 2000). The self-evidence of the landscapes as depicted by painters until the 20th century has given way to a growing public concern for the quality of our European landscapes that do not develop any more in a self-evident way. How can this concern be transformed into activities contributing to a responsible planning and management of landscapes? How can methods for landscape analysis and tools for landscape management be made compatible with the landscape demands of society? To be able to answer these questions within the perspective of awareness raising and training, we first explore some conceptions of landscape, defined by the European Landscape Convention as:

> *"a zone or area as perceived by local people or visitors, whose visual features and character are the result of the action of natural and/or cultural (that is, human) factors. This definition reflects the idea that landscapes evolve through time, as a result of being acted upon by natural forces and human beings. It also underlines that a landscape forms a whole, whose natural and cultural components are taken together, not separatel."*.

2. The factual, the right and the real landscape

The concept of landscape includes several dimensions of reality (Jacobs, 2002):

– The *factual* landscape as object can be described and quantified in a cognitive and scientific way. It is the domain of geographers and landscape ecologists, integrating a wide range of natural sciences, and of civil engineers using this objective knowledge to guide their construction and management activities in landscape.

– The *right* landscape is the inter-subjective landscape on which we have opinions and to which we can attribute values. It is appreciated or depreciated, depending on the criteria as agreed upon within specific groups related to the landscape. In fact the word landscape in its German (Land*schaft*), Dutch (land*schap*) or Swedish (land*skap)* expression refers to the organisation of a group of inhabitants. The right landscape is the domain of action groups and NGO's, but also of politicians. It is studied by social scientists and forms the arena for those developing the social constructions that determine the future of the landscapes.

– The *real* landscape is the subjective landscape with which we have a personal connection, and which always plays a role on the background when speaking about landscape. It is the landscape of our youth, or the landscape for which we are ready to invest our spare time in practical involvement. It is described by painters and historical geographers, but is also the basis for our

personal behaviour in landscape and for the artistic design of landscape architects. It is the landscape fully experienced as a whole.

Awareness raising primarily concerns the third dimension of landscape, the *real* landscape, which has long been neglected in science and policy ("facts are facts, perception is reality", Pinto Correia, 2002). The European Landscape Convention addresses explicitly this dimension, taking objective and inter-subjective concepts as starting points. Training and education in landscape appraisal and operations should consequently address all three dimensions.

PAGONY, AN INITIATIVE CARING FOR LANDSCAPE BETWEEN MAN AND NATURE

The Pagony Studio for Landscape and Garden Architecture was established in Budapest, Hungary, in the early 1990s, encouraged by István Kálmán. Pagony is active elaborating ways to merge landscape phenomenology and ecology with the actual social structure of the place in its historical context. Individual initiatives, ideas and efforts are integrated into a landscape that is sustainably designed, maintained and continuously developed by a community living in that landscape.

Landscape is a living organism, a creature with its own character, identity and history. Approaching nature from this point of view helps to develop a personal relationship with the roots of the place, also in the design process with local governments and private owners. The creation of a five-village forum in the Dörögd basin is a good example, bringing together the farmers, local governments, environmentalists, hydrologists, ecologists, historians, etc. and making them consciously share their preferences, objectives and points of view.

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3. The natural, the social and the cultural landscape

3.1. Motivation, a key for linking scientific disciplines

When "Babel of tongues" arises among representatives of different disciplines involved in landscape, perhaps a simple consideration could lead to a common understanding. This simple consideration is that all disciplines of all sciences have their roots in human beings that tried to understand a particular aspect of the world they share with their fellows. So in the end even the most sophisticatedly specialised disciplinary knowledge refers back to the world shared by all humans and nature. Human needs, human motivations, human interests are the starting point as well as the ultimate goal of sciences and the technologies derived from them (Maslow, 1970). And as stated above, the landscape reflects the complex human motivations interacting with nature, which are based on the satisfaction of man's needs, according to man's appreciation and the available technology now and in the past.

The human motivations range from those centred in the somatic organisation (body), via those centred in the psyche (soul) to those of the mental potential (spirit). In this sequence they primarily connect the human being to the natural ecosystem environment (man to nature), to the social environment (human to human) and the cultural environment (human to inner-human or humane). Figure 1 gives an overview of these interacting motivations.

