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LANDSCAPE ISSUES

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Editorial policy is to include articles, reports, reviews, dissertation and research seminar abstracts concerning a wide range of landscape-related issues. Papers with a bias towards any aspect of rural landscape, landscape education or computer use are of particular interest. Contributions are welcome.

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A BACKWARD-LOOKING FOREWORD

G.W.Hyden

The School of Landscape Architecture originally set up in the Pittville Pump Room at Cheltenham celebrates this year, 1986, its quarter century. Twenty five years ago the need for undergraduate education in landscape architecture had been of much concern to the then Institute of Landscape Architects. An analysis of demand for qualified members in 1961 indicated a need for between sixteen and twenty each year. Of these only six to eight needed to be trained in landscape architecture as their first 'degree' discipline, the rest being postgraduate. Entry to the profession was, at that time, through the external examination system only. It is, however, noteworthy that of the nineteen candidates taking the Design Set Piece in 1961 only two were able to pass. Twenty five years later the external system is still claiming a similar 'success' rate.

Integrated with the then existing School of Architecture the original proposal was for a three year course with the possibility of a fourth year, using the Institute of Landscape Architects' external examinations for eventual entry into the profession.

But the full-time undergraduate system has grown and changed out of all recognition. The Cheltenham School was soon followed by other full-time undergraduate courses and six are now able to offer honours degrees with professional diplomas exempting their students from examinations of the Landscape Institute.

With the growth of the number of courses and their academic recognition has come a more rigorous curriculum. Staffing too has changed. In the early days at Cheltenham design was taught by architects and plant knowledge acquired by a residential component taken at a local horticultural college, all overseen by one

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part-time landscape architect. The present situation benefits from a full-time staff of twelve exclusive to the School, no less than seven of whom are professionally qualified landscape architects.

The location of the School has also undergone important changes. From the studios in the Pump Room a move into the College of Art in Cheltenham was followed in 1981 by one to the Oxstalls Campus of the Gloucestershire College of Arts and Technology in Gloucester, the acquisition of residential accommodation and the use of the grounds for horticultural teaching proving to be great assets. The loss, five years ago, of Architecture, and the closure of the Degree in Town and Country Planning as part of a more recent N.A.B. review have been observed with some trepidation. However, the School continues to provide a full and stimulating curriculum and attracts able students committed to a design philosophy.

It was a great privilege in the early years of the School to have as a governor and adviser, Sir Geoffrey Jellicoe who received the first CBE to be awarded for landscape architecture, incidentally in the year of the School's founding. The important role played by Bodfan Gruffydd, first in the creation of the School, and a decade later, keeping it going through a most difficult time, may be fully realised by only a few; his continuing backing and advice have been a great strength. The School has had many friends over the past twenty five years: it is impossible to identify all of them here, but the unstinting support of 'Reggie' Dent, Principal of the College of Art in the 60s, enabled the creation of the School, 'Jamie' Martin continued that role in the 70s, and now the commitment to our future through the 80s is with Derrick Williams, Principal of GlosCAT.

Since Roger Cartwright was awarded the first College Diploma in July 1968 over 270 have now been gained. Diplomates can be found in most areas of landscape design and ex-Gloucestershire students work in North and South America, Scandinavia, many countries of Western Europe, the Near and Far East, not to mention those in Australia and New Zealand.

Continuing improvement and the achievement of higher standards are the concerns of the School. The environment clearly demands the skills and techniques taught here. It is to be hoped that over the next twenty five years some of these ambitions for the landscape will be realised.

LANDSCAPE STUDENT DISSERTATIONS

M. Spray

INTRODUCTION

What interests landscape architecture students? The question is asked each year in a slightly different way by many students about to embark on their major individual research studies: "What have past students written about?" As the answer may be of interest to future students (as well as their tutors), and may perhaps be of passing interest to the landscape profession, the following analysis is offered.

This analysis is very cursory; and it requires three clear apologies. First, it is select, in that it is based on the work of undergraduate students at the Gloucestershire School, in comparison with that at Leeds Polytechnic and Sheffield University, chosen to represent a comparable undergraduate course and postgraduates, respectively. Second, the selection of categories of topics for enumeration is a biased one - they are categories of interest to me. Moreover, no comprehensive categorisation has been made (1). Third, actually categorising many of the dissertations, even when I knew the content of Gloucestershire ones, proved difficult: again, this is a very personal analysis.

Since 1975, all Gloucestershire dissertations that have passed examination have been retained in the College library (along with a selection from previous years). In that year two sets were presented: this marked the changeover from a fourth year to a third year assignment.

Students here have always had more or less free choice of

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subject, so long as a relationship with landscape architecture could be demonstrated; although latterly the question "Where is the landscape architect in all this?" has been pressed on students whose initial choice seemed a little peripheral. For the whole of this period, the dissertation has been the responsibility of one member of staff*,who has also been responsible for the smaller individual research studies for first and second year students. Besides this overseeing tuition, each student has been assigned to a 'specialist tutor' - preferably one with a knowledge of the chosen subject. Occasionally, subjects have been adapted to suit tutorial preferences. Somewhat more often, tutorial advice has led to an adjustment of topics. In practice, however, students exercise a fairly free choice, although a 'case study' of some sort must be encompassed. Almost without exception, a student has had to pass the dissertation before being allowed to take a degree or to enter the fourth (graduate professional) year.

The present expectation is a script of about 12,000 words. The expected wordage has, over the period, been much reduced - but is still more than other Schools require. About half the time of the first and second terms of the third year is now devoted to this assignment.

Since 1975, 240 students here have successfully submitted dissertations: 120 male and 121 female.

At Leeds, the 'personal study' runs, with other work, over ten months, from the second to the third year spring terms. "The objective is to produce a critical appraisal" of a part of the subject of personal interest "within the context of the landscape discipline. It may be of an aspect of design, technology or management theory, or of a particular type of landscape problem. The exclusive study of a single site may be appropriate, provided that the wider implications of the findings are considered."(2) This latter possibility is difficult for Gloucestershire students to take up ; as is the suggestion that submissions, "although normally written, may incorporate tape/slide material, drawn material, [and] physical evidence of trials and experiments". True experimentation has never formed part of a Gloucestershire submission. Each Leeds student has a personal study tutor.

*currently Aylwin Sampson [Ed.].

At Sheffield, the dissertation in the postgraduate course occupies the final six weeks. Less than the maximum of 10,000 words is expected. Tutorial advice is limited to agreeing the subject, and perhaps criticism of part of the final draft. Choice of topic is largely free - so long as it has a high landscape content, is well defined and incorporates a case study or other detailed examination. Occasionally, students are directed to study an area in which they are weak.

In the figures for Sheffield, dissertations by Natural Environmental Science with Landscape Studies (now Landscape Design and Plant Science) students submitted for a master's degree are included.

How similar are the other Schools? A quick look does suggest that the pattern is quite similar to the three analysed here. Perhaps this is one of the ways in which British landscape schools are showing too much similarity.(3)

THE SUBJECTS

As explained, even with Gloucestershireshire studies (4), I found it difficult to put labels on many of the dissertations. There is thus a number not represented in the categories I have selected; and for some categories I have rather less than complete confidence in the number presented. In this respect, comparisons between the Schools may be misleading. However, three major 'areas' were looked at in detail:

+ whether studies were of aspects of design or of a planning level and/or land-use; or of aspects of management;

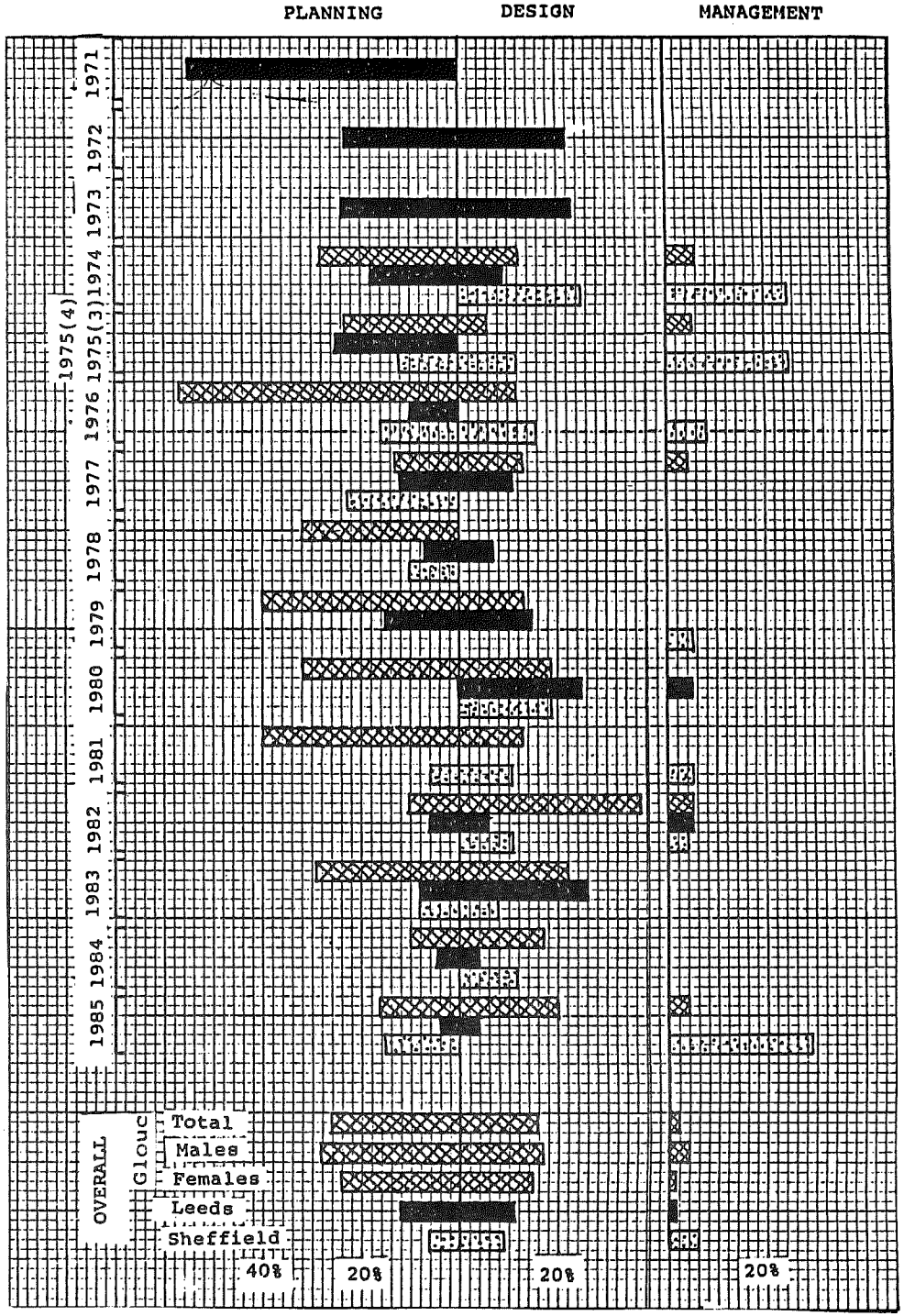
+ whether situations studied were rural or urban;

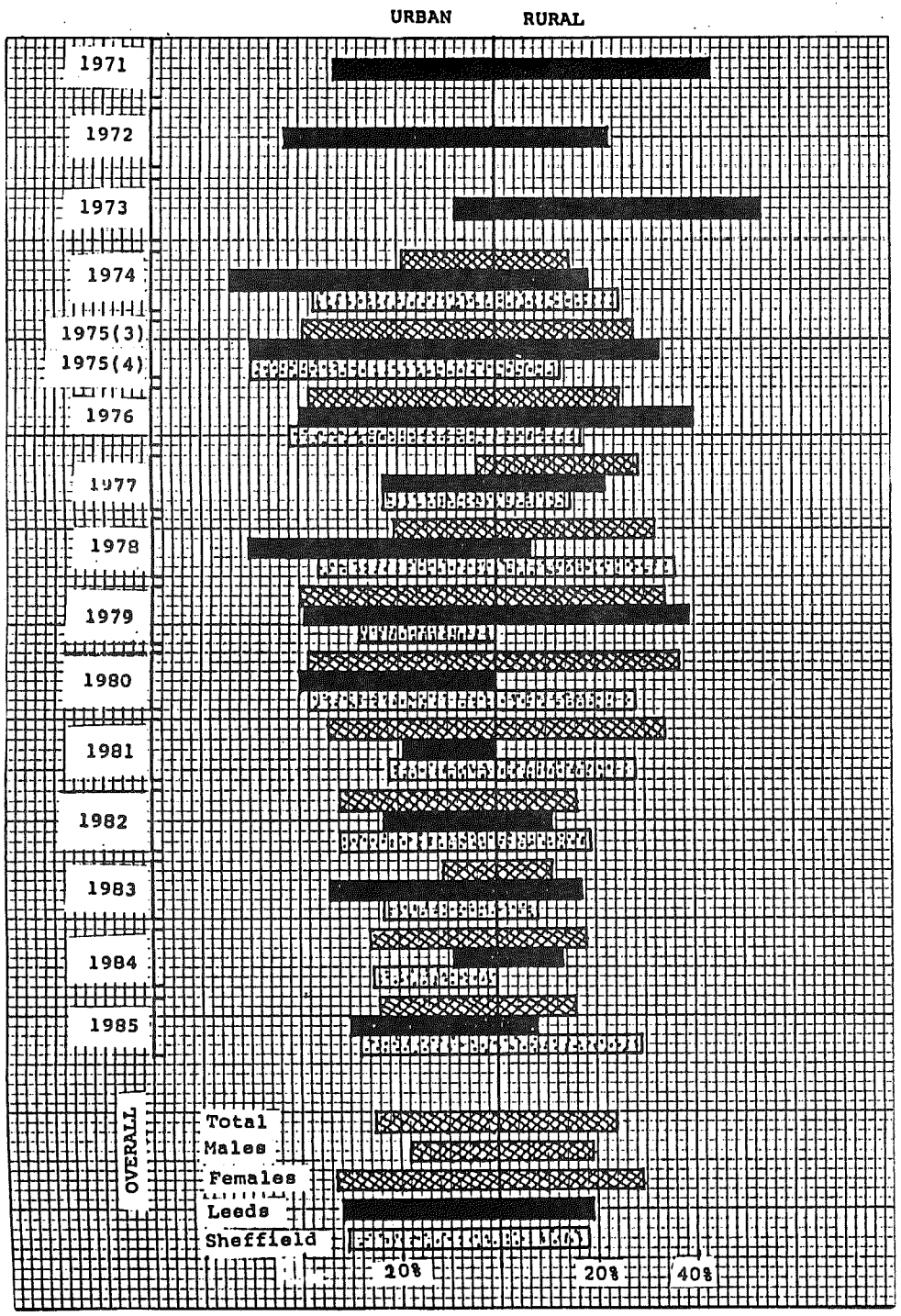
+ whether they considered the landscape architect's traditional soft materials or hard materials.

These three areas are graphed, as are other topics with reasonably large representation.

Design : Planning : Management

Most dissertations do not concentrate specifically on one or another of these 'levels' of landscape work. Very few deal with management: Sheffield, with 6% overall, has




URBAN
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Sheffield
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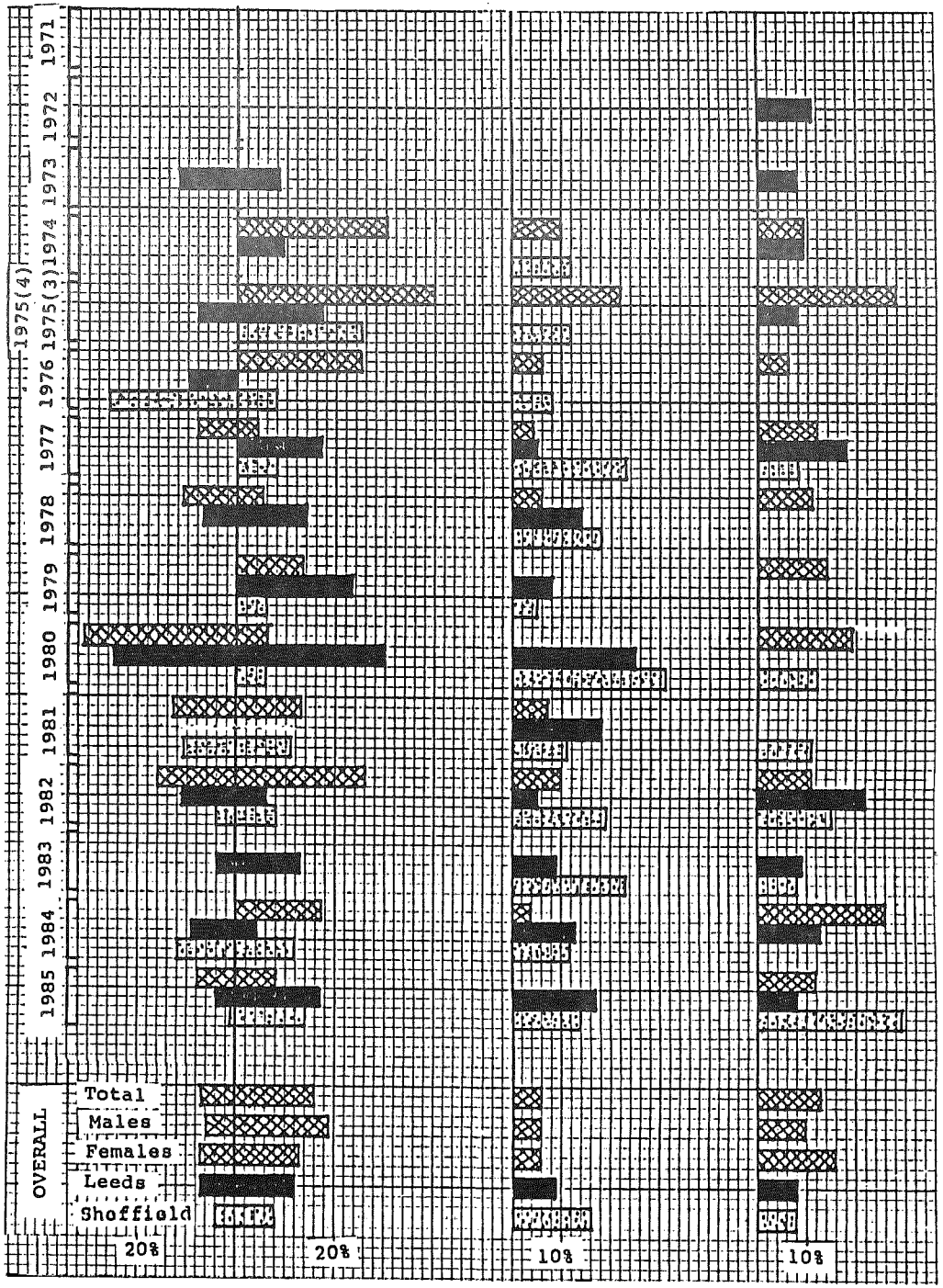
20%
40%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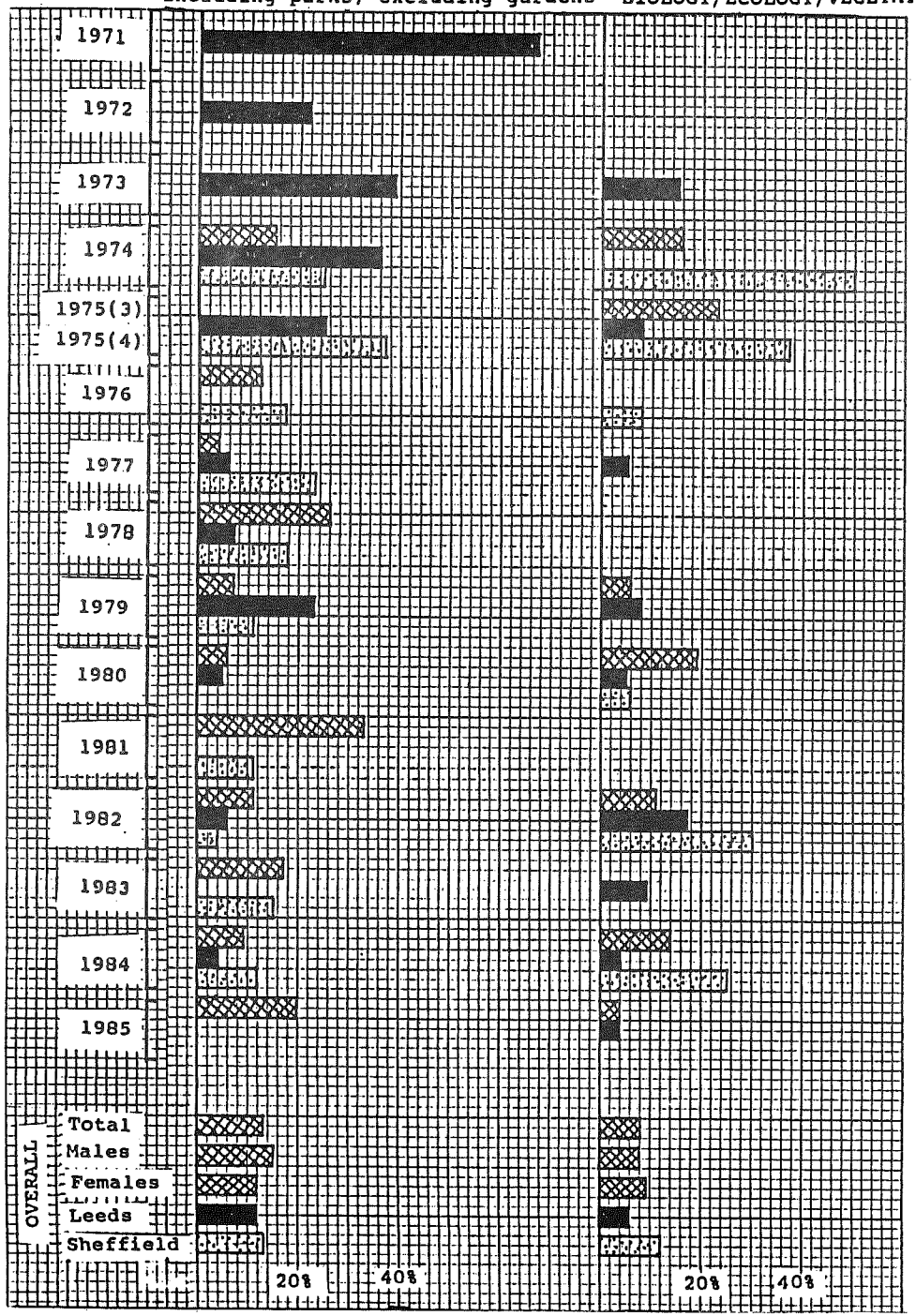

some peak years in this category (class sizes are small), with such titles as Management of roadside woodland (Shepherd,1975), and Recreation management in the Skaftafell National Park, South-East Iceland (Hines,1981).

Sheffield and Leeds show a balance between design and planning and/or land-use. Gloucestershire - always considered the design-orientated course - shows a greater interest in the latter, especially in the earlier years. Overall, Gloucestershire studies seem to fall more clearly into this group of categories. Of all 627 dissertations, only 12% are specifically studies of aspects of design; (15% deal with wide-scale topics). Gloucestershire subjects range from Design Strategies for British Shopping Centres (Buchanan,1980) to Computers and design (Krelle, 1983).

