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## Towards a theory of the landscape: the Aegean landscape as a cultural image

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### Abstract

Seeking to contribute to a theoretical and analytical approach to the study of landscape, this essay offers directions for integrated future research that combine quantitative with qualitative methodologies towards the ultimate goal of landscape planning and policy implementation. Towards this goal, this paper represents an attempt to apply concerns about landscape theory and appropriate methodology on landscape form, function and meaning by delineating a framework of analysis for the Aegean landscape of Greece. Such a challenging goal, however, undertaken here through critical geographical perspectives, should rather be approached on a transdisciplinary basis. The plethora of processes of action and interaction among the various components of a landscape dictate that there are almost no methodological frameworks and tools that are irrelevant to in landscape study, planning, use or policy implementation. If one focuses on characteristics distinctive to the landscape context, however, such as the visual–cognitive–experiential interface and biophysical–human interaction in the landscape, the beginnings of a theory of landscape as a stage set for human life may, thus, be established.

On this basis, a conceptual framework for contemporary multifunctional landscapes is first proposed to serve as a basis for the development of an analytical framework. The case study that follows focuses on the construction of the Aegean cultural landscape, aiming to illustrate and begin to apply concerns and approaches presented in the theoretical part of this study. Aegeanity is first negotiated in theoretical terms on the basis of its distinctive geography, scale and cultural meaning, encompassing landscape characteristics and relationships as presented above. As concerns Aegean landscape analysis, goals and criteria of assessment are interwoven into appropriate methodological schemata and examples of this work presented accordingly. © 2001 Elsevier Science B.V. All rights reserved.

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... Then he spoke and the sea was born  
And I saw and marveled  
And in its midst he sowed small worlds in my image  
and likeness:  
    Steeds of stone with manes erect  
    and amphorae serene  
    and the slanting backs of dolphins  
Ios, Sikinos, Serifos, Melos ...

... And ample the olive trees  
    to shift the light through their hands  
    as it spreads softly over your sleep ...  
... but sparse the water  
    that you may hold it a God  
    and understand the meaning of its speech  
and alone the tree  
    without a flock of its own  
    that you may take it for friend  
and know its precious name  
sparse the earth beneath your feet  
    that you may have nowhere to spread root

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but must reach for depth continually  
 and broad the sky above  
 that you may read the infinite yourself  
 THIS  
 small, this great world!

Odysseus Elytis, 1974

## 1. Introduction

International, and especially European, interest in landscape, landscape values and methodologies of landscape analysis and assessment has grown in the past few years, calling for government action to evaluate, protect and enhance the quality of landscapes at the local, regional, national and international levels (Klijn et al., 1999, p. 12). Concerted efforts towards these directions are taking shape at a slow pace for various reasons. First, there is considerable disparity in the landscape concept and experience itself. There also exists a lack of standardization on analytical methodologies among landscape scientists “caused by the ambiguity of the phenomenon of landscape, which originates from the developed analytical systems of the brain” (Aoki, 1999, p. 91). Attempts to collect, classify and store data on European landscapes, identify landscape values and design a method to operationalize these in spatial planning have so far been unsatisfactory in terms of spatial resolution, the use of digital data, transparency and relevance to policy making and decision making (Klijn et al., 1999, p. 12). The applicability, therefore, of these or other techniques or approaches to landscape analysis, assessment and planning is still unclear. Meanwhile, distinctive versions of multifunctional landscapes, old or new, have been increasingly vying for recognition, promotion or preservation, making the call for a return to the study of the landscape imperative.

From a geographical perspective, landscapes, as complex realities, exist in historical time, and thus, tend to exhibit special identifying features; they function as systems of energy, material and information flows interwoven in real, perceived and symbolic ways. They represent material constructions which are reflective of the basic organization of society

and economy, and thus, they may be read rather like texts (Meinig, 1979; Cosgrove and Daniels, 1988, p. 1). In fact, they constitute “intertextual sites” which support unquestioned assumptions about the organization of society and culture through the naturalization of particular readings from particular positions (Norton, 1996, p. 358). In other words, they are articulated on the basis of a synthesis of various discourses; the term textual is especially apt here since it emphasizes the legibility of landscape as expressed through its visual and representational qualities. The relevance, thus, of a cultural understanding and interpretation of changing geographical schemata of changing economic, physical as well as social, relations becomes direct and central in the case of landscapes as spatial units of human life and activity.

