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AURORA BOGNOR REGIS

Some people, mainly astronomers I guess, claim that the greatest sight of outstanding natural beauty that exists today is the sky at night. To observe the Perseid meteor shower on a clear August night with the Milky Way glistening in all its glory certainly takes some beating. Or again, the cold clarity of the winter constellations of Taurus and Orion, the star clusters of the Pleiades and Hyades and the planetary wanderers present a spectacle of infinity truly awe-inspiring. But for the majority of the people of this country there is a very limited prospect of having this experience because of the excesses of city lights, which effectively subdue the sky to a hazy glow or cancel it out completely. Worse still, the installation of artificial lighting is increasing inexorably within the urban areas (bright security lighting systems), on the urban-rural fringes (new housing estates) and even deep into the countryside (motorway lighting). Indeed a satellite image of the south east of England at midnight reveals just how much man-made light spills outwards and upwards from the urban centres, giving rise to the form of light pollution amusingly labelled in the title of this piece.

This state of affairs no doubt provoked the creation of the Dark Skies Campaign which I first learned about on the radio some six months ago. Led by astronomers (who else?) it aims to encourage lighting engineers and others to consider more carefully, and to specify, the appropriate kind and degree of lighting so that by gazing upwards from the city we may still, should we wish to, reaffirm our contact with the natural sky and all its cosmological meanings.

Clearly, public lighting within a city is needed, providing safety for both pedestrian and motorist. While the motorist could cope with his vehicle's own headlights, for the person on foot there is the deep-rooted fear of darkness (and hence the unknown) which has to be dispelled. The lighting of pedestrian areas in many cases seems to have been somewhat of an overreaction: either by default from the bright road lights spilling onto footpaths or by deliberate specification of intensities higher than what might otherwise be preferred. Indeed, so long as footways are clear and obstacles can be identified, there is a case for pedestrian areas being 'enhanced' by subdued lighting thereby preserving what romantic or mystical qualities remain of the urban environment at night.

"Let not the darke thee cumber
What though the Moon do's slumber?
The starres of the night
Will lend thee their light
Like Tapers cleare without number"

[Robert Herrick, *The Night Piece to Julia*]

For the landscape architect concerned with recreating the character and identity of our urban centres there is a strong argument to segregate pedestrian and road traffic in order to be discriminating in the use of lighting so to enrich the environment in an aesthetic sense. Certainly illuminance levels, spacing ratios, glare control all need to be addressed according to standards and legislature, but the urban designer could also ponder the suggestions made by the Dark Skies Campaign. Buildings need not be flooded with light – subtle illuminations can project their silhouettes dramatically against starry skies. Lighting intensities can in some circumstances be lowered safely or novel effects created within water features in public squares. Downward-pointing lamp designs can avoid excessive diffusion; 'shadow cones', so convenient for muggers, can be eliminated.

Light is both a potential pollutant and enhancer of the night-time urban experience. The key is to use it to effect but not to excess, since none of us wish to bring about John Betjeman's prediction:

When all our roads are lighted
By concrete monsters sited
 Like gallows overhead,
Bathed in the yellow vomit
Each monster belches from it,
 We'll know that we are dead.

[from *Inexpensive Progress*]

CENTRAL TENDENCIES

Wanting to make the most of the warmest November on record, I decided recently to do a night-time reconnaissance survey of a site we are currently using for a design project: King's Square in Gloucester. I was somewhat surprised to find it rather deserted for a Friday evening. The illuminations had been switched off (shades of the Dark Skies Campaign?), the fountains were silent and the water drained away. Some small, provincial towns, it is true, sort of 'close down' soon after dusk when the last shop has locked its doors and the last bus departed. In King's Square in Gloucester, the explanation may have more to do with the phenomenon of a migration of the retail centre of town towards more prestigious developments (Southgate Street-Victorian Docks area) and, quite possibly, to what is termed 'suburbanisation' or the shift of services and functions towards the suburbs. In many cases this can leave city centres resembling what Simon Jenkins calls "Ozymandian ruins, devoid of any reason for existing, left with the ghosts of fame long past".

Through the last decade or so we have witnessed quite a change in shopping behaviour and it is not surprising that inhabitants of the suburban housing estates should seek local services. Further, with a growing car ownership and congestion in city centres it also made a lot of sense for developers to take advantage of the additional space available for car parks in these suburban localities. Great runways of tarmac surrounding the DIY and furniture hangars are now typical ringroad landscapes. Larger, genuinely out-of-town centres such as Metroland, Gateshead, and Merry Hill at Dudley, provide more than mere retail shopping: here one finds entertainment centres, cinemas, health clubs, restaurants and so on: veritable magnets to the leisure generation.

But with John Gummer's pronouncement earlier in the year that there should be fewer out-of-town centres and the recent recommendation of the Royal Commission on Environmental Pollution setting ambitious targets for curbing the growth and use of cars, perhaps we are seeing what might be the first signs of a welcome boost to the attractions of city centres. But it is not just up to the town planners around the land to take up the challenge: as David Mackay speaking of Barcelona's successes says, there has to be a common, coherent purpose in the design of the city, not just letting it happen between different departments... "it needs an author".

The evidence of degradation in Britain is all too obvious: closed and boarded-up shops; old cinemas converted to warehouses or temporary squats. Even the charity shops close down and move to busier areas. Can such town centres be saved? Architects, landscape architects, transport planners and other professionals need to work together to invigorate and animate urban spaces. Designs need to be innovative but also sympathetic with the towns' histories; transport policies should involve integrated public transport systems of a quality and price which might lure the British public away from their love affair with the car. In Paris or Amsterdam to go by bus or tram is fun, safe and 'cool'. "Tourists don't use cars, don't want to watch traffic jams", says George Stern. "They, most of us, want to walk and use good public transport. We want pedestrian-friendly streets which are safe and easy to cross, with broader pavements and outdoor cafes...more bus and cycle lanes should be introduced...European cities do it." Only 2.5% of urban journeys are made by bicycle in Britain compared with a third in The Netherlands, although in cities such as York, where the councils have positively integrated cycling into their transport policy, the figure is about 20%.

For the past six months I have been monitoring public responses to these intricately linked issues of out-of-town shopping, private versus public transport and the protection of existing town centres in a range of media output: letters and articles in *The Times* and the *Gloucester Citizen*, *Call Nick Ross* and *Any Answers* on BBC Radio, *et al.* While clearly not a reliable statistical sample, it is interesting to note that the consensus view seems to be in the, for want of a better name, environmental camp and largely advocating a proper balance between catering for shoppers and protecting the quality of life.

The car has at the moment, however, a very strong attraction for many people over other means of transport and city centre car-parks are frequently described as being rife with vandalism and are generally insecure. Add to this the traffic congestion and pollution so prevalent in many cities – not least borne out by asthma cases – that it is hardly surprising that centres are stagnating. Yet at the same time city centres are still perceived as the hub of social activity – historically it was always thus – and to reconcile this apparent dichotomy we must, as Dr Brian Mawhinney – the Transport Secretary – has stated, change our lifestyle to one of reduced car usage. Moreover, it is opportune to stimulate public debate on urban issues generally, an idea currently being promoted by the Urban Design Group who have declared, for their 1995 programme, the theme of 'Reclaiming the Public Domain'.

LANDSCAPE AESTHETICS – RECENT ADVANCES IN THEORY AND RESEARCH

Philip Hubbard

Questions of aesthetics are fundamental to human experiences of landscape, yet every opportunity is taken by designers and architects to circumvent such difficult issues by dismissing them as purely subjective. The idea that aesthetic judgement is simply subjective is deep-rooted in contemporary society, dominated as it is by the ideology of individualism, with aphorisms such as 'beauty is in the eye of the beholder', and 'it's all a matter of taste' regularly used as arguments to justify a lack of concern for aesthetic issues. Hence landscape aesthetics are frequently dismissed as 'a kind of froth, difficult to analyse and easy to blow away' (Lynch, 1976). Yet this ignores the obvious point that a primary objective of landscape architecture and design should be to create visually pleasing and stimulating settings. Understanding how aesthetic needs can be satisfied would appear to be a major task confronting the design professions, with their avowed interest in enhancing environmental and landscape quality, although the casual observer would probably be very surprised to find how little consideration is actually given to the significance and appreciation of landscapes by those responsible for their production and maintenance.

Perhaps this lack of consideration for aesthetic issues is less surprising if one considers the fact that very little is known with any surety about how landscape is interpreted, and whilst understanding how people look at, make sense of and generally feel about the landscape would appear to be a key requisite in the development of theories of good design, it is clear that landscape aesthetics is not a well-developed field, with a paucity of authoritative texts and no solid base of knowledge (Carlson, 1993). In part, this is a consequence of philosophers of

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aesthetics generally devoting their attention to the fine arts, ignoring aesthetic reactions to more complex phenomena such as natural and built landscapes. More importantly perhaps, research on the perception and evaluation of the environment falls uncomfortably between a number of disciplines, including landscape architecture, geography, planning, and environmental psychology, and whilst this diversity is the source of much methodological variety and eclecticism, its legacy is that landscape aesthetics has remained hampered by a range of competing theoretical discourses. As a result, Scruton (1979) has described the field as a 'continuing intellectual disaster area'.

Nonetheless, over the last thirty years there have been a plethora of studies which have examined the interpretation and assessment of natural and built landscapes, with landscape aesthetics now recognised as a self-contained field in its own right (Sell et al, 1982). Far from being an intellectual disaster area, it can be argued that such research has added considerably to our knowledge of how landscapes are appreciated. Yet there have been very few attempts to synthesise and evaluate this disparate literature, and hence the field of landscape aesthetics has remained hampered by a lack of conceptual and theoretical consensus which leads it to be portrayed as something of an esoteric intellectual pursuit. Thus it is the intention of this review to consider recent examples of empirical research into questions of landscape aesthetics in an attempt to identify common lineaments that may provide a basis for future research. For the purposes of the review, a number of diverse research traditions or paradigms will be considered under two general headings, which, for the want of more suitable labels, have been termed psycho-biological and socio-cultural theories respectively. Clearly, within the space available, a comprehensive overview of this fragmented literature is not possible, yet it is hoped by articulating many of the key competing theoretical and philosophical positions underlying research into landscape aesthetics that grounds for convergence can be identified. In particular, it is hoped to demonstrate that many traditional approaches to aesthetic issues are simply untenable, particularly the idea that aesthetics are merely subjective.

Psycho-biological theories of landscape aesthetics

Many pioneering examples of research into landscape aesthetics were heavily influenced by the traditions of experimental and perceptual psychology, with attempts to extrapolate the findings of laboratory-based research to environmental settings. An important influence in this respect was the psychophysical approach pioneered by Daniel Berlyne, often termed experimental aesthetics. Borrowing from neurophysiological theory, Berlyne (1971) suggested that aes-

thetic responses can be predicted by studies of the way the brain operates and reacts to stimuli, in particular, that evaluation is a function of the degree to which a visual stimulus activates an organism. Such a theory thus posits physiological arousal as the basis of landscape assessment, implying that the assessment of a scene is determined by the amount of perceptual information it conveys. Psychophysical models thus attempt to determine mathematical relationships between the physical characteristics of a landscape or design (e.g. form, size or colour) and the perceptual responses of human observers (Uzzell, 1989). In this model, human responses and physical features are thus integrated through thematic relationships – a single response is related to a single objective feature in the environment. Thus Berlyne saw aesthetic response as a simple reflex model, mediated by a simple stimulus/response cycle. These ideas were introduced to studies of landscape aesthetics by Wohlwill (1976) who presented the idea that visual complexity and landscape appreciation are related through an inverse 'U' shaped relationship, with moderate levels of visual complexity preferred to higher levels, where too much visual information results in 'perceptual overload'.