Rural : Urban

Where a situation is specified, more Leeds and Sheffield studies have been labelled urban. Gloucestershire ones are balanced - perhaps surprisingly for a school with an intended slight rural bias. If one looks in more detail, however, more women here write dissertations that can be categorised in this respect: twice as many women have written on distinctly urban topics, compared with males; and with rural topics the ratio is 3:2. The graph as a whole implies a tendency away from this particular categorisation. There are relatively few urban fringe studies.

Hard : Soft

In the third set of polar categories, in which studies of buildings (but not built-up areas generally) have been counted in 'hard' and vegetation types in 'soft', there is an expected emphasis. Over twice as many titles indicate an interest in 'soft landscape elements'. At the Gloucestershire school, this is true of both sexes, although males have chosen a 'soft' subject more frequently. Nonetheless, overall, out of 627 titles, only 12% are clearly identified as 'soft'.

The 'soft' material is, of course, plants - whether or not planted. Sheffield students seem almost twice as likely as Leeds students to study plants and/or landscape planting - and almost three times as likely as Gloucestershire students. Even so, only 16% of Sheffield dissertations seem to belong in this category. Titles

there include Herbaceous perennials: their potential use in landscape schemes (Boschi, 1981) and Coastal planting in urban areas (Campbell, 1975).

Biological, ecological and vegetation studies cover a fairly wide range of topics, many overlapping with 'conservation'. Gloucestershire titles range from Amenity woodland in urban areas (Percy, 1979) and Calluna moorlands (Ritchie,1975(4th.)) to Bird reserves and their relationship to nature conservation and land-use (Scragg,1980) and Oak wilt: the disease, its control and its effects with regard to Britain (Greaves,1985). The overall picture is much like that for plants and planting - but there seem to be great fluctuations from year to year.

Native plants, 'naturalistic vegetation' and the 'ecological approach' (see Table) receive a little attention - especially at Sheffield; but only 19 students altogether (and only five at Gloucestershire) have shown a specific interest here.

	% ALL GLOS.	% GLOS. MALE	% GLOS. FEMALE	% ALL LEEDS	% ALL SHEFF
One student	0.4	0.8	0.8	0.4	0.6
Native plants/ natural. planting	2.1	1.7	2.5	3.1	4.4
Gardens	1.7	0.8	2.5	2.2	2.5
Interior planting	0.8	0.0	2.5	0.9	0.6
Reclamation	0.8	0.8	0.8	6.1	2.5
Historical studies	2.9	2.5	3.3	1.7	1.3
Art in landscape	1.2	0.8	1.6	1.7	1.3
Computers	0.4	0.0	0.8	0.4	1.3
Children's play	1.2	2.5	0.0	1.7	2.5
School grounds	2.1	0.0	4.1	1.3	1.9
Landscape architects & education	2.1	4.2	0.0	2.2	1.3
Landscape profession & Role of L.A. in society	5.4	5.0	5.8	2.2	5.7
Women in landscape architecture	0.4	0.0	0.8	0.0	0.0

The category conservation - whether of buildings, landscapes, energy or living organisms - has a fair representation at the Gloucestershire school, with 13% overall, and a noticeably greater female interest in this area. Biological conservation topics predominate. Representation at the other schools appears somewhat less. Gloucestershire titles include Conservation of stone farm structures (Phillips, 1978), Blaenau Ffestiniog: the role of a national park in protecting industrial landscapes (Langer, 1983), and Biofuels in the landscape (Todd-Jones, 1984).

The remaining graph implies a considerable but decreasing interest in recreation, which in the case of Leeds students looks dramatic. A number of studies examine the use of urban parks, although more are concerned with the countryside.

Two other plant topics were counted; and both show very low numbers. It looks as though women are slightly the more likely to study gardens, and interior planting.

Reclamation studies are also very few. Leeds has the best representation, especially of studies of colliery spoil.

Historical studies are surprisingly few, although it is interesting to note that "history has always been a minority interest in the landscape profession".(5) They are commoner at the Gloucestershire school than elsewhere; they include The value of pictorial documents for the historical geographer and landscape architect (Haigh, 1975).

Surprisingly, considering its origins in an Art College, studies of art in the landscape are not common here. Two titles are Sculpture outdoors: the site and the public (Dent, 1982), and Murals in the urban environment: their significance in the working-class residential areas of town (Tute, 1981). Earth sculpture (Duckworth, 1980) is a Leeds study.

There seem to be only four studies of the use of computers - all recent. There are, in addition to those, a few studies of graphics and graphic communication.

Although recreation is dealt with in about 13% of dissertations, play receives little attention. Indeed, nor do children: I have not attempted to count studies dealing specifically with children, but they probably do not extend beyond the ones in the play category. Equally, the school environment has only a small representation.

The education of landscape architects and their involvement in education is a small category. The relationship between education and practice in landscape architecture (O'Connell, 1985) is a Leeds study. Environmental education: a role for the landscape architect (Scott, 1983) is a Gloucestershire one.

If few students make education their field of study,

slightly more concern themselves with the landscape profession , and the landscape architect's social role. Many other studies obviously touch on this, but few - less than 5% - deal with it substantially. Some of the 'education' ones do; and also ones such as Sheffield's The role of the landscape architect in district planning (Randall, 1978).

The paucity of educational and professional (and, apparently, ethical, sociological and political) studies is disappointing. What is amazing is that, in a field where female influence is recognised as important, and with a profession in which women have been prominent, only a single dissertation has dealt with Landscape - a career for women? An investigation of landscape as a career offering equal opportunities for women (Eyers, 1985). And that from a school with at least numerical equality.

This list still leaves a significant proportion of studies unlabelled: for example, several on shopping centres, burial grounds, archaeological sites, reservoirs, and symbolism. It also leaves out some eccentrics. For example, from Gloucestershire: Geomancy (Lee, 1975 (4th)), Urban violence and the role of the landscape architect (Herring, 1975 (3rd)), Gypsy caravan sites (Rogers, 1979), Landscapes of military training (Walters, 1983), and Genius loci: a spiritual and geomantic examination of place (Mellors, 1984).

WHY DISSERTATIONS?

How useful are all these dissertations? Few people probably doubt their educational value. Beyond that, their value may be quite limited - except that they provide models and sources for future classes of students. There seems, however, to be little cumulation of ideas by successive dissertations, at least in this school, which is a little wasteful ... Even though a dissertation study may be successful for examination, it seldom, again at least in this school, seems to be 'followed up'. And it is rarely reworked for a wider readership. Publications from Gloucestershire studies include 'On relationships' and 'On communication' (between landscape architects and nurserymen) (A.Watkins, 1975, GC+HTJ September 26th and October 3rd), 'Acer to Weigela: the plants urban landscape architects use' (M. Spray and J. Hutchinson, 1982, GC+HTJ, August 13th), and 'The landscape profession: new directions' (into environmental education) (J. Scott, Landscape Scotland

Quarterly, September 1985; also revised for Landscape Issues 2(2) 1986), but they number perhaps little more than half a dozen in over a decade. This also is rather wasteful...

One does wonder if, in this respect, it is sensible only to ask students to produce a dissertation - whether it might not be better to allow those students who wish to to submit a condensation of their work, in the form of a thoroughly referenced paper or report. Apart from, I think, greatly increasing the likely readership, this would have the advantage of lightening the burden on library shelves. The majority of landscape dissertations in this college's library have been consulted in the last five years, mostly, of course, by other landscape students: but average consultation is much less than one reader a year, (and some are consulted more for the high grade they were awarded than because of their subjects). Dissertations from here, and most of the other schools, are occasionally requested by Inter Library Loans - so there is some slight exchange between schools.

It is difficult to gauge how much students benefit by reading past students' work. Certainly, this can help in the selection of topics ; and it can save much time by providing a ready bibliography. But, as noted, there seems to be suspiciously little cumulation, of material, interpretation, and therefore understanding, by later students building on earlier students' foundations. There is slightly more contemporary reinforcing - of classmates working on similar lines sharing information and contacts - but, by the nature of individual assessments, this is tentative and weak.

Finally, it is interesting to note how a few dissertations seem to be used as stepping stones to further work in the same fields. Looking outside the three schools examined here: at Manchester University, R.Tregay studied Woodland design (1975), and at Birmingham J.T. Samworth wrote on Parks: adopt, adapt and provide (1971).

TOPICS FOR THE FUTURE

There are suggestions of trends and fashions in the titles to date; but they are not especially clear. Perhaps rather easier to identify are those subjects which have not yet received much attention - but which may be attractive in future.

The 'social relevance' of landscape architecture is talked about more now, and may, with studies of the politics of the profession, be expected to feature more. Studies of 'landscape ethics' are somewhat lacking so far.

So are studies of 'ethnic landscapes': the landscape provision for minority groups in general has not been explored. And as we have seen, there has been almost nothing on the involvement of women.

As more professionals move into community work, or, indeed, as trained designers work in non-professional ways, studies of 'community involvement' and 'grassroots landscapes' may become more frequent.

'Computers in landscape architecture' one might expect to be an increasingly frequent title. So too, studies specifically about what design ought to be.

With the Landscape Institute now trying to embrace management and landscape science along with design, one might well see more concern for the first two of these areas - and more studies that look across the whole range of activity.

Education of the landscape architect has received very little attention: perhaps it is time for this subject to be tackled as well. As pointed out at the start of this paper, this is a rather personal, and very incomplete, review. A proper study of landscape students' dissertations could make for an excellent landscape student's dissertation...

NOTES

(1) The Landscape Institute's librarian is developing such a list. Titles of dissertations from most years of most British courses are available at the Institute, some accompanied by abstracts.
(2) Leeds course document.
(3) R.Holden and T.Turner (1984) Landscape education: where next? Landscape Design (151),31-5.
(4) Titles are listed annually in Landscape Issues.
(5) D.Jacques (1985) in S.Harvey and S.Rettig (eds) Fifty years of Landscape Design, Landscape Press, London. (This review gives useful insights into the British landscape profession's interest in several fields.)

REVELATIONS OF A YEARBOOK

C.M. Young

What might such an unprepossessing publication as a professional yearbook contain that could raise an issue worthy of anything other than a passing glance? The genre is after all prosaic, to say the least, and yet the Landscape Institute Yearbook 1986 contains in its 'Presidential Introduction' notions that do deserve more than a cursory glance. The first is that the profession is about to 'come of age'. Accepting this as a well-considered judgement rather than a figure of speech, one is prompted to ask from what evidence such judgements derive. It is commonly accepted that 'coming of age' is a significant point in the development of the individual and although its precise timing is fairly arbitrarily determined it nevertheless represents a change of life where the individual is assumed to attain a level of maturity commensurate with the responsibilities and duties of adult life. By this judgement the President is suggesting that coming of age is as significant for professional bodies as for individuals and by implication that the landscape profession has attained a maturity that fits it for assuming those responsibilities and duties commonly embraced by older professions. The President also refers to the profession not yet engaging 'top gear'. This is taken to mean that, while all the means of production are available, they need to be organised and adjusted to set the machinery working to achieve the efficiency and effectiveness so prized today.

In attempting to relate both these notions to the landscape profession one might interpret the coming of age in terms of a state of relatively stable maturity following a period of vigorous growth and the engaging of

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top gear as the extent to which the corporate body utilises its resources and realises their potential.

The evidence, or part of it, that may be used in the examination of the President's view is contained within the Yearbook itself. This is not to say that evidence from elsewhere would not be equally appropriate; it may well be, and so it is not claimed that these notes provide conclusive or necessarily the best evidence by which to test the ideas, but more an intimation of what a more exhaustive study may substantiate.

Here, four indices have been selected by which a test may be effected.

(a) Some characteristics of the membership, and particularly any changes in numbers and in the various classes, are analysed. The membership figures show a slow but steady increase from the founding of the Institute in 1929 to 1970, when there were a total of 278 Fellows and Associates. From that time the same classes expanded dramatically to treble by 1980 (Fellows 79, Associates 755) and averaging 83 new professional members each year, while from 1980 to the present, new members have increased at an average of 73 each year. This decrease in the rate of membership growth following vigorous expansion seems to match the pattern suggested above and therefore lends credence to the suggestion that the profession is entering a phase of consolidated maturity.

	1970	%increase	1977	%increase	1986
Fellows	72	+12.5	81	-17	67
Associates	206	+104	421	+186	1205
Graduates	-	-	179	+156	460
Students	285	+167	761	-42	439
Probationers	448	-	-	-	-
Totals	1011		1442		2171

Table 1 Summary of membership numbers by class
up to 18th November 1985.
(excl. Honorary and Retired members)
N.B. All figures in tables (except table 2) have been rounded up or down to the nearest whole number.

A glance at Table 1 shows how the membership has changed over the last sixteen years. It should be noted how the proportion of students to the professional classes has

changed. Before 1970 most students were probably taking the Institute examinations externally, the rigour of this system perhaps stifling the transfer to the professional classes while the inflated Student figures in 1977 reflect the transfer of many from the disbanded Probationer class. Another notable feature is the growth of the Associate and Graduate membership and a decline in the numbers of Fellows and Students over the last nine years. The decline in Fellows' numbers is difficult to explain but most probably attributable to several factors. Most obviously it may be due to insufficient suitably qualified Associates offering themselves as candidates for the higher class or candidates failing to satisfy the examining panel of their worth, although a 55% increase of principals in private practice since 1975 may yet produce more suitably qualified candidates. (It should be noted that four new Fellows have been elected since the publication of the 1986 Yearbook). It could also be that this kind of élitism doesn't hold the same attraction for a younger generation of landscape architects as it obviously did for the older generation.

The decline in Student numbers is possibly nothing more than the combined effects of the reduced value of student incomes and a recent surge through into the Graduate class. The growth in Associate membership has continued vigorously over the last sixteen years to represent now more than half the total Institute membership; with the pressure from increasing Graduate numbers, only a commensurate increase in the corporate work-load will continue to provide employment and career opportunities for the aspiring landscape architect.

An analysis of the membership would not be complete without mention of the two new branches established on the expansion of the Institute in 1977. Landscape Managers and Scientists have been attracted to the Institute and doubtless have enriched the services offered to the public. While their value can hardly be questioned by the predominantly designer members of the Institute, their numbers (42 Managers and 23 Scientists) are, as yet, depressingly small.

The overall picture suggested by this examination is of solid growth in the main body of the Institute membership but of fluctuations and uncertainties in the development of élites and specialists.

(b) A gauge of professional maturity may also be provided by an estimate of corporate competence, measured here by

the aggregation of the academic qualifications derived from samples of Associates and Graduates. Such an analysis should at least suggest the breadth of competence as implied by the numbers of qualifications which include, beside undergraduate degrees in landscape design, a multiplicity of both post-graduate and under-graduate 'specialisms'. It is not possible from the Yearbook data to give an accurate account of the diversity of these qualifications but clearly such a study would provide a useful corollary to these figures.

	Number Qual. 1970	Average Number Qual. 1970	Number Qual. 1977	Average Number Qual. 1977	Number Qual. 1986	Average Number Qual. 1986
Associates	74	0.98	103	1.37	110	1.46
Graduates	-	-	68	0.97	115	1.64

Table 2 Academic Qualifications of Associates and Graduates (figures derived from samples of 75 Associates & 70 Graduates)

The picture offered by Table 2 is of a growing competence over the last sixteen years but perhaps more importantly the prospect is suggested by the Graduate figures for 1986 of a future Associate class of increased competency. However, it is necessary here to utter a caution on the interpretation of these figures. Over the last four or five years the undergraduate courses have been offering degrees in addition to diplomas, even though the established duration of courses has not altered, thereby distorting an otherwise clear picture of alarming precocity.

Corporate competence may also be reflected in professional experience. It is possible to make some broad estimates of the length of professional experience as expressed through the duration of Associate membership, or 'career years' and this is set out in Table 3. Assuming a maximum career in landscape architecture of 40 years (i.e. from 25 to 65 years of age) it is possible to relate age, career span and numbers of Associate members.

	Time of election to Assoc. membership			
	Pre 1960	1961-1970	1971-1980	1981-
Numbers of Assoc.	28	91	586	500
'Career years' completed in '86	25+	15-24	5-14	4-0
Associate's age in 1986	50+	40-49	30-39	under 29

Table 3 Associates' 'career years'

Not unexpectedly the figures above for Associate numbers represent a pyramidal form, albeit one with a very wide base. Although the assumptions may be varied and anomalies and exceptions taken into account the overall picture of a youthful membership with relatively short careers is added to and confirmed by these figures.

(c) A further measure of professional maturity and also a step towards an evaluation of the utilisation of membership resources may be gained by examining the contribution of women in the profession. Landscape architecture seems to be specially and increasingly attractive to women and as they form a third of the total membership, it seems reasonable to assess their contribution throughout the profession.

	1977	% of class	1986	% of class
Fellows	12	15	7	10
Associates	63	15	375	31
Graduates	51	28	199	43
Students	177	23	136	31
Totals	303	or 21% of class	717	or 33% of class

Table 4 Women members of the Institute (Because of uncertainties in identification these figures should be regarded as minima.)

Over the last nine years the female share of the membership has risen by about 12%, with advances registered in all but the Fellows' class, where both the number and the proportion of women members has fallen. The spectacular growth of the Associate and Graduate classes has helped raise the membership of women from a little over a fifth of the total membership to a third. This kind of growth suggests that women are progressing 'through the ranks' and are now poised for a challenge to male dominance of the Fellows' class, and also perhaps in other areas of authority and influence in which they are woefully under-represented. For instance, there have only been two women presidents out of twenty-five and the last was back in 1957-9. Women comprise only 16% of recently elected Council Members/Officers and are represented in the Manager and Scientist branches by 14% and 26% respectively of those memberships. In Table 5 a comparison is made of the numbers of male/female principals in private practice where it may be seen that while the proportion of women is much lower the growth rate is higher than that for males. It is also worth noting that in the four largest practices only two principals out of 22 are women.

	1975	% of total	1986	% of total	% increase 1975-1986
Female	13	12	37	15	185
Male	94	88	201	84	114
Totals	107		238		122

Table 5 Principals in private practice

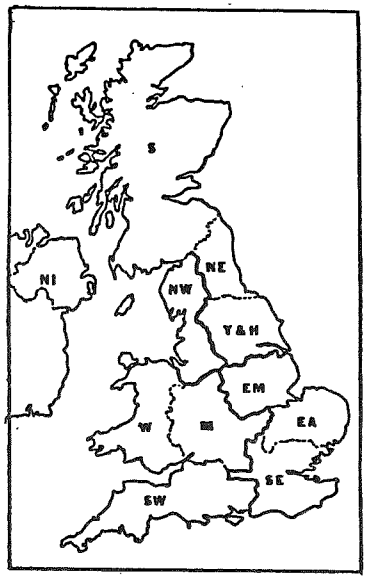
Although all these figures show that women have not yet reached a level of authority commensurate with their total numbers there are signs of progress in the Chapters where women occupy 45% of the Chairs. Overall the impression gained is one of strong basal growth with the occasional flower, but not a picture of maturity yet.

(d) The state of practice is now considered. Although a full and balanced picture could only be achieved by considering both private and public sectors, it is only information on the former that is provided in the Yearbook and therefore to that which this analysis is limited. In terms of public visibility the private practice is probably most responsible for projecting the image of the profession and thus most likely to influence public perception of the landscape architect's role in society. An examination of Table 6 will show the extent of that visibility and the degree of accessibility to potential sources of work.

Institute regions	1975	1986	% inc.	East	West	North	South
London & S.E.	34	45	32	45	-	-	45
*South-west	12	24	100	-	24	-	24
Midlands	11	32	190	-	32	-	32
East Midlands	-	10	-	10	-	-	10
East Anglia	1	5	400	5	-	-	5
North-west	10	19	90	-	19	19	-
Yorks & Humber	7	8	14	8	-	8	-
North	7	-					
North-east	-	7	-	7	-	7	-
*Scotland	13	37	184	-	-	37	-
*Northern Ireland	1	16	1500	-	-	-	-
*Wales	2	8	300	-	8	-	8
Totals	98	211 = 115%		75	83	71	124

Table 6 Regional distribution of private practices in U.K. (N.B. Changes in regional boundaries in 1985 make detailed comparison between 1975 and 1986 impossible. Only regions marked with an asterisk have been unchanged).

As may be seen from Table 6 there has been more than a doubling of the numbers of registered private practices over the last eleven years. This vigorous growth is emphasised if reference is made to the 1984 Yearbook, which shows that nearly half has occurred over the last two years. During this period by far the greatest regional growth was in Northern Ireland, which with East Anglia, Wales, Midlands, South-West, North-West and Scotland, must represent something of a professional Eldorado. This kind of growth may be stimulated by increasing public and governmental awareness of environmental issues combined with a growing appreciation of the landscape architect's potential. The table also shows the neighbouring regions of London and South-East and East Anglia have the highest and lowest number of practices respectively. In 1975 London and South-East was clearly the most attractive region for practices, since when there has been a shift towards the provinces and to Scotland and the Midlands in particular, but if the U.K. is considered as four 'cardinal' regions, the South is clearly the most favoured where the greater number of practices is on the Western side, i.e. Wales, Midlands and South-West. Generally, it may be claimed that with this distribution of private practices, the services of the landscape architect are widely accessible and (s)he is well poised for exploiting new areas and presumably a widening range of work. Considered thus it might seem that private practice has come of age but one suspects that there are no such grounds for optimism in the public sector.



Landscape Institute regions 1986 (with 'cardinal' divisions shown by heavy lines)

The expansion of private practice may also be expressed in terms of the proliferation of offices.

Growth is of two kinds: one where the number of single office practices has more than doubled over the last eleven years, most of these being staffed and led, in all

No. of offices within a practice	No. of practices 1975	1986
7	0	1
6	1	1
5	0	2
4	1	3
3	0	5
2	4	10
1	89	189
Totals	95	211

Table 7 The growth of practices 1975-1986

probability, by young, relatively inexperienced Associates; the other type is of practices with more than one office. No doubt the size of a practice can be measured in a number of ways. Here the number of offices a practice may have, is used as an indication of size. Accordingly, Table 7 shows that over the last eleven years the largest practices have got larger, that there are now slightly more of them and that there is now a complete and extended range of practice sizes. (The two largest practices are between them represented in nine of the eleven regions). A comparison of the 1975 and 1986 practice registers also reveals the regional distribution of new offices, although changes in regional boundaries during this period prohibit a comprehensive analysis. Where these changes have not occurred figures are quite reliable and show that the greatest growth thus measured has been in Scotland with 34 new offices, closely followed by London and the South-East with 30 and the Midlands with 28, although both these latter regions have reduced in area since 1975. In East Anglia, Northern Ireland and Wales none of the offices recorded in 1986 existed eleven years earlier.

In reviewing the evidence above, one is impressed by the extraordinary development of the profession in this country over the last decade. This development has occurred over a broad front and can justify some optimism for the future of the profession and therefore of the landscape condition. Of the few aspects analysed here, private practice and overall membership growth would seem to accord most closely to the idea of the coming of age. Elsewhere there are doubts: in the balance of the membership classes, in the real advance in corporate competency and experience, and in the extent to which women are assuming a role of responsibility. If there is to be renewed discussion about a Royal Charter for the Institute perhaps a thorough demographic review should be instituted before the aspirant asks for the key to the door.

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For a much fuller account of some of the issues raised here and for useful background information the following references are recommended.

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INTEGRATING CONSERVATION AND RECREATION POLICIES IN THE RURAL LANDSCAPE

J.F. BENSON

1. INTRODUCTION

Curry (1985) has argued that changes are required to the balance between conservation and recreation in the countryside; his evidence and analysis is based largely on the National Survey of Countryside Recreation 1984 (Countryside Commission 1985b) and the case is, simply, that public policy places a clear priority on conservation rather than recreation, but that this does not reflect public attitudes.