Although all-encompassing theory may no longer be as sought after in contemporary social sciences as in the past, the fact that no integrated, comprehensive theoretical and analytical frameworks, have been thus, far formulated that adequately address landscape study, assessment and planning has been, in many regards, debilitating. Moreover, the plethora of processes of action and interaction among the various components and functions of a landscape dictate that almost all existing theoretical frameworks of analysis, as well as methodological tools, have some application in landscape study, planning, use or policy implementation. If emphasis is focused, however, on characteristics distinctive first to the landscape (landscape as a concept), secondly to the particular geographical context (landscape as a construct) and thirdly to the objectives of the study or planning initiative (landscape as a goal) as articulated in landscape production and reproduction, the building blocks of a landscape theory may, thus, be established.

Seeking to contribute towards theoretical and analytical approach to the study of multifunctional landscapes, this essay begins to negotiate a framework of analysis for landscapes, one in which theoretical concerns, goals and other considerations such as scale, criteria of functionality and so on are interwoven into appropriate methodological schemata. A conceptual framework for contemporary multifunctional landscapes is first proposed to serve as a basis for the development of an analytical framework. The case study that follows focuses on the construction of the

Aegean cultural landscape, aiming to illustrate and begin to apply concerns and approaches presented in the theoretical part of this study. Far from proposing a comprehensive, sophisticated approach of systematic data collection on all aspects of present-day landscapes, the objective is to offer directions for integrated future research that combine quantitative with qualitative methodologies towards the ultimate goal of landscape planning and policy implementation.

## 2. Landscape: the concept

The forthcoming discussion is based on two assumptions, that all landscapes are multifunctional and that all landscapes are cultural—being best understood contextually and historically—although the degree to which these qualities characterize each landscape varies in neither related nor comparable ways. With regard to multifunctionality, one immediate outcome of ongoing trends of time-space compression, the disruption of temporal and spatial barriers and the explosion in movement and intermixing in the western world has been great fragmentation, differentiation and complexity both between and within what formerly used to be more distinctive and homogeneous landscapes. These newly-reinforced landscape characteristics refer both to the physical geographical and equally to the human geographical components of place or landscape and require integrated sustainable management.

The cultural landscape, the essential object of this essay, is traditionally defined through the perspective of the discipline of geography which originates in the Sauerian notion established by the Berkeley or Landscape School of Geography as “a perceived segment of the earth’s surface”. This definition draws on the ancient geographical tradition of chorography, the study of the ways in which landscapes bring together in unique patterns both physical geographical and human geographical processes. Sauer (1925) argued for a science that inquired about how individual landscapes came to take on their shapes and for an analytical approach that would be rigorous, objective and based on observation, but “whose end result would never become some general law explaining all outcomes” (Crang, 1998, p. 15). His ideas on people–land relationships in the landscape were

widely professed by subsequent generations of geographers while few other attempts were made towards a broad theory of landscape from a geographical perspective, with the exception of Appleton’s (1996) prospect-refuge schema of landscape evaluation, derived from animal predators behavior theory.

While the Sauerian landscape tradition of artifactual analysis and culture history continues to flourish in the United States, it has been significantly complemented since the 1960s by W.G. Hoskins’s studies of English landscape history and J.B. Jackson’s numerous books of essays on the meanings of the American landscape. These traditional perspectives to landscape analysis were later challenged through questions about social power, the role of human agency and various other agencies, forces of change and issues of interconnectivity, leading to the formulation of a multicultural basis in the perception and study of landscape in geography (Terkenli, 1996). During the 1980s and early-1990s in specific, the New Cultural Geography established the application of social and cultural theory to landscape interpretation through focused ideological concern about socio-cultural and political processes both shaping and acquiring shape in the context of the landscape. Since, the cultural landscape has always been one of the basic units of analysis in geography, this multicultural landscape perspective refers not only to multifunctionality in the landscape, but also to multiformity, multitextuality, multivocality, multisemity and so on. Furthermore, the cultural landscape has never ceased to be conceived or analyzed by the discipline of geography in its natural medium, its physical geographical setting—as the word ‘landscape’ itself establishes in the first place.

Implicit in the geographical definition of landscape as emerges from the previous paragraph, as well as in the philosophy of the proposed approach, are variable perspectives of specific geographical contexts, intricately connected with distinct social and environmental meanings and relations as understood and inscribed in place. The geographer Cosgrove (1998b), accordingly, recently redefines landscape as “a way of seeing”, rather than as a scene or an image. Implicit in this definition and landscape philosophy are questions of signification, decodification and operationalization of the ways and arrangements whereby landscapes are both materially and perceptually constructed; ways

through which the experience of richly textured landscapes finds its way into other cultural forms and processes, as well as ways in which discursive and ideological struggles over place are played out in concrete physical settings and many others, much complicating and enriching the analysis of landscape as a concept and as a construct.