The theories suggested by Berlyne have been subjected to rigorous testing both in field and laboratory-based experimentation, with varied results. Empirical evidence has been presented to suggest that visual complexity is in fact a significant factor in people's appreciation of landscape (see, for example, Kuller, 1991), yet the idea that complexity is the major factor affecting the appreciation of townscapes has been criticised by some researchers, most notably Rachel and Stephen Kaplan (1989), since it is not supported empirically by all studies. In particular, whilst such a theory suggests that different types of environment of equal complexity should be equally preferred, it has been demonstrated that urban and natural scenes of equal complexity are evaluated quite differently. Specifically, it has frequently been argued in the research literature that natural landscapes are preferred over built landscapes because of the contribution of what are termed primary landscape qualities such as water, vegetation and other items of 'evolutionary significance' (Kaplan, 1987). These sociobiological theories are similar to those evolutionary theories presented by Appleton (1975) in perhaps the most frequently cited work on environmental aesthetics, *The Experience of Landscape*, which suggested that landscapes are evaluated in terms of the extent that they are indicative of environmental conditions favourable to survival. Appleton illustrated this habitat theory by stressing the importance of landscapes which offered both prospect and refuge, relating this to primordial desires to see potential prey whilst being safe from being preyed

upon. Thus it can be seen that the primitive symbolism of landscape may be as important as objective visual information measures in affecting preference.

Many other researchers have then extended the remit of psychophysical models to incorporate other sets of physical factors both intrinsic and extrinsic to a setting, including biological diversity, mystery, prospect, refuge and so on (e.g. Ulrich, 1981). The attraction of such approaches that focus on formal qualities of the environment is obvious, as such qualities can be measured in quantitative ways, and easily compared with other specified resources of an area or region. Much of this work, however, has been criticised for its gross empiricism, as it tends to reduce aesthetic response to a stimulus-response model of human behaviour (Bourassa, 1991). For example, Shafer and Brush (1976) developed a rather spurious model of landscape assessment based on the measurement of twenty-six biological and natural variables, which through factorial analysis they collapsed down to eight factors which explained 66% of variance in landscape preferences. Whilst such models may be generally reliable as predictors of preference (Uzzell, 1991), they have been treated with much scepticism because of their descriptive nature and lack of any theoretical considerations, apart from the implicit notion that formal characteristics of landscapes might be related to preferences. Such research has thus been portrayed as being more concerned with generating findings than formulating theory (Dearden and Sadler, 1989).

Such formal aesthetic theories also take an additional source of intellectual sustenance from the work of Gestalt psychologists at the turn of the century. The laws of Gestalt psychology, which were originally applied to two-dimensional pictures in laboratory settings, have since been applied to three-dimensional environmental stimuli. These laws are a series of conditional tendencies within perceptual organisation that hinge upon the law of *pragnanz*, that is that the human visual system seeks to integrate separate visual stimuli into meaningful wholes, maximising redundancy and simplicity of form (Punter, 1982). These laws have been applied to the evaluation of landscape by a number of practitioners, notably Rudolph Arnheim and Ernst Gombrich. Arnheim (1977), in the context of the built environment, commented that a 'building cannot fulfil its function and transmit its message unless it presents an ordered pattern', suggesting that a building evokes a positive reaction when it presents a form which constitutes a 'good Gestalt.' The most frequently cited examples of a 'good Gestalt' is the so-called 'golden section' which forms the basis of classical design theories. Such aesthetic theories, which place maximum emphasis on formal visual structure and composition, have acted as the basis of a recent treatise on landscape

aesthetics by Bell (1993). Of more interest, however, is the series of studies by Peter Smith (summarised in Smith, 1979) which attempted to evolve an integrative theory of landscape aesthetics by combining formal gestalt psychology and neuropsychological principles. Smith suggested that aesthetic pleasure is a product of two opposing forms of emotional response to environmental stimuli; firstly, the arousal that results from curiosity and complexity, and secondly, contrary to this, the perception of orderliness and the consequent reduction in arousal. Smith termed these arousal and de-arousal sensations as the primary and secondary reward systems, and further hypothesised that maximum aesthetic assessment occurs when these two processes are in balance. This suggests that landscapes should convey the optimum amount of visual information within as clear a compositional structure as possible – ‘complexity within coherence.’ Smith illustrated this point by demonstrating how many traditional architectural designs achieved this ‘likeness tempered with difference’ by virtue of their structural composition, particularly the rhythm and pattern of architectural elements. Smith also considered that there would be a standard (i.e. universal) datum for aesthetic value, as he argued that all people share a central nervous system which works according to set rules. However, he pointed out that the most complicated variable in the aesthetic equation was that of symbolic value, which to him seemed to pose an insuperable obstacle to any usable theory of aesthetic value (Smith, 1979).

Socio-cultural perspectives on landscape aesthetics

The majority of the aforementioned research has been predominantly concerned with explaining aesthetic reactions in terms of the formal and sensory aspects of landscapes, arguing that the evaluation of a landscape is inherent to its particular physical qualities, for example, size and scale, form and shape, texture, colour and pattern. Whilst such formal aesthetic theories are intuitively attractive, as they suggest that certain landscapes or settings are innately and universally perceived as being in ‘good taste’, such theories have been criticised because of this very emphasis on form rather than content. In many ways, such an approach takes an extremely limited conception of aesthetics, overplaying the significance of physical forms at the expense of the symbolism, meanings and associations ascribed to these forms by virtue of our individual histories and experiences as members of political, economic and social groups (Hubbard, 1993). It has therefore been acknowledged that such studies of austere object perception detach the functioning of individuals from their social and cultural milieu, and therefore provide only a partial understanding of people’s evaluations of the environment.

The reliance on formal, disengaged, theories of environmental aesthetics has therefore largely been replaced by an emphasis on experiential aesthetics, which focuses on responses to symbolic, non-sensory aspects of design as well as to the sensory, physical, attributes. Such theories have been contested by many philosophers of aesthetics who fear a descent into relativism, as the fact that each individual potentially attributes a unique meaning to their environment suggests that aesthetics is purely subjective, with no objective basis for aesthetic judgement. Indeed, this suggests that scientific research of this phenomenon is rendered impossible. On the contrary, however, it has been suggested that environmental meanings, and hence assessments, are constructed through codes or schemas which are socially transmitted and thus based on learning and culture (Bourassa, 1991). Pennartz (1989) thus contends that these codes are not individual properties, and that there may exist individual structures of perception, cognition and action common to all members of a group. This can be compared with the concept of habitus developed by Bourdieu (1977) which describes the ‘socially-constituted system of cognitive and motivational structures’ which influence people’s world-view.

Insights into the way people endow their environment with meaning, and form useful associations, are therefore essential if one wishes to explain assessment of the landscape, as part of the basic cognitive construction of the environment is giving meaning to it (Fenton, 1985). This recognition, that aesthetic reactions are shaped not only through physical form but intermediate variables also, distinguishes current approaches to landscape aesthetics from the previous Pavlovian-influenced behaviourist approaches. Furthermore, this reformulation of aesthetics as ‘socio-aesthetics’ (Alcock, 1993) implies that aesthetic judgements are far from random but rather that they signify values that stabilise cultural, group or individual identities. This suggests why many researchers have found that landscape assessment is not as idiosyncratic as may be supposed, and rather than being an issue of personal taste in fact may be indicative of basic environmental values:

“It is true of course that viewers respond affirmatively to particular visual configurations of the environment. Their responses, in fact, are often sufficiently patterned to refute the objection that aesthetics is too subjective to warrant legal protection. But these configurations are compelling because they signify values that stabilise cultural, group or individual identity.” (Costonis, 1982, pp. 357-358)

Hence recent years have witnessed an exponential growth of empirical research attempting to elicit the varied meanings which people attach to landscapes, with

the logical consequence of this approach being the investigation of how attitudes and perceptions of townscape diverge between different individuals and groups. Such differences have been investigated in terms of age, gender, class, and lifestyle, and whilst much of this research has been suggestive rather than conclusive, there is considerable support for the notion that there are major cross-cultural differences in landscape perception, conceptualisation and evaluation. For example, Lamb *et al* (1994) have demonstrated that Italians and Australians differ widely in their classifications of natural and built landscapes, with Australians respondents adopting a more rigorous definition of nature than the Italians, who were far more tolerant in their acceptance of anthropogenic interference in the natural landscape. This resulted in markedly different evaluations of sets of both natural and urban scenes. Similarly, Tips and Savasdisara (1986) have shown how landscape tastes differ between the inhabitants of neighbouring Asian countries in subtle, but important ways. Such studies remind us that landscape is as much of a social as a physical phenomenon.

One group whose salient reactions have been recognised as being distinctive from most others are those who are actually responsible for shaping places. Therefore, the most frequently explored distinction explored in terms of aesthetic attitude is between the 'producers' and 'consumers' of landscapes. Whilst such a delimitation is rather artificial (after all, all producers are consumers also), it has been a remarkably consistent research finding that the most pronounced differences in environmental evaluation and assessment are between environmental designers and those without any design training. Such an 'appreciation gap' between experts and non-experts has not only been well documented with respect to the architectural profession (e.g. Devlin, 1990, Nasar, 1994), but also for the landscape architecture and planning professions (Uzzell and Lewand, 1989, Hubbard, 1994). Specifically, it appears that design training and socialisation inculcates a 'professional' perspective which emphasises the objective, physical qualities of the landscape and discourages a more personal, subjective response. Such a perspective means that designers frequently overlook the meanings and associations attached by people to places, and have divergent landscape tastes to those expressed by the public. The way in which people ascribe aesthetically compelling qualities to townscape, and the way this reflects individual and cultural beliefs, is something that cannot be understood in front of a designer's drawing board or from an architectural drawing, yet these are the vital issues that need to be addressed by planners and designers if the seemingly subjective aesthetic preferences of the public are to be understood.

Therefore, the last few years have witnessed a growing interest in the topic of

environmental meaning amongst landscape researchers, with the objective of much of this work to investigate how our surroundings are invested with meaning and to examine the content of these meanings. Indeed, environmental meaning research is emerging as a field in its own right, with attempts to understand such issues from a perspective not centred exclusively on the individual nor on societal determinism, frequently adopting methodological frameworks from semiotic research to examine how landscapes communicate meaning and can be 'read' in different ways (Punter, 1982). Such notions of iconography are very much at the heart of post-modernism, with researchers beginning to question the role that the landscape can play in mediating economic and social processes, and exploring the recursive relationships between landscape and society as mediated through environmental meanings and symbols. Such a convergence of individualistic and societal perspectives on landscape aesthetics would have been unthinkable only a few years ago, yet there is a growing appreciation that personal aesthetic attitudes and preferences are rooted in the interplay of individual, spatial and societal forces as they merge in everyday practices and actions. The adoption of methods from social psychology and social representation studies by landscape researchers (e.g. Canter and Monteiro, 1993) marks an important advance in this respect, as does the exploration of frameworks adopted from symbolic interactionism (e.g. Pennartz, 1989).

Reformulating landscape aesthetics

This review of empirical research on landscape aesthetics, albeit extremely cursory, has established that there is a growing recognition that many traditional approaches to investigating such issues are inadequate as they subscribe to an overly simplistic view of human behaviour which reduces aesthetic response to a simple stimulus-response model and ignores the importance of intermediary factors. As such, the reliance on formal characteristics of landscapes which characterises many landscape evaluation methods fails to take into account cultural values, which are crucial in individual's interpretations of landscapes, environments and places. The inclusion of content and meaning variables in the consideration of landscape aesthetics can therefore be recognised as a positive development, marking the distinction between a participatory aesthetics and an aesthetics of dis-engagement – whilst the latter treats the environment as an artistic object, the former treats it as a setting for everyday life. Clearly, adopting methodological frameworks adopted from the fine arts is not sufficient for understanding the aesthetic quality of landscape, as landscape is functional, and aesthetic qualities cannot be abstracted without any consideration of these func-

tional aspects. In many senses then, it may be preferred to refer to environmental rather than landscape aesthetics, as the term landscape has too many connotations of being visual, bounded and distant, experienced in a disinterested and disengaged manner.