The present paper argues that, whilst there may be a case for recreation policy review and reappraisal in the light of changing circumstances, the issue is not recreation at the expense of conservation. In fact to argue, explicitly or implicitly, that new priorities for recreation must be made at the expense of conservation is misleading on four counts; first, it directs attention away from more important factors which affect both topics; second, it erects tensions and conflicts which are really reflections of the same problem; third, it ignores a growing consensus on the merits of integrated rural conservation and development; and fourth, it ignores the importance of conservation for recreation.

The paper begins by extending the discussion of the relative balance between conservation and recreation issues in national policies and countryside management.

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The evidence for differing public attitudes to the issues is then re-examined, especially in the light of the National Survey of Countryside Recreation 1984, and the supply and demand for each discussed. Finally, recent initiatives in integrated rural development are outlined, and conclusions drawn.

2. CONSERVATION VERSUS RECREATION: THE CASE?

Curry's analysis of the development of current policies is not in dispute; but the ascendance of conservation has been a response to pressures on many rural resources caused by changing agricultural and forestry practices, rather than an élitist and socially divisive victory for 'nature loving Hampstead Fabians' (Newby, 1979). The evidence for change, deterioration and loss of landscape and wildlife resources is substantial and overwhelming (Pye-Smith & Rose, 1984) and despite the growth in influence of the conservation lobby (e.g. Wildlife and Countryside Act 1981), the balance between policy and financial support for agriculture/forestry and conservation/recreation is still overwhelmingly in favour of the former.

The characteristic restraints and negative aspects of policies for recreation developed, as Curry shows, before the recent growth of conservation policies and during a period of legitimate concern over conflicts between them; if recreation policy is overdue for review, it does not follow that a reappraisal should lead to promotion of recreation at the expense of conservation. Rather the two are inextricably linked, should be mutually supportive, and both enjoy widespread support from the public.

The legislative and organisational framework under which policies are developed is an important influence, although Curry does not discuss this. For example, Government action on wildlife conservation is through the Nature Conservancy Council (with a very restricted brief for recreation), whilst landscape conservation and recreation are jointly promoted through the Countryside Commission. Both organisations promote and support their tasks directly and through many official and voluntary organisations; much responsibility is devolved, and research, advice, grant-aid, as well as statutory land designation and management, all contribute to the evolution of policy and programmes. In the case of wildlife conservation, the National Parks and Access to

the Countryside Act 1949, established a dual strategy; National Nature Reserves (and Sites of Special Scientific Interest) established by NCC and Local Nature Reserves established by local authorities, the latter sites with a specific objective of access and recreation for local people. The paucity of action on LNRs (105 in 1984) compared to NNRs/SSSIs (195/4150 in 1984) (Nature Conservancy Council, 1984) may be read as a lack of public interest in conservation at a local political level, but must be set against the growth of country parks, picnic sites and other explicitly recreational initiatives during the same period (1984 figures: Country Parks 189; Picnic Sites 234; 2561 km long distance footpaths; (Countryside Commission, 1984)). Also, initiatives like the Upland Management Experiment (Countryside Commission, 1974), Urban Fringe Management Experiments (eg Countryside Commission, 1976) and now the Groundwork Projects are all concerned with the interactions between recreation, conservation and other land uses, resulting in substantial investment and provision for recreation and access.

There is considerable evidence, therefore, which gives the lie to the idea that the balance between conservation and recreation is wholly one-sided. Nor is it clear that the restraint policies characteristic of recreation are wholly misplaced even during the 1980s. Whilst an uncontrollable recreation explosion, predicted from spurious extrapolation of car ownership in the 1960s, did not occur, nevertheless there is still substantial conflict caused by recreational pressures on wildlife and landscape resources. For example, the pollution, erosion and change in wildlife habitats and traditional landscapes of the Broads (Countryside Commission News 1985) is in part due to recreational impacts; there are conflicts on the River Derwent in Yorkshire between passive and active recreation (Yorkshire Wildlife Trust 1985); and local impacts still arise at many sites such as Cannock Chase Country Park (Countryside Commission, 1985).

The conclusion that recreational policy and action needs to be more positive, promotional and socially orientated should be made not on the grounds that 'conservation' is élitist and unpopular (Curry, 1985), but rather by an appeal to a different set of arguments and concerns. In particular, is there evidence that there is an unsatisfied demand for and current consumer dissatisfaction with recreational opportunities?

3. RELATIVE PUBLIC ATTITUDES: THE EVIDENCE

Curry's evidence on public attitudes to conservation is, by his own admission, 'a little more sketchy than that of attitudes towards recreation.' The alternative ways he offers to examine attitudes to conservation must therefore be treated with caution. In particular, few surveys answer all the questions attempted, and are of dubious value on questions for which they were not designed. The National Survey of Countryside Recreation 1984 did not even examine public attitudes to recreation (only public activity and participation) and so cannot be expected to provide reliable answers to questions about attitudes to conservation. Only the surveys by World Conservation Strategy (1983) and Cotgrove (1982) attempt this, when 53% and 64% respectively of those polled declared support for and a financial commitment (in principle) to environmental conservation. These figures reflect a broad spectrum of public opinion, free (?) from the bias inherent in assessments based on membership of groups and visits to sites.

The social bias of minority pressure groups is well known and applies whether they be concerned with conservation, fishing, camping, road transport, nuclear energy or the arts. Any analysis based on memberships often only shows the bias; it does not follow that interest among a wider public is any less or indeed any greater. Membership of political parties in Britain is no guide to voting patterns.

The 'middle-classness' of conservation organisations is therefore a very unreliable surrogate for public attitudes to conservation. Nor is there an a priori case that poorer people, living in more degraded environments, should be environmentally most militant. Commitment to these issues involves complex choices and there are many social, economic and environmental issues characteristic of urban areas which might be expected to command more militant attention than rural conservation. The growth of support for urban wildlife conservation may reflect this (Cole 1983) but none of the groups in Curry's Table 1 is explicitly or practically committed to action in degraded urban environments. Nor do the data suggest that bias is absent from the recreation groups; membership of all groups declines from social group A to E.

There is no justification for classifying the Royal Society for the Protection of Birds, for example, solely

as a conservation organisation. Members are undoubtedly motivated by an altruistic wish to conserve birds, but also gain privileges of access to reserves (93 in 1984), magazines, promotional goods and other benefits.

In comparison to an analysis based on membership lists, the World Conservation Strategy and Cotgrove surveys show majority public support for conservation.

The data on activities on countryside trips (Curry, Table 2) can be interpreted in a number of ways. For example, the proportion of respondents (and proportion of trips made) undertaking activities for which the resource is likely to be most critical ('Visiting coast...long walks' (59% of trips)) exceeds the list for which the activity is likely to be more critical ('Fishing...Pick your own' (41%)). This distinction is perhaps between passive and active recreation, and contrasts strongly with Curry's 7% 'conservation trips' and 93% 'recreation trips'.

The combination of 'visiting coast/cliffs' (which depends upon the coast/cliff having been conserved) with 'visiting friends/relatives' (which depends on where they live) as trips predominantly for recreation (to the implied exclusion of conservation) can be interpreted in other ways. Further, interpretation of some data is difficult given the terminology used; the label 'sport' (whether organised, informal or watched) is meaningless unless the activity is described and linked to the countryside resource on which each depends. Finally, to classify all trips into the 90% of Britain which is not urban as 'countryside trips', without information on the spatial and temporal separation of the trips, only allows the most superficial generalization to be made.

Curry's final Tables (3/4) derived from the National Survey are open to similar criticism; the trips calculated cannot be properly regarded as recreational only, nor do they all necessarily depend upon the countryside resource. The large number of people who participate in recreation includes children (and perhaps other household members) who have not freely and independently chosen the 'recreational' trip; > 30 million recreationalists contrasted with 9 million wildlife television programme-watchers is therefore extremely misleading.

But there is other evidence on public attitudes; for example, McLaughlin & Singleton (1979) have shown at a Norfolk Naturalists' Trust Reserve that the proportion of

Trust members among visitors is low (12%) and whilst their objectives were mainly recreational, there was broad compatibility between the visitors expectations and the conservation objectives of the management plan. Roome's study (1982) shows that National Nature Reserves are used by the public, whilst Nevard and Penfold (1978) have argued that there is a large and unsatisfied demand for wildlife conservation in Britain.

A NOP survey commissioned by the British Waterways Board in 1984 revealed that more than 5 million people had used the waterways for informal recreation - walking, picnicking or simply sightseeing along a canal. Fewer than 1.2 million had used them for boating and 770,000 for angling (quoted in Countryside Commission News No 17, 1985).

A public attitude survey was carried out by South Yorkshire County Council (1977a) during the preparation of a strategic environmental study. The project (South Yorkshire County Council, 1977b) aimed to make a survey and appraisal of a range of environmental resources and to generate policies and programmes on three issues; environmental improvement, environmental conservation and informal countryside recreation. In order to provide a basis for weighting the variables to be integrated using potential surface analysis techniques, the public were interviewed to assess their views and attitudes. From a sample of 327 selected randomly from electoral rolls, the ranks and relative weights assigned to issues such as the conservation of landscape and wildlife and the provision of opportunities for informal recreation did not show the marked preferences and conflicts implied by Curry's analysis of the 1984 survey. Also, whilst some responses on recreation showed significant differences related to age, sex, location and mobility, these were not evident on conservation issues, implying a differing set of attitudes and perspectives on the issue.

These are examples of a wide range of other evidence available which is relevant to the issue. I conclude that there is little reason to claim from the 1984 survey that recreation is more popular than conservation; nor is the implication that the two are mutually exclusive either realistic or constructive. The National Survey of Countryside Recreation was not designed to assess the connections and conflicts between attitudes and activities related to countryside conservation and recreation and there is therefore scant evidence to support the thesis that public attitudes favour one or

the other, even assuming that that is the choice to be faced.

4. DEMANDS FOR CONSERVATION

The supplies of landscape and wildlife resources are relatively well recorded and assessed, but what of demand? The reasons for conservation are the subject of continuing debate, and whilst resolution of the issues is elusive, Curry's declaration that 'conservation values, taken out of the context of human enjoyment, become very difficult to understand' is not clear or realistic.

For example, three general themes have emerged in the debate on the evaluation of wildlife resources (Willis & Benson, 1983) ('landscape' as a resource shares important features with 'wildlife', although the scales and perhaps public attitudes are different). First, it is argued, wild plant and animal species have a right to exist; this involves complex philosophical arguments and a wide spectrum of opinion (Mills, 1983), but represents a widely held belief which may be growing. A second reason, typified by the World Conservation Strategy (1983), is the need to conserve a healthy and unpolluted environment for plants, humans and other animals, coupled with the idea of sustainable yield. This reflects a major switch in attitude from the preservation of assets by protection, policing and human exclusion, to one of wise management of resources. Whether the 'crop' be timber, oilseed rape, fish, picnics or the contemplation of nature, the yield must be renewable and perpetual. Thirdly, and more tangibly, wildlife resources provide humankind with direct benefits which may have value; these may be direct economic returns from the supply of meat or fish, potential returns from the conserved genetic pool and direct returns from recreation activities of many kinds which may be enjoyed at home or in the countryside.

Two important points need to be stressed; first, wildlife (and landscape) have values which do not depend upon direct use of the resource; and second, 'natural' environments may be necessary for specific recreational uses e.g. nature photography, painting, bird watching, as well as more generally as the basic resource upon which many activities depend.

Because it is very difficult to value non-marketed environmental factors (including recreation), economists

have tried to assess the preferences and values of individuals in terms of their willingness to sell or pay for the assets or experiences (see Shaw and Zube 1980). Although much of the work has been done in North America, it has shown very high demands for wildlife and landscape conservation.

The work identifies several demands and values for conservation, in addition to consumer surplus for actual recreational use. An option demand exists which can be likened to payment of an insurance premium to retain the option of possible future use. Existence value represents a willingness to pay for the knowledge that a natural environment exists and is protected even though no recreational use is contemplated. Finally, bequest value represents a willingness to pay for the satisfaction derived from endowing future generations with resources (see Willis & Benson 1983 for further discussion).

So far a static view of the case for conservation has been outlined; since conservation is a long-term strategy, reflected in the sustainable yield argument, consideration must be given to the dynamics of demand. It is likely, although untested, that demand for conservation (and recreation) is income-elastic, and may increase in future in the light of changing work, leisure and spending patterns. This raises important questions concerning the quantity and management of resources. Membership of conservation/recreation groups is then less important than their growth in recent years, which has been substantial and at a rate which exceeds many other indicators. A second point on dynamics is that wildlife and landscape losses are often effectively irreversible, reducing the variety of future options.

It follows that given the diverse nature of public demand for conservation coupled with a diminishing supply in the face of competition with agriculture, forestry and other land uses, there may be a case for devoting more resources to conservation, not fewer; there is certainly a case for exploring and making explicit the demands and values placed on conservation of both wildlife and landscape resources, one reason for which will be direct recreational use.

5. DEMANDS FOR RECREATION

Recreation too is characterised by its diversity;

simply, it is whatever people do when they are not sleeping, working and perhaps eating. There is an extensive literature on the classification of outdoor recreation areas, activities and users. A useful distinction is between user-orientated resources, where the activity is the overriding concern, and resource-based recreation, where the environment is the critical factor on which the recreational experience depends. This is partly, though not exclusively, a distinction between active and passive recreation.

The concept of carrying capacity is helpful in discussing the implications of this distinction (Brotherton, 1979). The concern is the trade-off between quality and quantity, that is, the problem of too many people changing and ultimately destroying the attractions that they (or others) seek to enjoy. A multiplicity of 'capacities' has been discussed (e.g economic, perceptual); for what has been described as 'ecological' carrying capacity, a simple schema is shown in Figure 1.

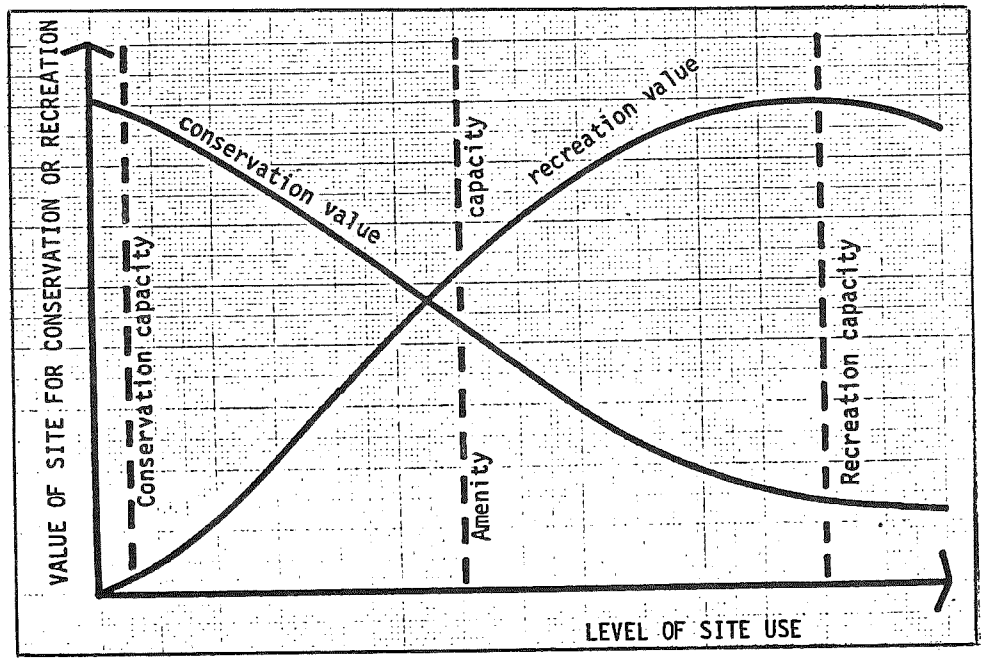

Figure 1: The effect of use levels on conservation and recreation benefits (after Brotherton,1979).

The degree to which conservation and recreation objectives are incompatible, and the degree to which accommodations can be reached, will vary infinitely depending upon the site, the users and the investment in management. The essence of Curry's criticism that site management policy and practice is too conservation -orientated could be interpreted by saying that the optimum 'amenity capacity' determined for a given site is in the wrong place.

Whilst much national policy (and some strategic policies) evolved based on (now inaccurate) extrapolations of trends in things like car ownership, it does not follow that fears of the conflicts between conservation and recreation at specific sites were unfounded. There are numerous examples of changes at sites resulting from recreational pressures; the case of the Norfolk Broads has been noted, to which can be added Tarn Hows (Countryside Commission, 1977), Kynance Cove (O'Connor, Goldsmith & McCrae, 1975), Holyrood Park, Edinburgh and Achmelvich Bay, Sutherland (Barrow, 1977), and many coastal sites.

Managers at sites must formulate policies based on the degree of habitat/landscape change which is acceptable, and the acceptability of the means to cope with increased use. Coordination at the local and regional scale is needed in order that the combined (and preferably integrated) needs of recreation and conservation are served; there is little evidence that such coordination occurs,nor that the organisational means exists to do so

The conclusions to be drawn from the National Survey of Countryside Recreation 1984 are crude and generalized and throw no light whatsoever on aspects of user-satisfaction (or otherwise) with resources encountered in the countryside. There is a considerable literature on visitor perceptions, expectations and satisfactions at recreation sites, and a growing body of data on visitor surveys at specific sites, all of which provide a basis for improved (and if necessary different) site management. Some of this evidence shows that wildlife is a vital ingredient in public expectations in the countryside. For example, Everett (1978) found that over 74% of visitors to the Dalby Forest (Forestry Commission), North Yorkshire hoped to see some form of wildlife, with indigenous mammals and brightly coloured birds ranking as most popular. Elementary ecological theory on food webs and pyramids teaches that such species depend upon the conservation of complex plant and

animal communities and habitats.

The arguments in the preceding sections can be summarized by saying that much activity under the broad heading of 'conservation' is concerned with the supply of wildlife, landscape and other resources in the countryside, whilst 'recreation' (perhaps interpreted in a less restricted sense than that used by Curry), is concerned with demands on these resources. The two are integral parts of the same problem, and the separation inherent in existing legislation, organisations and financial provision needs to be better integrated, not divided and contrasted.

6. INTEGRATED RURAL RESOURCE DEVELOPMENT

The idea of integrated development has been widespread in the Third World, mainly related to economic initiatives, but has surfaced in Western Europe stimulated by the World Conservation Strategy, the European Economic Community (van der Plas, 1985) and recent experiments in Britain.

The idea is simple and obvious but the execution is problematical. Any analysis of national and local strategies for rural areas reveals dis-integration (Dower, 1985). The system is characterised by centralised bureaucracies with fragmented or overlapping responsibilities. The legislation, grant-support and other financial incentives are complex and sometimes based on administrative convenience rather than efficacy. A common response to new issues has been the creation of a new agency, causing further fragmentation and making cooperation more difficult. The overall result is at least complicated and sometimes counterproductive. These problems apply to any sectoral interest in the countryside - agriculture, forestry, local services, landscape conservation - and the problems are magnified if the relationships and interactions between the sectors is examined. Hence Curry's analysis of the interactions and balances between conservation and recreation is but one facet of a much more common phenomenon which characterises the whole countryside.

Three recent experimental projects designed to confront these issues are of interest (Sayce, 1985); the Dartmoor, Exmoor and Bodmin Moor Study (Dartington Institute, 1984), the Peak District Experiment (Parker, 1985; Peak Park Joint Planning Board, 1984) and the Radnor/Eden Projects (Rural Planning Services, 1984).

Generalizations are difficult, given the diverse nature of these projects, but each sought, in different ways and at a local level, to promote integration between the rural agencies, between the agencies and the communities they serve, and in terms of the multi-purpose use of land. A combination of social, economic and environmental interests was served and the results (O'Riordan, 1985) have been judged encouraging and cost-effective.

None of the projects addressed policy conflicts between conservation and recreation, but there is every prospect that the theme of integration will spread to embrace the whole spectrum of issues surrounding the development and conservation of all rural resources.

7. CONCLUSIONS

It will be clear from these comments that I am critical of Curry's case for a reordering of priorities. Policies for countryside recreation are undoubtedly restrictive and negative in many respects, and reappraisal may well lead to a case that they be made more positive and promotional for both social and economic reasons. But I believe that the case is not made by arguing that recreation is more popular than conservation and further suggest that the wrong questions are being asked. The evidence of recent years shows that policies for both conservation and recreation have failed to prevent the erosion and deterioration of wildlife and landscape resources in the countryside. The way forward must involve a better integration between conservation and development and a first start may be to reconcile conservation and recreation interests.

8. ACKNOWLEDGEMENT

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CONSERVATION AND RECREATION PRIORITIES: A REJOINDER

N.Curry

The article by Benson in this issue is to be welcomed as a contribution to the need for a further integration of recreation and conservation policies in the countryside. Since, however, it is based upon an earlier paper of the author's (Curry, 1985), I would wish to briefly clarify a number of points in five main areas.

Firstly, I feel that Benson has misinterpreted the central thesis of my earlier paper. He accuses me of wishing to see the development of recreation "at the expense" of conservation and of maintaining that the balance between recreation and conservation is "wholly one-sided". He maintains that I conclude that conservation is "élitist and unpopular", that recreation and conservation were "in conflict" and "mutually exclusive" and that "fewer resources" should be devoted to conservation. Unfortunately, none of these assertions appear in my paper, nor, it is to be hoped, are they implied. Rather, my article, as Benson accedes at the outset, simply seeks to record that, on the whole, recreation policies are much more restrictive than conservation ones and that this does not accord with public priorities.

A second area of comment relates to the growth in interest or concern in recreation and conservation issues. Benson asserts that the interest in conservation is simply due to wildlife and landscape deterioration in the face of agricultural change, rather than the political erudition of the conservation lobby. In truth, probably both factors have placed conservation so high on the political agenda. Certainly, though, evidence of a

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problem alone is never sufficient to instil political action - the strength of political support for an issue will always have a significant role to play.

Benson also seeks to show the growth in recreation interest by the number of Country Parks and Picnic Sites that were designated between 1968 and 1984. Unfortunately, his figures are misleading, since around 60% of all of these designations, up to 1974 at least, (Slee, 1982) were already de facto recreation areas and were designated simply for the purposes of grant-aid eligibility. These figures thus vastly overstate the public programme of recreation provision during this period.

Lastly, in terms of recreation growth, Benson seeks to use evidence of environmental deterioration as a result of recreation in a few critical areas as a means of justifying restraint policies for recreation. But why should environmental deterioration by recreation lead to discouragement rather than more effective management? It seems rather narrow-sighted simply to solve problems of deterioration by restricting access rather than examining the potentials of differing parts of the same recreation system. More generally, the extent to which recreation does lead to environmental deterioration is in some dispute. As a result of a study of recreation pressures on the countryside, Sidaway and O'Connor (1978), for example, conclude that specific instances of environmental deterioration are by no means symptomatic of conditions in general.

Benson's section on the evidence, thirdly, is a little curious. He asserts that the 1984 N.S.C.R. "does not even examine public attitudes to recreation", when it has questions on both people's current countryside recreation satisfactions and future aspirations. The remainder of his evidence does not indicate any relativity between recreation and conservation and it is therefore rather difficult to see what case is being developed, in its use.

Fourthly, Benson seeks clarification of my earlier assertions that conservation values are inextricably linked with human values. Simply put, I was arguing that values for conservation that have no relation to human activity at all, struggle to be legitimate. This viewpoint is largely confirmed by section four of Benson's paper.