In the attempt, then, to reconstruct, by first deconstructing, landscape as a concept, we return to the original, 300-year-old definition of the cultural landscape as “a portion of land which the eye can comprehend at a glance” (Jackson, 1984, p. 3), as a visible expression of the humanized environment perceived mainly through sensory, and particularly visual, as well as cognitive processes; a medium and an outcome of human action and perception. These three interlocking facets or aspects of the landscape (Fig. 1), the visual, the cognitive and the experiential may alternately be theorized as form (the visual), meaning (the cognitive) and function (biophysical processes and invested/articulated human experiences), highly inter-related and interactive. All three of these landscape facets are shaped by both biological laws and cultural rules, interpreted and applied on the land through

(inter)personal strategies. They consequently vary in time, space and social context.

Landscape analysis must, accordingly, follow widely varying methodologies, thus, becoming a greatly challenging, inherently transdisciplinary task, addressing a wide variety of landscape functions, forms and meanings (Fig. 1). Specifically, in our case, questions of representation and representability, and, more peripherally, questions of landscape formal character and identity refer to the visual or morphological dimension of the landscape, as well as to the cognitive and sensory dimensions through concerns of imageability, (inter)legibility and perceptibility. The former require cartographic/GIS, formalist/morphological, photographic, aesthetic, iconological, or other such methods of analysis (Gunn, 1979; Lindsay and Mittman, 1979; Jakle, 1987; Taylor, 1994; Hatzistathis and Ispikoudis, 1995; Clay and Marsh, 1997; Thorn, 1997), whereas the latter necessitate semiotic, cognitive, psychological and hermeneutic methods of analysis (Stefanou, 1978; Eleftheriadis et al., 1990; Tsigakou, 1991; Vouza, 1997; Cosgrove, 1998a). The third dimension of the cultural landscape, the experiential or functional, combined with the cognitive,

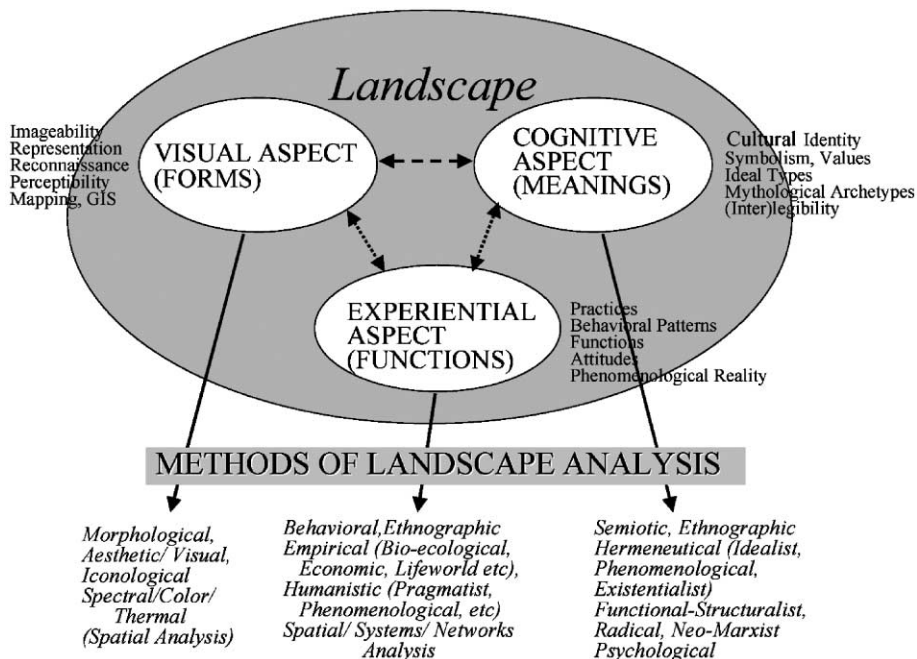


Fig. 1. Landscape aspects and methods of analysis.

becomes the means and product of landscape dynamism, sustainability, as well as (in conjunction with both of the other dimensions) landscape symbolism, ideology and place identity. In accordance with the particular landscape functions and goals of the study, behavioral approaches, humanism (specifically, existentialism or phenomenology), post-structuralism or biophysical and ecological systems analysis as well as other empirical methodologies (Jackson, 1984; Cosgrove and Daniels, 1988; Legakis et al., 1993; Naveh and Lieberman, 1994; Rackham and Moody, 1996; Buttimer, 1998a; Klijn et al., 1999; Terkenli, 2000) generally become especially relevant to the analysis of this dimension or landscape aspect.