Discussing landscape planning and management in the perspective of the sustainable development of man and nature, it is crucial to be aware of the priorities among these motivations. As Maslow points out, the primary needs are those to keep the body alive (water, food, shelter), followed by those of the social survival (a position in society and preferably also recognition). Only when these "lower" needs are sufficiently covered, the inner or spiritual development can come on. However, at the same time, Maslow stresses that the ultimate humane motivation is the development of the inner individual potential, or the individual's hidden program (Cornelissen, 1998). So in the human being

and thus within society, there is a built-in polarity between the basic needs and motivations versus the ultimate needs and motivations. When stressed, this polarity becomes a paradox, although it can also be seen as a sequential gradient. In between the two a manifold of tradeoffs can be found in two opposite directions. One is covering the social and psychological needs with increasing quantities of luxurious food and housing (materials) or covering the needs for spiritual development with socialising. This could be called a downward trade-off. The upward trade-off would then be to accept simple living conditions and a lower salary in order to have more time for the social life. On the next level this could mean to limit socialising in order to make time for inner development (concentration, contemplation, meditation). Far from advocating a fundamentalist approach to these trade-offs, it is deemed crucial to identify them and include them in education and training.

This reflection on the way society and we handle our motivations is particularly relevant when the shift to a sustainable development of the rural landscape is at stake. A shift that requires turning from maximum tolerable consumption levels to minimum required consumption levels of all limited resources (Van Mansvelt & Van der Lubbe, 1999). Especially in the monetary rich countries, the perspectives for a change to sustainable development of landscape as the basis for human livelihood should be taken serious (Daly *et al.*, 1990; Perlas, 1999). This again is a key issue for education and training toward our common future.