Finally, whilst agreeing with the need to give serious thought to integrated development policies for the British countryside, this is not an argument for ceasing to discriminate between different facets of such a policy. If recreation and conservation policies are to be integrated (to reflect an appropriate integration of these two as land uses), they must first be identified and assessed. Benson himself maintains that currently the two policy groups do stand apart and that is the point from which a critical appraisal must begin.

But even within the IRD experiments recently launched in Europe, discussed across Europe and (with the exception of the Peak experiment), now buried by Europe, where has the recreation priority been? Not, unfortunately, fully integrated into systems of land management but, in keeping with the policy emphasis of the last 25 years, it has invariably been considered as a residual to the more 'pressing' relationship between conservation and the productive countryside.

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LANDSCAPE MAPPING AND ANALYSIS USING COMPUTER AND LINE PRINTER

R.J.Moore

The computer generation of choropleth (density shaded) maps by overprinting characters on a standard line printer is now generally considered to be only of historical value in the development of automated cartography. This type of map display owes its origins to the Harvard 'Symap' system of the late 1960s, but it has now been largely replaced by superior quality map output from variable density dot matrix printers and colour ink-jet and laser copiers. This report is essentially an attempt to revive interest in and to demonstrate the advantages of rapid production on a line printer of unsophisticated maps, as working tools in the design process. The examples given relate specifically to two recent landscape projects undertaken in the Gloucester School. In one the application was in survey and evaluation. In the other a 'sieve' analysis was performed to identify small sites characterised by selected landscape features.

The production by hand of choropleth maps of altitude, gradient, aspect, land use and land grade, for example, is a time-consuming task and requires considerable drawing skill to achieve an accurate, neat and effective presentation of information. There is, no doubt, great merit in such an operation, not least the facilitated assimilation of site facts through an intimate contact with the map base; however, when the study area increases in size to 'regional' dimensions, data handling then becomes prone to errors in accuracy and precision, as well as in subjectivity (particularly if map registration is undertaken by more than one researcher).

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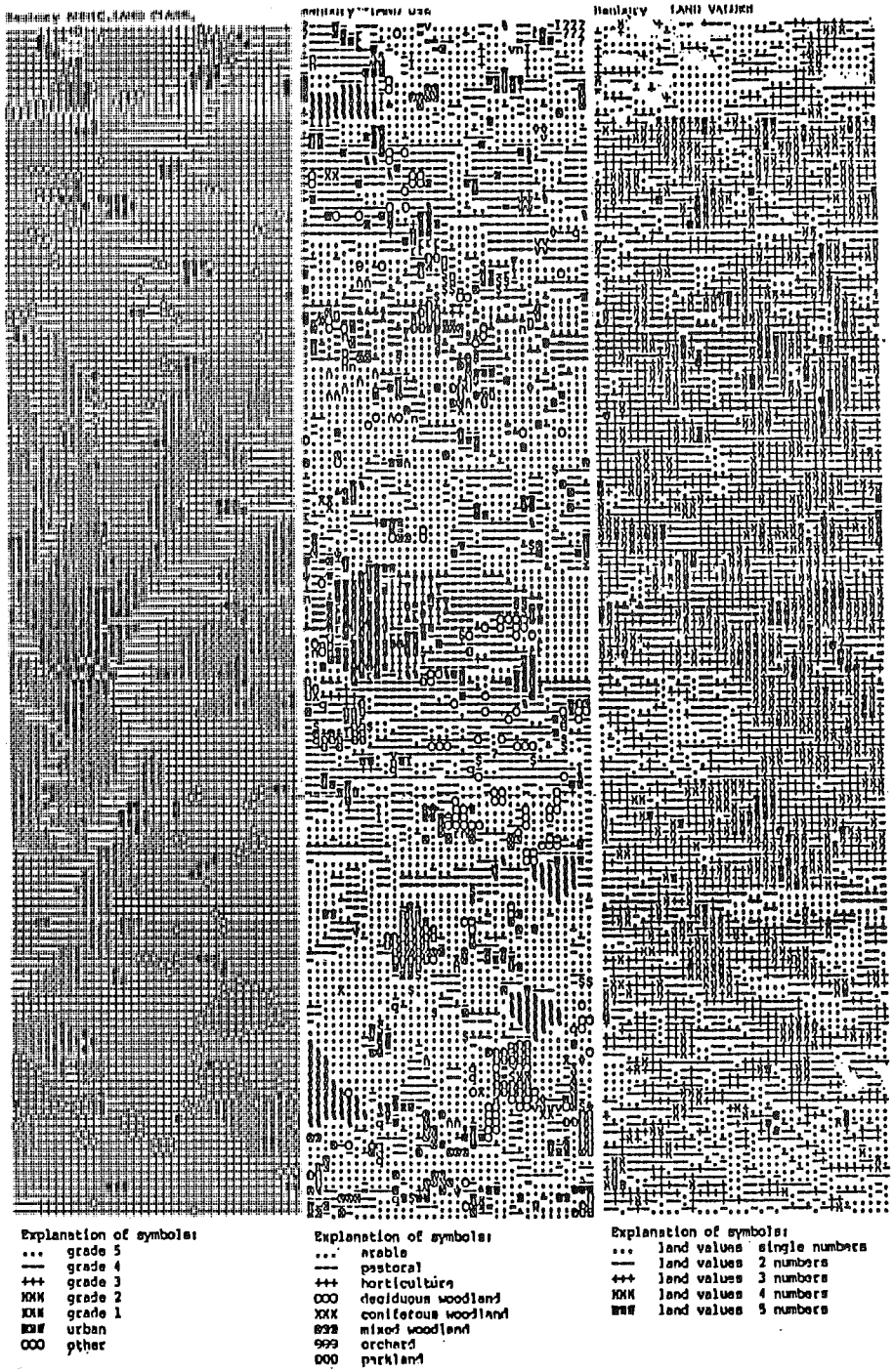
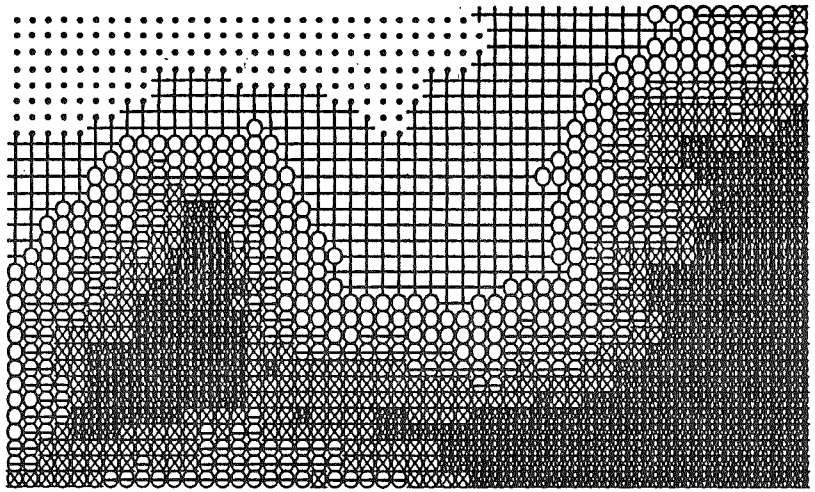


Motorway site: agricultural land classification (left), land-use(centre) and land value (based on ecological and visual criteria).

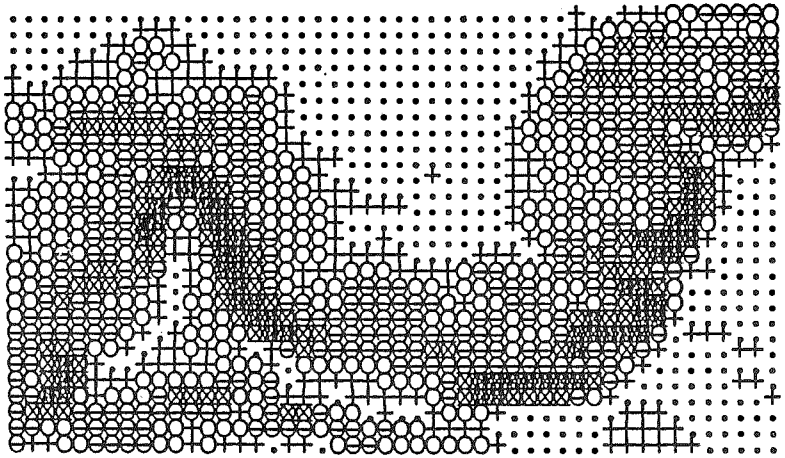
Witcombe altitude



Height ranges:

...	<80.00
+++	<120.00
OOO	<160.00
⊖⊖⊖	<200.00
▨▨▨	<240.00
▩▩▩	<299.00

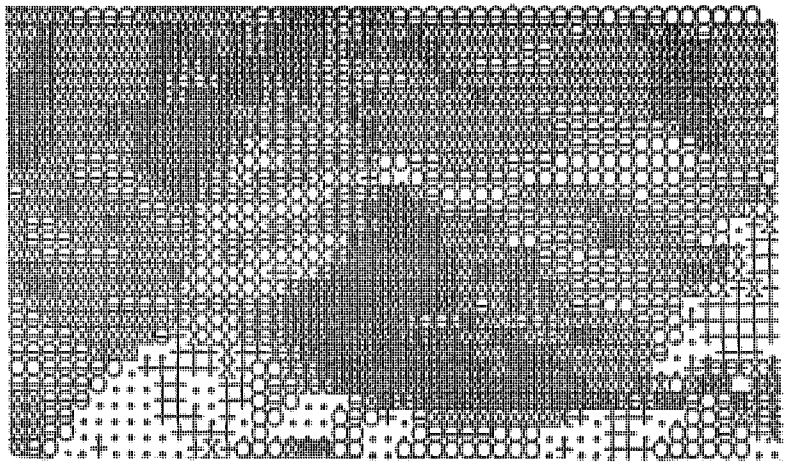
Witcombe gradient



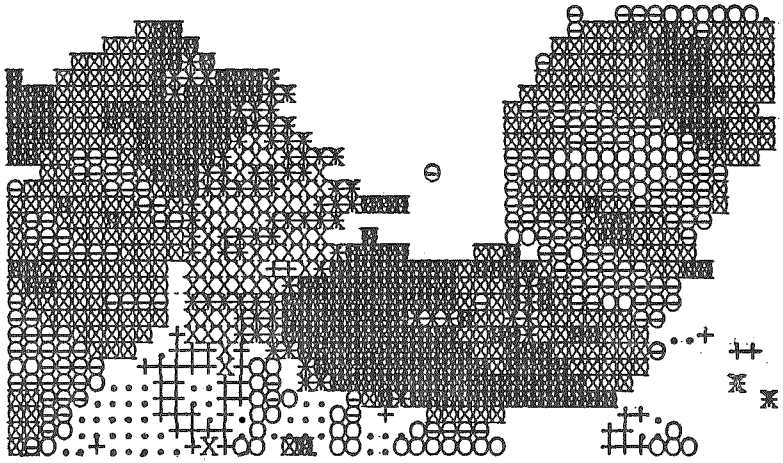
Gradients:

...	< 3.00 degrees
+++	< 6.00 "
OOO	< 9.00 "
⊖⊖⊖	<12.00 "
▨▨▨	<15.00 "
▩▩▩	<19.69 "

Witcombe aspect



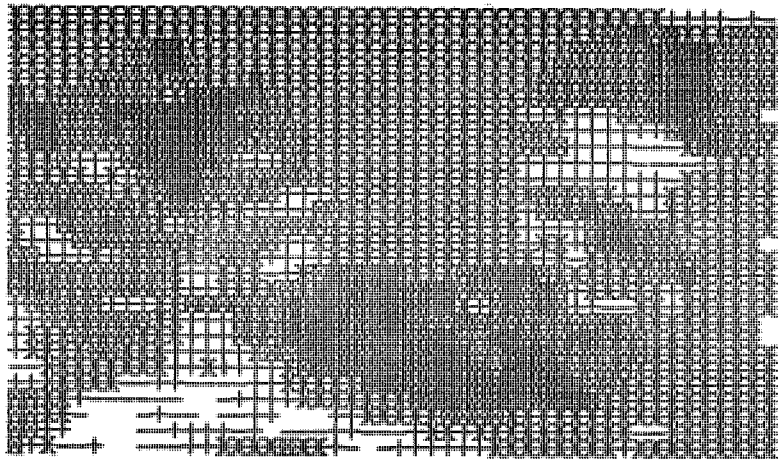
Witcombe aspect above 3 degrees



Explanation or symbols:

▩▩▩	north	337.6 - 22.5 degrees
✕✕✕	north east	22.6 - 67.5 "
XXX	east	67.6 - 112.5 "
+++	south east	112.6 - 157.5 "
...	south	157.6 - 202.5 "
OOO	south west	202.6 - 247.5 "
⊖⊖⊖	west	247.6 - 292.5 "
▨▨▨	north west	292.6 - 337.5 "

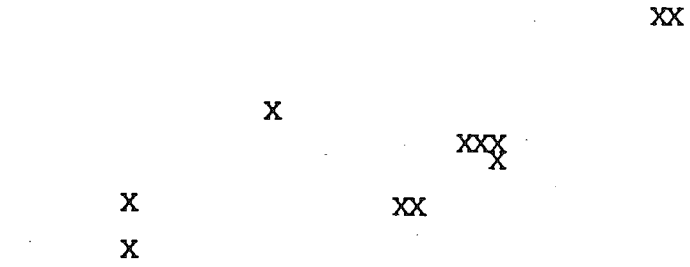
Witcombe gradient/aspect



Explanation of symbols:

▓▓▓	north	greater than 10 degrees
▓▓▓	north	between 5 and 10 degrees
▓▓▓	NW/NE	greater than 10 degrees
▓▓▓	NW/NE	between 5 and 10 degrees
XXX	east/west	greater than 10 degrees
XXX	any aspect	less than 5 degrees
+++	east/west	between 5 and 10 degrees
+++	SE/SW	between 5 and 10 degrees
---	south	between 5 and 10 degrees
---	SE/SW	greater than 10 degrees
	south	greater than 10 degrees [not shaded]

Witcombe sieve



X

[Sieve criteria:altitude 50-200m, gradient 5-15 degrees, aspect 290-70 degrees, presence of track, woodland, and water, absence of buildings, roads and heath]

It is in such a circumstance that the choice of computer support can offer the designer an effective summarisation of land surface characteristics, portrayed in a wide range of area-shaded maps.

The system of computer terrain analysis and sieving that produced the maps illustrated in this report has been developed in Gloucester to operate on a regular rectangular grid of data points. This means that the information relates to a set of discrete values, spaced according to the grid interval chosen. Clearly, the finer the mesh the more closely do the data reflect the 'ground truth'. At the outset a decision has to be taken with regard to an acceptable number of points, balancing precision against the time available to enter the values into the computer files.

The production of the maps showing landform parameters is based upon an altitude matrix and the formulas used to derive gradient and aspect are given in Evans (1979). The maps of nominal information (land-use, presence or absence of certain artefacts etc.) are based simply on integer values relating to the several categories chosen.

The choice of a line printer as the map output device was deliberate. As a computer 'peripheral' it is a standard with proven reliability. Programming for it is easy and, it is operationally quite rapid, in contrast to some other forms of plotter. The transformation of oblong character definition into a square matrix to match the data files was achieved by the use of two routines written to set 12 characters to the inch both vertically and horizontally (Diablo Systems, 1978). Interestingly this produces a roughly 1:50000 scale map if the grid interval is 100 metres.

The third year landscape planning project focused on the issue of motorway impact on the landscape. The M40 extension from Waterstock, near Oxford, north to Umberslade was to be fully analysed in terms of its effect on the environment: visual, aural and ecological. All desk survey information was derived from a 1:25000 Ordnance Survey map base, and land-use, visual quality and land grade definition was complemented by field work.

The first year project brief asked the students to design a memorial to a fictitious Gloucestershire painter. The memorial had to reflect the artist's philosophy and subtly or otherwise inform on the local landscape that inspired her. The search for a suitable site consisted

of a massive sieve over an area 5 by 3 kilometres of the Witcombe embayment within the Cotswold escarpment. The sieve program simply read the various computer files of data and attempted to match the values occurring at each data point with those typed in as the 'search criteria' by the designer.

In each project the computer was used to generate maps of a range of types and permutations and the illustrations accompanying this report are a selection from a large number that were produced. When gradient and aspect values are combined according to categories identified by Owen (1986) a very useful map showing the pattern of annual incidence of sunlight on slope facets can be mapped. Owing to the periodical format, some maps have been reduced in size and consequently may suffer from poor contrast. Since the altitude data are stored in a matrix, a convenient system for the computer, further graphic representations are possible using other College programs described in a previous issue (Moore, 1984), the most important being two-dimensional contour surfaces and three-dimensional perspectives.

Conclusion

This short report has discussed a computer technique which is not original. Hopefully, however, it has demonstrated its continued application in landscape architecture. Maps are a vital visualisation tool, and when used as part of the design process should not require a great investment of time in their production. The use of the line printer for hard-copy output was satisfactory on two counts. Firstly, no complicated computer files nor programs needed to be compiled, and, secondly, the map printing was of adequate clarity for the use to which it was put.

In the two projects described above, it was found that, while initial height interpolation and the typing in the information took a little longer than expected, mainly due to the 'newness' of the system to the users, the flexibility afforded in the different means of showing landform and other landscape patterns far outweighed the problems of data 'capture' and validation. The problem that is most cause for concern, however, and one that should not be dismissed lightly as technology advances, is the apparent acceptance of the computation results by the students without their having understood what is the nature of land slope and aspect, their derivation and how the sieve process operates. With respect to professional

training, one cannot rely on these computer techniques being widely available in landscape offices in the foreseable future, and even if they will be, there is still a strong argument for students to have both a knowledge of the fundamental principles involved, and some practice in the methods of traditional manual map work.

Acknowledgement

Thanks are due to Steve Fisher for his advice and programming the character spacing.

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BOOK REVIEWS

CITY FORM AND NATURAL PROCESS, by Michael Hough, Croom Helm 1984.

The aim of Michael Hough in writing this book is to "seek a valid basis for aesthetics that has its roots in urban ecology". The search for this new foundation for the planning, design and management of the urban landscape takes the reader through a series of chapters ("Climate", "Water", "Plants", "Wildlife", "City Farming") examining the contradictions inherent in conventional ways of managing the city's resources and its natural systems: high inputs of energy and technique on the one hand; on the other, equally high outputs of air and water pollution and of under-used, sometimes "invisible" land. The picture presented is a familiar one as far as description is concerned. The author's particular contribution lies, to begin with, in his dogged insistence that alternative approaches are possible and in many cases already available, a point amply proved by the marshalling of examples drawn from international (mostly Western) study and personal experience. On its own, this world wide review would make the book worthwhile. But there is much more to the author's thesis than this, summarised in the opening ("Urban Ecology, a Basis for Design") and concluding ("Making Connections") chapters. These contain a reasoned rejection of what is neatly defined as the equivalent in terms of landscape of the "International Style" in architecture, a doctrinaire aesthetic based on an excessively rational, technological and thus partial view of the city and its inhabitants. In opposition to the "pedigree" and placeless landscapes produced by this approach, Michael Hough makes a plea for a "vernacular", place-based urban landscape which would arise from a broader understanding of the evolution of natural systems as they are manifested in particular cities as well as from a wider view of particular citizens' needs, especially their need to create their own landscape, rather than having it imposed upon them, however tastefully. Such a landscape, he claims convincingly, would possess a greater depth of meaning and thus eventually a greater aesthetic appeal than those displays of horticultural virtuosity which constitute the norm today. He does not dismiss such "pedigree" landscapes altogether, but sees their role as a limited one, confined mostly to those key areas, e.g. civic squares, central parks, where the city's prestige needs appropriate expression.

Elsewhere the new vernacular would prevail; cities cooled and ventilated like Stuttgart by green corridors of preserved woodland and new parkland; the surplus landscape of highway interchanges and abandoned industry consciously brought into play as a habitat for recreation and wildlife; market gardens, allotments and city farms on other unused land; rough afforestation à la Warrington or Delft forming an appropriate setting for the less polite forms of human (especially young human) behaviour; retention ponds substituting for hyper-efficient storm water drainage; even sewage treatment managed, not only on sound recycling principles but also for decorative ends, as in the stepped and highly sculptural aeration basins of the treatment plan at the Rudolf Steiner Seminariat, Jarne, Sweden.

Many of Michael Hough's examples will be familiar to the reader, but many will not, and the value of his book lies in the way it makes connections, bringing together a mass of material and observations from theory and practice in an easily assimilable text and a wealth of clear and apposite illustrations. This may be one of those books which is distinguished, not by any great originality, but by its synthesis of disparate material at precisely the right moment. It certainly points one way ahead for urban landscape design, and will be compulsory reading for students of that and allied subjects. Its impact will be all the greater when it appears in paperback form at a somewhat lower price than the present hardback edition.

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THE ENCYLOPAEDIC DICTIONARY OF PHYSICAL GEOGRAPHY, edited by Andrew Goudie, with B. W. Atkinson, K. J. Gregory, I. G. Simmons, D. R. Stoddart & D. E. Sugden, Blackwell, Oxford, 1985, 528p.

Given that physical geography - ecology, hydrology, geomorphology - comprises the building bricks for the landscape architect, a reference book covering these topics has been long awaited. According to the blurb on the dust cover, The Encyclopaedic Dictionary of Physical Geography sets out to plug that gap by providing a thoroughly comprehensive reference work for the whole of physical geography. To fulfil this not inconsiderable aim an impressive list of editors and over 50 contributors have provided more than 2000 entries, from 'abîme' to 'zoogeography'. The entries vary from one sentence definitions of terms to lengthier 'short essay' explanations of concepts or theories. Most of the entries are backed up by references, some of which are recommended as further reading. As well as the main body of the dictionary there is also an index at the back which enables the tracking down of topics and terms not given their own entry.

This book is a mammoth undertaking, and inevitably there are bound to be quibbles about the space allocated to some items at the apparent expense of others, but in only 500 pages for the entire range of physical geography something has to give. It is interesting, for instance, to look at the space given to entries on each of the components listed at the front of the book as comprising physical geography. 'Geomorphology', for instance, gets 15 column centimetres and 8 references. 'Meteorology' has only 2 column centimetres and no references allocated to it, but 'micro-meteorology' has 16 column centimetres and 3 references. 'Pedology' is not mentioned at all, either in the main body of the dictionary or in the index. And on this 'feel-the-width' basis 'ecology' and 'hydrology' finish well ahead of the rest of the field. One of the reasons for this may be the editors' stated aim to cover new concepts, and this might explain the apparently cursory description of, for example, the Penck & Brückner model of the Quaternary, but the extensive coverage of the Croll-Milankovitch cycles. The book succeeds admirably in covering new theories as well as representing the balance of feeling on older theories which are being appraised such as 'climax vegetation'.

There does appear, however, to be some difference of opinion between the publisher and the editors over the

cross-referencing, for while the publisher insists that the book is 'fully cross-referenced', the editors make it clear that it is 'selective', and use of the book makes it apparent that the latter is true. Indeed, in some places the cross-referencing is inconsistent, and occasionally the index even seems to be a hinderance. Why does 'mesophyte' get an entry, but xerophyte only appear under 'savanna', and neither cross-refer to 'habitat'in which some context is given in plant classification? Why does 'duricrust' fail to cross-refer to the various types, such as 'calcrete' and 'laterite', when there are entries for them? Surely they help to elucidate the term 'duricrust'. Where I wondered would I find an explanation of river terraces? Neither the dictionary nor the index made it clear. And a final carp in my own area of interest: why give an explanation of linear dunes under the term 'seif' when this is restricted to certain types of linear dune, and not mention 'helical flow' even though this is one of the most-quoted supposed origins of linear dunes, and is mentioned in the entry for 'helical flow'? Only considerable determination in the use of the index enabled me to find this information. All these are specific points, but they underline a more general observation. On the whole I felt there could have been more cross-references, and that they would have enabled entry-hopping, so that one topic led to another. I felt that I had to work a little hard when I was just dipping into the dictionary.