Given that the list of approaches and examples of application suggested above are indicative rather than in any way exhaustive, the greatest difficulty in such attempts at categorizing ultimately lies in the danger of categorizing itself. Categorizing inevitably leads to a loss of interconnectivity among such approaches and essentially among landscape dimensions as presented here, as well as to the break-up of the relational and organic nature of landscape components and ultimately to the impoverishment of landscape analysis. Irrevocably, this is a weakness of most such analytical frameworks, a problem that most of the studies presented above grapple with, more or less successfully.

The danger, however, is greatest with more compartmentalized methods of evaluation and measurement, among non-social-scientific approaches. This inherent difficulty in landscape analysis consequently calls not only for interdisciplinarity and transdisciplinarity (European Landscape Convention, 2000; Tress et al., 2001) in landscape studies and planning, but would also benefit much from individual contributions

from combined human and physical geographical backgrounds, such as provided by the discipline of geography. According to the geographer Hagerstrand (1995), it can only be fulfilled through the accumulated knowledge of fields such as environmental history and geography. Buttimer (1998a, p. 3) suggests that “for science, the conceptual challenge is to pioneer fresh frameworks of inquiry that both transcend functionally-specialized conventional approaches and facilitate better understanding of the relationships between people and their environments, from micro-regional to transnational scales. Such research, however, is stymied by a sectoral specialization of thought and practice within both academic and policy-making circles”.

Moreover, returning to the original definition of the word landscape, if landscapes as perceived constructs are created through human action and experience inscribed in place through time and conceived mainly visually and experientially, then landscape analysis and planning must primarily follow the opposite direction: from the perceived forms and communicated meanings to the fulfillment of their multifunctional roles as sustainable milieux of human livelihood (Fig. 2). This process, however, must not be conceived as strictly one-dimensional or one-directional, but as multilayered and many-directional, with a great emphasis on continuous reciprocal feedback from one constituent element of the cycle to the other.

Finally, all attempts towards landscape knowledge, assessment or evaluation and management must necessarily be based on analytical frameworks that vary according to landscape typology, degree of integration of landscape elements in a system and according to scale of the landscape under study. Buttimer

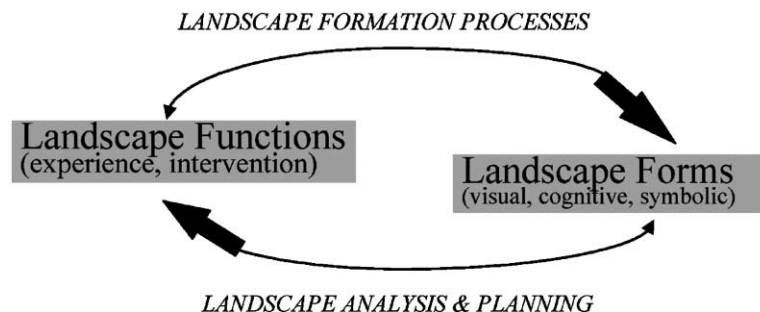


Fig. 2. Landscape formation and analysis: basic parameters.

(1998b, pp. 31–32) stresses the significance of the appropriate scale for action and interaction with regard to sustainable landscapes, a scale at which bottom-up and top-down interests could be negotiated. “discerning the appropriate scale at which these priorities may be reconciled poses, she adds, new challenges for science, for policymakers, and especially for enterprises and regional communities”. Few terms, such as appropriateness and scale, so commonly used, acquire such a diversity of meanings, may be measured in objective spatio-temporal terms and/or functional terms or become simply a matter of judgment (Buttimer, 1998a, p. 2). She also argues that it is scientific expertise that is structured to identify optimal scale for one function at a time. “In real life situations, however, these functions interweave. Together they constitute the lived horizons of people in actual places; options taken in one region bear implications for other regions at scales ranging from local to global”. We turn to this domain, next, and to landscape constructs that constitute the lived, perceived and imagined horizons of everyday life.

### 3. Landscape: the construct

As already mentioned, the contextualization of multifunctional landscapes is a cultural process—where the cultural, as a signification system, interpenetrates the economic and political, even the physical, systems within a social order. Until recently, at least, the cultural distinctiveness of a landscape has been articulated in the context of a particular socio-economic system embracing and expressing the whole dynamic of land and life. Accordingly, in the past, there has always been some distinctiveness, real or staged, about the geographical properties or the historical or even literary associations of a cultural landscape, properties that used to distinguish it from other landscapes. At present, cultural or landscape identity is increasingly based on geographical networks and develops through various types of interconnections and interdependencies rather than any kind of spatial boundaries.