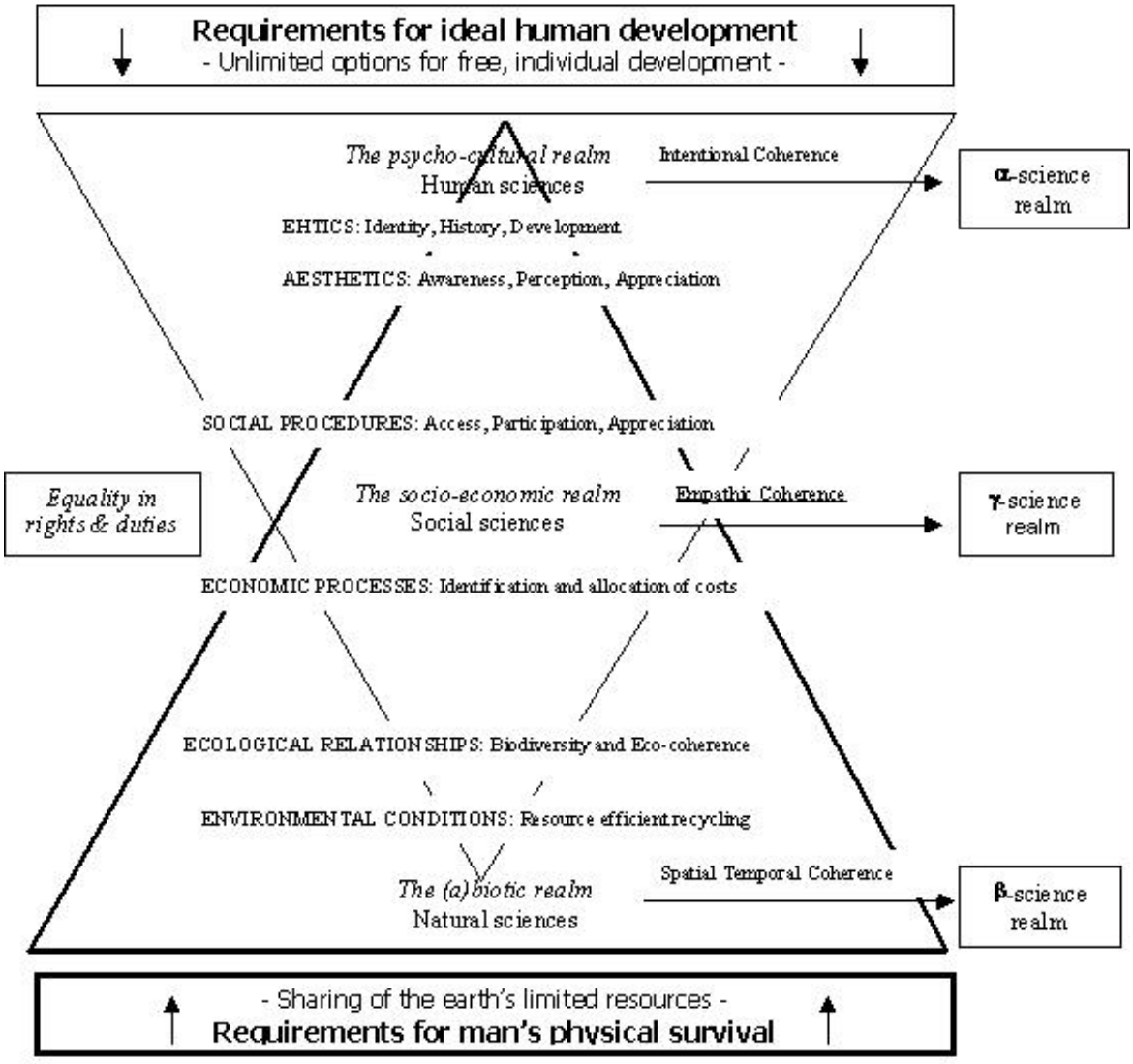

Figure 1: Maslow's triangle adapted to show requirements for physical & ideal development (from Van Mansvelt & Van der Lubbe, 1999)

3.2. Disciplines in context

Besides as a key for prioritisation, Figure 1 may help to value the contribution of the various disciplines, each with their major strong points and minor weaknesses, in context. They actually need one another, each often presuming that the other sectors stick to *business as usual* when proposing their sector's best disciplinary solution to solve the problem perceived as part of their sector's responsibility (Tress *et al.*, 2001). Environmentalists "own" the environment, ecologists "own" the ecosystems, economists the economy, sociologists the human interactions. In contrast to older strategies that argued in favour of the Machiavellian *"divide and rule"*, for the design and implementation of sustainable development it may be wise to go for *"relate and serve"*. This would mean facilitating the introduction of various disciplinary fields of expertise into interdisciplinary teams, starting in education and training. This facilitation would however require quite a revision of academic and governmental policies and cultures (education, professional ethics), appreciating interdisciplinarity and even transdisciplinarity in a much more proper balance to disciplinarity, and not least in terms of editorial policy, careers and salaries (Tress & Tress, 2001).