A major hurdle in the development of any coherent theory of environmental aesthetics has then been the continuing debate as to the definition of the term aesthetics itself, a problematic concept which is frequently taken in its narrowest sense as simply an issue of visual beauty and good taste divorced from everyday experience (Alcock, 1993). This Kantian doctrine of aesthetic disinterest has dominated art appreciation since the mid-eighteenth century, and the same assumptions of aesthetic experience as contemplative, passive and disinterested have underlined most approaches to landscape aesthetics (Taylor, 1994). Indeed, the dictionary definition of aesthetics refers to 'the nature of the beautiful', even though the original Greek root of the word contains a broader conception, not preoccupied with beauty *per se* but rather the conditions of sensuous perception, a meaning which has largely been lost (Punter, 1982). Yet it is the latter sense of the term that is most appropriate in the context of landscape aesthetics, as the everyday experience of the landscape is not that of a detached observer, but rather that of the existential insider, immersed in the landscape and experiencing it through all the senses. Drawing on the work of Dewey, Berleant (1992) has thus suggested a pragmatic theory of landscape aesthetics which emphasises the aesthetic as part of the everyday, reminding us that aesthetic experience involves all the senses, not just the visual. The aesthetics of engagement which Berleant has suggested thus leads to the reformulation of landscape aesthetics, in which the continuous experience of the landscape in an engaged manner replaces the contemplative appreciation of a beautiful scene or landscape.

Such notions of experiential and engaged aesthetics are then beginning to inform the types of research described in this paper, and whilst the field of landscape aesthetics is still characterised by a lack of a unifying theoretical structure, increasing efforts have been made by researchers to integrate fragmentary research efforts and assimilate diverse philosophical traditions. Indeed, general points of agreement and consensus are beginning to become apparent to researchers traditionally divided by disciplinary and epistemological boundaries, with the long-overdue cross-fertilisation of ideas between rural and urban researchers also becoming evident. (After all, there is no necessary reason to suspect that the cognitive processes which control environmental understanding operate any differently between town and country). This has led to the develop-

ment of a more integrative, holistic understanding of landscape aesthetics, with both psycho-biological and socio-cultural perspectives contributing to an increased understanding of these cognitive processes and the way they affect evaluation. From semiotics we have learnt about the symbolism of certain landscape features, from information theory we have learnt of the optimum complexity of form that causes maximum arousal, from formal aesthetics we have learnt of the primitive symbolism of simple Gestalt forms, and from psychological research we have learnt of people's inward representations of landscapes. Many of these research themes are to some extent complementary and help to validate one another; for example, Smith (1979) has shown that neuropsychological theories can apparently reconcile Gestalt laws of form and information theory. Similarly, congruence has been demonstrated between the findings of psychological research and socio-biological theories. Such interpretations may either be considered as partial explanations of landscape appreciation or as an interrelated hierarchy (Punter, 1982), but either way it is suggested that any coherent framework of landscape aesthetics and meaning would have to attempt to integrate and synthesise these different approaches or research paradigms. In the same way that formal theories too often ignored the cultural meanings of landscape, socio-cultural researchers cannot ignore the importance of the formal qualities of landscape. A recent advance in this respect is the exploratory theory of landscape aesthetics proposed by Bourassa (1991) which describes aesthetic response as resulting from a combination of cultural and biological rules and personal strategies.

Conclusion

In summary then, the objective of this review has been to refute the idea that landscape aesthetics is merely a subjective matter, and to demonstrate that it is considerably more measurable and less idiosyncratic than might be supposed. On the other hand, this does not imply that there are universally objective standards of landscape beauty (or ugliness). Rather, this review has suggested that there are significant socio-cultural differences in aesthetic value, and that the landscape tastes shared by one group are not necessarily shared by all, because of certain symbolic qualities or the meanings which places evoke from people. Here then is a major task for landscape researchers, demonstrating how the landscape is invested with meaning and how this varies between different groups, particularly between designers and non-designers (which of course has major policy implications). In turn, it has been suggested that such research should cultivate cross-fertilisation of ideas across diverse research traditions based on a

more careful consideration of the nature of aesthetic experience itself.

More importantly perhaps, the examples of research reviewed here (and many more besides) indicate that aesthetics is not trivial and that landscape aesthetics do matter to people. Indeed, if one accepts the broader conception of landscape aesthetics postulated here, then one can see aesthetics issues as central to debates as to what constitutes a humane and culturally revitalising landscape:

"Landscape perception in the broadest sense takes aesthetic awareness beyond what is beautiful or pleasing to the eye to encompass the full range of intrinsic perceptual experience and its associated meanings. Understood in this way, the aesthetic stands at the heart of all that is humanly valuable." (Berleant, 1992, p. 117).

Put this way, there is an obvious need for both researchers and designers alike to consider aesthetic issues in a wider context as part of a hierarchy of material considerations to be taken into account in any landscape design, alongside factors of comfort, user safety, access and shelter. To reiterate an earlier point then, landscape aesthetics must be considered as part of a continuum of human needs, and to dismiss them as merely subjective or divorce them from other design issues is simply untenable.

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THE MANAGEMENT OF FOOTPATHS IN NATIONAL PARKS

Allan Ruff and Colin Maddison

The uplands of Britain display a remarkable diversity of scenery and wildlife habitats. This, coupled with their largely unenclosed nature, makes them of particular interest to both ecologists and recreationists. However, the factors that shape the 'natural beauty' of the uplands also make them vulnerable from an ecological point of view. As recreational pressure on the uplands has increased, so has the impact on flora, fauna and the landscape. The most widespread impact of upland recreation has been the erosion of hill paths, which are affected by the type and intensity of use. Overuse of upland paths can mean a decline in both the ecological and recreational value of the resource and lead to conflict between the interests of recreation and conservation.

Where erosion has become a problem, management has been required to balance the interests of conservation and recreation. However, management of footpaths has its own implications for the conservation and amenity value of upland areas. Much of the management that has taken place has been reactive, piecemeal and under-resourced. Furthermore, there are real differences in ideology which have led to conflict between different user groups. These factors have resulted in controversy over the visual intrusion and environmental impact of many of the footpath management techniques that have been used.

Nine out of the ten national parks display characteristics that place them largely in the category of upland Britain. Many of the most popular upland areas within England and Wales lie within the parks and it is in these areas that footpath erosion is often most acute. The dual purpose of the parks is both the conservation of natural beauty and promotion of public enjoyment. Sensitive and appropriate

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management of paths within the parks is, therefore, of particular importance.

Research has, however, revealed a number of important points in relation to footpath management (Maddison, 1993) in national parks:

- i) There is a need to take a longer term strategic view of footpath management, that considers the whole network and identifies potential as well as current problem areas.
- ii) There is a scope for wider consultation with interest groups on a regular and formal basis and for greater involvement of consultees in the decision-making process.
- iii) Greater use could be made of resource data as a basis for regular and systematic monitoring of changes in the condition of footpaths.
- iv) There is scope for much greater use of management plans as an integral part of footpath management.
- v) There is a need for a widely acceptable approach to footpath management.
- vi) There is an overall requirement for better resourcing of footpath management by government, users and other sources.

An approach to footpath management is required that will sustain the unique qualities of upland areas, by reconciling the demand for recreation and access with the conservation of wildlife and landscape. This calls for a strategy for sustainable management, which allows present and future generations to obtain the same benefits, opportunities and enjoyment from upland areas, in recreational and ecological terms.

The most cost effective management programmes are likely to be those which are pre-emptive and based on regular monitoring and planned maintenance. Monitoring should identify changes in key indicators and provide a direct cue to appropriate management responses. Most benefit will be derived from monitoring when key indicators and management responses are agreed by a consensus of interested parties.

The opportunity for increased dialogue could be an important feature of an integrated monitoring and resource management scheme, by providing a forum for consultation and consideration of contrasting views. Footpath management fora could ensure widely acceptable solutions to footpath management by identifying multi-use conflicts and opportunities and by building on common ground between interest groups.



A badly-eroded surface susceptible to severe storm damage

Recommendations

After examining the management of upland footpaths within the national parks of England and Wales, Maddison (1993) made the following recommendations for a future strategy.

- i) National parks should develop a strategy for the sustainable management of footpaths, which forms an integral part of national park plans.
- ii) Each park should undertake an ecological survey of footpaths to establish the condition of the resource base, drawing on appropriate experts as necessary.
- iii) Footpaths should be monitored on a regular and systematic basis.
- iv) Monitoring should identify changes in key indicators that trigger appropriate management responses.
- v) Monitoring procedures and criteria for management should be agreed by consensus.
- vi) Monitoring procedures and criteria for management should be reviewed on a regular basis to ensure continued relevance.
- vii) A Footpath Management Forum should be formed in each park to agree and review management aims, objectives, policies and procedures and to advise on related issues as necessary.
- viii) Where appropriate, more detailed management procedures may be delegated to a steering group by the Management Forum.
- ix) Management plans should be drawn up for footpaths within each park on an area, network or type basis.
- x) Project officers, who might be part of existing warden or ranger services, should be appointed to implement management plans and co-ordinate work by support staff, volunteers and landowners and managers.

In developing such a strategy for the management of upland footpaths, two recommendations of the National Parks Review Panel (1991) are of particular relevance:

- i) The full range of powers for management of the rights of way network should be transferred from the relevant local authorities to the national parks authorities.
- ii) Government should provide additional resources to park authorities to take on new responsibilities and to tackle footpath erosion.

Areas for further investigation

Maddison (1993) concentrated on identifying a strategy to ensure optimum use of resources and the sensitive and appropriate use of materials and techniques. There is a need, however, for further investigation in two main areas; the availability of resources and specific management techniques.

Resources

It has already been mentioned that government should make available additional resources to tackle footpath erosion. Government sources, however, are not infinite and there is a need to identify complementary avenues for resourcing. The Lake District National park, for example, identified possible opportunities to tap into EC funding and Countryside Commission initiatives (Maddison 1993). The Yorkshire Dales National Park are seeking funding from an EC environmental budget, the LIFE Programme, to continue the work of the 'Three Peaks' project (Countryside Commission, 1993a). The Countryside Commission's 'Parish Paths Partnership' aims to develop partnerships between local highways authorities and the community, to involve local people in improving and maintaining their rights of way (Countryside Commission, 1992).

The Ramblers' Association have suggested that resources could be transferred from support for intensive agriculture to reward farmers and landowners for protecting the environment. In the uplands, this could include payments for managing footpaths (Mattingly, 1990). This would be in accord with the National Parks Review Panel (1991), who recommended that: '...each national park authority should develop a scheme for involving farmers and landowners in the maintenance of public rights of way.' (National Parks Review Panel, 1991, 45)

The Review Panel also went on to recommend a new form of support system that provided incentives to '...encourage farmers to take positive measures to protect and enhance the quality of the park environment and provide access opportunities.' (National Parks Review Panel, 1991, 61)

This approach of financial rewards to farmers and landowners to achieve specific aims is supported by the Countryside Commission in their publication *Paying for a Beautiful Countryside* and is currently the basis of the experimental 'Countryside Stewardship Scheme' (Countryside Commission, 1993b).