Landscape identity is not established once and for all, nor does it remain constant in place; it may be articulated and manifested at a variable geographical scale, spatial entity or unit of analysis. It requires, as

any production or reproduction of place or other identity, the juxtaposition of other place identities, also continuously reorganizing, in order to be constructed on the basis of geographical difference (de Saussure, 1974)—whether in terms of inclusion and exclusion, in terms of functional distinctiveness, or simply in terms of unique symbolic value. Whether national or more broadly cultural, place identity, as it bears on landscape, is simply an idea with a history, a geography, an imagery and a vocabulary or depends on such in order to assume reality and presence in and for a human group of reference. What renders a landscape distinctive as a place is primarily its distinctive geography (Morley and Robins, 1995, p. 45), in other words, distinctive attributes and relationships that gain expression to a different degree in each particular case, along cultural and subjective lines (Lowenthal, 1961; Donald, 1988), thus, dictating a place in the local minds or sense of community or in nationalist ideology and propaganda.

The Aegean landscape, our case in point, may be regarded as the cultural image, the visible and symbolic expression of human–environment relationships formed over a historical period of millennia. Not only is the Aegean of this alleged landscape, however, elusive and problematic, but it varies enormously in time, place and social context while its production and reproduction occurs at all geographical scales ranging from the local to the transnational and global. The Aegean is defined as the larger geographical area that encompasses not only the islands and coastal areas adjacent to the Aegean sea, but also all other locations in the interior directly connected to the former through their physical geography (valleys, rivers, etc.) or whose human geography exhibits a strong orientation towards it—both historically and contemporarily (Lambrinouidakis et al., 1998).

In Mediterranean geography, one of the most persistent theories is that of the Ruined Landscape or Lost Eden (Rackham and Moody, 1996, p. 9; King, 1997). It is illustrated by a landscape typified as dry, barren, highly tectonic, characterized by low-stature vegetation and harsh conditions of making a livelihood and compounded by environmental degradation, rural poverty, insular isolation, explosive urbanization, demographic loss and economic underdevelopment. Each particular Aegean landscape, however, has its own story to relate: how mountains were formed and

the water regime carved its indelible imprint above-ground, under-ground and into human everyday life. How paleogeographical alterations in sea level produced and submerged land passages among islands and coasts of the Aegean, greatly determining the composition of its present-day flora and fauna. How intensive agriculture and extensive animal-husbandry through synergy and symbiosis with local ecosystems produced extraordinary landscapes of terraces, field patterns and built enclosures. How the central role of the sea in transcultural passages cemented trade and exchange among its people, through peace or war, engraved its unique spatial settlement layouts and townscapes onto the earth and largely determined ways of building and space negotiation.

The exigencies of a harsh environment, external threat and religious worship fostered human associations in everyday life and promoted a degree of societal solidarity and mutuality which found expression in shared, so-called traditional lifeworlds and cultures. For example, the enormous variability of Aegean landscapes is significantly due to their highly alternating horizontal and vertical geomorphologic configuration, land–sea interface and intricate shoreline. Visual analysis of such geomorphologic and hydrological landscape dimensions may proceed through descriptive, quantitative and psychometric—or social perspectives—such as technical descriptions, the landscape management system (LMS) model and the scenic beauty estimation (SBE) method (Tsouklaraki, 1997). The Aegean's striking floristic biodiversity, composed out of the resultant mosaic of microclimates and the repeated paleogeographical submergence and elevation of land passages between Europe and Asia, is comprised of Mediterranean, as well as East Asiatic and Central European plant species and may best be investigated through landscape ecological perspectives.

Instead, human and cultural ecological approaches may be applied to the investigation of landscapes of traditional subsistence socio-economic systems, such as Aegean landscapes at various stages of abandonment, poverty and degradation. To a large extent, the Aegean landscape's distinctiveness stems from its insularity, which has produced a unique maritime history and land–sea connections that have played a significant role in shaping local histories and geographies as well as human psychology and behavior, both

at a personal and at a collective level (Sofoulis and Dalakou, 1992; Mendoni, 1998). The great range of analytical approaches used in this case include, among others, historiographical methods, architectural analysis, archaeological records and ethnographic research. Finally, a variety of humanistic and structural/functionalist methodologies from the social sciences, demographic analysis, political ecology, ethnographic study and other approaches may be employed in the exploration and assessment of local lifeworlds and cultures as inscribed in complex ways in the functional and experiential dimensions of the physical landscape. These encompass the activities and expressions of the whole system of life in the Aegean in its enormous topical variability (Cyclades, Dodekanese, Sporades islands and smaller island groups) that developed over the course of centuries and is now undergoing economic, demographic and socio-cultural processes of rapid transformation.