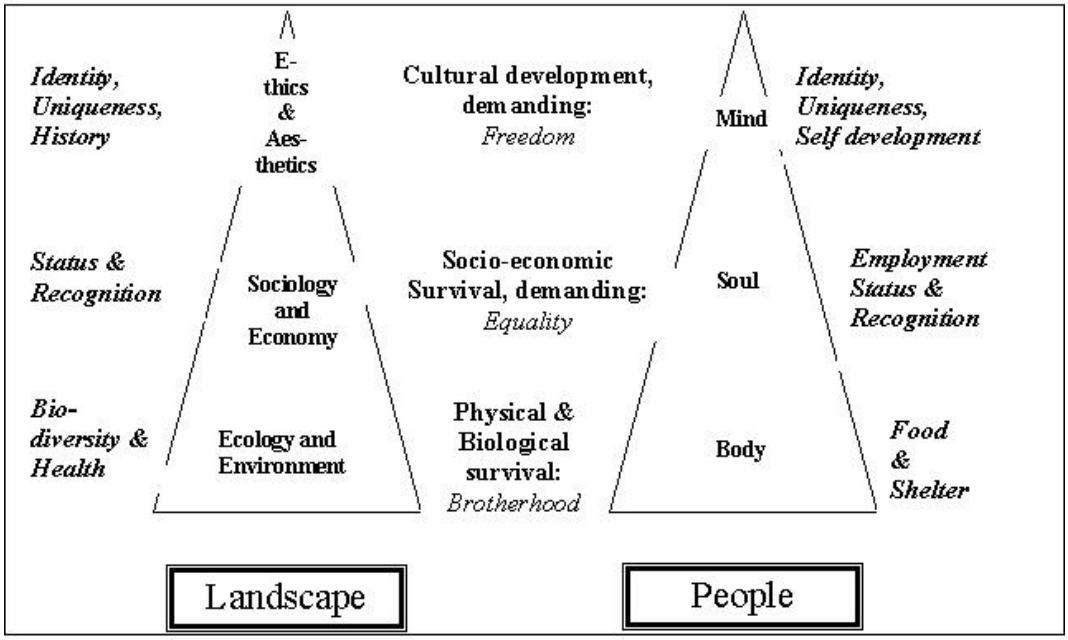

Figure 2: Links between the needs of Landscape and People (Van Mansvelt, 2001)

Figure 2 shows the application of the idea that "landscape reflects human needs" as proposed. Here, in addition to the previous figure, the needs of people and those of the landscape are presented in two separate triangles, each representing the double triangle of Figure 1. In the concept of both, people and landscape, identity is at stake as an integrating essential principle. Both types of identity, though different in origin, demand respect, (historical) understanding and commitment to be managed in a way that is aesthetically, ethically and ecologically sustainable on the long run (Bockemühl *et al.*, 2000; Spiegler, 2002). Here it may be useful to look at ways to perceive systems and or organisations that are experienced as having an identity.

4. On identity, character, culture and physical appearance

4.1. A comparison between landscape, companies and people

With regard to *landscapes* people talk about "*genius loci*" (the spirit of the place, see Antrop, 2000), but also about the character of the landscape (the complex of rural, urban, modern, traditional, natural and cultivated, poor and rich, etc.). Here the character refers to a set of values, an overall quality, whereas the identity refers to the individual uniqueness of this or that rural, forest, urban, seashore or remote mountain landscape. Identity is indicated by a name, character refers to an image. Two other realms of landscape can be discerned: the level of the ecosystem or organism wherein the various species interact in many ways with the environmental conditions in daily, seasonal and annual development cycles. Pollution, reclamation, restoration, reforestation and the like are processes occurring within the landscape as an organism. Human building activities or roads, houses, factories, theatres, schools, waste recycling stations etc. figure in that same level that represents the "living" body of the landscape. And finally there is the level of the landscape as a measurable, touchable, physical result of the development processes that bring it about.

Now, what is interesting is that in the language of management and organisation development, similar levels of existence of *companies* can be found. There first is the corporate identity for the name of the company: its unique being. Then there is the character of the company, the image that it radiates to the consumers, the competitors and, last but not least, to the perception of the own staff. The identity is invisible as such, but appears in the outside world in the forms, colours, sounds etc. of its label, designed by the PR section that has chosen to radiate the company's character as the most attractive and impressive one. Then there is the layer of procedures, processes, and organised actions: business as usual, "the way we work" or "the habits of the company". Some will call this the culture of the company. And finally there are the physical features of the company's housing, transport and the company's products. It will be clear that this is a rather rough description, which should be specified according to the products of the company: food, shoes, electronics, courses and lectures, consultancy, regional infrastructure etc. But as a basic set of layers, each with their specific features, it can definitely serve increased understanding.

Finally, also in *people* such a differentiation can be made. The identity of the individual reflects the person's essence, his ego or "I" with its inherent potential of transformation. Then there is the person's character, the way he or she appears and is perceived by the others in his or her performances toward the outer world. The character reflects the value system that it represents, the groups that it complies to etc. And then there is the level of physiological processes underlying and supporting the individuals' psychology in the so-called psychosomatic interactions. Here health and disease, growth, ripening and ageing are at stake, with their counterpart-processes in the psyche. And then at last there is the physical body that carries and reflects the other levels.

