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Mitton, Roger and Willmott, Michael (2005) A social forecast revisited. *Futures* **37** (1): 39-50

This is an author-produced version of a paper published in *Futures* (ISSN 0016-3287). This version has been peer-reviewed but does not include the final publisher proof corrections, published layout or pagination.

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Citation for this version:

Mitton, Roger and Willmott, Michael (2005) A social forecast revisited. *London: Birkbeck ePrints*. Available at: <http://eprints.bbk.ac.uk/archive/00000345>

Citation for the publisher's version:

Mitton, Roger and Willmott, Michael (2005) A social forecast revisited. *Futures* **37** (1): 39-50

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A Social Forecast Revisited

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Abstract

In 1971, the authors produced a thirty-year forecast of leisure in the U.K (<http://eprints.bbk.ac.uk/archive/00000345/01/mitton1a.pdf>). In 2001 they obtained survey data for comparison with the forecasts. The paper presents the original forecasts and describes the methods used to produce them, assesses their accuracy in the light of the survey data, and concludes with some reflections on the underlying forecasting methodology and on changes in leisure patterns.

A Social Forecast Revisited

In 1971, as young researchers, we produced a forecast of the future of leisure in the United Kingdom [1]. In 2001, the Future Foundation, of which Michael Willmott is now a director, gathered some survey data on leisure activities. Since 2001 was the target year for our forecasts, this gave us an opportunity to see how good our forecasts were, to reassess the mechanism by which our forecasts were made and to test the assumptions that underpin many of today's forecasting methods. It also provides some interesting pointers to the nature of social and economic change in Britain over the course of the last 30 years and the role of leisure within that. But, before considering these questions, we need to explain the forecasts and how we came to make them.

We were working then at the Institute of Community Studies in Bethnal Green, where Michael Young and Peter Willmott were analysing the results of their London Region Survey, which were to form the basis of their book *The Symmetrical Family* [2]. The

telecommunications division of the Post Office (later British Telecom, later still BT) commissioned the Institute to carry out a forecast of leisure, one of a set of related forecasts of aspects of life in the U.K. in 2001. The London Region Survey had contained questions about a range of leisure activities, and the results were to form the basis for the forecast. (The report itself was not published but part of it was used as the basis for Appendix 5 of *The Symmetrical Family*.)

We claim no originality for the basic forecasting method we used. Variations on it were well known at the time and are in widespread use today. The report on the forecast [3] describes it as follows:

The central assumption is that current variations in behaviour can be used to indicate what future patterns are likely to be. We know, for example, that swimming and income are related – richer people do more swimming. We also know that people in the U.K. will be richer in 2001. So we conclude that people in 2001 will do more swimming. To take bingo as another example, we know that bingo and social class are related – lower status people play more bingo. We also know that there will be relatively fewer people in these social classes by 2001. So we conclude that less bingo will be played in 2001.

At a general level there is historical justification for this reasoning – as incomes have risen, people have tended to take over the habits formerly confined to the rich. When working-class people began to be able to afford a holiday away from home, for example, they did what the middle classes had done before (and what the aristocracy had done before them) – they went to the seaside. But at a specific level, as in forecasting swimming or bingo, this approach is clearly too simple. Well over half the people in the U.K. whose annual income is less than £1000 are aged over 60, so the apparent lack of enthusiasm for swimming among the poor might be due as much to their old age as to their poverty. They would not necessarily take to the water in large numbers even if they had higher incomes.

Another way of putting this is to say that swimming, though partly dependent on income, is also dependent on age. A forecast of swimming that uses income as the only forecasting variable will probably be wrong. One has to use both income and age together. By a similar argument, a case could be made for also taking into account car ownership, health, access to swimming pools and many other things. But we did not have data on all these other factors, even assuming we could cope with the complexity. We had to choose a limited set of forecasting variables, and in this study we used those that surveys had suggested as the most important – age, income, social class, education and car ownership.

The method that we used to assess the relative importance of these variables for each leisure activity was fairly homespun. For each activity, we simply looked at a large number of tables of results from the London Region Survey – showing, for example, how swimming was related to age and income, age and car-ownership and so on – and made our own estimates of the importance of each of the five variables in determining participation in that activity [4]. (Nowadays, of course, there are multivariate statistical techniques that can analyse this quite simply and more accurately. Although such methods were available in the early 1970s, for some reason we did not use them; perhaps we did not have the necessary computing facilities, or perhaps we just did not know about them then.)