Management techniques

The National Parks Review Panel (1991) recognised the influences of recreational activity and recommended that: 'There should be further independent research into the environmental impact of human activity on upland moors and the techniques for minimising these impacts.' (National Parks Review Panel, 1991, 41)

The 'Three Peaks' project and more recently the 'Pennine Way Management Project' have done much work on techniques for restoring eroded paths. Nevertheless, there is a need for continued research in this field. The 'Three Peaks' project, for example, identified the need for further research on techniques for restoring and reinforcing vegetation in particular (Countryside Commission, 1993a). Research needs to be ongoing and locally orientated to identify solutions appropriate to particular circumstances. There is also a need, however, to share knowledge and experience on a wider scale. The British Upland Footpath Trust might provide a forum for wider liaison and dissemination of information on management techniques.

Many factors influence the use of footpaths and both the Ramblers Association and the British Mountaineering Council have pointed out the need to consider the wider issues (Maddison, 1993). The positioning of features such as car parks, view points and visitors centres, can all influence footpath use and thus erosion. Mattingly (1991) also points to the need to consider the provision of alternative routes and the possibility of closing key roads to private vehicles on peak tourist days. These are all factors that merit investigation in minimising the impact of recreational activity.

Conclusion

In conclusion, although Maddison (1993) focused primarily on the national parks, the principles identified of a strategic, sustainable and pre-emptive approach to footpath management might apply to all upland areas. To be effective, research will be required to identify the most appropriate indicators to trigger appropriate management responses, and the limits of acceptable change beyond which management responses should be initiated. Footpath Management Fora can help ensure widely acceptable management responses, but it must be remembered that not all users of the countryside are represented by specific user groups. Ongoing investigations will be needed to monitor pub-

lic attitudes and requirements; though the proposed Fora would be well placed to initiate such work.

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THE BULGARIAN RENAISSANCE YARD: THE USE OF CHARACTERISTIC FEATURES IN THE URBAN STRUCTURES OF HISTORICAL SETTLEMENTS

Vladimir Shtilyanov

During the period of the Bulgarian Renaissance (17th to 19th centuries), an important epoch in contemporary Bulgarian history, specific social and economic circumstances gave rise to the origin and development of the so-called Bulgarian Renaissance House and the Bulgarian Renaissance Yard. In this context the paper attempts to clarify the connection between these historical circumstances and the origin of the garden yards as an initial element in the development of the Gardening Act in Bulgaria. That particular historical link defines the characteristic features of the Bulgarian Renaissance Yard.

One of the main Bulgarian regions detached during the Ottoman rule and which had a limited Muslim presence is the area around the town of Kotel and its surrounding settlements (The Kotel Balkan, figure 1). This region was one that had the relevant circumstances mentioned above, and here one can observe the preservation of these sites indicating the first steps of the Bulgarian nation in appreciating such garden yards and a sense of their unique construction.

Research has sought to define the aesthetic criteria and the traditional Bulgarian notions about the ways of uniting man to his natural environment. Considering both the traditions and the modern tendencies in design, the development of an appreciation of Landscape Architecture in these settlements is discussed. A suggestion is made for the organisation of these garden yards into a unified green system within the contemporary structure of historical settlements, and a strategy of using the characteristic features of the Bulgarian Renaissance Yard in the urban structures of historical settlements is proposed.

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Historical context

The manifestations of cultural heritage are among the most important criteria of every nation's creativity and spiritual essence. From earliest epochs till nowadays mankind's struggle towards perfection has been attended by the unceasing search for the absolute values of beauty and harmony.

For Bulgaria, an important aspect of such a heritage is the pattern of houses and yards preserved in their historically authentic state from the era known as the Bulgarian Renaissance (17th to 19th centuries). During this crucial period in recent Bulgarian history, the existence of particular social and economic circumstances led to the creation and development of the so-called Bulgarian Renaissance House and Bulgarian Renaissance Yard.

The present study attempts to reveal the aesthetic criteria by which these houses and their gardens can be evaluated and to discuss traditional ideas about the different ways of uniting man to his natural environment. Methodologically the research follows four directions:

- historical dating and determination of the links between the historical circumstances and the origin of the Bulgarian Renaissance Yard,
- documentary investigation of 24 yards in the town of Kotel and in the five settlements surrounding it – Jervana, Katunishte, Itchera, Gradetz and Medven,
- analysis and deduction of the main characteristic features, and
- recommendations regarding ways of marrying the historical traditions with modern planning tendencies in the development of the region.

As early as the beginning of the Ottoman invasion in the 14th century, the town of Kotel and its surrounding settlements were established as a natural fortified locality where the last defence was organised by the army of survivors and the residential population. This desperate resistance in the isolated areas forced the oppressor to accept negotiations and a semi-dependent existence of the residential population was secured. Some of the settlements received privileges as "soldier settlements" and were charged with providing soldiers for the regular Ottoman army. In return these settlements were tax exempted and Ottoman



Figure 1: The Kotel Balkan

peoples were not allowed to settle in this area. It was also forbidden for Ottomans to enter the village on horseback and spend the night there.

The special status of these settlements determined the markedly homogeneous ethnic structure of their population – Bulgarians mostly. Their manners, customs, means of livelihood, building skills and aesthetic ideals have left a clear

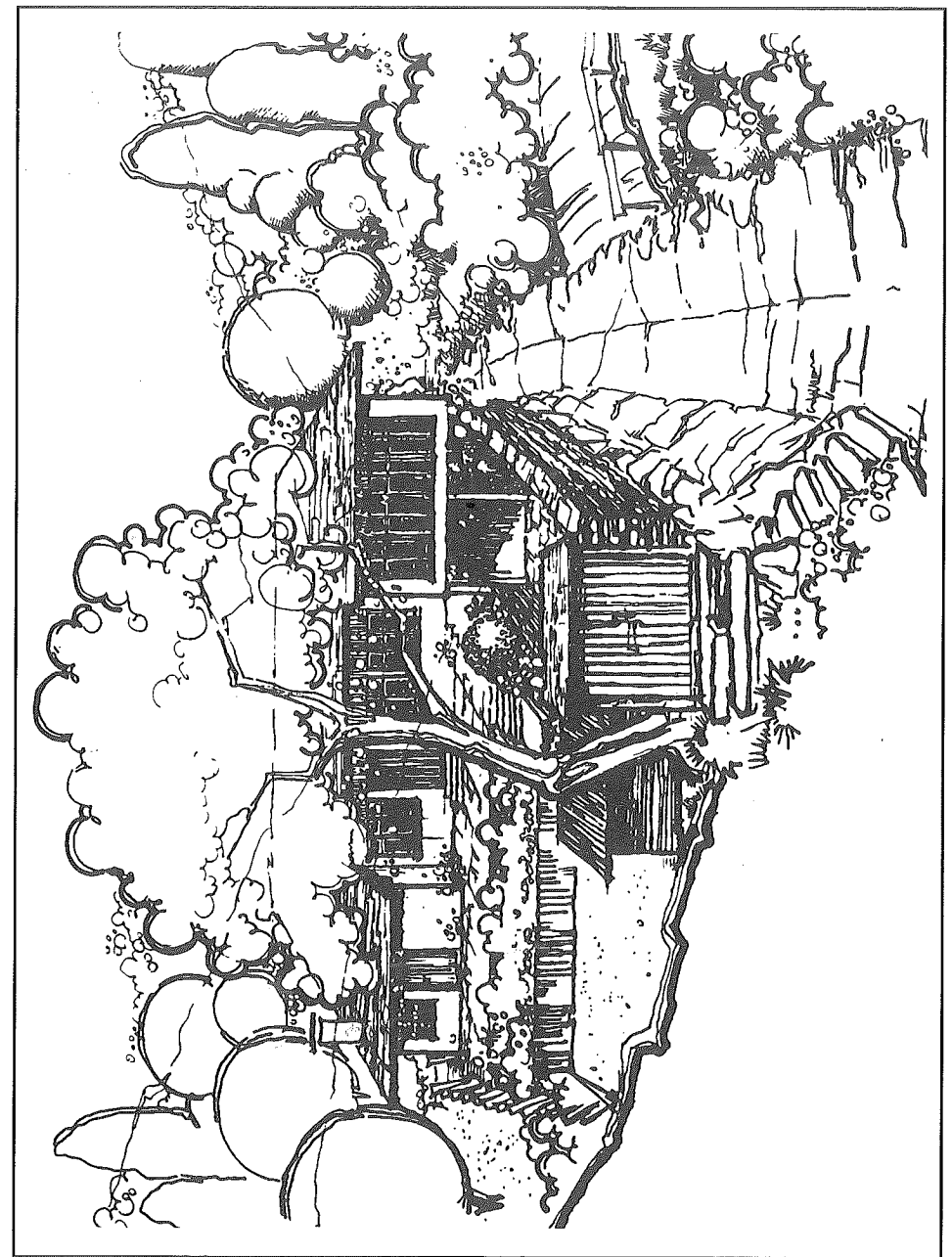


Figure 2: Typical Renaissance spatial structure of a house and a front yard in the village of Katuishte

mark on the original aspect of the vernacular architecture and yards in the region.

During the 19th century the Empire started to decline and thanks to the opportunities for independent initiatives in these settlements it can be seen that craftsmanship and trading came into being. The new entity – financial relationships – sprang up and developed rapidly. Representatives of the newly affluent classes headed the fight for national and political liberation. Their activity spread far beyond the regional limits and it acquired a national character.

The earliest-surviving traditional vernacular architecture – the buildings and yards of the Kotel region – were created precisely during that particular historical period. The significance and the role of the yard in the life of the Bulgarians have been enormous – only behind the high stone walls, far from prying eyes, was the owner able to relax, to enjoy the company of his family and, perhaps most importantly, to feel comparatively free.

Analysis of features

The investigation of 24 yards in the region involved the documentation of their planning and spatial structure (figure 2) and the analysis of narratives from elderly people about the ways of constructing houses and yards. We also had the opportunity to study the reasons behind the urban structure which was planned for these settlements.

Street patterns were irregular. The paving construction was of cobblestone, with a concave middle section for effluent (figure 3). Very specific in their structure were the open scenic vistas to the surrounding landscape. In general, for these garden yards, research indicates

- i. the precise correspondence between spatial organisation and functional needs;
- ii. the subordination of all spaces and elements of the structure to the human scale;
- iii. cohesiveness with nature;
- iv. the rustic character of the original vernacular architectural elements of rural detail.

Spatial organisation and functional need

The way a yard is built becomes obvious from the analysis of the elements and is a direct reflection of the way of life and means of livelihood of the owner. All the villages investigated are typical mountain settlements with compact housing and predominantly irregular and multifunctional yards. The relationship of the house and farm buildings points to the exact occupation of the owner and his family – shepherding, leather manufacture, homespun tailoring, smithery, etc. Such a structure of the yard is typical for the beginning of the Bulgarian Renaissance in the 18th century. However there are also some patterns preserved from the 19th century, where we can see a fairly distinct division of the yard into a representative flower garden in front of the house and a farmyard behind it. On the other hand, probably under the influence of the European Baroque style, in some areas in the town of Kotel there may be noticed an evident tendency to build up symmetrical houses and yards with space grading (from small to large, from dark to light).

Subordination of spaces and elements

Residential buildings and all architectural details are strictly subordinate to the human scale. The essential thing to be achieved in this respect has been the feeling of cool, quiet and security. In some samples the stone fences reach a height of more than ten feet so that an Ottoman rider would not be able to look inside the property (figure 3). The other important aspect of this subordination to the human scale is the very strong traditional sense of harmony. This is the harmony between the part and the organic whole, between the colours of the materials used and the flowers. In this respect one cannot fail to notice a close resemblance to the Moorish patterns of the Alhambra in Granada.