Taking a step back, if we could briefly sketch the defining characteristics of the physical symbolic Aegean landscape, we might outline its (a) enormous biophysical diversity, highly related to its fascinating paleogeography, (b) variable geomorphology, intricate and spectacular horizontal and vertical geomorphologic configuration, tectonic forms and processes, karst phenomena and all existing types of beaches, and (c) an intricate insular geography, that in conjunction with its geographical location, has historically rendered the Aegean sea into a space of communication, trade and intercultural exchange. Properties of insularity inscribed in the Aegean landscape may be summarized into a set of geographical attributes or relationships, such as isolation/distance from the mainland or other secondary centers (measured in various terms), enclosure by the water element and limited resources and/or potential (Codaccioni-Meistersheim, 1988).

Perhaps the most striking particularity linking the physical landscape component to its respective human landscape component is not the great degree of interaction between these two realms (King, 1997, p. 6), but its striking manifestation in the visual, experiential and symbolic aspects of Aegeanity. Its manifestation in unique, variable and elaborate schemata of environmental and natural resource perception, evaluation and management by the human groups that have inhabited this part of the world since prehistory is eloquently engraved in its present-day landscape.

It essentially constitutes the Aegean cultural landscape, especially difficult to replicate and manage where the structural and functional links between forms on the one hand and human needs or landscape perceptions on the other have been broken. The defining characteristics of the human symbolic landscape of the Aegean (Houston, 1964, pp. 2–7) may, then, be summarized as (a) a long tradition of urban life, characterized by political/ideological and cultural progressivism and a strong orientation towards commerce and maritime mercantilism in contrast to (b) the harsh conditions of rural life, characterized by inwardness and meager self-sufficiency, typified in the rural landscapes of olive groves and maquis grazing lands—and, secondarily, cereal farming and vineyards. In the islands of the Aegean, these two aspects of the humanized Aegean landscape combine into the (c) dry, barren, underdeveloped coastal landscape, where livelihood has traditionally depended on fishing and which now represents the symbolic landscape of Greek island tourism, the pure expression of the 3S's (sea, sand, sun) in tourism attraction.

This line of argument inevitably brings us to a series of symbolic images of the contemporary Aegean landscape, additionally drawing questions of positionality and situatedness into landscape analysis. For example, the landscape of the Aegean may be conceived as a cultural image of tourist consumption for the visitors, as a home ridden with problems for the local populations, or as a cultural hearth for the rest of the Greeks. Beginning with the latter, the Aegean landscape as a national symbol and as a cultural and family hearth is constructed in collective Greek imagination with an orientation towards a historical past, thus, turning into an anachronistic construct. Due to its adjacency to Asia Minor, “the lost home-lands”, the Aegean becomes the closest geographical realm to one of the most significant historical hearths of Hellenism. The Nobel-laureate Georgios Seferis, in his poem, *Myth of our History* (Friar, 1982), writes . . . We passed by many capes many islands the sea that leads into the other sea, seagulls and seals. Sometimes forlorn women in loud lamentation wept for their lost children and others raging sought for Alexander the Great and for glories buried in the depths of Asia. We anchored by beaches heavy with night aromas with birdsongs, waters that left on the hand

the memory of great happiness.  
But the voyages never ended . . .

According to this myth, the Aegean landscape is imagined as an essentially uninhabited landscape during the best part of the year, while, during holidays and especially summer, it becomes vacationland, the playground of both Greek and international tourism. The poem *Axion Esti* by Odysseus Elytis, the other Nobel-laureate and “Poet of the Aegean”, an excerpt from which is quoted at the beginning of the article, attests to the barrenness and harshness of the Aegean landscape. On the other hand, the Aegean as a landscape of tourism embodies stereotypes woven into the myth of Aegeanity constituted by attributes of the “perfect” climate (warm, sunny), its ancient history and long-standing traditional ways of life, and hospitable, friendly people inviting visitors to an easy way of life. For example, according to Galani-Moutafi (2000, p. 210), the image of the modern Greek landscape through tourism consists of a mixture of sandy beaches, bottles of retsina and ouzo, bouzouki players and dancers of syrtaki and the symbol of the Parthenon.