The forecasts of the five forecasting variables themselves – the breakdown of the adult population of the U.K. in 2001 by age, income, social class and so on – were obviously fundamental. We used official forecasts where these existed, or the other forecasts commissioned by the Post Office, or we made our own extrapolations from published figures. The forecasts we used were as follows, with, where available, data from the present day for comparison [5]. The figures are percentages of the population of the

U.K. aged 18 or over, except those for car-ownership and income, which are percentages of households.

		1971	2001 forecast	Recent actual
Age	18-24	15	15	11
	25-29	9	10	9
	30-39	16	19	20
	40-49	17	17	17
	50-59	17	16	16
	>= 60	26	23	27
Income (at 1971 prices)	<£1000 per year	44	8	15
	£1000 < £2000	44	28	22
	£2000 < £3000	8	27	19
	£3000 < £4000	2	23	17
	£4000 < £5000	1	6	11
	>= £5000	1	8	16
Occupational class	I Professional	5	19	N/A
	II Managerial	17	14	N/A
	III _{nm} Clerical	10	7	N/A
	III _m Skilled	41	44	N/A
	IV Semi-skilled	19	11	N/A
	V Unskilled	8	5	N/A
Age of finishing full-time education	16 or under	84	55	60
	17-19	9	29	20
	20 or over	7	16	20
Car-ownership (in household)	No car	50	18	27
	One car	42	58	44
	Two or more	8	24	29

The forecast we used for age overestimated the numbers of young people and underestimated the numbers of elderly, by a few percent in each case. On income, the Post Office forecast of the overall increase in average incomes was about right (a 2.2 fold increase in real terms between 1971 and 2001). But, our estimates of the current distribution of incomes shows that the assumptions on how that overall rise in income would be shared across the population were not correct [6]. While the projections foresaw a rebalancing towards middle-income groups, in fact the proportion of households in higher income groups has grown faster and those in the poorest fallen less than had been expected. Income polarisation had been decreasing since the war, but from the middle of the 1970s – just a few years after our forecasts were done – and for the next twenty years, the gap between rich and poor increased. On car ownership, although we did a bit better, we encountered the same (and presumably related) problem as with income in that we did not expect that inequality in British society would actually increase.

The social class forecasts are more difficult to assess because the definitions have changed over time. In fact official statistics no longer use the five-class system used for the forecasts. For most of the last thirty years the SEG (Socio-Economic Group) system has been preferred, and that too has now been superseded by the NS-SEC (National Statistics Socio-Economic Classification). The following table gives figures from 1975 and 2000 for the adult population divided up by SEGs [7]:

	1975 (%)	2000 (%)
Professional	3	5
Employer and Managerial	9	16
Intermediate and Junior non-manual	32	35
Skilled manual and own-account non-professional	24	20
Semi-skilled manual and personal service	24	18
Unskilled manual	8	6

These figures suggest that the forecast was broadly right in predicting an increase at the upper end and a decrease at the lower, but it looks as though the very high growth predicted for class 1 was a bit wayward.

These considerations highlight an obvious point about forecasting – it can only be as good as the assumptions that underlie any model. In Britain, government forecasters have consistently under-estimated the ageing of the population [8] while, as we have pointed out, changes in income distribution have proved equally difficult to predict.

The leisure data for 1971 came from the responses of about 2000 adults in the London Region to the question “Have you engaged in this activity at least once in the last twelve months?” The alternative was “twelve times or more”. Our reason for using the “once” figures was simply that the number of participants in many leisure activities is very small – perhaps only two or three percent of the adult population; adopting the “twelve times” criterion would have drastically reduced the numbers in our tables and thus ruled out many activities from the study. So far as we could tell from the more popular activities, the “twelve times” people did not differ from the “once” people in social profile, only in numbers. The data for 2001 came from a survey [9] of about 1000 adults in the U.K., using the same question and list of activities as in 1971.