Despite this, the encyclopaedic dictionary does provide physical geographers and others working in the field of landscape processes - including landscape architects - with the first reference volume of this sort. At £40, though, it is going to be out of the reach of undergraduates and even some of the practitioners it professes to be for. It thereby perhaps precludes its greatest potential use which would be as a quick reference volume for clarification when reading other books or writing essays and reports. A paperback version would surely be justified. Nonetheless, I am sorely tempted to splash out the money, and I am sure that copies of this book in library reference sections will become much-thumbed, both by students writing last-minute essays and teachers preparing lessons and lectures. If you do not already have access to this dictionary, I suggest you persuade your library to at least order one.

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INFORMATION FOR CONTRIBUTORS

LANDSCAPE ISSUES publishes articles and reports on aspects of landscape architecture and landscape education. Manuscripts should be submitted to the Editor, in duplicate for refereeing, typed on A4 sheets with ample margins and bearing the title of the paper together with the name(s) and any affiliation(s) of the author(s). A high scholarly standard is expected, and normal conventions for references, illustrations etc. should be followed. Footnotes should be avoided. Further details will be supplied on request. Although there is no strict limitation on the length of articles, 3-5000 words are preferred. Reports are much shorter and cover matters of topical interest; for example, specific design projects, research seminars and dissertations. Illustrations are welcome: diagrams should be neat and clear; photographs should be black and white or, if colour, of suitable clarity for reproduction. Copyright is held by the authors of all work submitted. Articles may contain views which do not coincide with those of the Editorial Board.

ANNIVERSARY BALL ANNOUNCEMENT

The School of Landscape Architecture, Gloucester, will be holding a "Mad Hatter's Ball" to celebrate its 25th. anniversary on June 27th.1986. The venue will be the mediaeval tithe barn at Ashleworth, Gloucestershire. For further details and tickets contact Martin Portus via the School Office (telephone: 0452-426771).

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A SPECIAL HUNGARIAN ISSUE *SPECIÁLIS MAGYAR KIADÁS*

ISSN 0265-9786

HUNGARY FOR IDEAS

For an intending landscape architect there is much to be gained from seeing historical and contemporary examples of good design and planning. When these are set in a foreign context the relationship between landscape and culture is more sharply focused.

The School of Landscape Architecture, Gloucester, has for many years undertaken study tours abroad: Germany, Switzerland, the Netherlands, USA and Spain are recent examples.

Last September, however, saw the visit to Gloucester of a party of students and staff from the Department of Landscape Architecture in the Horticultural University of Budapest. Their fourteen day stay marked the latest stage in the development of links between our College and Hungarian educational institutions.

Contact with the Department was first made in the course of the International Federation of Landscape Architecture Congress of 1984 which was held at the resort town of Siófok on Lake Balaton in Hungary. This contact subsequently led to the decision by the School of Landscape Architecture at Gloucester to make Hungary the destination for the 1985 foreign study tour.

The programme for that tour, drawn up by the staff of the Horticultural University, aimed at both presenting a general overview of the geography, history and culture of the country as well as directing the visiting party to study several sites of specific interest in the fields of landscape planning and landscape design. Noteworthy examples of these included the open spaces of Budapest, the so-called "closed gardens", the landscape problems posed by the second home movement, and recreational provision in the Visegrád Hills and around Lake Balaton. The study tour had two bases: Budapest, the capital city of some two million people, and the regional centre of Pécs in the south of the country, with a population of 165 000.

The visits made in the Pécs region were arranged through the Pollack Mihály College of Technology, with whom there has been to date a number of exchanges of planning students and staff, and with whom the Gloucestershire College of Arts and Technology is formally twinned.

The success of the tour could be measured from both an educational and a landscape architectural viewpoint. There was no doubting the value of experiencing life in a country whose political system contrasts so much with our own, and in terms of presenting the students with original design ideas and different planning solutions the experience was worthwhile. From this success grew the notion of a reciprocal visit for Hungarian landscape architectural students to England, which took place in the Indian summer of September 1986.

For their part the twenty-strong group of Hungarians enjoyed a similar programme, a balance between visits of general interest and those of particular landscape architectural merit. In addition, as in Hungary, formal talks and informal social events were arranged. The two-week programme included the following major visits:

- Historic gardens and parks, for example, Blenheim, Stourhead, Hidcote and Snowshill

- National Garden Festival, Stoke-on-Trent

- Brecon Beacons National Park

- Brighton and the Seven Sisters Heritage Coast

- Bristol, Cheltenham, Bath, Milton Keynes and London

- Royal Horticultural Society gardens, Wisley

Whilst the fortnight was highly concentrated as regards the main programme of educational visits, the study tour also provided the students with a rare opportunity to savour the English way of life, and no doubt a wealth of impressions will remain with them for many years.

This tour was the first occasion where a genuine exchange had been agreed between institutions, and in April 1987 another group of third year students from Gloucester will depart for Hungary to be guests of the Horticultural University. It is strongly felt that this international connection can only be of mutual benefit educationally, as well as providing the means of further dissemination of information about our respective national professions.

MAGYARORSZÁGI ÖTLETEK

Egy kertészeti tanuló nagyonsokat tad tanulni a történelmi és a korbeli jól kitervezett és fölépített példák látogatásával. Egy külföldi szemmel nézve, a rokonság a tájkép és a kultúra között jó elötérbe kerül.

A Gloucester-i kertészeti föiskola hosszá éveken keresztül rendez külföldi tudományos utakat, legutóbbi példák: Németország, Svajo, Hollandia, U.S.A. és Spanyolország.

Az elmúlt szeptemberben, a budapesti kertészeti egytem haligató és elsado csoportja látogatott el Gloucester-be. Ez a két hetes látogatás jellemezte a legutóbbi kapcsolatot a mi és a budapesti tanulmányi intézetek között.

Az első kapcsolat Siófokon, a Balaton partján, jött létre az 1984-es nemzetközi kertészeti kongresszus alkalmával. Következőleg a gloucester-i School of Landscape Architecture elfátározta, hogy az 1985-ös külföldi tanulmány út Magyarországon lesz.

A látogatási programmak az vott a célja, amit a Kertészeti Egytem állított össze, hogy egy általónos képet adjon az ország földrajzáról, történelméről és kultúrájáról, ugyamakkor specialis érdekességekat is nyújtson a látogató csoportnak. Említésre érdemes példolák: budapesti nyitott terűletek, az úgynevezett "zárt" kertek, a miásodházi mozgalom által okozott problémák és az üdülési területek a visegrádi hegyeken és a Balaton partján. A tudományi útnak két központja vott: Budapest a két miliós főváros és Péos a 165 ezres lakosú délvidéki center. A Pollack Mihály Teknikum rendezte a péosi látogatást akivel már elölőzeg több cserelátogatás zajlott le úgy a halgatókkal mint az elöadokkal és akivel a gloucester-i College of Arts and Technology formálisan is "ikrek".

A látogatás sikerét le lehet mérni úgy a nevelési mint a kertészeti szempontból. Kétségtelenül nagy érteke volt egy különböző politikai rendszer hapasztalata és az eredeti tervezési megoldások nagyon elősegítették a tanulókat. Ebből a sikerből épült a közös vizit a magyar hallgatóknak Angliába, 1986 szeptemberében, amikor vénasszonyok nyara vott.

A húsz tagú magyar csoportnak hasonló programjuk volt, általános erokkességek és különleges kertészeti témák. Ezenfelül ugyanúgy mint Magyarországon, hivatalos előadások és táisadalmi összejövetelek voltak szervezve. A következő fontosabb látogatások képezték a két hetes programot.

- *Történelmi kertek és parkok, például Blenheim, Stourhead, Hidcote és Snowshill*
- *Nemzeti kertészeti Fesztivál*
- *Brecon Beacons Nemzeti Park*
- *Brighton és a Seven Sisters Heritage Park*
- *Bristol, Cheltenham, Bath, Milton Keynes és London*
- *Királyi Kertészeti Egyesület Kertje, Wisley*

Annak ellenére, hogy a két heti program össze volt sűritve tanulmányi látogatásokkal, a tanulóknak bőven volt alkalmuk megismermi az angol életmódot és kétségtelenül hosszú évekig fog élni az itt szerzett gazdag tapaszfalatjaik.

Ez volt az első igazi cserelátogatás a tanulmányi intézetek között, és 1987 aprilisában egy másik haimadéves tanulócsoport látogat el Glougester-ből Magyarországra mint a Kertészeti Egytem vendégei. Ez a nemzetközi kapcsolat mindhétiranyba jó tapasztalatol kelt és elősegíti a közös információt.

THE "CLOSED GARDENS" OF HUNGARY

Michael Ivory

From the Tupolev Tu 154 of Malev, 30,000 feet above the Danube, no direct evidence is visible of the works and installations marking the frontier between the Hungarian People's Republic and Austria.

The pattern of the landscape as a whole, however, makes it quite obvious that the observer is crossing the boundary separating two very different social systems. On the Austrian side this pattern is a technicolour dreamcoat, a rich and complex mixture of mostly small fields carrying a variety of crops, expressive of the widespread individual ownership of a Western democracy. At the invisible frontier the change is dramatic: a countryside of huge, evenly-coloured open fields stretching almost from one village to another, to be measured in square kilometres rather than in hectares, and the obvious result of the collective or State farming practices of a People's Democracy. The apparent monotony of this landscape is however relieved by the frequent occurrence of another pattern. Bundles of long, narrow strips of land lie scattered across the countryside, sometimes seemingly at random, elsewhere coming together to form larger groupings and displacing the collective prairie altogether. From the air, the crops they carry produce a richness and variety of texture and occasionally almost kaleidoscopic effects of colour. One feels that here is an ancient landscape, a relic of the feudal pact, perhaps, tolerated on the margin of collective farming but no doubt due for eventual "rationalisation".

In fact, some parts of this landscape of "closed gardens", as they are known, are quite recent and, as a whole, far from being threatened with conversion to

Michael Ivory is a linguist and a senior lecturer in the School of Landscape Architecture, Gloucester. He has visited Hungary several times, most recently for a two-week study tour sponsored by the British Council.

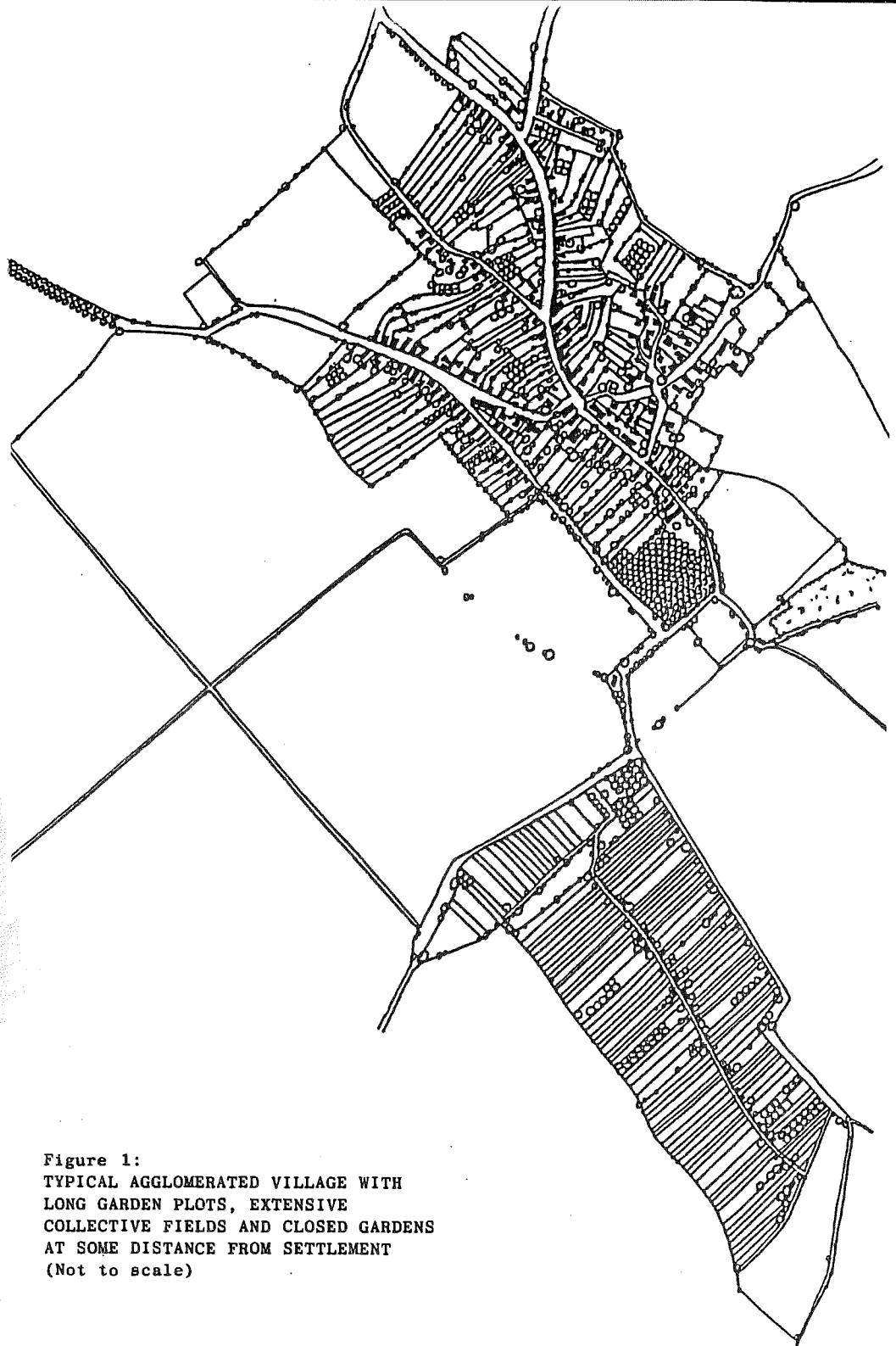


Figure 1:
TYPICAL AGGLOMERATED VILLAGE WITH LONG GARDEN PLOTS, EXTENSIVE COLLECTIVE FIELDS AND CLOSED GARDENS AT SOME DISTANCE FROM SETTLEMENT
(Not to scale)

collectivisation, their future as an important element in the social and economic fabric of Hungary is assured. Why this should be so is explored in another article in this issue of Landscape Issues. (L.Howes, No hiding place: Hungarian social landscapes). Here, the concern is with the origins, present management, and sometimes problematical future of the closed gardens as a vernacular landscape.

Although in some ways similar, physically and socially, to British allotments or German Kleingärten, these Hungarian gardens have a longer history. An integral part of the pattern of traditional rural land use, they were sited on steep slopes unsuitable for arable farming, sometimes on the margin of the village but quite often detached from it among the other fields. Divided up among individual owners, they grew a variety of useful plants, above all vines, frequently fruit trees and vegetables, and also herbs and spices and individual crops. In this variety they reflected the polyculture of the traditional farmyard, although animals were not present. In fact the name "closed gardens" derives from the need to fence off the plots against the depredation of grazing animals. Sometimes small structures were built to house tools and equipment.

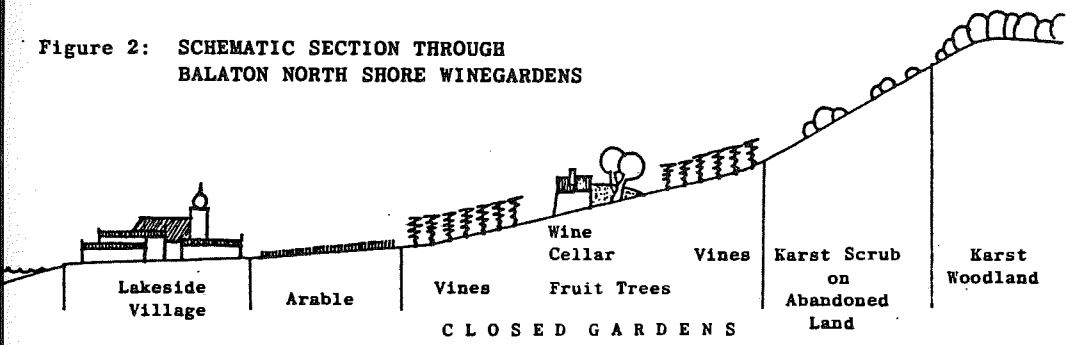
In recent years however, the desire of a significant proportion of the Hungarian population for a second home or weekend cottage has led to the colonisation of many closed gardens. The consequences of this movement, in environmental terms, have usually been unfortunate, and in some areas landscape planning measures are being taken in an attempt to adapt the gardens to their new function without losing their special visual qualities and economic role.

Closed gardens exist in most parts of Hungary. One of the most extensive and, in planning terms, one of the most vulnerable areas, is that extending along the north shore of Lake Balaton. Here the same basic pattern repeats itself frequently: a village and its arable land occupies the flat or gently sloping area close to the lake; as the gradient steepens and the land becomes less easily cultivated, vineyards take over, subdivided into closed garden plots traditionally of 3000-5000 square metres, often with the south east orientation ideal for viticulture. The vines extend up the slope as far as physically possible (sometimes up to a gradient of 30%) giving up finally to scrubby Karstic woodland (Figure 2).

Scattered in an apparently haphazard way among these wine-gardens are the buildings housing the vintners' wine-presses and other equipment and the deep cellars, where the wine is kept at a constant temperature of 10 -12°C. The traditional wine house of the Balaton region (and elsewhere in Hungary too) is one of the most pleasing examples of the integration of vernacular building with its landscape. It sits gable-on to its wine-garden at the upper end of the sloping plot, looking out over the vines to the lake. A central door, perhaps flanked by small windows, gives on to a dark interior, from which precipitous steps lead into the cellar. The spoil excavated in the course of digging out the cellar is formed into a long narrow mound above, continuing the line of the steeply-ridged and symmetrical roof and tying the whole structure even more firmly to its surroundings (as well, of course, as giving extra lagging). Roofs may be tiled or thatched while walling materials are either limestone in the Karst area or rendered sun-baked mud and straw blocks elsewhere. Decorative plasterwork of a greater or lesser degree of sophistication on the gable signals the owner's pretensions and may bring the building into the category of "Peasant Baroque", but in no case were any of these vernacular buildings conceived of having a function beyond the economic one. Grassed areas immediately around the building provide space for essential tasks like barrel caulking and sampling the vintage, while individual fruit trees provide (as well as fruit) essential summer shade.

Not every plot is built on, since one wine-house may serve several vineyards in one persons's ownership. Although the basic structure of this landscape is a simple one, it permits a great range of detailed responses to the changing geographical conditions encountered along the lakeshore. It is an exposed

Figure 2: SCHEMATIC SECTION THROUGH BALATON NORTH SHORE WINEGARDENS



landscape in more than one sense. From the lakeside settlements and main road it is very visible, an almost constant background presence, and thus an important element in the identity of this much loved and visited area. But it has also been exposed to strong pressures for change which threaten its stability. These pressures have come in two waves. The first, in the 1950s, collectivisation, has receded, not least because the successful management of these small plots seems to demand the kind of commitment and even knowledge of, and feeling for, individual vines traditionally guaranteed by personal ownership. A much more serious and continuing threat is however that posed by the attractiveness of these wine-gardens as sites for second homes, particularly for Budapesters. Balaton, as already noted in the article elsewhere in this issue by Jones and Carlton, is the most popular of all places in Hungary for second homes, to an extent where the north shore is now almost continuously built up. In the 1960s and early 1970s, as the riparian zone filled up and prices for lakeside plots rose, attention turned to the possibilities of the vineyards. The wealthier discovering the advantages of greater privacy, space and quality of landscape and building began buying wine houses and their attendant plots in the more accessible areas. Late comers and the less affluent contented themselves with the plots alone on which to erect their own "chalets", as funds and availability of materials permitted. This invasion by city dwellers was helped in many cases by the willingness of the local owners to sell off the vineyard plots. Such people tended to be elderly and to have children who preferred the economic opportunities of town life to staying in the countryside and who were therefore not interested in helping to work, and eventually inherit, their parents' land.

Degradation of the landscape followed the change in ownership and the substitution of a recreational for an economic function. Although pleased to think of themselves as part-time countrymen, the newcomers normally lacked both the skills and the time (particularly if they came from far-away Budapest) to manage the vines in the traditional way. If local labour could not be found to carry out the tasks, good husbandry suffered. Inappropriate ways of gardening made their appearance, like the planting of exotic trees and shrubs (including that horticultural equivalent of the garden gnome, the blue spruce, without which no suburban garden in Central Europe appears complete.) Perhaps the most serious change of all, however, was the proliferation of

low structures, mostly out of sympathy with the landscape and ignoring the precepts of traditional construction. Building regulations have proved largely ineffective in controlling the process. One, limiting floor area to twelve square metres, is intended to prevent anything being built other than functional buildings serving the agricultural needs of the plot. But it is either ignored or, more bizarrely, circumvented by erecting a building on several storeys, none of which exceeds the statutory minimum floor area. The result naturally makes a strange contrast with the older single-storeyed wine-houses, as does the sometimes weird variety of materials, obtained from a variety of sources, for walls, roofs, fences and gates. Incongruous flat or asymmetrical roofs appear too. The visual confusion is further accentuated by excessive subdivision of the original plots and the consequent increase in building density.