Several years ago, Greece was promoted as a tourist destination by the Hellenic Organization of Tourism, through images of Aegean landscapes, as the land “chosen by the Gods”. For the locals, on the other hand, the Aegean landscape is the quintessential representation of home, a representation that feeds on existing social networks, family roots and bonds to place and traditional ways of life. Tourism folklore aside, however, traditionality translates into marginality, articulated on the basis of insularity and underdevelopment. Here, the interlinkages between forms and functions (Fig. 2) that produced traditional ways of life are no longer as useful and desirable as they used to be. In fact, for the locals, the top priority is to modernize, in other words to break long-established function → form continuities, by substituting both older forms and obsolete functions with contemporary ones according to the dictates and necessities of post-industrial, service-oriented leisure societies.

#### 4. Landscape: the goals

What becomes apparent from this discussion is not only the need to address the landscape in an



interdisciplinary fashion, in order to achieve adequate and in-depth coverage of its complexity, but even more importantly, transdisciplinary analytical approaches that synthesize, for each particular case, those most suitable among appropriate methodologies, according to the goal at task (cf. Tress et al., 2001). Obviously, each one of the variables proposed above as contributing to the definition of one or more aspects or myths of the Aegean landscape requires a different methodological approach of measurement or assessment, whereby selected methodologies adhere and are adjusted not only to specific goals, but also to basic frameworks of landscape analysis. In order, then, to negotiate the specific landscape forms, functions or meanings under study or development, these would have to be examined within the appropriate analytical framework selected for each particular case of landscape study or planning, the landscape type and scale, and the dimension or landscape components selected for analysis—as proposed in Fig. 1). For instance, so-called traditional forms and structures have been produced through processes that may no longer be re-established or re-invigorated, posing serious new challenges for urban, rural and landscape planning interventions. It is, however, precisely these connections, these interlinkages, that need to be sustained and managed in order for local economic systems to remain viable at least through tourism (Fig. 2). This is where the goals of landscape analysis and planning become especially significant in tying together possibilities of intervention with specific, existing or potential, landscape functions. What follow are some case studies that illustrate the connections proposed in goal-oriented landscape analysis and planning and either constitute successful applications of Figs. 1 and 2 or have such future potential.

Ongoing research at the University of the Aegean on the communicated image of the geographical space of the Aegean by the daily Greek press revealed a generalizing conceptualization scheme applied indiscriminately to the whole Aegean region. The principal objective of this particular study has been the creation of an electronic database, serving as an instant public opinion barometer on the Aegean and an instrument of place promotion for tourism and other purposes. On the basis of our findings, the Aegean landscape as articulated in the press represents on the one hand, the primordial Greek hearth, actually and symbolically

straddling Greece's bi-polar ideological orientation towards the East and the West and on the other a border landscape ridden with socio-economic problems and geopolitical threat. The methodological approach adopted in this case was a combination of the descriptive/historical and hermeneutic/content analysis of articles of daily newspapers of both local and national circulation. On the basis of an exhaustive list of all place/landscape aspects—broken down into categories such as cultural, physical, economic, political and so on—itemized information records were compiled for all newspaper references to the Aegean, including detailed data on form and content of reference, date and place of publication, page and column, length and type font and other pertinent information.

Another recent study on cultural images of the Aegean was conducted through Greek elementary education textbook analysis (Raptis and Terkenli, 1998) mainly for purposes of theory construction and furthering research in Aegean geography, with a bearing on various matters of regional planning and policy-making. It reveals the use of cultural stereotypes in the perpetuation, through the Greek educational system, of distinctly peripheral images for the Aegean, images that highlight selected aspects of its isolation and insularity that correspond to interests of the center. The Aegean landscape is portrayed as distinctly neglected, marginalized places or vacation resorts and as images of the past: as the cultural landscapes of childhood memory, the family hearth or the collective old country. A synthetic qualitative methodology was employed in this case, whereby textual and pictorial references to the Aegean landscape in reading textbooks of the Greek elementary education system were analyzed and interpreted. The three major types of place/landscape references appearing in the textbooks (a) texts, (b) pictures, and (c) place names, were further categorized mainly in terms of direct or indirect geographical relevance to the Aegean and weighed according to their contribution to the plot of the text. Content and semiotic analysis was performed both for images and textual references referring to all place/landscape aspects (Fig. 1), whereas descriptive statistical tools were employed to present the findings.