Cohesiveness with nature

In the majority of the case studies there has been observed a skilful utilisation and preservation of topographic character by forming terraced grassed home yards and flower gardens. This can perhaps be compared with the villas of the Italian Renaissance (14th-16th centuries). The architectural volumes are imperceptibly taken into the undulations of the relief with minimum earthwork. The other aspect of this cohesiveness with nature is the use of local materials only – crumbled stone (sandstone), slates and timber. A very important thing in this respect is the deliberate use of plants alongside the building materials. This use

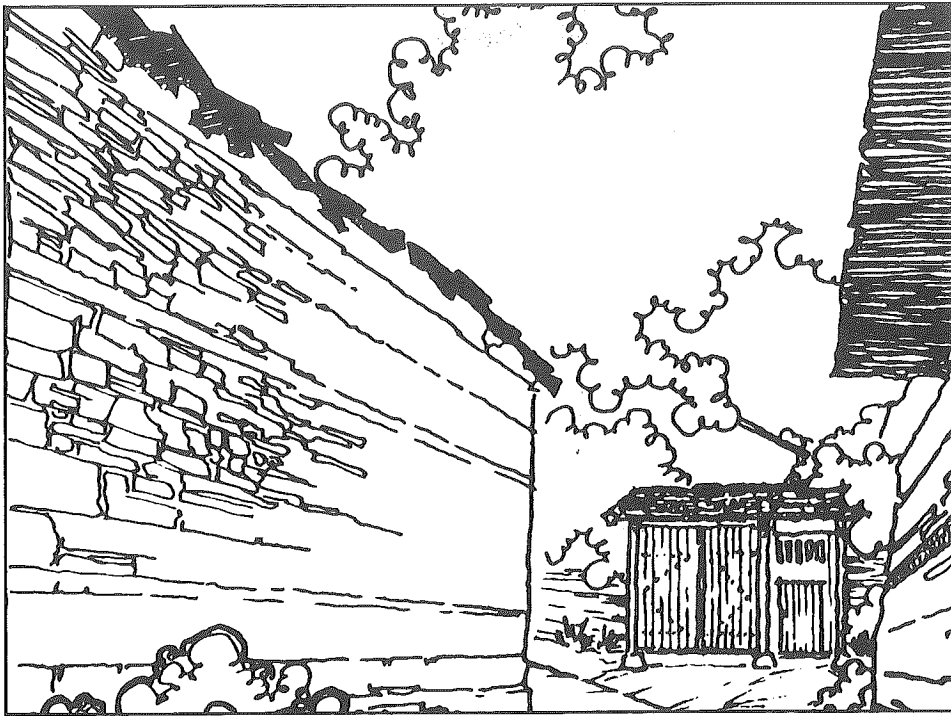


Figure 3: Cobblestone road in the village of Katuishte, high stone walls and an entrance to a home yard

of abundant vegetation creates diversity in the landscape, gives shelter to the buildings and forms a graduated visual connection between rural and natural environment.

Rustic character

One of the most important elements of the rustic detail is the typical cobblestone pavement. At the beginning of the period the stones in use were unfashioned and of irregular shape, while at the end of the Bulgarian Renaissance we can observe some examples of ashlar pavements and kerbstones. Another important part of the Bulgarian Renaissance yards is the supporting stone walls covered with slates and the adjoining timber fences. They usually complement the very picturesque stone stairs and make a natural connection between the numerous terraces. All the buildings in the region have slate roofs and large timber doors situated usually in the lower part of the property. Other specific architectural elements of the yard are the fountains, the stone wells, the lanterns and the typi-

cal (for the region) trellised vines which have a very close association with considerations of security.

Recommendations

Finally it is necessary to consider those features that provide a basis for a contemporary understanding of this first demonstration of Bulgarian Garden Art. Today we may see joyless pictures in these settlements – ravaged by time and landslides; yards overgrown with weeds and mosses. On the other hand, especially in the town of Kotel, there are some new quarters with three or even four-storied houses that do not have anything in common with the cultural heritage. The transformation of many houses, or parts of them, into shops, garages, and cafés blots out the traditional compact housing and alters the functionality of the yards.

A new planning concept has to be clarified in the Kotel region in order to enable the local authorities to carry out a strategy of using the characteristic features of the Bulgarian Renaissance Yard as a corrective for any new initiatives. Integrity between utility and aesthetics, unity of natural surroundings, cultural heritage and historical authenticity must be the starting point in planning the urban structures of these historical settlements. In view of the utility requirements of contemporary life, the most reasonable strategy for Kotel's region in our opinion is to continue the "green mission" of careful planting within the yards and to preserve the original characteristic features described above within the settlements. That seems also to be a good starting point for turning the area into an effective recreational centre of not too high tourist density.

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TREE LEGISLATION IN FOUR EU MEMBER STATES

Alice Ross

A study of the effectiveness of landscape conditions in planning as used by District Councils in England and Wales (Ross, 1991) has been extended, thanks to a Landscape Institute travel award, into Europe, with the purpose of comparing the planning legislation affecting the landscape at district level in four countries of the European Union in the hope of discovering successful methods worth including in any harmonisation programme across the continent.

The investigation involved a study tour comprising visits to Brugge in Belgium, Lille and St Omer in France during November 1992, Trier in Germany and Hemsteede and Leiden in the Netherlands in February 1993. But limited by time and resources, this study was more of a reconnaissance survey collating information from a wide range of sources and, where possible, including interviews with landscape architects and local government planners. The study covered many topics, but of particular interest, and described in this report, was a comparison of tree legislation in the four member states.

France

The protection of historically-important trees on 'sites inscrits' (conservation areas) is through the Ministry of Culture and the Architecte du Bâtiment de la France, rather than by local authority TPO equivalents.

The Plan d'Occupation des Sols (Land-use map) for the town or district dictates general tree and other planting requirements for each zone. The Règlement document for this map contains some conditions relevant to trees, such as: Woodlands designated TCa and TCb on the Plan are subject to a major prohibition of felling.

Paragraph 13 from Lille's Règlement ('Espaces libres et plantations, espaces boisés classés') contains the majority of conditions relating to trees, from which the following is a sample:

- Any large* tree felled must be replaced by a large tree (* 'tige haute').
- Any large tree felled in a designated park area must be replaced by four new large trees.
- For every 150 sq m of surface parking space in urban areas, one large tree is to be planted.
- Every car park over 500 sq m must be set within a plantation in country areas.
- All new agricultural buildings are to be screened by large trees. Open spaces left between industrial developments are to be planted up.

The general prescription for tree planting and protection as can be seen seems fairly thorough and exhaustive, but they can be refined further even at commune level, where conditions as to tree species can be set out and the percentage of trees : other planting : hard landscaping can be specified for designated zones within the commune. The main problems would seem to be the mechanical nature of the conditions and the lack of reference to design and the relationship with the character of the existing landscape.

Belgium

In Brugge in those cases of development where trees are scheduled for removal, one or more replacement trees are a requirement in order to permit the development. Here a tree is defined as having a circumference of 30cm at 1m above ground level. For surface car parking, one tree per five parking places is stipulated.

In the countryside, the local authority has the power to insist on tree screening around huge new EU barns, the descriptively-named 'shame plantations'. Inappropriate species (not on recommended lists) can also be removed from woodland planted by farmers.

Germany

The Rheinland-Pfalz situation with its adoption of the principle of landscape compensation was quite a radical development in German planning. It operates for tree preservation and planting as for the other aspects. A value will be set on

the tree threatened by development. It can be replaced with planting a similar value tree on the same site or in the immediate vicinity, or cash compensation can be paid to be used for future tree planting elsewhere. As with the French example, though admirable in intention, it is somehow reducing design with trees to mechanical planting, by value this time.

Netherlands

In the Netherlands, at the regional/countryside level say of North Holland, an informal 'forest law' exists, that is, an agreement exists to replace woodland felled for development. It is similar in idea to the German one just quoted: a similar, or greater, area of woodland must be planted, either on site or in the immediate neighbourhood if possible, of the same quality and species as the former woodland. An example was given of a proposed golf course requiring felling of twenty-year-old woodland on the Flevoland Polder, to which the 'forest law' would apply.

In Leiden, a one-for-one replacement of felled trees is required. Felling permission must in all cases be obtained from the Local Authority, the planning department at the time of the visit liaising with the landscape architects in considering the application. As in Britain, Leiden has tree protection orders: 'monumental' trees so protected are plotted on to the master plan for the city to inform would-be developers of their presence. It is a criminal offence to cut down a protected tree (not just a planning offence, as in Britain), but the Leiden interviewee admitted that it is usually difficult to prove who actually committed the deed and so the careful regulations often go for naught. Within the contracts which the City agrees with developers, tree species to be used may be specified, ornamental cultivars being acceptable in central more 'artificial' areas while more naturalistic or native species are specified for the urban fringe. The protection of what are designated 'monumental' trees is particularly important both in Leiden and nationwide. The same level of consideration is given to them as to the built development, and, as in Rheinland-Pfalz, a value is set upon them, using the 'Methode Raad'. This formula is similar in many ways to that in the Arboricultural Association's *Amenity Valuation of Trees and Woodlands* but has the advantage of being formally legally accepted throughout the Netherlands and of automatically index-linking the 'price per head' (see below).

In outline, the Raad method of tree valuation considers five factors:

- Factor 1: 'de eenheidsprys' – the price per head. This is a price per sq cm of stem area at 1.3m above ground level, set at 8 florins per sq cm in 1984 but index-linked.
- Factor 2: the area of the stem at 1.3m above ground level (three formulae are given, allowing radius, diameter or circumference to be used as the means of calculating the area).
- Factor 3: the value of the tree to its site:
 - in the city centre, it rates 1.0
 - in the inner suburbs, it rates 0.9
 - in the outer suburbs, it rates 0.8
 - on the urban fringe, it rates 0.7
 - in open countryside, it rates 0.6
- Factor 4: the condition of the tree – its age, life expectancy, health and shapeliness are taken into consideration, so that a healthy, well-formed mature tree rates 1.0 with a sliding scale, so that a dead tree rates 0.0
- Factor 5: the scarcity value of the tree, so that
 - a single tree rates 1.0
 - street trees rate 0.8
 - small groups of 2-5 trees rate 0.6
 - a big group rates 0.4
 - woodland rates 0.

(There are also computations relating to stems, canopy volume and spread.)

A worked example at 1988 prices gives the following result:
a solitary lime tree in good condition in the city centre, 40cm in diameter at 1.3m above ground level had a compensation value as follows:

Value of stem per sq cm = 9 florins
Area of stem = $3.14 \times 20 \times 20$ sq cm = 1275 sq cm
Value to planting site = 1.0
Condition = 1.0
Scarcity value = 1.0

Thus, compensation value = $9 \times 1275 \times 1 \times 1 \times 1 = 11313$ florins

The Leiden interviewee quoted a recent example where the Raad value of a

monumental tree was 80000 florins – approximately £40000 – enough to make a developer pause and reconsider the design of his scheme. It seems a fairly exact way of measuring the desirability of a tree to the community, though there are areas where subjectivity might creep in, for instance over Factor 4, where the aesthetic judgement of the perfection of the tree's form comes into the equation.

Conclusions

It appears that in all four countries visited, as in Britain, trees are valued and a good deal of planning legislation of various sorts relates to their protection and replacement. A comment must be made that the requirements seem somewhat mechanical and that little consideration is paid in the legislation to the relationship to the existing landscape or to the design of new planting. As an eye-opener to developers, the Raad method of putting values on trees might with benefit be applied in this country.