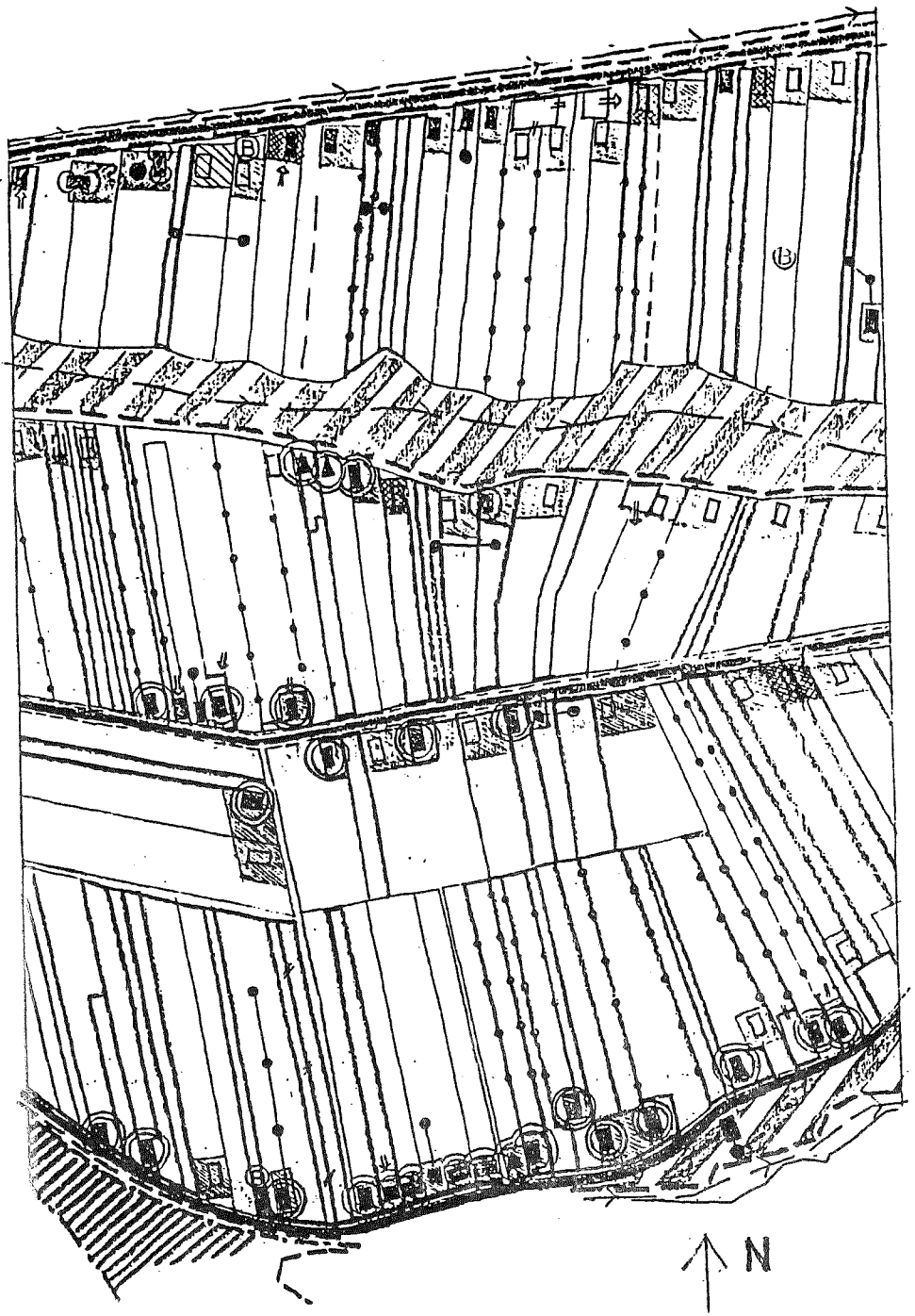
The final threshold in the process of transformation of a working landscape to a recreational/residential one is crossed when the local authority accedes to pressure from the new owners for the area to be formally designated part of the built-up area, thus making it eligible for public funding for such "improvements" and "amenities" as electricity, sewerage, lighting, surfaced roads and so on. When these have been completed there will be virtually nothing to distinguish such an area from any other assemblage of weekend homes.

For a long time, little positive action has been taken to prevent the quite rapid erosion of the traditional landscape of such closed gardens, whether on Lake Balaton or elsewhere. The reasons for this are manifold. The country's permanent housing crisis, with most urban families living in very cramped conditions, makes it politically difficult for government to resist the claim of hundreds of thousands of individuals for second homes, sites for which have to be found somewhere. In contrast to English town-dwellers, whose centuries-old tradition of countryside worship led, amongst other things, to an early appreciation of the qualities of humble domestic building, most Hungarians are still close to a rural past which is identified with poverty, insecurity and low status. The cult of vernacular building, and still less, of vernacular landscape, is thus still in a very early stage of development and confined largely to architects and other cognoscenti. Most village-dwellers, for example, are busily engaged in transforming both their farmhouses and gardens (of the type shown in Figure 1) into as close an approximation as possible of a suburban

villa and its surroundings, with metal rather than wooden windows and lurid annuals instead of ducks. Nor has there been, at an institutional level, an effective body concerned with landscape conservation as such. The Ministry of Agriculture looks at closed gardens from the perspective of food production, the Ministry of Construction from a purely building point of view. The perception of closed gardens by local authorities may be influenced by the enhanced land values accruing when the gardens are converted to recreational or residential areas.

Recently, however, the situation has begun to change. In the County of Pest, for example, surrounding Budapest, a landscape plan is being prepared for an area of closed gardens which have become run-down. Here, close to the metropolis, pay in industry and commerce is high and agricultural wage-rates by comparison unattractive. The drift away from the land is not sufficiently compensated for in this case by the prospect of an easily-accessible market for produce and many of the plots have an untended air, while others have been developed in a sporadic way as weekend homes. The prospect is one of further change of this kind until the area becomes indistinguishable from any other "weekend cottage zone" of variegated chalets and ornamental planting. The landscape plan sets out to revive economic viability and in so doing, to restore visual quality. The means proposed are on the one hand, disseminating information about crop management and on the other, strengthening and enforcing planning regulations. Thus a model closed garden would be created and managed to demonstrate both traditional and progressive husbandry techniques: an historic winery would serve as an information and social centre as well as cafe and horticultural equipment shop; and capability maps would be available showing the suitability of the different parts of the site for a variety of crops, particularly fruit trees with their varying susceptibility to frost damage.

Other documents show where siting of new buildings would be acceptable (for example, not on the crests of hills), and regulate roof shapes and building materials. The hope is that the original horticultural role of the closed gardens will be revitalised and combined harmoniously with an acceptable level of recreational/ weekend-home use.



LEGEND

- Area excluded from closed gardens
- Closed gardens to be retained
- New woodland planting
- State/collective vineyards
- Woodland
- New buildings permitted
- New buildings permitted only when particular conditions fulfilled (eg amalgamation of adjoining plots)
- New buildings permitted provided plot divided
- Plot boundary
- Plots to be amalgamated
- Plots to be considered together with building permission
- Proposed subdivision of plots of more than 4000m^2
- Proposed amalgamation of plots of less than 2000m^2
- Satisfactory building
- Building requiring alterations
- Building to be screened by planting
- Dereliot building to be restored
- Building or hut to be demolished
- Building under construction to be removed
- Possible new building
- Building to be conserved of local significance
- Building to be conserved of regional significance
- Proposed track or road
- Drainage channel
- Building prohibited

Figure 3: LANDSCAPE PLANNING PROPOSALS FOR SECTION OF CLOSED GARDEN AREA ON LAKE BALATON NORTH SHORE (Not to scale)

In the southern city of Pécs, some loss of the closed gardens which occupy much of the urban fringe is regarded as inevitable in the face of irresistible pressure for second, and sometimes first, homes. Here the approach is one of "damage limitation". Using nationally accepted criteria, three categories of closed garden are defined:

- those which are to be formally designated as part of the built-up area and which can therefore be provided with all the normal urban services and facilities,

- those where the productive and recreational functions can be combined, and

- those to remain in exclusively productive use.

By designating a sufficiently large area in the first category to meet the demand for second homes, it is hoped to prevent, temporarily at least, the unregulated and sub-standard building which might affect the other two types of area.

Because of their particular importance, the landscape planning of some wine gardens of Balaton is entrusted to the national and regional planning agency (V.A.T.I.*). Individual plans are prepared for those areas where recreational use is to be combined with continued production. These are based on detailed survey and evaluation of all relevant physical and social factors (including for example the distance of plots from their owners' primary residence in order to assess whether time is likely to be available for proper management.)

The landscape plan itself sets out an array of measures, some compulsory, some advisory, designed to reconcile continued production and maintenance of visual quality with a degree of second home ownership and construction. Among the compulsory proposals might be:

- designation of areas to be afforested, typically including the marginal land of the steep upper slopes which have often fallen into disuse,

- prohibition of building on small plots (eg. less than 1500 square metres), and

- prohibition of building on ridges.

* Városépítési Tudományos és Tervezö Intézet

The recommendations might include the following:

- suggestions for acceptable subdivision of existing large plots,

- potential sites for new building,

- guidelines for the design of new buildings (discouragement of metals and plastics for example, orientation of the roof line, general massing and colour to correspond very broadly to the existing buildings), and

- land capability for different crops.

In addition an inventory is made of all plots with the recommended action summarised. In the case of buildings erected without permission - a frequent occurrence - this would stipulate removal!

The erosion of the environmental quality of the traditional agricultural landscapes is an issue in most European countries, concern and controversy having been largely contained within national boundaries. Such landscapes may often be properly described as vernacular in that they were hand-made by their users rather than by experts or specialists, that they employed materials available locally and that they evolved slowly over long periods. Their appeal to us today is a strong one, which can be interpreted in various ways, usually by reference to the contrast they make with contemporary landscapes, by comparison with which they are invariably richer, more varied and complex, both ecologically and visually. But it is at least possible that it is their expressive qualities that are most interesting, the ways in which they make visible a lost intimacy between the individual, the community and the land which the nature of contemporary modes of production have done away with. The appeal of the closed gardens would appear to fit nicely into this category of an historic landscape expressing the kind of former man — land relationships about which we are pleased to cultivate nostalgia sentiments.

But they are of course more than this, and it is this role as an expressive element of contemporary Hungarian society, rather than simply their status as an historic landscape to be preserved, which is particularly interesting. What seems to be the essential aim of the Hungarian landscape planners involved is the maintenance

of a "modern" vernacular landscape, one with historic elements to be sure, but one which fundamentally sets out to ensure the possibility of large numbers of individuals working the land in a productive way, both for profit and for recreation.

The situation is full of paradoxes and contrasts: the combination of work and recreation for one, the promotion by a Communist state of this type of individual land ownership for another. In a paper read to the 1984 IFLA Congress, Dr Laszlo Dalanyi, now of the Ministry of Construction and Town Planning, expressed cautious confidence that the closed garden landscape could be conserved by the type of planning procedures described briefly above. His vision of their future was one of harmonious combination of "active recreation for broad groups of society" with the interests of those continuing to work the land and with the enhancement of national agricultural production. It has to be admitted that the "broad groups" referred to by Dr Dalanyi are in fact likely to consist mostly of relatively moneyed families able both to purchase and travel long distances to their weekend homes among the closed gardens. The virtual absence of a public recreational element in the solution proposed is also striking.

Given the previous relative unawareness and neglect of the value of vernacular building and landscape in Hungary there would seem to be a good opportunity to use the plans now being prepared to promote the closed gardens, particularly the historical ones, and to increase their visibility in the public mind. How this might be done would of course be a matter for debate, but would presumably include encouragement of that public access which seems almost entirely lacking at present. Otherwise it may well be that the landscape planners of V.A.T.I., of Pest County and elsewhere have found the formula leading to successful synthesis of land, people, work and pleasure, freedom and control, which will ensure the survival of this significant landscape of "closed gardens".

THE EDUCATION OF LANDSCAPE ARCHITECTS IN HUNGARY

Imre Jámbor

For a quarter of a century, landscape architects have been trained at Budapest's Horticultural University along with horticultural students. The quite distinct teaching programme in landscape architecture over this period was however preceded in the history of the institution by a long tradition of training in garden design.

The institution was founded in 1894, with the then function of training students for the horticultural industry. Nevertheless, from its very inception, the college found an important place in its curriculum for garden design, enabling it to keep pace with developments in European landscape architecture. In charge of the subject was Professor Károly Räde who as a tree specialist was also responsible for arboriculture and ornamental horticulture.

At the time, Hungary, like other European countries, had been dominated from the middle of the 19th Century by the idea of the garden as a collection of plants, with spatial and architectural elements playing a subordinate role. A significant change of style in garden design occurred at the beginning of the 20th Century. The stereotyped design forms of the plant collector's garden were succeeded by a style of a strongly architectural character in which the building was closely linked to the landscape by formal design elements. The protagonist of this movement in Hungary was the architect Béla Rerrich, Principal of the College and Professor of Landscape Architecture. The basis of his teaching was that architecture and garden design share a common task, the creation of space, with differences only in techniques and materials. His audiences were influenced accordingly. His professional work had strong links with

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the eclectic tendencies then dominating architecture and with Art Nouveau. After Rerrich's early death, it fell to his successor, Professor Imre Ormos, to deal in his teaching with those world-wide developments in garden and landscape design which occurred in the 1930s. Professor Ormos' name is associated with the foundation of the Department of Garden Design and Planning, whose work centred on the then evolving style which owed much to phytosociological considerations and to landscape ecology. The College developed rapidly, winning in 1939/40 the new title of Royal Academy of Horticulture. New buildings and trial plots were added and the number of students increased. Courses at the time lasted three years. Added teaching responsibilities (including substantial developments in garden design) resulted in a further renaming in 1943 the College of Hórti- and Viticulture. By 1960, in addition to the general education to Diploma level in horticulture, an independent speciality in landscape architecture and garden design had been set up, with students being taught to a separate curriculum.

At this time the course lasted four and a half years i.e. nine semesters. The subject of "landscape planning" was added to the curriculum and a significant number of hours devoted to its teaching. The introduction of the subject and its adaptation for teaching purposes are associated with the name of Mihály Möcsenyi, the then Head of Department.

Rising standards in teaching and research, together with the increased demands made on its graduates led, in 1968, to the granting of University status. Now known as the Horticultural University, the institution acquired all the rights and obligations attributable to a university. At the same time the length of the course was extended to five years (ten semesters). Landscape architecture and garden design are taught as a specialist discipline with its own curriculum. Between fifteen and twenty students graduate each year with the qualification of Diploma Engineer (Landscape Architecture).

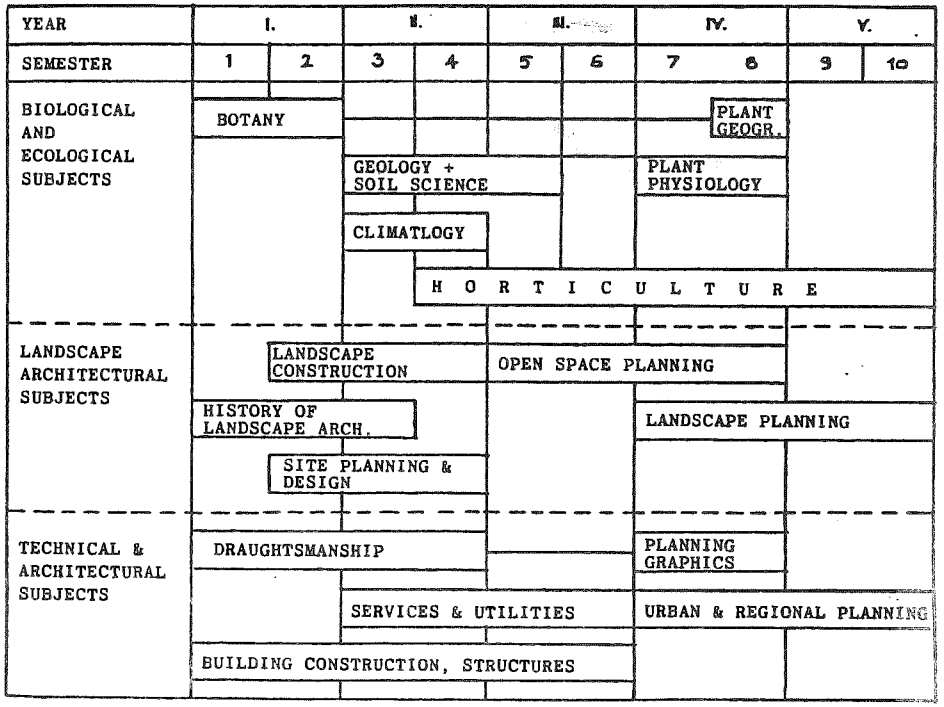
The curriculum has been revised and modernised several times: about a third of its content now consists of basic scientific subjects; another third of biological and ecological material and a third of technical, architectural and aesthetic subjects. The most important disciplines are landscape architecture, urban open-space systems, landscape planning, horticulture, applied ecology, and urban and regional planning. Student

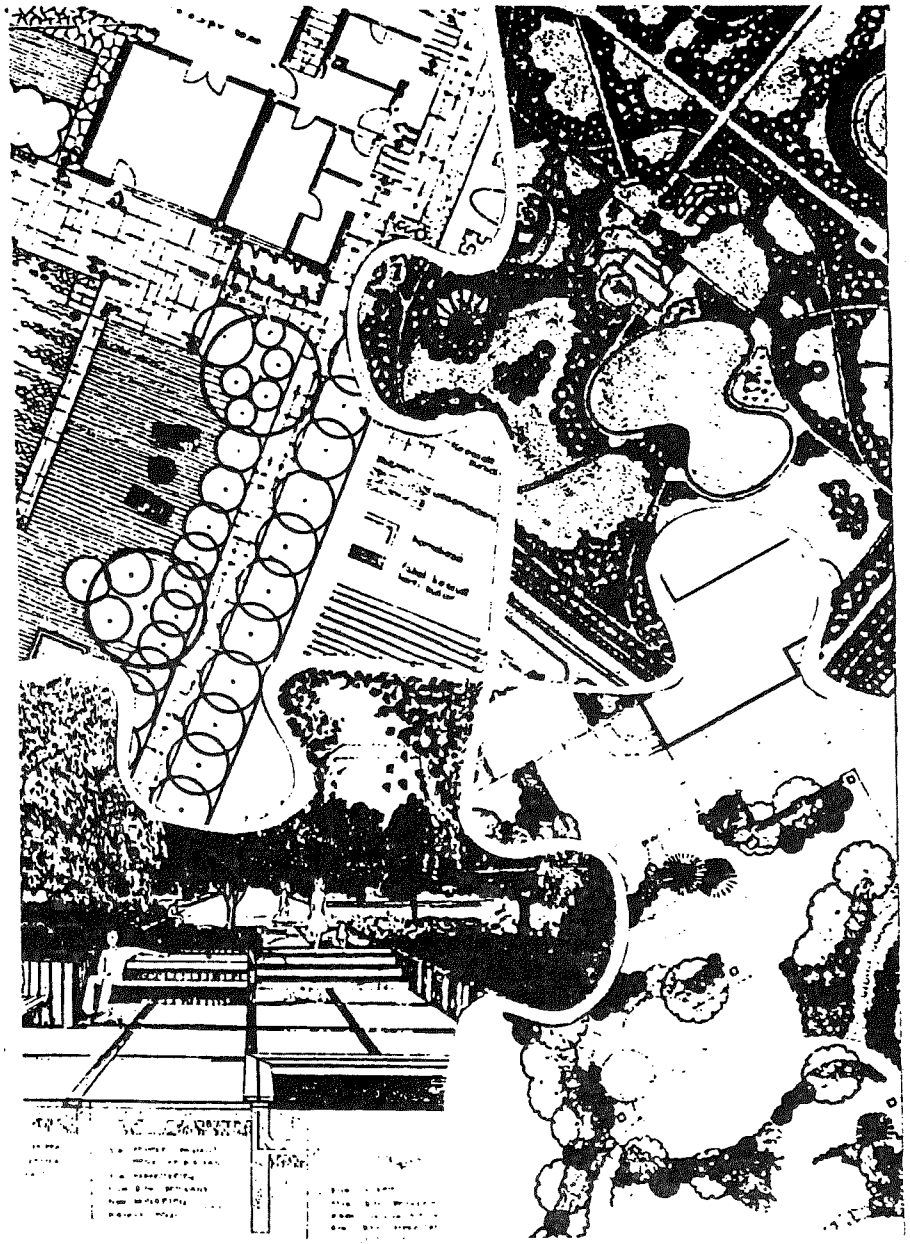
applicants must pass an examination in drawing, mathematics and biology.

In the course of the five years, the students take part in about 5000 hours of lectures and project work, including time spent in practice and in study tours in Hungary and abroad. About fifty examinations and tests have to be passed during the course. In the final two years each student does a diploma project on a subject personally chosen. This is presented to a jury consisting of both academic staff and professionals working in practice.

The professional activity of graduate landscape architects and the interests of the subject generally are both protected and promoted by the provisions of planning legislation. Thus open-space planning and landscape planning may only be carried out by specialists who have been trained as landscape architects at the Horticultural University.

COURSE PROGRAMME





The language may be a puzzle, but these Hungarian student landscape drawings are remarkably similar to their British counterparts.

In 1984/85 a postgraduate course in landscape planning was begun. Intended for those architects, engineers and other specialists already professionally active in the field of landscape architecture, who need to deepen and extend their knowledge of the subject, the two year course is also suitable for previously qualified landscape architects who wish to develop their professional knowledge and bring it up to date.

Academic responsibility for the subject of landscape architecture belongs to the University's Institute for Environmental Planning which is divided into three departments; Landscape Architecture, whose Head is Imre Jámbor; Landscape Planning under Attila Csemezi; and Arboriculture and Ornamental Horticulture under Béla Nagy who is also the Director of the Institute. The three departments maintain relations with numerous foreign universities and research institutions.

The scope of the University's teaching was further extended from 1st September 1986. The whole range of subjects contributing to the study of food technology are now taught and a new faculty has been established. The University has had a further change of name and is now called the University of Horticulture and Food Industries.

Both city and countryside in Hungary pose a wide variety of problems for landscape architecture to solve and research and teaching tasks at the University are considerable. The aim is to train and educate professionals with the ability and motivation to solve these problems.

NO HIDING PLACE : HUNGARIAN SOCIAL LANDSCAPES

Laurie Howes

There is only one way to travel to Hungary. By train.

As the under-occupied, slightly formal, dark green and orange carriages pull out of Vienna, one is aware of, and over-sensitised to, the approaching border. At that border, a lengthy delay, a considerable security presence and several different layers of Hungarian bureaucracy bring home to the West European the fact of entering a different Europe. And the view from the window confirms that here is a very different landscape. Gone are the small, neat, over-floral villages and the careful affluence of Austria with its gently rolling wooded hillsides. Now there is a flat landscape, duller to the eye with vast tracts of "prairie" farming and a lack of obvious signs of human habitation.

All the visitor's carefully cultivated prejudices and expectations seem confirmed by that slow journey through north-west Hungary to Budapest. Such expectations are derived from a variety of Western images and programme the visitor to search for confirmation of an East European socialist and planned uniformity. Some expectations however derive not from the West but from cultural images provided by Hungary itself. Hungarian literature, cinema, and history, as well as Marxist ideology, taken together have combined to stigmatise "rural" as inferior and second rate. Another expectation comes from Western social science which in offering the concept of a "socialist" city suggests the possibility of a "socialist" landscape.

The view from the train to Budapest does suggest that the Hungarian rural landscape can be categorised as one with a dull uniformity and sameness and one which fits all too

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easily into Western European cultural expectations of Eastern Europe. And until the late 1960s such expectations concerning all of the Hungarian rural landscape would have been generally correct.

In the inter-war period Hungary was clearly and recognisably divided between "the magic palace" of Budapest and the rest of the newly truncated country. Provincial rural life in the 1920s and 1930s was characterised by a profound poverty, mass un- and under-employment and a ubiquitous lack of basic facilities. These features were so strong that they "equalised" the rural landscape and produced a sameness arising from a shared rural poverty.

Radical changes introduced by governments after 1945 further confirmed the sameness of the Hungarian rural landscape. Blanket policies of forced industrialisation and associated urbanisation together with a conscious neglect of agriculture and rural settlements amplified the existing differences between rural and urban Hungary (Kulcsar, 1983). These policies led to a massive migration to Budapest and the other industrial centres and regions, the consequent depopulation of much of rural Hungary and a declining total agricultural product by the mid 1950s. Thus on to a sameness resulting from the poverty of the inter-war years was superimposed yet another layer of experiences within the rural landscape.

All this makes the reality of rural Hungary today a genuine shock (Howes, 1984), for in the 1980s, two facts are evident in the new rural social landscape which contradict these initial impressions of sameness: first, much of this no longer projects an image of backwardness, decay and relative poverty as compared to the urban. Rather it projects an image of dynamic growth, development and comparative wealth. Piles of building materials on road sides, half completed new houses, shining new water towers, polythene greenhouses, new school buildings, cars parked amongst domestic animals and crops, household plots and "closed gardens" meticulously cared for, clearly deny the idea of a stagnant or impoverished rural economy; second, the frequently close co-existence of such dynamic localities to other rural settlements, whose visible decay is equally dramatic, points towards an increasingly differentiated rural landscape in which growth and decline sit side by side.

This paper discusses the major forces which appear to be leading to this increasing locality differentiation in the Hungarian landscape. It is based on material collected in three of the country's nineteen counties during a six week research visit in 1986. A number of rural settlements were visited and investigated, interviews were conducted both with local residents, administrators and elected representatives as well as with representatives of relevant national organisations, research institutes and other academics.