A third study utilizes experimental iconology as a tool of postcard analysis towards the goals of qualitative improvement and tourist development of urban

landscapes of the Aegean. This method is based on the principle that evaluation, as well as aesthetic and semantic interpretation of a landscape depends on the degree and mode by which the image is perceived and formed and the degree of mental, psychological and practical appropriation of the landscape by an individual (Stefanou, 2000, p. 229) or a group. The proposed analytical process consists of three phases: (a) collection of behavioral information on the supply side of the tourist industry producing the postcards; (b) semiotic analysis and interpretation of the postcards; and (c) analysis of the landscapes depicted on the postcards, in order to identify collective landscape images formed by the tourists. This approach was empirically applied in determining short travel itineraries with a high density of tourist visits, in examining the ideological evolution of context-specific tourism policy, in developing an approach towards qualitative landscape assessment using psychometric properties and in identifying landscape landmarks for purposes of tourism promotion and development. The findings of this latter research project point to significant differences between tourists' and residents' images of the urban tourist landscape (Stefanou, 2000). Experimental iconology and its applications elucidate the mechanisms of individual or collective landscape perception and appropriation as shown in Fig. 2 and illustrate the value of using landscape representations, such as postcards, in tourism policy design and planning interventions.

All such endeavors deal with the integration of the biophysical with the social, as well as with the integration of the three aspects of the landscape (Fig. 1) through social scientific perspectives into the cultural landscape and, are thus, subject to the limitations of these perspectives. Inevitably, they remain segmentary, highly targeted towards specific goals and subject to difficulties and deficiencies suggested in the first part of this article and of this section. They tend to normalize over a much contested field, namely that of Aegean landscape symbolism or place identity and to standardize a large geographical context into one overarching landscape type. Decidedly, for landscapes to fulfill their multifunctional roles as sustainable milieu of human livelihood, questions of geographical scale, perspective and analytical purpose, and thus, the criteria by which objectives are negotiated and outcomes measured, emerge as vitally important.

## 5. Concluding remarks

Present-day landscapes are undergoing rapid transformation. In our contemporary society with its increasing dependence on instant interconnections and image flows, landscapes in their visual/pictorial, experiential and symbolic capacity, become, by nature, the most visible and eloquent expressions of variable and changing human–environment relationships. Though multifunctionality and sustainability have been inherent qualities of the cultural landscape for the best part of human history, and though technological capacity for intervention in both has been much enhanced in recent times, landscape multifunctionality and sustainability are both now endangered. Older forms of spatial organization and use have given way to divisions of space and landscape schemata much more temporary, tentative, fluid and less well-defined, though much better interconnected and containing enormous potential for more imaginative and informed landscape formation and management. So far, however, greater proliferation of landscape types and internal spatial differentiation have been accompanied by increasing specialization and loss of the wealth, both in terms of variety and in terms of complexity, not only of meaning and value, but also of activities and functions. This loss, as regards both the physical and the cultural aspects of landscape, acquires at present an irreversible quality and necessitates fast and concerted action.

Also, as a result of rising incomes, standards of living and leisure time as well as improved transportation and communication systems and the growing need of Western societies for contact with nature and environmental sustainability, present-day landscapes acquire a more pronounced public good character. In this way, contemporary societies witness a return to the original quest for landscape as practiced, since the Renaissance when travelers and explorers of the world first rediscovered their own identity and sought greater self-awareness (Jackson, 1980, p. 4). In this form of tourism, the landscape as a geographical travel motive assumed again its quintessential quality, that of the mirror where humans observe ourselves in the world. Sustainable, integrated landscape management, thus, now more urgently than ever before, needs to address, combine and connect a large number of diverse landscape functions, such as ecological

stability, economic viability, expression of place identity, recreational activity, historical dynamics and so on.

This remains quite a daunting task, but offers, nonetheless, exciting challenges for all related disciplines and practitioners at all levels to negotiate landscapes and life, scale and appropriateness. The task is indeed daunting because desired interventions in landscape forms may be contradictory to existing landscape functions which may also require contrasting or conflicting planning and/or management initiatives and strategies and vice versa. What are harder to negotiate, however, are changes in human ways of thought and action deemed central and foremost to any landscape change or articulation. These are already appearing to be more difficult than changes in landscape, especially at a time when changes are occurring at a global scale and at long-term time-frames beyond individual grasp. They are, nonetheless, met by a growing recognition in social as well as in biophysical scientific circles of the contextualized, positional character of all forms of knowledge and experience (Norton, 1996), which the recent resurgence of interest in all types of landscape addresses in parallel with the growing urgency for change in attitudes towards it.

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