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A BIBLIOGRAPHY OF CONTEMPORARY NINETEENTH CENTURY HORTICULTURAL AND GARDENING LITERATURE

Colin Young

The 274 titles of this bibliography, which excludes periodicals, are about British gardening and horticulture and were published during the nineteenth century. The intention for this piece of work-in-progress is to develop a full publishing history on the basis of the listed titles but meanwhile it is hoped that this immature exposure will elicit helpful reaction from students of the subject. The horticultural and gardening literature of the nineteenth century is characterised by multiple editions (Rivers, 1864, runs to at least 20 editions) and by changes of publisher, especially over a long publication run, and frequently these complications are added to by inaccuracies in publication dates quoted in the more recent literature or in dealers' catalogues. To bring order and clarity to this subject should assist a better understanding of horticulture and gardening in the nineteenth century and to this end the following is dedicated.

This list represents a marked shift away from the exclusive literature of the estate improver of the previous century, with his twin concerns for taste and utility, to a literature that addresses the new villa owning middle classes in search of novelty and spectacle and gives a sidelong glance at the gentrified cottager. We see a process of diffusion and proliferation of craft knowledge juxtaposed with an embrace of new technologies and plants that fused innovatory gardening with social status. The head gardener emerged as something more than a horticultural worker: proud of his situation, often in the employ of the landed aristocracy (e.g. Sutherland, Pontney, Nicol, Mawe and, most famously, Paxton), skilled and experienced for sure but articulate and conscious of the responsibility he carried as horticultural ambassador of his ennobled employer. The titles clearly show that the majority of target readers were amateurs, among whom were the emergent lady gardeners led by the indefatigable Jane Loudon but succeeded by a growing band who, in the view of Geoffrey Taylor, achieved eminence equal to the men.

A perusal of the authors, their subjects and the dates of publication is revealing.

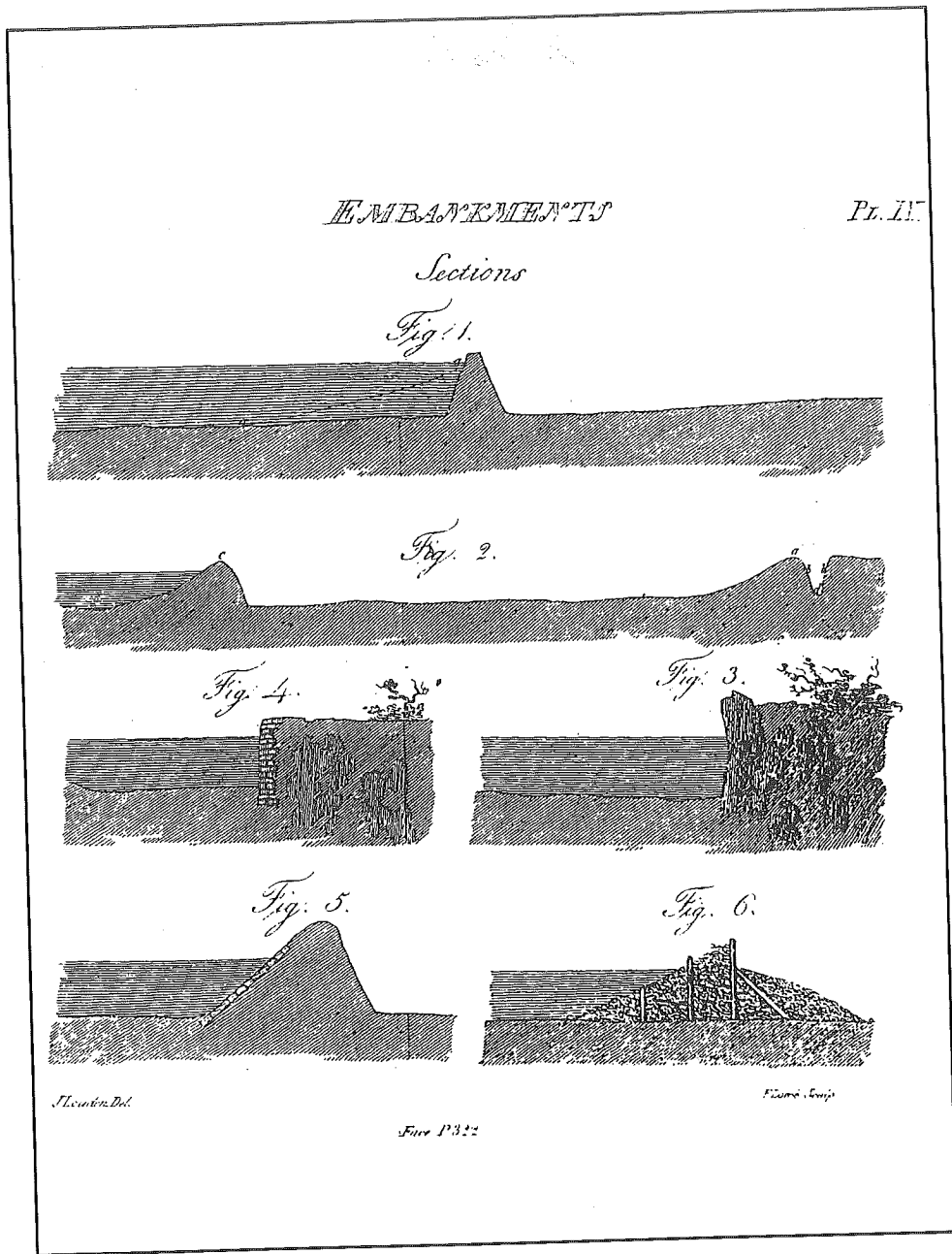


Figure 1: Embankments from Loudon's 'Observations on the Theory and Practice of Landscape Gardening', 1804

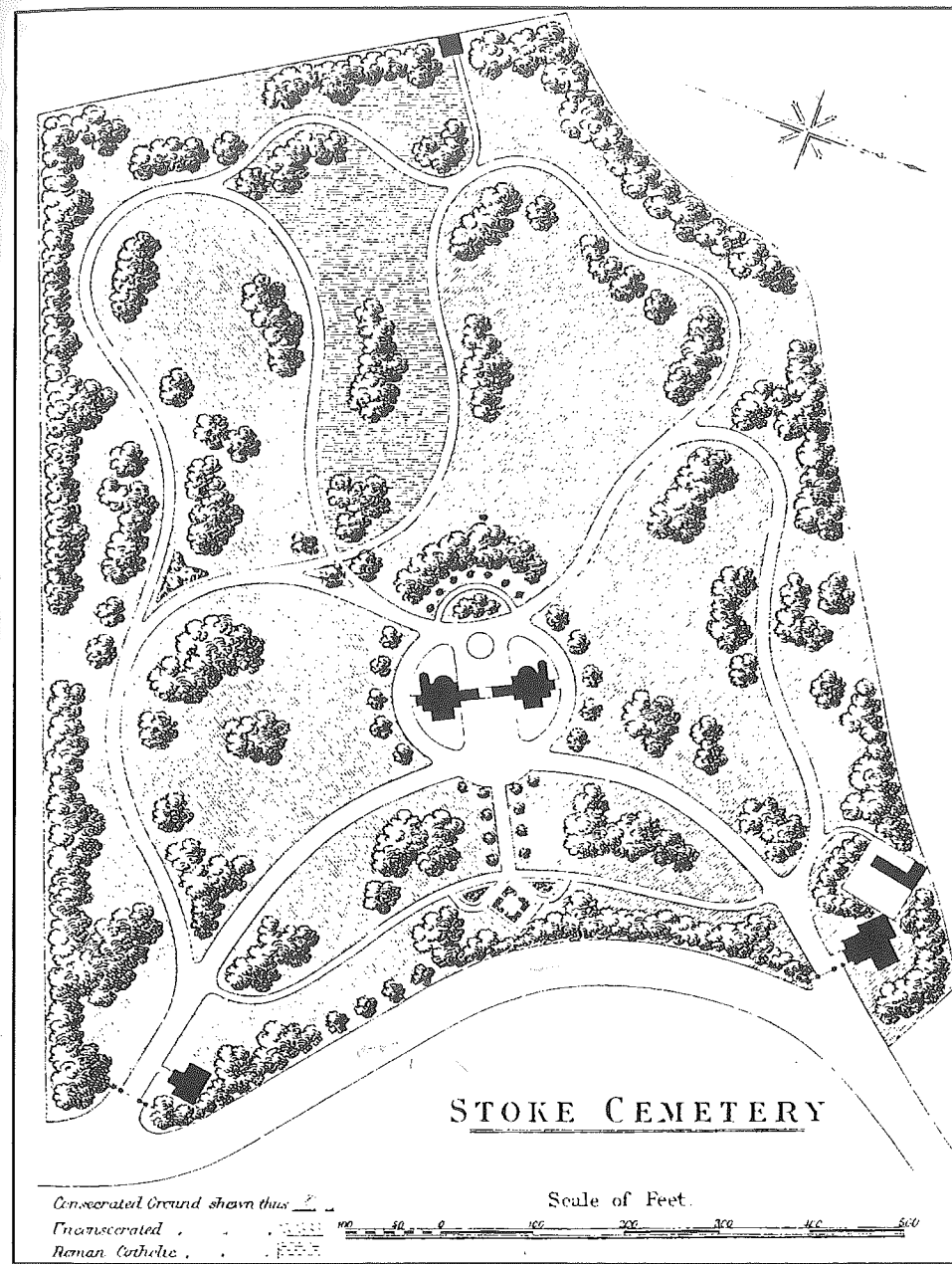


Figure 2: Stoke Cemetery from Milner's 'The Art and Practice of Landscape Gardening', 1890

Firstly, the dominance of Loudon's oeuvre is inescapable and confirms his extraordinary energy and influence, especially when one realises that the *Encyclopedia*, for example, ran to 1233 densely printed pages (4th. ed. 1826). The size of Shirley Hibberd's contribution is a useful reminder of his popularity and the extent to which he saw himself as a latter-day Loudon while Robinson gives a fin-de-siècle flourish to the list. If these were the big producers the others should not be dismissed for want of output for they all contributed to a corpus of national and regional experience and expertise of unparalleled significance and of illuminating topicality. For example, modest though the subject matter is, M'Kellar (1861) was dealing with a very fashionable concern in his little book on geometry, Kemp (1850) was inspired by the 'incongruity and dullness' in the design of small suburban gardens while Wood (1891) offered a full range of practical up-to-date advice to the amateur gardener. Also featured is a nice balance of concern between the flower garden and fruit and vegetable culture which, together with various theses on new glasshouse technology, confirms the important role the latter played in the domestic economy and the burgeoning popularity of horticultural exhibitions and competitions.

Of single genera to have been accorded a monograph, the rose and fern feature strongly, somewhat surprisingly if considered against the popular archetype of vicarage gardens filled with broad-leaved evergreen shrubs. It is also surprising that only Hibberd (1872) attempted a monograph on ivy and that the synergy of lawn and developing mowing technology should appear to be so neglected in book form.

It is perhaps a little surprising that so few titles explicitly address gardening in the new public landscapes. Not surprisingly Loudon (1840) is a notable exception with M'Lellan (1894) able to show how far parks had developed over the intervening forty odd years. Likewise, it is surprising that the issue of the urban graveyard, so graphically described by Dickens as 'hemmed-in...pestiferous and obscene', should escape the attention of those who had it within their power to show a more humane and sanitary way of dealing with one of Victorian society's preoccupations. Of course, it might have been that after Loudon (1843) had dealt so comprehensively with the matter most horticulturalists felt there was nothing more to be said between the covers of a book (even though no less than 2928 new cemeteries were opened between 1833 and 1863) until the issue of 'urn-burial' prompted Robinson (1880) to advance his idea of a 'garden-cemetery'.