The Hungarian landscape, here understood in its broadest meaning, offers the foreign visitor especially one denied (almost certainly) the facility of language, a means to understanding contemporary Hungarian society. This use of landscape as a tool in understanding a society may be a heresy to the landscape architect for which, in this journal, I apologise. I will use it, however, and will designate the term "social" landscape to mean the use of landscape in this way. What then can the Hungarian social landscape provide for the researcher attempting to understand that society? First, most obviously and most importantly it provides a bench mark and a check list with which to evaluate "official" interpretations of what it happening. Second, it offers a research agenda in terms of questions, problems, doubts and social paradoxes which demand answers: why does such marked local differentiation exist; how have these differences come about in a centrally planned society?; how does such differentiation fit into prevailing concepts of social equity within a self-avowedly socialist society?

From an interim analysis of the material collected twelve factors appear to account for a significant amount of the differentiation between rural localities:

1. the national economy,
2. settlement planning,
3. population,
4. agriculture,
5. industry,
6. the housing market,
7. leisure and recreation,
8. transport and physical location,
9. ethnicity,
10. family composition,
11. "hobby" gardens, household plots, "closed gardens",
12. the relationship between the local councils and the agricultural co-operatives or state farms.

Space permits only the most cursory account of what are obviously complex and dynamic influences on Hungary's rural settlements.

1. The National economy. As in all other societies the national economy sets the resource parameters and the basic options for the society. Heavy external borrowing coupled with high dependence on external trade makes the Hungarian economy especially vulnerable. Since the middle 1970s there has been an acknowledged national economic problem, but this problem has had a different effect on rural vis-a-vis urban communities. One consequence of Hungary's economic problems has been a fall in real wages since 1978, although significantly not per capita incomes (Zachar, 1986). It is secondary incomes earned within the so-called black or "second" economy which have prevented a real fall in the average standard of living. One major source of secondary income open to all Hungarian families (but most accessible to rural dwellers) is petty commodity and subsistence production on one of the 1,500,000 closed gardens, household plots, hobby or auxiliary farms owned by 80% of rural families and 20% of urban families (Enyedi, 1982). Hence it is not surprising that the largest growth in real per capita income has occurred in the rural sector.

A second consequence of the national economic situation clearly does differentiate between families and localities. An increased emphasis on competitiveness throughout the society together with the implementation of the "socialist" principle of rewards according to work done (measured by profitability) has benefitted those in the more successful rural enterprises and localities (Szlameniczky, 1985).

2. Settlement planning. If the national economy sets the economic parameters the physical planning system, in theory, sets the physical boundaries of change within the rural landscape. The National Settlement Plan introduced in 1971 to guide national and local decision-making indicated a national hierarchy including the more prosperous and already growing key settlements which were to be allocated development funding and resources. It also identified those settlements seen to be in decline which would no longer be resourced.

There can be no doubt that the plan exaggerated existing differences between rural settlements. However research conducted at V.A.T.I., the agency responsible for national and regional planning, found that between 1971

and 1981 this imposed hierarchy was less than completely successful within its own objectives. Broadly, only half of the centres designated for growth in 1970 had become growth centres by 1980. But half of the centres which had become growth centres by 1980 were not designated as such in 1970. This finding clearly indicates that other forces have been working within the rural sector.

3. Population. Hungary has one of the lowest birth rates in Europe. The population is set to decline from its present 10.7 million by several hundred thousand, perhaps a million, in the next two decades. The inevitable consequence (strongly resisted by local representatives and administrators "on the ground") is that some villages must continue to lose some part if not all of their population. Already there exist villages where the population has halved in the past ten years or as in one extreme case, in Baranya county, the village is completely deserted. To further complicate the situation demographic trends strongly indicate that the period of massive rural to urban migration back to the smaller towns and even the countryside is over. Budapest has effectively stopped growing and there is increasing evidence of the beginnings of a reverse migration to the countryside. Demographic forces will almost certainly sharpen the dynamics of rural change.

4 . Agriculture is undoubtedly the post-war Hungarian success story (Hartford, 1985). (See Bryan Jerrard's report in this issue). It has transformed both itself and the rural landscape during the past twenty years and in the process radically improved the status of all of rural Hungary (Zimonyi, 1985). As a most valuable sector within the national economy in terms of export earnings and wealth creation agriculture has also injected a new wealth into rural society at the grass roots. In addition to providing employment the agricultural co-operatives and state farms have been the means by which rural settlements have been able to reconstruct and resource themselves. What is significant is the great differences in production levels, management practice and most of all profitability between different co-operatives and different state farms which differentiate one locality from another (Romany, 1985).

5. Industry. The immediate post-war experience of industry in Hungary was of ever increasing centralisation mainly in the existing pre-1940 industrial areas and regions. This was most notable in and around greater Budapest. Since the early 1970s there have been major

changes in the structure and location of industrial activity. Of particular importance here is that during the past decade industry has moved out from the Budapest industrial belt and since 1980 has decentralised dramatically, spatially if not in terms of control (Barta, 1985). Much of this has been to where half the national work force live, the villages. At the same time many agricultural co-operatives have transformed themselves into industrial producers. Currently between 30 and 50% of income generated in the agricultural co-operatives is from non-agricultural activity (Enyedi, 1984, and Varga, 1985), and increasingly rural inhabitants working in many agricultural co-operatives and state farms are industrial and service workers. These changes have profound long-term implications both for the structure of industry and for rural settlements. Again differentiation is occurring between those villages located within the sphere of influence of the more entrepreneurial, dynamic and thrusting agricultural enterprises and those outside it.

6. Housing market. One consequence of the forced industrialisation of the 1940s and 1950s was an under-resourcing of infrastructure and in particular housing. Thirty years later housing is still perhaps the most difficult problem which the average Hungarian family has to face.

One result of the inadequate stock of urban housing is a rural based industrial workforce commuting on a daily or weekly basis. But with increasing industrial activity and employment opportunities on many agricultural co-operatives a significant number of worker-peasant families appear to be settling for either improving the existing family house or building a new house where they presently live. In addition, given the Government's acceptance in the eighties that the state does not and will not have the resources to solve the housing problem certain villages, especially those close to major urban centres, are gaining a new breed of self-build ex-urban residents attracted by lower land prices. Reverse migration is clearly happening in such localities, with visually significant results (Sillince, 1985).

7. Transport and physical location. Accessibility is especially important in differentiating localities in rural Hungary given the low rates of car ownership and the very high costs of private as compared with public transport.

8. Leisure and recreation. Accepting the problems noted within the economy and especially the recent difficulties in obtaining foreign currency frequent foreign travel is difficult even for the affluent. One reaction to this, given a new leisure consciousness coupled with reduced working hours in the "first" economy and a desire to participate in the "second" economy has been the proliferation of the "weekend" cottage across the rural landscape (Dingsdale, 1986). There is clear evidence that dwellings in rural settlements in attractive though sometimes remote environments are being renovated by a new "leisure" class. This phenomenon also interrelates with the housing problem. One solution to the perceived problem of inadequate living space for families in towns may be not to buy a very expensive larger flat or house (in town), but to retreat for long weekends to a rural and more spacious environment and buy a country cottage. The strong "second" home tradition, embedded in historical agricultural practice, makes the holiday house an attractive answer to a host of problems for many Hungarian families.

9. Ethnicity. Strong cultural, religious and ethnic groupings have historically characterised Hungarian society (Reining, 1980). Such groupings have affected the comparative development and wealth of different sub-regions and individual villages. Transformed beyond recognition by the massive in- and out-migrations resulting from the two world wars the old established ethnic locational patterns have largely disappeared.

It appears, however, that a number of smaller localities have, by whatever processes, been "adopted" by distinct ethnic groups within Hungarian society, so that particular groups now gravitate to certain localities and by their migration increase the differentiations within the wider society.

This is noticeable within the obviously highly desirable and affluent commuter villages close to urban centres which often appear to have selected themselves in terms of sub-national identities. By contrast a number of both very remote and urban fringe villages have been "colonised" by Hungarian gypsies. Here the replacement of one population by another is perhaps at its most dramatic visually, and starkly distinguishes that locality from its neighbours.

10. Household and community composition. As the changes noted above work through the economy, and as government

increasingly transfers responsibility for the provision of many services and functions previously supplied by the state to individuals and communities, the composition of families and communities in terms of number, age and sex will differentiate them one from another. In Hungary as elsewhere, a multi-generational household with six income earners is in a totally different economic situation to a household with one income earner. If bourgeois capitalism in Western Europe destroyed the family, "socialist" capitalism appears to have transformed many Hungarian families into highly successful production teams. Nowhere is this so apparent as in the the expanding urban fringe villages where the new Hungarian man and woman build their own houses, cultivate their hobby gardens and work in the second (and third!) economies - in between earning their livelihoods in the first economy and raising a (small) family! As with other successful forms of production there is increasingly the problem of what to do with accummulated wealth. Thus inheritance and inter-generational support appear to play a vital role in the futures of individuals and families. Likewise, communities appear increasingly dependent on a local leadership for energy, skills and political knowledge. And those which do possess energetic, skilful and capable local politicians clearly do well at the expense of those which do not.

11. Household plots, hobby and closed gardens. Although mentioned earlier, and elsewhere in this issue (See M.Ivory : The "closed gardens" of Hungary), the importance of gardening in the Hungarian economy and wider society is such that it must be identified here in its own right. Families that enjoy easy access to a plot or closed garden are often able to satisfy all their domestic needs for vegetables, poultry, milk, eggs, meat and wine - and in addition to sell the surplus. Furthermore if they actually own the land they may be able to realise its development potential. The precise economic value of a plot or garden to a family is hard to calculate but many interviewees considered that their "garden" produced the equivalent of 50-100% of an average annual wage.

In rural Hungary the value of the household agricultural product is often very dependent on the efficiency, management and resources available from the local co-operative or state farm. For it is the "collective" enterprise which supplies seed, young animals, veterinary services, marketing and guarenteed prices for any surpluses produced. Clearly the famous productivity of

private household plots and gardens would be far less without the important support of large-scale agriculture. Thus again differences in efficiency and productivity between the larger agricultural enterprises is transferred in to the wider society. Most recently and identified by the ubiquitous polythene tunnel, a newer and more entrepreneurial "commodity" gardener has emerged who depends on selling out of season produce and having immediate access to a sizeable urban market.

12. Local councils and the agricultural co-operatives or state-farms. The relationship between the local elected authority and the local agricultural enterprise appears to be a vital factor (perhaps it is the critical factor?) in explaining locality differences. The increasing importance of the success of the agricultural enterprise has already been indicated. When combined with the local council these two bodies then hold between them the necessary statutory and financial resources to develop their communities. Given a national government increasingly anxious to relieve itself of the financial burdens of providing local rural services, local councils with the resources of a local agricultural enterprise have virtually a free hand. Not surprisingly there appear to be growing differences between those localities which lack political will and resources, those with one but not the other, and those favoured localities which enjoy both.

Conclusion

In the 1980s, rural Hungary is caught up in a process of dynamic change and development which is increasing the differentiation between rural settlements or localities. This is expressed physically and in a very legible way on the landscape. The traveller does not need to speak or read Hungarian to appreciate the dramatic visual differences between one rural settlement and the next, particularly if he compares the presence or absence and the condition of buildings, gardens, crops, public facilities and consumer durables. Twelve major factors have been identified to account for such differentiation. It is suggested that it is the particular mix of these factors within localities which accounts for the differences between localities.

Two factors, however, stand out as having the most visual impact: first, the housing market. The scale, energy and inventiveness of private house building provides clear evidence that a major economic and social thrust,

of recent origin, is occurring outside the major towns and cities; second, the sheer number of hobby gardens, household plots, and closed gardens, and those working in them, confirms the existence and importance of the agricultural second economy.

The Hungarian social landscape is a very public landscape. It is highly visible. Social changes and emerging differences are not concealed behind the physical or institutional barriers of the urban environment. There is no hiding place in this rural landscape for social differences and privileges which are increasingly apparent within Hungarian society. Of the research and policy issues which emerge from this preliminary investigation three appear to be particularly important:

First, the massive flood of post-war migration to Budapest and other major cities has slowed down or stopped. Current population figures suggest a watershed with some evidence of reverse migration. The reversal of a process of concentration which took so long in much of Western Europe appears to have happened in Hungary after a much shorter time span and when almost half the population still live in, and many still work in, the countryside. Hungary with its long and painful twentieth century history of physical disproportion and settlement imbalance, may well emerge in the near future by contrast as possessing a modern, appropriate and sustainable national structure.

Second, issues of planning and social justice are inevitably linked to the task of policy making for rural Hungary. Attempts to plan future industrial, agricultural, infrastructure and settlement needs are conditioned by the acceptance of relative past failures and a current mood among the larger part of the population in favour of local democratisation and further liberalisation within the economy. The dilemma in planning and allocating resources on some basis of socialist need yet simultaneously stimulating the economy through competition is not easily resolved. Nor is the question of public support in those localities which lose out in the differentiation stakes between settlements. This issue of an increasingly spatially diffentiated society is likely to prove to be one of the major challenges for the Hungarian government in the coming decade.

Third, this paper makes the obvious, though easily ignored, point that the conjunction of eyes and landscape can be an important tool for social research. This is not intended as a plea for a return to some long buried "chaotic" and physical empiricism. Nor is it a call for a neo-ecological approach. It does, however, make a case for the use of landscape as a tool for social research. That it can be initially misread and misconstrued (especially by people on trains!) points to the need for care.

The human use of land and buildings and their activities associated with a landscape can provide one method of producing a bottom-up social science research agenda. A landscape then can provide clues, puzzles, contradictions and paradoxes which require answers. It also arms the researcher against the power of established theory, received wisdom and official interpretation (in Hungary as elsewhere) which would often rather ignore what is happening on the ground.

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THE BUDA ARBORETUM OF THE HORTICULTURAL UNIVERSITY, BUDAPEST

Gabor Schmidt

The Buda Arboretum, or, as we like to call it, "The Arbor", occupies the whole campus of the University, which incidentally also has two other arboreta: one in Szarvas and another in Soroksár. It is an inseparable part of the students' life: the Arbor is the first thing that the new students enter, and, five years later, the Arbor is again the place where the "last walk" of the graduating students is organized. The Arbor provides the backdrop to pleasant walks and friendly talks, and, of course, contains a wealth of lovely plants of many kinds and from many places.

The Buda Arboretum consists of two main parts: the Old Garden and the New Garden. The Old Garden was founded in 1893/4, as a show field to the Horticultural School, predecessor of our present University. It was purposely designed and the plants were grouped in systematic order. This grouping was very convenient for teaching, but not always good ecologically for the different plants. The Old Garden houses many fine trees and shrubs. Here, for example, the old Chinese cedar (Cedrela sinensis), the Parrot-tree (Parrotia persica) and the Lebanese oak (Quercus libani) are the oldest and probably the largest specimens of their kind in Hungary. Many of them still carry the traces of the Second World War: healed wounds on the surface and shell splinters and bullets inside the trunk, for during the siege of Budapest, the Arboretum was the scene of heavy shooting). Here is also our rockery: a colourful place in the spring and a romantic and cool corner during the summer. On the upper side, the Old Garden is bordered by the Memorial Allée. In this avenue each final year of students on the course plants a tree before leaving the University.

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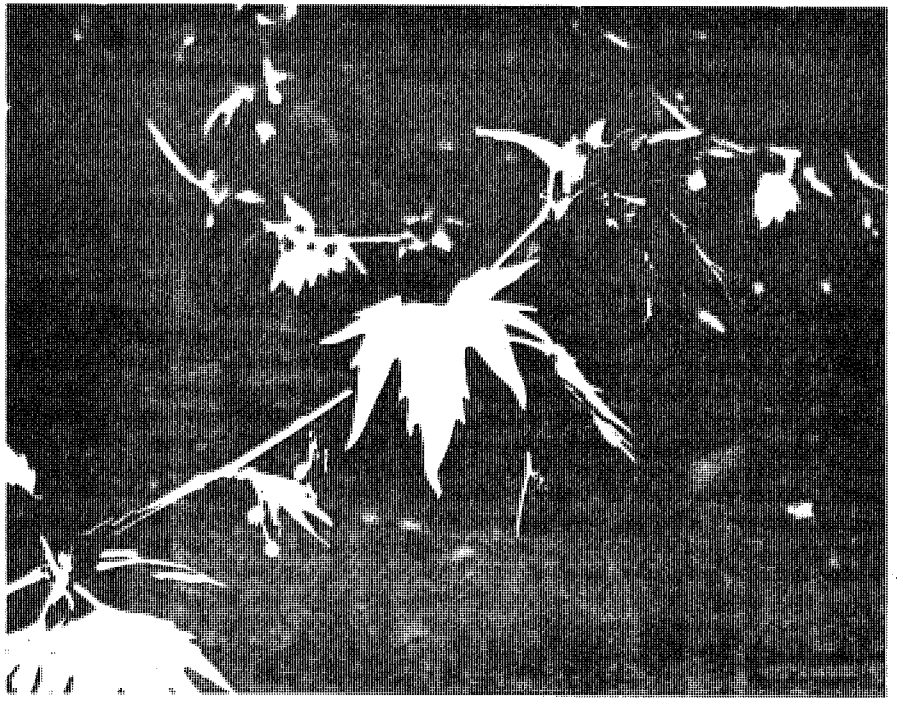
The New Garden, situated below the old one, was gradually built after the Second World War. Its newest part was started only ten years ago, and planting is still proceeding. This garden is also managed in a landscape style, but here the grouping of plants is on an ecological rather than systematic basis. This new system results in better survival and growth, and much easier maintenance. Similarly looking species however, which are easy to confuse, are still planted close to each other. Spectacular features of the New Garden are the collections of Japanese cherries, the flowering crabapples, the Mediterranean corner and the miniature pinetum.

The Arboretum now covers eight hectares. Its collections include about 900 woody species and cultivars, and almost 200 perennials. Its sheltered situation in the centre of Budapest and on the southern slope of the Gellért Hill ensures probably the mildest microclimate in the whole of Hungary. As a result, it is possible to grow many tender rarities: pomegranates, true cypresses, figs, and even some palms. Besides these, there are practically all the ornamental species and cultivars which one can buy in the



Hungarian nurseries, with the exception of lime-hating plants, the soil being very chalky. Unfortunately, our students have to learn them! During late spring and early autumn, which are the two seasons of "plant-recognition exams", you can see swarms of anxious young people studying the labels and holding plant-maps in their hands.

As a matter of fact, teaching is the first and most important task of our small arboretum. The second task is connected with our breeding and introduction program: all the promising novelties are tried here first, under semi-extensive urban conditions. In addition, and not less important, is the representative function: the Buda Arboretum surrounds and embraces the University buildings, delights the eye, and welcomes the visitors at any time of the year.

G.S.

[The School of Landscape Architecture based at the Oxstalls Campus in Gloucester benefits from the grounds which are the residue of the College's former use. Already, however, they provide a teaching resource comprising a basic range of plant types for the study of horticulture by the landscape architectural students. It is the objective of the School to make more use of the grounds for this purpose, hopefully establishing the only plant collection particularly planned to teach horticulture for landscape architecture students. Most well-known gardens, arboreta and pineta are collections of rarities. At Gloucester we hope to concentrate on plants suitable and available to designers, but we envy the Hungarians with their garden heritage and their continued upkeep and interest in their exceptional University grounds.

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EDUCATION IN SURVEYING FOR STUDENTS OF LANDSCAPE ARCHITECTURE IN HUNGARY

Lajos Babós

In Hungary the training of landscape architects takes place at the University of Horticulture in Budapest, where about fifteen students graduate every year as certificated landscape architects and planners (M.Sc. in Landscape Architecture) after completing five years of study.

As far as the improved living standards call for a thorough knowledge of our environment, the subject of land surveying is among the most important, along with the history of landscaping, site preparation and civil engineering. At the Department of Landscape Architecture, a part of the Environmental Management of the University, two professors and an assistant for site preparation are responsible for educating students in surveying. A comprehensive, up-to-date selection of instruments and measuring equipment — about £14 000 in value — is available for use in the practical training. In addition, a special text-book, lecture notes and an exercise book prepared by the author of this article, various instructional films and a personal computer help the students to acquire the knowledge of landscape surveying.

In terms of the allocation of course time to the subject, the landscape architectural student receives a total of 160 hours instruction. In the first two terms, lectures and practical periods occur regularly, both complementing each other and providing a suitable foundation in methods and instrumentation.

At the beginning of the third term — in early September — the students do field work for two weeks at the special

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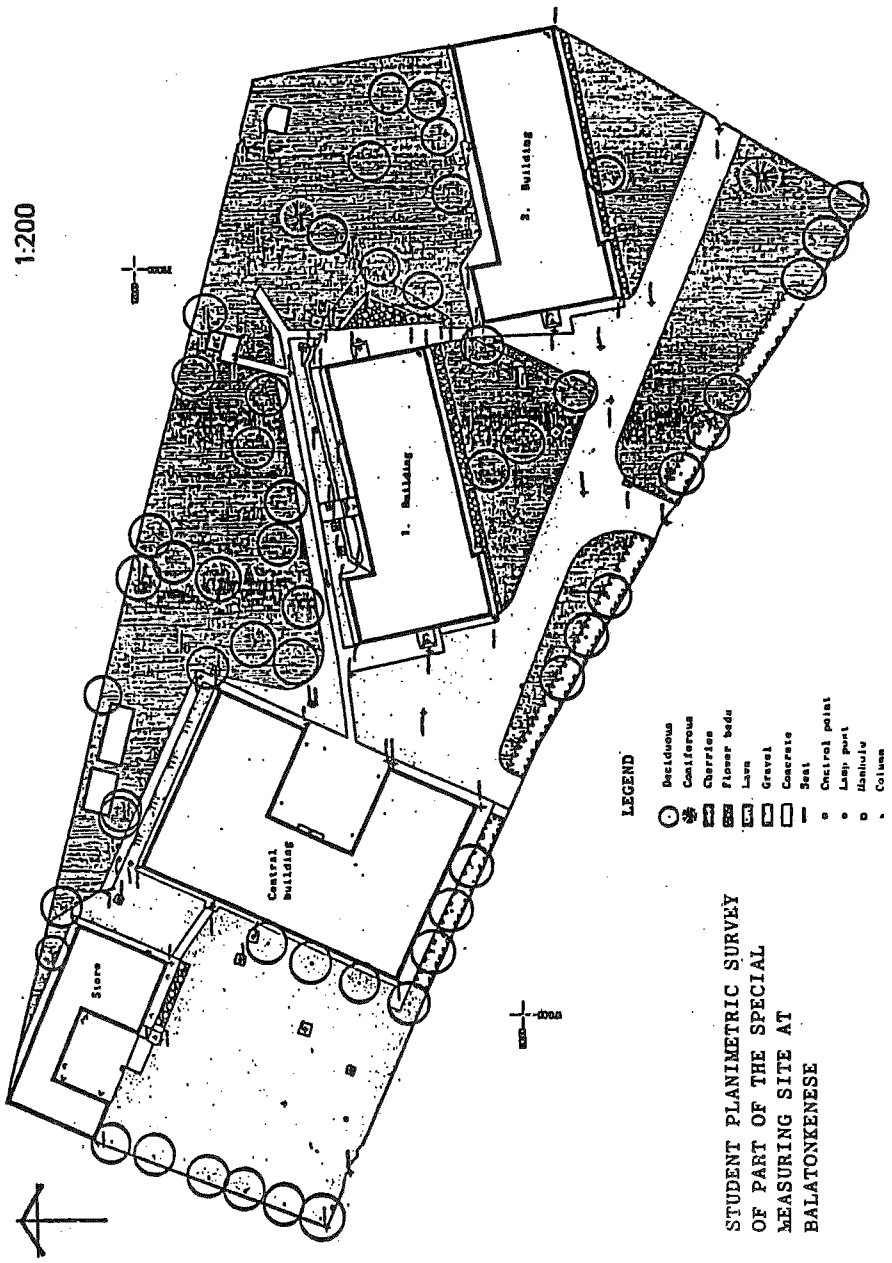

measuring site of the Technical University at Balatonkenese — at Lake Balaton — where in small groups they produce the following:

1. Contour-line survey map (scale 1:1000) covering an area of about twenty hectares.

2. 1:200 scale planimetric map of an area of approximately one hectare.