4.2. Landscape: an instrument for human development

The landscape's *genius loci*, the company's corporate identity and the human "I" can be compared in the sense that they represent the essential factor determining the way the being is and develops. The landscape's character, the corporate image and the human psyche carry the identity allowing it to communicate with the others. The landscape's organism, the corporate culture and the somatic organisation of man allow the inspired souls to incorporate into the physical reality, changing it in a range of ecological, technological and metabolic processes. Finally, each of them can also appear as "static for the moment", as a materialised end product of the three other activity levels.

For the human organisation, notably in its inherent social context, it can be argued that individual freedom of development is crucial, and each individual has his or her own responsibility to structure that development according to his or her own potentials and intentions (Budd, 1979).

Similarly, it can be argued that each individual has his or her needs for food, shelter, housing etc., the physical needs for survival. Only, whereas in the sphere of psycho-spiritual development there are unlimited options for everybody to study, sing, meditate, dance, create (provided that hunger and danger are limited), the physical resources of the earth are limited and demand for a fair sharing according to each' individual's real needs for survival.

So, as all individual organisms and organisations are unequal on their level of identity as well as on their level of physical life, yet living on one and the same earth in a certain period of time, it seems clear that a fair way of decision-making is needed on sharing. Here a system of equal rights and duties is needed to balance both inequalities in such a way that the limited resources are shared according to each individual's personal needs for survival and development, and that each individual's personal needs for spiritual development are allowed and facilitated to flourish.

Companies and landscapes are in this view instruments for human development: physical, psychological and spiritual, as well as the results of those developments. It may be clear that unless education and training manage to open up the students' minds and hearts for such notions as presented here, a focus on reckless competition for limited resources of all against all, inevitably brings about unlimited fighting for survival, hidden in whatever rational reasoning and diplomacy. Landscape is already showing the signs of this competition.

4.3. Complementarity of research methods

Regarding the different routines, paradigms and opinions present in each discipline, major research instruments for each of the indicated fields of academia can be identified. For the human sciences the important awareness of ultimately individual experiences should be mentioned, that of course can be shared among mutually interested people. Here, paradigms, religions, arts, and stories are objects of observation and research. For the social sciences the crafts are crucial, as well as their validation in an essentially participatory context, whereas in the natural sciences research is focused on a detached, "objective" position, relying on analyses, calculation and statistics to assess the object's relevance.

Here again, education and training should contribute to the awareness of the relevance, including the strong and weak points of the various research traditions, and how they can be extended to fit today's demands for compatible integration of the disciplinary knowledge systems.

5. Compatibility of landscape perceptions

Summarising the above concepts related to landscape in their mutual compatibility, the following scheme of interacting landscape dimensions can be presented (Table 2). This scheme is an attempt to bring together compatible points of view on the landscape as a whole, as a basis for systems of landscape education and training that comply with the holistic approach of the European Landscape Convention.

Table 2: Summary of scientific concepts and landscape dimensions

scientific and social principle	***area of primary validity***	***appropriate norms derived from***	***relevant dimensions of landscape***	
Ethics **<u>People</u>** **Human Sciences** Freedom: exploring	Essence Ethics (incl. feeling and thinking)	Paradigm / Religion, Arts, Stories	identity character	Real landscape

the unlimited options	Aesthetics			
Economy **Profit** **Social & Economic Sciences** Equality: balancing the rights & duties	Appreciation Thinking & Feeling Production	Participation Crafts, Validation	organisation	Right landscape
Ecosystem **Planet** **Natural Sciences** Fraternity: sharing the limited resources	Thinking Ecology Environment	Statistics Calculation Analysis	physical appearance	Factual landscape

III. PRACTICAL CONSEQUENCES

1. The power of examples

Many examples already exist where local communities have taken initiative to organise landscape management. Text boxes in this paper give an impression of some examples, arbitrarily chosen from the information readily available to us. In a next version of this paper a more complete picture may be given on the basis of a survey of the Council of Europe Member States.

Region-specific products of agriculture and local traditions appear to enhance the identification of inhabitants with their landscape. Visitor's centres and promotion campaigns attract tourists and thus enhance the economic basis for landscape development. But most effective is still the involvement of citizens in the operations of maintenance and transformation of landscape. Increasingly, these citizens will have an urban style of life and feel responsibility for the development of landscape in a non-conventional way, since the traditional agricultural basis of landscape formation has over large parts of Europe lost its effectiveness.