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THE WELSH BORDERLAND

Jay Appleton

Ghostly horizons overhang the plain
 In crimped crests of quartered meadowland,
 Pricked out with sandstone and patched up with trees.
 Here spreads a cosy net of little fields
 Secured with hedges, wild and winterful,
 Watching the year revolve. The works of man
 Are mortised in the cultured wilderness.
 The glum grey waters of a greasy brook,
 Creeping below some strand of woolly wire,
 Worry the crumbling substance of a cliff
 And trickle out of sight. The clarity
 Of dead and drumming silence tunes the eye
 To feel the texture of the neighbourhood
 In cool defiance of a wisp of fog
 That rises in the hawthorn to obscure
 The inner pattern of its elegance.
 Though the half-curtained sun says "Four o'clock!"
 What blasphemy to measure such a scene
 By the bare finger of horology,
 When from the very fabric of the place
 Rises the tang of the Silurian Sea!
 As in the spasm of adolescent love
 The being blends with an elusive prize
 That tempts and taunts and seems to be attained,
 So from this hill the penetrating eye
 Achieves a vast communion with a sky
 Grown green with age and hoary with a haze
 Of figure-clouds that call the heart away.
 It is as though the kernel of the soul
 Were crushed and scattered on the countryside,
 Infusing with its own magnetic field
 The crowding, whispering hills. Hurry away
 Before the vandals forge their prosy gibes
 To massacre so frail a fantasy.

[from Jay Appleton: *The Poetry of Habitat*, 1978]

A CAVALIER ATTITUDE

Richard Sneesby

I'm looking for a new car. My Renault 9 has served me well but is now at that stage when things are beginning to go wrong, the mileage is building-up and repairs and re-sale values come to mind each time it doesn't start first-time in the mornings or, as happened today, the exhaust blew, converting a medium-sized family saloon into an international tractor.

So, how do I choose a new one? The options are endless. I have a limited budget so Ferraris, Aston Martins and Porsches are unfortunately out. I don't want a small 'super-mini' either, not my style, or a sales-rep's car. In fact, I want another small family car, capable of taking three or four people, bags of cement and shopping from Tesco's. More importantly I want gadgets. Lots of gadgets. Gadgets of the type found in the top range of cars which convert driving from a chore to a delight. A second-hand 1600cc, 4wd, Lagondiabaloturbo estate would do nicely.

If I can't have them all, it must have at least a few of the fun things that a Ferrari or even a Ford Mondeo offers and that my car doesn't: ABS brakes, power steering, twin air bags, central locking, electric windows, CD player, etc. The fact is, I *can* have them. Admittedly I have had to wait a few years. The car I can now buy for £5,000 second-hand is a development of the super-cars of ten years ago, so the Peugeot 306 will have gadgets, it will have safety features, it will have a high re-sale value, and it will run on unleaded petrol (another failure of my car). What has brought about this remarkable state of affairs?

Car designers and manufacturers are continually seeking technological breakthrough, probably the main selling point of new cars. Sure, they style their cars slightly differently and offer a choice of colours and interior trim, but technology moves on. The second-hand cars of today were the technological landmarks of five years ago and in-turn borrowed their ideas from the super cars of ten years ago. In this way I would put money on the steering wheel gear-change of the 1994 Porsche 911 being standard on the Ford Fiesta (or whatever its equivalent is called) in 2014.

This process, the evolution of ideas and technical innovation, is not happening

in landscape design. The analogy with the car industry is a good one. Most landscape architects are forced to design production-line schemes, the Vauxhall Cavaliers (or perhaps even more accurately, the Ford Cortinas), of landscape design. Where is the new technical innovation? What are the landscapes of 2014 going to look and perform like?

The problem, as I see it, is that seldom are landscape architects designing the equivalent of Ferraris, Porsches and Japanese executive cars and, even if they do so, they keep ideas and breakthroughs to themselves. There is no Grand Prix in landscape architecture – no reason to move forward, no-one taking the risks necessary for design development. Occasionally there will be a very high quality landscape built, often mistakenly likened to a Rolls Royce, and like a Rolls Royce one which is exclusive and shrouded in mystery. What we need is an injection of Japanese and Italian-type drive and innovation. Something which is going to set new modes for the future. ▀

Paradoxically, many such designs and innovations appear on student drawing boards. Each year, between 200 and 240 new graduates are released into the profession with their own ideas and aspirations for the future of landscape architecture. Our development as designers is peculiar and can be likened to one of those huge Habitat vases containing a tiny bunch of carnations. We typically start from a low (and unstable) base and move upwards towards our wide-point about four or five years into our training, thereafter being depressed (constricted?) into standard office solutions and low client aspirations with only the very occasional opportunity to create high quality and innovative designs thereafter. It must be the next mission of the profession to find the means to build upon student endeavour rather than dampen it.

If we can find a new direction (punk-rock also springs to mind here) we need to develop and share it, passing ideas and innovations onto others and future generations. After all, only the most foolish car designer would spend time and money creating another Ford Cortina, and only the most devoted or mis-guided client will be persuaded to buy it. As for me, well I suppose I can put up with my gadget-free zone for another year.

1994 DISSERTATIONS: BA Hons, Cheltenham

The following is a list of the successful dissertation submissions for 1994. These documents can be consulted in the College library at Francis Close Hall and abstracts may be obtained from the Librarian on receipt of a stamped addressed envelope. Titles and abstracts are also stored on a computer database in the Department of Countryside and Landscape enabling key-word searches to be undertaken.

Anderson, Elizabeth	<i>Giving the environment the hard shoulder?</i>
Bentley, Mark	<i>Computer technology and the landscape architect</i>
Calonder, Augusto	<i>Towards interpreting "Landscape Architecture"</i>
Crowe, Kay	<i>Victorian parks and the apparently ad hoc manner of change</i>
Delhanty, Tom	<i>The modern movement in landscape architecture and garden design: its successes, failures and consequence</i>
Disbury, Tracey	<i>The modernist garden</i>
Edwards, Richard	<i>Hydrology, ecology and the landscape architect</i>
Fletcher, Simon	<i>Light as a medium for the landscape architect</i>
Goodman, Toby	<i>Facade planning: a report into the viability of providing verdure on urban buildings</i>
Grierson, Rupert	<i>Marina design – A sensitive balance between the purely functional and the aesthetic</i>
Harcombe, Sarah	<i>Exploring the extent that a landscape architect can effect the appreciation of the sense of place from within a car at speed</i>
Hart, Joss	<i>The Regents Canal, London – a study of a hidden asset</i>
Hastings, Anthony	<i>Has Hong Kong developed a unique landscape style?</i>
King, Jonathan	<i>Marketing and the landscape architect</i>

Louis, Blyth	<i>The problems and opportunities created by the extraction of china clay from the Hensbarrow region of Cornwall</i>
Lovell, Claire	<i>The art of landscape design</i>
McNay, Alistair	<i>The potential of golf courses for environmental education</i>
Pollock, Christina	<i>Colour controversy as it affects the garden and landscape</i>
Richardson, Paul	<i>Urban scales: their evolution, causes and characteristics</i>
Sentance, Rebecca	<i>Water – the source of life</i>
Shaw, Mark	<i>Areas of outstanding natural beauty: a detailed assessment of current policy framework and its practical implications</i>
Stevenson, Andrew	<i>Restoration and evolution: the beneficial and detrimental factors on today's landscape</i>
Sword, Kevin	<i>Traditional settlements: models for the design of contemporary pedestrianised areas</i>
Turner, Elizabeth	<i>Can landscape architects make a positive contribution to crime prevention through environmental design?</i>
Ward, Nigel	<i>The aesthetic and environmental effects wind farms and wind turbines have on landscape</i>
Winstone, Adrian	<i>An investigation into community involvement</i>

ELASA '95 CONFERENCE: SUSTAINABLE LANDSCAPES – PROBLEM OR POTENTIAL?

The 1995 European Landscape Students Association Conference will take place in Cheltenham, 13th to 19th May. Hosted by the Department of Countryside and Landscape, CGCHE, it will have as its theme 'Sustainable Landscapes'.

Sustainability can be defined as:

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland Commission, 1987).

Improving the quality of life while living within the carrying capacity of supporting ecosystems (Caring for the Earth, report of the World Conservation Union, UN Environment Programme and World Wide Fund for Nature, 1991).

This century has seen profound changes in the relationship between the planet and its inhabitants. Alarms have been raised about issues of population, food production and its distribution, the recognition and protection of species and their supporting ecosystems, energy conservation, industry and transport. The 1992 Earth Summit in Rio de Janeiro focused everyone's attention on the need for coordinated action plans for the very survival of the earth. While nations may disagree about details and priorities, they are united in the recognition that a coordinated approach to the management of resources is vital for the security, well-being and survival of the planet.

Landscape architects are in a unique position to make a positive contribution to the design and stewardship of the land. The aim of this conference is to provide a forum for studying and debating these critical issues. Students from 25 European countries, the professionals of tomorrow, will be encouraged to explore problems and potentials through a series of workshops, lectures and discussions generated by local site visits and an exhibition of representative work from their own countries.

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REVIEWS

The role of horticulture in human well-being and social development: a national symposium. Diane Relf (ed), 1992, Timber Press, Portland, Oregon, ISBN 0 88192 209 9, £37.50 hb

It is not inconceivable that humans find plants...highly pleasurable due to the genetic development of human consciousness in environments where plants played an essential role in human survival. (1)

This is not from a paper in this volume, but is indicative of the level of much of the work discussed there. We might take a cue from the first words of the first chapter: "Earth is a plant-oriented planet". It should therefore be no surprise that we find plants important to Hom. sap.; and that this importance extends to well-being. A survey of astronauts' and cosmonauts' preferences for 'interior decor' showed, for example, a need for "more natural and varied colors, plants, landscape pictures, and natural woods...[L]ove for natural materials and forms, especially in high technology habitats, seems to transcend national boundaries". [p.99]

The role of horticulture... aims to be a platform for research initiatives that would move us towards a full understanding of the relationships between plants and people. This is perhaps over-ambitious. Its content, in this light, seems partial, eclectic, and in places awkwardly naive. Reading through the book reminded me of the negotiations, ten years ago, between the board of the Landscape Research Group and an American benefactor who wanted to fund a 'Nature-Experience Research Project'. These negotiations, not surprisingly considering the Life, Universe and Everything nature of the title, were abortive. They were mediated by Charles Lewis of Morton Arboretum, who for years has been valiantly trying to promote a more serious attitude to understanding the cultural significance of plants.

Indeed, Lewis twenty years ago seemed to be pointing up some of the basic aspects of what he called 'people/plant proxemics' (2) that *The role of horticulture...* brings attention to. One wonders what progress has been made. These proceedings are full of appetizing titles; but too often the text is picayunish. 'Can you have a merry Christmas without a tree?' – "it may be too early to say..."; 'Urban nature, place attachment, health, and well-being' – "...Finally,

there is mounting evidence that nature has a powerful impact on people's emotional states"; 'The relationship of plants to lifestyle and social system' (abstract only)– "The results...indicate that most people like plants"....

Or, are we so out of touch (literally) with plantlife, that we need (genetic?) memory-jogging? For instance, that

relative humidity [in offices] in the absence of plants was slightly below the range recorded for human comfort, whereas it was within the recommended range in the presence of plants. [p.119]

The book does serve to remind us, through the work of Roger Ulrich for example, that even just visual access to plants appears to hasten hospital patients' recovery (so do pets); or that

the inclusion of vegetation in the urban environment appeared to have the greatest psychological impact, [whereas] the exclusion of vegetation actually elicits negative psychological responses, thereby creating stress. [p.145]

Suchlike indications now need to be taken further into practice.