3. Longitudinal and cross-sections of a motor-road along 500 metres.

4. Site planning of a sports-ground.

In order to produce these maps, students will have received tuition in:

1. Low-order triangulation, trigonometric elevation measurement, tacheometric traversing and tacheometric detail survey.

2. Traversing, planimetric survey, elevation measurements by levelling.

3. Line (longitudinal and cross sectional) levelling.

4. Grid levelling, horizontal and vertical setting-out.

Each student is assessed on his practical performance in a group and at the final university examination where he must show competence in the application of spatial co-ordinates and the fundamentals of surveying including the different methods of graphic procedures of survey data, and the basic principle of producing topographic and planning maps. The students must know in detail the different kinds of solutions to problems of setting out a horizontal triangulation network, determining the height of points, the handling of the different instruments for measuring distances, angles and elevations, and the practical ways of producing suitable layouts for landscaping, civil engineering and earth-work projects.

Because of their thorough education in surveying, graduates in landscape architecture are authorized to do low-order surveying in Hungary.

L.B.

[Two points in the above article are worth commenting on from a British perspective.

Whilst in the Gloucester School, and probably other British schools, a knowledge of the principles and techniques of land surveying is considered worthwhile on the grounds of both training in precise measurement and accurate calculation and greater site knowledge ("learning through the soles of one's feet"), by no means are we able to match the 160 hours of tuition provided in the Hungarian curriculum. For our part, survey teaching is limited to a total of about five hours of lectures and ten hours of practical work including necessary follow-up computations. Additional practice is sometimes provided when suitable site plans for design projects are unavailable, insufficiently detailed or out-of-date.

In Hungary there appears to be no equivalent to our own series of accurate, detailed large scale Ordnance Survey maps (the same can be said of much of the U.S.A.), and any dealing in land therefore requires the preparation of an accurate base plan and the fixing of boundaries. The reference to graduates in landscape architecture being "authorised" to undertake lower order surveying probably allows landscape architects to produce maps for other purposes in addition to those for use in landscape work. Some countries have a national system for licensing suitably experienced persons to produce lower order land plans which carry official (legal) recognition.

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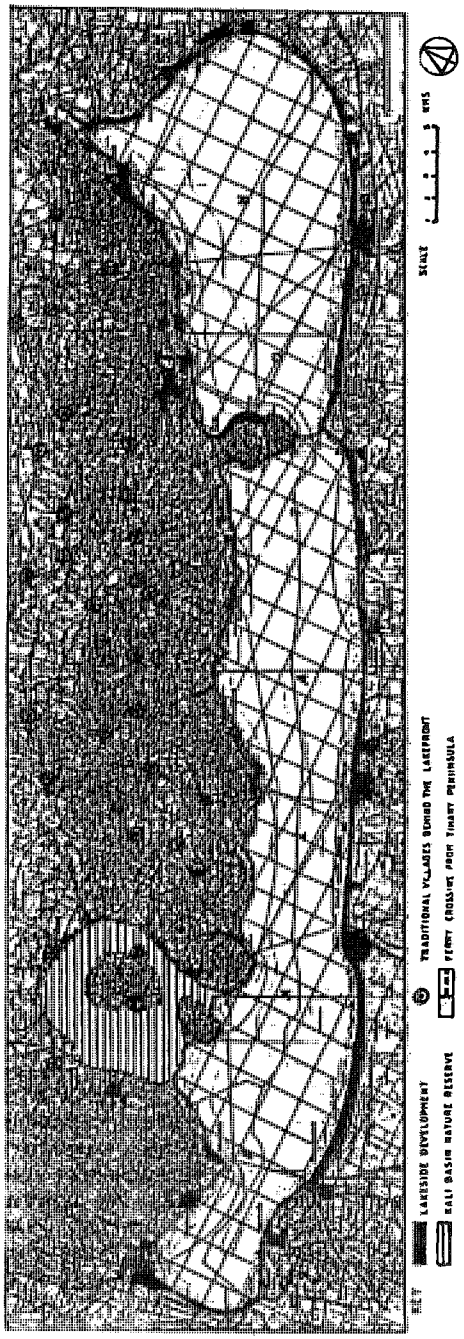
RECREATIONAL DEVELOPMENT OF LAKE BALATON, HUNGARY

K.Carlton and A.Jones

Lake Balaton covering 600 square kilometres is the largest freshwater lake in Central Europe and has a shoreline of 197 kilometres, much of which has been developed for recreation. The lake region became popular after 1920 when the traditional recreation areas in Transylvania and the Adriatic coast were ceded as a result of the Treaty of Trianon. This loss initiated the start of major recreational development around Lake Balaton as it was the only 'sea-shore' environment in Hungary and its shallow waters warmed rapidly in summer. Today the southern shore is more heavily developed as the water is shallower than on the northern shore but it is still only two to three metres deep even here.

The proximity to Budapest and the construction of the M7 motorway to link the city with Lake Balaton have resulted in a great deal of tourist development, creating very dense settlements. The problem of over-development stems from the tradition of second homes in the country which every Hungarian has the right to buy. Many of the houses around Lake Balaton are second homes and are used during the summer only. There has been a country-wide tendency to build these chalets and bungalows as other possibilities for investments are limited. This phenomenon can also be seen as a movement back to the countryside with many Hungarians wishing to recapture the traditional way of life. Whereas 60% of people in Hungary worked on the land before the war, now only 10% of the population are engaged in agriculture. In addition, from a financial point of view, it is cheap to live and work in the city and maintain the second home for the summer vacation.

Kevin Carlton and Anthony Jones are recent graduates of the School of Landscape Architecture in Gloucester, and participated in the first Hungarian study tour in 1985.



MAP OF LAKE BALATON SHOWING THE LINEAR LAKESHORE DEVELOPMENT, THE SCATTER OF TRADITIONAL VILLAGES WITHIN THE LAKE HINTERLAND AND THE LOCATION OF THE KALI NATURE RESERVE

With mushrooming development, an attempt at control was made in 1983 when the Hungarian government imposed housing legislation to prevent outsiders from purchasing all buildings on Lake Balaton's shore, giving the right exclusively to local people. Building regulations exist at present for the visual quality of Lake Balaton's shore development, which has so far succeeded in keeping multi-storey blocks away; but there are no restrictions on building size or style for private holiday flats. Because restrictions on development are limited, schemes such as shared ownership of summer homes have been set up. Such schemes are not popular, however, and it is difficult to halt the spread of houses around the lake. Larger towns are in fact planned by amalgamating some settlements, particularly on the northern shore and in the future this may well become a continuous belt of holiday flats and houses similar to its counterpart on the southern side of the lake.

Dense housing development along Lake Balaton's shore-line has deprived much of the hinterland of the lake behind this "belt of holiday homes" of capital for investment. Many of the traditional villages at some distance from the shore-line are being transformed by the purchase of older houses for renovation as an alternative to modern houses near the lake. This has killed much of the traditional character of these villages and there is great concern that many of the "closed gardens" cultivated by the locals will be lost.

The spread of tourism has caused many conflicts in the lake's surroundings. The Kali Basin, Hungary's newest nature reserve has been retained in its natural state only after a two year battle between cooperative farmers and nature preservationists. Local farmers gain grants for both landscape amelioration and the sale of land for second homes, and the ploughing up of grassland for this purpose in the Kali Basin has only just been halted.

Attempts are made wherever possible to preserve the traditional scenery in future planning, as in the Kali Basin. House building is not allowed in the closed gardens but many farm houses and other illegal structures are tolerated because the planners want the hill slopes to remain in the hands of the farmer and not to be covered with second homes. Vineyards have in the past been lost to recreational developments but now there is a positive policy to protect them, both in an effort to halt the spread of second homes and to prevent rural de-population. Old villages may indeed be revitalised by

developing them for recreational use, provided that their character remains unaltered.

To return to Lake Balaton itself, in medieval times the lake level was some four to five metres higher than at present and was dammed up artificially for defence. Water seeped slowly into the lake through the surrounding water meadows where reed beds filtered out material eroded from the surrounding vineyards. Today these water meadows and reed beds have largely been lost and the resulting increased lake pollution has led to a serious problem of eutrophication. Pollution problems in the lake could only be alleviated today by the use of some sort of stilling lake system to purify the water before entering Balaton.

Power boat racing on the lake has now been banned and the sporting season on Lake Balaton begins around the middle of May, with the first sailing race, often an international event, held at Balatonfüred. Winter sports are particularly significant. Each winter Balaton's shallow waters freeze to form ice around thirty centimetres thick, ideal for skating and sail-boat sleighing.

Much of the regional planning around Lake Balaton appears to be for the peak summer period, from late May to early September, with schools for sailing and other water-sports at Balatonfüred, Siófok and Tihany. Rowing, fishing and horseback riding are also major attractions of the area and today more and more hotels, tourist hostels and motels are springing up in addition to the thirty two camping sites that already cater for 33,000 holiday-makers.

[This is an edited version of an article that first appeared in a compilation of student reports of the Hungarian study tour in 1985]

A COLLECTIVE VIEW OF HUNGARIAN FARMING

Bryan Jerrard

Hungarian agriculture has been transformed in the last forty years from a backward, peasant-worked and private estate dominated system to an industry which rivals much that is seen in the West. Hungary has the highest rate of agricultural land to total landscape in Europe — 70.5% — thus outstripping Denmark, and in 1981 it had a better rate per head in the agrarian export-import balance than France (Romany, 1985). By every index available agrarian reforms, engineered by a command economy, have created some 140 state farms and over 1,400 collectives or co-operatives in a Hungarian compromise between the typical East European Marxist model and strong elements of private enterprise to produce dramatic increases in animal, vegetable, horticultural, viticultural and manufactured products (Bolassa, 1985).

This is what the text-books and monographs state. The evidence seen by a party of Gloucestershire farmers on a week's visit to five farms in April, 1986, was impressive and confirmed the record. The farms were in a broad triangle from north of Lake Balaton to Budapest and Gödöllö and south to Kecskemét. The landscape was the Danubian Basin, a flood plain of Quaternary sand, gravel and loess. Wind breaks of poplars were common. This area has an annual precipitation of some 500-625 millimetres and high evapotranspiration rates; it is generally moisture deficient, especially in the growing season.

Moisture deficiency is a problem on the co-operative farm visited near Kecskemét, the 'Hungarian-Russian Friendship Farm', 7,000 hectares in extent and founded in 1960 by

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the amalgamation of over 500 farms. It now has 1,700 members who concentrate three broad areas of activity: horticulture, fruit and wine production, crops and animal processing and, finally, machinery maintenance and essential service provision for rural homes. The turn-over is some £7m (500m forints) and the whole enterprise is controlled by an elected council working within broad parameters set by national and county planners. Wine output amounts to 300,000 litres a year — less a little for guests — and is bottled on the farm and shipped out by rail to Budapest and abroad. Flowers and pot plants are supplied to nine florists and fruit for eight supermarket branches, wheat and animal feed outputs were 8,000 and 14,000 tonnes respectively while 120,000 geese were kept for their liver. Water for irrigation costs about 6 forints (9p) a cubic metre and harvesting labour is supplemented by students and others on vacation. Visitors were shown Claas combine harvesters, Italian Fiat and East European machinery.

Working conditions were also noted. Some fifteen days' holiday is given each year and one extra day after every three years' service. Women worked fewer hours than men and mid-day meals were provided for workers and their families in seven restaurants. House gardens, or home-plots, of 6,000 square metres per family, provided additional income from cows, geese and pigs.

Income per head interested Gloucestershire farmers and a visit to another co-operative at Dömsöd near Budapest provided some clues. A "third category" unskilled worker earned 4,500 forints (£67) a month, stock workers earned 6,000 forints and "first category" trained staff whose work included silage making, earned about 8,000 forints. Leaders of teams had 9,500 forints and their deputies some 7,000-7,500 forints. These figures represented only 60% of their wages; the rest came from bonuses and the profitable private land. This aspect of private farming relies much more heavily than is generally acknowledged in the West on inputs from the co-operative — improved stock, feed, fertiliser, slaughtering facilities and marketing expertise. Efforts to quantify the value of inputs by workers and their families make the construction of economic models of co-operative farming tantalisingly difficult (Fekete et al, 1976).

A state farm, organised on much more directed lines, at Enying, near Lake Balaton, gave an opportunity to see pure Holsteins, first imported to the farm from Canada in 1970. Some Simmental-Holstein crosses were noted — as

were the American dairy equipment and West European milking systems in a huge concentration of cowsheds, milking parlours and dairies. Serried ranks of individual huts for calves were novel for the visitors who respected the rearing skills and practices discussed on this farm.

The high level of agricultural training and openness to improved practice reached its zenith on the experimental farm at Gödöllö, one of Hungary's six agricultural universities. The main thrusts of activity on 8,000 hectares were the production of improved seeds, of research and of education. Seed potatoes, green peas and improved vines found markets on other co-operatives and on state farms. Experiments with fallow deer from 1981 on once useless land have led to the marketing of venison for hotels in nearby Budapest. Students have a five or six year training at Gödöllö and competition to study there is considerable.

Overall the party were very impressed with the apparent efficiency of what was seen, with the high-quality graduate-trained managers, engineers and other experts and by the sheer size of fields and agro-businesses on the plain. The hosts invited criticism where some practices were admittedly outdated and comparisons between Russian and American tractors were expected — and made. And then, back to England where a pinching CAP will have to fit local farmers.

1. Pat Romany (1985) Agriculture in the Eighties, New Hungarian Quarterly, Vol. XXVI, No.100, Winter, pp 52-61.

2. Akos Bolassa (1985) Planning and Economic Policy, N.H.Q., Vol. XXVI, No.99, Autumn, pp 46-57. See also E.Csizmadia, Socialist Agriculture in Hungary, Budapest, 1977.

3. Ferenc Fekete, Earl Heady, Bob Holdren (1976), Economics of Co-operative Farming, Budapest, passim.

REVIEWS

THE OXFORD COMPANION TO GARDENS, Jellicoe G. and S., Goode P. and Lancaster M. [Eds], Oxford 1986. £29.50.

Among the array of books with "garden" in the title this is one which has to be wholeheartedly recommended to landscape architects as a wholly compatible companion. Serious, enormously knowledgeable but good-looking too, this latest in the Oxford series of "Companions" should prove a reliable and stimulating guide for many a journey through the history and geography of gardens. The consultant editors' worries about the need to limit the scope of the work can be understood, but between Aalto, Alvar and Zug, Szymon Bogumil, the browsing reader is led into an alphabetically organised labyrinth where constant revelations of intriguing facts disincline him to escape.

The editors' technique of systematically inviting native specialists to write about the gardens of their country or region has been very successful. There is, perhaps rightly, an emphasis on English gardens, and beyond these, on other familiar ground, France and Italy for example, though the descriptions are fresh and some of the examples quoted relatively unfamiliar. Beyond, however, the whole world opens out, from Bangkok to Bulgaria. The editors refer darkly to unanswered letters to potential contributors but these can surely only have been addressed to inhabitants of gardenless regions. Some hitherto neglected areas in garden writing certainly receive their due.

In the context of this number of Landscape Issues it is good to see the quite extensive treatment of the gardens of Hungary as well as those of the other countries of East-Central Europe (even though the somewhat bizarre entry for Romania seems to have escaped editorial

control). The region's rich heritage, particularly of Baroque and "English" gardens deserves to be better known in the West, especially now with growing local pressure for conservation and restoration after decades of indifference and decay. Thus it is a pity that the entry "Conservation" only deals with British experience in this field and does not draw on the work of the enthusiastic, if under-funded, state agencies responsible for garden preservation in this part of Europe. A pity, too, that the short bibliography forgets that Brian Knox dealt with Czechoslovakia and Poland in one of the volumes of the Dumbarton Oaks Colloquium on the History of Landscape Architecture(1), a work noted elsewhere in relation to Hungary, and more useful and accessible to most readers than the works in Czech and Polish actually included.

Whatever failings and omissions like these that occur in the Companion they are outweighed by its virtues and the extent of its cover. Thus in the section "Landscape Architecture: the United States", there is a interesting but brief discussion of landscape architectural theory which ends in sombre regret that the subject has no "generally acknowledged philosophical spokesmen"; the writer of "Landscape Architecture : Britain" prudently avoids the topic of theory altogether, confining himself to a review of work actually carried out by British landscape architects.

Perhaps the achievement of the work is that from its generously international perspective it firmly links gardens with landscape and with landscape architecture. In this, its influence, which one expects to be widespread, should be a wholly beneficient one, and the book itself, even at this quite high price, represents excellent value.

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Note

1. Chapter : The Arrival of the English Garden in Poland and Bohemia in The Picturesque Garden and its Influence outside the British Isles, Niklaus Pevsner [Ed], Washington, 1984.

HUNGARY : POLITICS, ECONOMICS AND SOCIETY, Hans Georg Heinrich, 1986, Frances Pinter, London, £5.25 pbk.

Books and articles on contemporary Hungary were hard to find in Western countries even as recently as 1979. But the pace of change in the country over the past decade, related to the Hungarian Government's official drive to export and accumulate Western currency has witnessed an increase in available literature (in English) about and from Hungary. Sadly, although Hungary's image to the West has become "the liberal face" of the Soviet satellites' official persona (excluding Yugoslavia — a slightly different case), the more reliable commentaries have come from Hungarians who have been forced to leave the country or go underground, e.g. István Szelenyi, Miklos Haraszti and Agnes Heller. Most of the books select specific themes. Official government books have provided the broad picture, but gaps still exist.

In terms of information conveyed, and the span of issues and debate about the Hungarian economy and society, Heinrich's book, part of a series on Marxist régimes, is a very useful overview. It covers Hungary's history and political traditions; the political system; changing social structure and attitudes from feudalism to what he calls the "Technotronic age"; the economic reforms and the régime's policies in areas such as education and agriculture. The accompanying statistical data are particularly useful.

Of direct relevance to landscape planners is the discussion on the ways in which geographic and environmental factors have played a role in shaping the contours of its social and economic structures. Anyone who visits more than Budapest cannot help but be impressed by the rurality of Hungary. Even in its so-called "industrial society", a majority of the population still live in village-type settlements, and one half is involved in agricultural activities. Agricultural problems remain high on the political agenda, and are responsible for many of the unique patterns of social and political development that Hungary's socialist society has experienced since the Second World War. The country's present pattern of industrial location and urbanization reflects certain adaptations to given environmental conditions, but in the context of particular political and economic strategies. Hence, the concentration of agriculture on the Central Plain and the industrial belt through the central

highlands. Very little has been preserved of the original landscape, due in no small measure to tourism, especially in the Balaton area. For example, in 1983, 10,463,000 entered Hungary.

The thrust towards rapid economic development and intensified tourism has obviously had its environmental consequences, and the somewhat brief section on "Environmental Policy" attempts to chart the major spheres of concern and the Government's efforts to deal with environmental problems. Heinrich notes that water pollution, the price for Hungary's high agricultural productivity, is the most pressing problem. Hungary is also in the top group of European air polluters, ranked sixth in respect to sulphur emissions per square mile.

Although an Environmental Protection Act was passed in 1976, economic pressures have tended to over-ride environmental considerations. The author describes one of the few popular ecological movements to have emerged in Hungary, organised against the project to build a hydraulic power dam on the Danube, between Bratislava and Budapest.

Finally, for those interested in the history of political struggles in the modern era, Heinrich traces the events from the breaking up of the Hapsburg monarchy, through the periods of the Hungarian Soviet Republic; the periods of fascism and anti-semitism (Hungary was pro-Germany during the Second World War), the age of Stalin and its stultifying effects on all aspects of East and Central European life; plus the events and debates surrounding October 1956. There is room here for only one comment. The author seriously underplays the role played by workers' councils in the Hungarian Revolution (See Peter Fryer's 'Hungarian Tragedy'), striving to create a new type of social order. They didn't necessarily see the alternative to Stalinism as reverting to the old bourgeois values.

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ZOLDFELULETGAZDALKODAS - Tájrendezés és Kertépítészet, published by Fővárosi Kertészeti Vállalat and Kertészeti Egytem, Budapest. ISSN : 0237-0077.

Zöldfelületgazdálkodas translates as "Green Space Planning". It is a quarterly journal published by the Fővárosi Company and the Horticultural University in Budapest. All the articles and abstracts which it contains are written in Hungarian, yet some thirty copies of the periodical are distributed to overseas countries. The Gloucestershire College of Arts and Technology also takes the journal as part of the increasing information exchange between the two institutions and there is good reason to include this review to publicise its name (difficult though it is to pronounce!) and its contents among other landscape schools and professionals in practice.

The titles of all the articles in Zöldfelületgazdálkodas are translated into German, English and Russian, and the articles are grouped under six landscape/horticultural sub-headings: as an indication of the range of material covered in the articles, a selection from some of the recent issues is given below.

Landscape Planning/Environmental Conservation
Why is the Danube Bend a recreation landscape? [István Juhász], 55(1985)p.13.
Environmental impact of the storage lake Kis-Balaton [József Bunyevácz et al], 59(1986)p.7.
Landscape ecology and landscape planning [Péter Csima], 59(1986)p.17.
Landscape Planning in the USA [Attila Csemez], 61(1986)p.19.

Open Space Design
Open Space Management [Imre Jámbor], 55(1985)p.19.
Open space design of the village centre of Balatonszemes [András Perjés], 59(1986)p.23.
The task of landscaping in the agricultural area [Erzsébet Gergely], 61(1986)p.23.

Reconstruction of Historical Gardens
Historical gardens in Hungary, 60(1986)p.27.
Past and tradition of the Islamic garden architecture [Adél Mahmoud], 61(1986)p.33.

Garden Technique (Horticulture)
Transplantation of mature trees [Gábor Kalla], 55(1985)p.35.
Climber supports [Karl Ludwig], 61(1986)p.40.

Open Space Maintenance
Rejuvenation of the trees in Pozsonyi Street [Eva Lakics], 54(1984)p.38.
Tree protection plan [Eva Göndör],61(1986)p.44.

Education, Research
Selection of extreme site tolerant trees and shrubs [Gábor Schmidt],56(1985)p.44.
Data collection and registration of protected trees [András Perjés], 60(1986)p.47.

For most readers outside Hungary, who have been tempted by any of these or other titles, there is obviously a major problem of translation. While there is a limited number of agencies and individuals who would perform this service, if foreign readership is to be encouraged perhaps the editors could be urged to provide brief summaries in the more widely-spoken languages to accompany the articles.

The substantial section in each issue that is devoted to abstracts and reviews of recently published papers and books from a variety of sources is clearly intended primarily to inform the Hungarian readership on current landscape research and practice abroad. Nevertheless I am sure that it would be equally enlightening for Western landscape professionals to read such commentaries, particularly as they offer a unique perspective from an East European country on both our landscape theory and practice.

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