In awareness raising, attention for the effects of landscape degradation should always be accompanied by examples of how landscapes can develop their identity as living landscapes with region-specific values, carried by local communities. The Landscape Award should play an important role in identifying such examples (see II.2.4.). But also exchange of experiences and ideas between landscape initiatives, for example by setting up a web site of active landscape groups, would enhance the success of campaigns for informing and educating the public. It would be desirable to develop a well-illustrated handbook on landscape management in Europe, on the basis of examples of successful initiatives for landscape management.

2. Basic information needed on relevant parameters

Knowledge management and availability of basic data (including an efficient clearing house function) are not only a prerequisite for awareness-raising, but also crucial for education and training in landscape appraisal and operations. Only based on good information is it possible to develop methodology for landscape typology, management and planning (Wascher and Jongman, 2002; Van Mansvelt & Van der Lubbe, 1999; Andrade, 2000). Special attention should be devoted to methodology that allows for European compatibility and at the same time encourages local diversification (Wascher *et al.*, 1998). In many countries methodology development has already started and it would be good to co-ordinate these developments as far as possible under the umbrella

of the European Landscape Convention, to allow common objectives of education and training to be defined. Here again there is the challenge to merge the general knowledge & standard setting with the appropriate diversification that respects and even supports the development of the local and regional particularities (identity).

CRANE'S HOMELAND
Every year in autumn, thousands of Cranes gather on the agricultural fields and peat bogs near Tandom (in the north of the Moscow Region, Russia) on their migration southward. The large diversity in land use also attracts many other rare animal species. Since a large co-operative of natural and cultural heritage organisations takes care of the sustainable development of this cultural landscape, the area is increasingly being acknowledged as a valuable landscape by citizens and authorities. Large scale reclamation of the remaining peat lands could be inhibited. A visitor's centre (Ecocenter Crane's Homeland) has developed which is very active in organising educational camps for local and Moscow school children, who can participate in practical landscape management activities.

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IV. TOWARDS ACTION

1. Questions and preliminary answers

In the Workshop on the theme of Public Awareness, Education and Training in May 2002, the following themes of discussion were introduced and preliminary answers to the posed questions were formulated. There was a common readiness to start action in the sense of preparing to co-ordinate the activities already going on under the umbrella of the European Landscape Convention. As soon as the Convention will come into force these preparations can be implemented.

1.1. Awareness raising

– *How to develop a collection of examples of landscape initiatives throughout Europe complying with the intentions of the European Landscape Convention? This collection may later be integrated in a web-site for the Convention?*

- check web-sites of the projects;
- ask the states to include examples of good practice in their submission to the web-site
- start with something already existing: ECLAS will ask their partners in landscape
- maintenance, provided the relevance is clear;
- at ICOMOS Paris a good database exists of landscape projects which can well be consulted;
- also the European Pathways project will check their contacts.

– *How to optimise the structure of the ELC web-site?*

- do research comparing existing, comparable web-sites;
- for 'normal" people make it more attractive, include pictures etc.;
- language: for wide use you need a wide language policy.

- *How to develop an inspiring book for landscape management with fine examples of good practice, paying attention to the territorial culture founded on the relationship between individuals and territory, linking it with the human rights aspect and with the consideration that landscape does not fulfil purely material but also spiritual interests?*

- a lot of books already available; review would be useful;

- such a book should be well-illustrated at any rate;

– *How to survey curricula for school children and for adult environmental education (including action camps in concrete landscape initiatives), enhancing the notion that the local population are the landscape experts most important for sustainable living landscapes of the future?*

- Austria: experience exists with a 10 years program of cultural landscape research including co-operation with schools;
- distinguish between school and post-secondary school education; focus also on innovative approaches, not only official normal curricula.

– *How to promote broadcasting and publication programmes supporting the intentions of the Landscape Convention?*

- Norway experience (cottages on coastline): awareness raising using media, giving journalists the job to develop strategy;
- suggestion: Universum TV series (Austria + Germany) to be approached to refer to ELC.