Eisuke Matsuo of Kagoshima offers an interpretation of horticulture's significance that may take us further. "When we are creative", Matsuo says, "we have a sense of relatedness and even pleasure". [p.146]

People have two ways of being creative: by fostering life and by acquiring objects ['things' might be a better term]. These activities are based on different philosophies....The philosophy of fostering originated in the maintenance of the human race and that of acquiring in the maintenance of the individual body....If we are unable to satisfy either urge, we are prevented from living as a human being.

"If we examine our daily life", he warns,

we may be surprised to realize that it is full of the philosophy and behaviour of acquiring objects but lacking in that of fostering life. Even farming [is largely acquisitive]...

By contrast, and in contrast to 'hort-industry',

horticulture provides us...with the concept and behavior of fostering life...[and] also with...acquiring objects...obtained by our own effort.

Modern life, he sees, especially urban living, preventing most people from fostering life other than their own or that of intimates; and thus he explains the growing popularity of plant-growing. (Unfortunately this viewpoint is supported in his paper only by Japanese references.)

Matsuo's is a two-page article. Several of the other 39 are as short; and 15 further items are abstracts only. However, a few are quite substantial papers, including Charles Lewis's own. Ulrich and Parsons briefly review a considerable amount of literature. Their section on the psychological evidence of benefits might be a useful starting point for a deeper investigation of the book's subject: verbal responses to slide shows (a common way of researching people's reactions) take us some way, and observation of behaviour takes us further, perhaps, but direct *physiological* monitoring, such as in some of Ulrich's research (3), will probably give us a more reliable view – by, for instance, measuring skin conductivity, pupil dilation, and alpha wave patterns. Such research seems still at a tentative stage, when one recalls discussions of this approach 25 years ago. Ulrich and Parsons discuss the benefits of miniaturization of equipment, including eye-tracking devices that tell us directly what is receiving attention. So far, results point generally to a greater pleasure and a lowering of stress and aggression when in or viewing 'nature' settings.

Several papers deal with aspects of horticultural therapy. Here again I wonder when we shall move away from base. Here, and in other parts of the volume, one also wonders how widespread an interest in the 'role of horticulture' there already is. I did not see much reference to the work of Peter Thoday and his colleagues in Britain, for instance, in the therapy section. Although this book results from a national conference, I had expected a much deeper representation of Rest of the World literature. Have the Germans and Scandinavians, Antipodeans and Japanese other than Matsuo, for example, so little to report? Few contributors were from outside the USA. None appears to be an anthropologist or archaeologist – or sociologist.

The organisers' intention was that the conference would lead to the establishment of research priorities for a fuller exploration of the physiological, psychological and social 'benefits' of plants, and that horticulturists will be more prominent in that research. The final section of the book reviews the prospect. The view seems rather hazy.

There are references to mechanisms for organising a 'Human Issues in Horticulture Council', a review of the (useful) work of the People-Plants Council (4), strategies to provide direction for 'people-plant' research, and so on. The strategies are:

- Develop a comprehensive list of existing research.
- Identify research priorities...

- Communicate research priorities...
- Provide support toward the establishment of new research projects...

It looks familiarly like bulletspike. Surely the prime tasks of this conference could have been these very ones. Are we really moving so slowly?

Probably. The whole business of promoting plants is, of course, an uphill struggle – one well known to landscape architects. While reading the book, I noticed that the Horticultural Trades Association has abandoned its Green Releaf campaign, “its flagship project to promote the environmental benefits of plants” in Britain. (5) Britons are probably not yet ready to flagwave their psychological and social benefits! Here is a real mission for landscape architecture...

Notes

1. Thayer, R.L. and Atwood, B.G. (1978) Plants, complexity and pleasure in urban and suburban environments *Environmental Psychology and Nonverbal Behavior* 3(2) pp 67-76.
2. Lewis, C.A. (1976) *People/plant proxemics: a concept for humane design* in Suedfield, P. and Russell, J.A. (eds) *The behavioral basis for design*, book 1, Dowden, Hutchinson and Ross, Stroudsburg PA; pp 102-7.
3. See eg Ulrich, R.S. (1986) Human responses to vegetation and landscapes *Landscape and Urban Planning* 13(1) 29-44; (1984) View through a window may influence recovery from surgery *Science* 224: pp 420-1.
4. Details from Diane Relf, Dept. of Horticulture, Virginia Polytechnic Institute and State University, Blacksburg, VA, USA.
5. *Horticulture Week* November 10, 1994. One reason may be that the campaign material was not very effective.

Martin Spray

Jean Giono: *The Man who Planted Trees*, Peter Owen, London, 1989, reprinted 1994, ISBN 0 7206 0739 6, £6.95

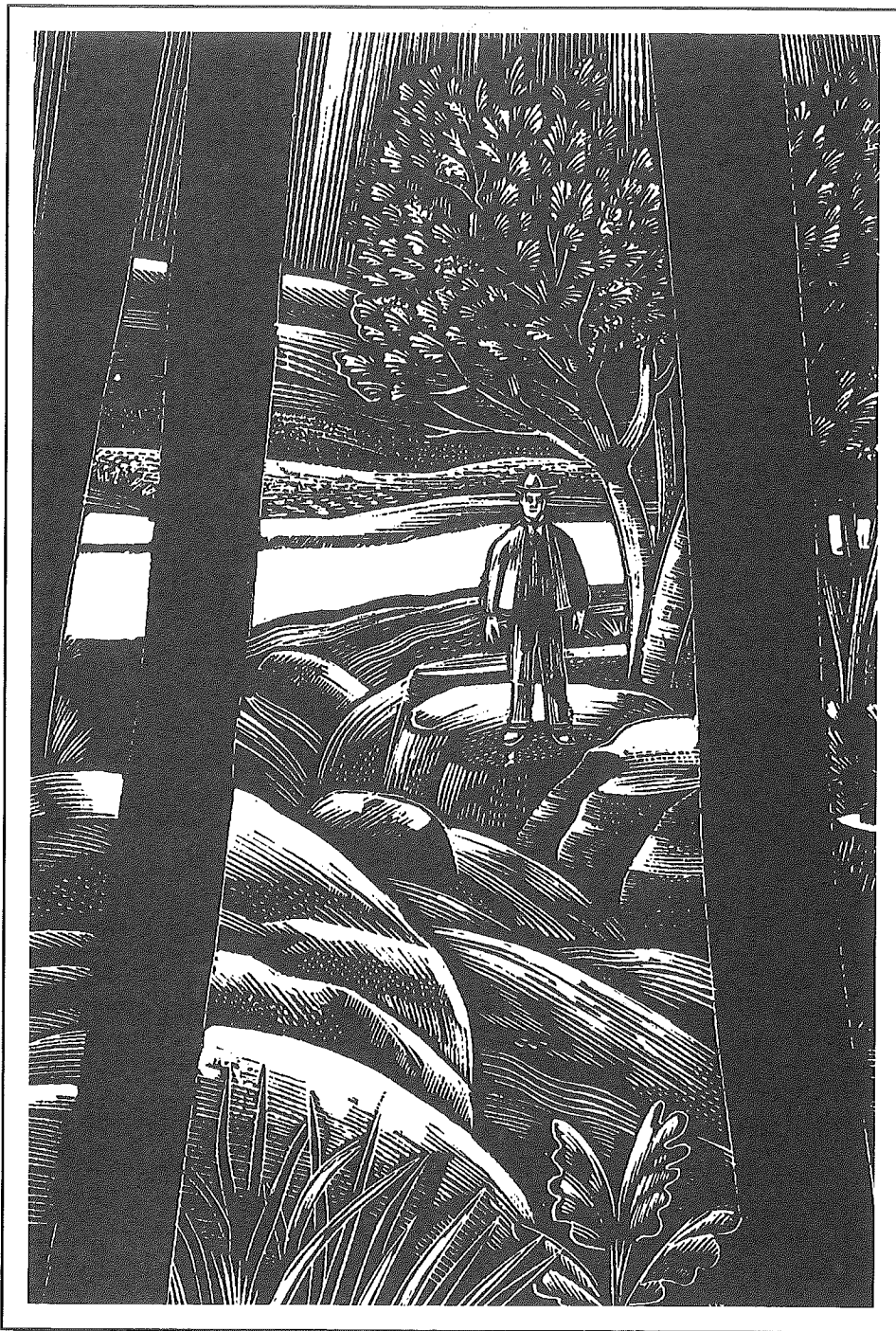
Some years ago, I visited and became captivated by a wild landscape in the south of France, an area consisting of limestone plateaus, granite ridges and deep gorges. On the south-east edge of the Massif Central, the Causses and Cévennes were until fairly recently a part of “France inconnue”, to both French people and certainly foreigners, since these inhospitable uplands are remote from the main axes of communication and served badly by roads internally.

From the summits of the Cévennes, which experience an uncharacteristically high rainfall for such a Mediterranean region, rivers flow westwards through a harsh landscape of degenerate oaks, some sweet chestnuts in the more sheltered localities, and broom on the highly siliceous soils. Further west, the tributaries coalesce and on meeting the Jurassic limestone of the Causses have cut deep and impressive canyons. Here the vegetation changes to scrub and includes the more typical xerophytic plants of the Mediterranean region: “La lande, vibrante sous le torride soleil d’été; c’est déjà le Midi!”

Over the centuries the region has been important economically for viticulture, sericulture, iron smelting and pastoralism, activities which have invariably led to deforestation on a vast scale, and indirectly to a great exodus of people. This state of affairs would have been more pronounced had it not been for the foresight of a local forester who, over 100 years ago, and despite much local opposition, set about recreating a woodland on the flanks of Mont Aigoual, which at 1565 metres is the highest peak of the Cévennes. By the side of the road which zig-zags to the summit, a commemorative plaque to this forester has been erected:

“Les montagnes de l’Aigoual jadis perdues, isolées et dégradées par les torrents ont été sauvées, ouvertes et restaurées par les travaux de reboisement dûs à l’initiative tenace du forestier G. Fabre et par l’oeuvre patiente de ses dévoués collaborateurs, 1875 – 1908”

On reading “The Man who Planted Trees” by Jean Giono, after having heard it broadcast on the radio for the first time this year, I inevitably drew comparisons between Georges Fabre, the trained Cevenol forester, and Elzéard Bouffier, the illiterate shepherd of Giono’s story who singlehandedly undertakes to reafforest a part of the Maritime Alps. Both were ‘men of the land’ who had exceptional local knowledge. Both experimented with various species and managed to find



the trees most suited to the terrain and soils. Both had a vision to reproduce a long lost landscape.

Giono's narrative, however, goes further. It may certainly be based on fact – possibly on the accounts of the work of Fabre – but there is a higher aim: “to make people love the tree, or more precisely, to make them love planting trees”. Bouffier found great joy in both the meticulous selection of acorns and their sowing as well as in the “hours of wordless contemplation of the countryside” he had created. The results of his efforts are there for all to see: “Creation seemed to come about in a sort of chain reaction...I saw water flowing in brooks that had been dry since the memory of man...As the water reappeared, so there reappeared willows, rushes, meadows, gardens, flowers, and a certain purpose in being alive...The whole countryside [glowed] with health and prosperity”.

The book was first published in 1954 under the – to me, more apt – title “The Man who Planted Hope and grew Happiness”. There is an inflexible determination in the daily ritual of planting 100 acorns, a calling that the old shepherd, having once made up his mind, seems duty-bound to follow all his days. Yet it is not a mission embarked upon ill-advisedly. A shepherd for most of his working life, and now well over 50 years of age, he has lived close to nature, he knows the land intimately and has developed a deep respect and love for his native soil. His hope is to renew the landscape with his efforts and, in so doing, he discovers “a wonderful way to be happy”.

The story is told in a concise, unencumbered style but warmly communicates the nature and vision of the tree planter. The text is illustrated with numerous, bold wood engravings (see illustration) which are a perfect complement to the resilient central character and the very moving story which unfolds.

Robert Moore