ITINERARIES "PEOPLE AND LANDSCAPES"

The Royal Belgian Geographical Society has developed more than 30 one-day itineraries (Hommes et paysages) *described in brochures to get acquainted with the landscape in an intelligent way and far from the banal tourist exploitation.*

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1.2. Training

– *How to develop curricula for interdisciplinary specialist training including landscape quality objectives?*

- EFLA (European Federation of Landscape Architects) have already established good experience with this sort of training; should just put into action for whole Europe;
- ICCROM course in Rome December 2002;
- ECLAS' aim is to co-ordinate landscape (architecture) education schools;
- Take care of also properly including landscape approach in uni-disciplinary training curricula like civil engineers;
- PETRARCA training weeks (2002: Elsas);
- many other institutionalised training initiatives to be listed.

– *How to survey, document and build upon training experience developed with NGO's active in the field of landscape?*

- ECOVAST published guide of practice on Landscape identification (Spiegler, 2002);
- Many small-scale initiatives to be listed.

– *How to organise international secondments to exchange experiences of officials between states?*

- Refer to Art. 8b of the Convention;
- No examples referred to yet.

1.3. Education

– *How to survey existing landscape education courses and promote exchange of ideas?*

- ECLAS ready to serve as starting point, since for landscape architecture a beginning has been made;
- LANDSCAPE EUROPE is ready to consult its network;
- IALE (International Association of Landscape Ecology) has recently initiated many activities in Europe, including MSc and PhD courses.

– *How to organise a network of university lecturers with the aim to promote the co-ordinated education?*

- ELC invited to ECLAS to discuss.

2. Implementation

The suggested actions as an answer to the questions posed in the previous section are promising. However, to guarantee a wide support among the member states, the readiness among the states and the relevant NGO's should be surveyed to act as process-owners for the actions defined. Once again, a start could already be made with an inventory of what activities already take place, which comply with the intentions of the European Landscape Convention.

To enhance further co-ordination of these activities under the umbrella of the European Landscape Convention, special funding should be made available. In the previous section many concrete suggestions are listed, that – even with limited resources – would already greatly stimulate the implementation of the Convention. Judging from the discussions in the Workshop in May 2002, several states would be ready to already make a start with working towards a common strategy in public awareness, training and education related to the Convention. It is hoped that in the 2nd Conference of the European Landscape Convention in November 2002, concrete steps can be taken.

AGRICULTURE AND LANDSCAPES
On the initiative of 6 farmers and 3 municipal delegates, concerned with the degraded cultural landscape encroached by forest in the Thur-valley around St.Amarin (Elsas, France), the Association Agriculture et Paysages *was founded in 1996. After 6 years, the association consists of 30 farmer-members working about 1600 ha of commons, and several municipal delegates. It employs two officials and three specialised landscape management workers for the assistance of all farmer-members. The association has returned into meadows more than 600 ha of overgrown land and takes an active role in organising public events like farmers' markets. Specific races of domestic animals (cattle, horses, goats) are bred and local products are successfully marketed. Much of the actions involve both farmers and local citizens, and the farmers are partly compensated for their landscape management efforts by local, regional, national and EU authorities partly through agri-environmental regulations. The association also plays a central role in the implementation of the district landscape plans within the framework of the Regional Nature Park Ballons des Vosges.*
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V. SYNOPSIS: THE EUROPEAN LANDSCAPE CONVENTION, A PARADOX?

The Landscape Convention seems to be characterised by the inherent paradox of providing *common* European guidelines for a *diversified* management of European landscapes.

It is a challenge for those concerned with the future of the European landscapes, to bypass this paradox by strongly encouraging facilitation from above and by enhancing involvement from bottom-up, which should be crucial elements in public awareness raising, training and education:

– base targets for landscape development on natural processes: know your *factual* landscape;

– develop awareness that landscape identity is and should be a reflection of current cultural processes: discuss the *right* landscape in the local community;

– achieve quality in the landscape by public involvement: act in your own *real* landscape on the basis of co-ordinated personal concern.

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