Using London Region data gave us a problem in 1971 since we were required to produce forecasts for the whole of the country, so we had to make estimates of leisure figures for the U.K. based on the Greater London results (see Appendix). Even though the Greater London Region contains around a half of the population of the U.K., leisure activities have strong regional variation, so this adds another area of uncertainty to the forecasting exercise and, in retrospect, is probably one explanation for some of the differences between forecasts and outcome that we discuss below.

So, to return to our original question, how well did we do with our forecasts? The original report summarised the overall forecast as follows:

The outstanding feature of the forecasts is that almost everything is likely to increase. This is simply a reflection of the outstanding feature of the survey data – that richer, higher status, more educated, car-owning people do more of almost everything. Since the basic forecast is that people in the U.K. will be richer, more educated, doing higher status jobs and owning more cars, it follows that almost every activity will have more participants in 2001.

We were broadly right about that. Of the 48 activities that were included in both surveys, 34 of them (71%) had risen in popularity, and, while several of the rising ones had risen strikingly, those that had gone down, with a couple of exceptions, had not gone down by much.

We were also right about the general level of increase. For each of the 48 activities in 1971 we have a percentage of people taking part, so we can calculate the average of these percentages. This is not a very meaningful figure in itself, but we can do the same for the forecasts and for the participation rates of 2001. This gives us some idea of the overall level of increase.

The average of the 1971 rates was 22.2% and the average of our forecasts 25.3%. The average of the 2001 activity rates was 25.8%. Our forecast was for an overall increase in participation of 1.14. The actual figure was 1.16.

We can repeat this exercise for groups of activities. The table below shows the results:

	1971	Forecast	2001	Forecast increase	Actual increase	N of activities
Sports as participant	8.2	10.0	12.0	1.22	1.46	11
Sports as spectator (not on TV)	5.9	6.9	7.0	1.17	1.19	12
Home-based activities	38.4	43.0	43.5	1.12	1.13	10
Away-from-home other than sport	34.8	39.6	39.1	1.14	1.12	15
All activities	22.2	25.3	25.8	1.14	1.16	48

We chose participant sports as a fast growing group of activities, and we were right about that; in fact the actual increase was substantially greater than we forecast. For the other groups, our forecasts were surprisingly accurate.

Turning to individual activities, the picture is more confused. We seem to have done better with those activities that had higher rates of participation. Presumably this is partly an artefact of the measure we are using, namely the change in the percentage engaging in the activity. There is, obviously, more scope for growth for a minority activity; a figure of, say, four percent, might go up by a factor of two, three, four or more, whereas a figure of, say, 67% clearly cannot increase by a factor of more than 1.5. The basis of our comparisons – the estimates of 1971 and the survey results of 2001 – are probably also more reliable for the larger percentages.

The following table gives our results for the high-participation activities, namely those engaged in by more than 50% of the adult population:

	1971	2001 Forecast	2001 Actual
<i>Going for a drive (for pleasure)</i>	68%	78%	64%
<i>Listening to recorded music (not on radio)</i>	68%	70%	89%
<i>Reading a book (not a magazine)</i>	67%	74%	72%
<i>Walk (for mile or more)</i>	65%	68%	72%
<i>Gardening</i>	63%	67%	62%
<i>Pub (not just for lunch)</i>	62%	69%	71%
<i>Going out for meal (not just for lunch)</i>	62%	70%	84%
<i>DIY</i>	60%	66%	63%
<i>Cinema</i>	53%	58%	56%

We did quite well with these but were wide of the mark with driving, listening to music and eating out. Driving is interesting. Like car maintenance and car cleaning, which are included in the next table, driving for pleasure was, not surprisingly, strongly related to

car ownership and, since car ownership was set to increase, we forecast an increase in all three of these car-related activities. However, though car maintenance and car cleaning have indeed increased, in fact by more than we forecast, driving for pleasure has actually gone down. In 1971 more people were ‘taking a drive for pleasure’ than actually owned cars – others were clearly taking them out. Today this appears less prevalent. In a mature car-based society, the sheer novelty of going for a drive may have worn off while the amount of traffic on the road today may also have reduced the simple pleasure of doing so.

Listening to music has increased by a good deal more than we thought. An important variable here, which we made no attempt to take into account, is technology. There are now more ways of listening, such as the Walkman and more recently minidisc and mp3 players, than there were in 1971. There are also more places to eat – notably American-style burger bars, pizza parlours and the like – which must partly explain the figures for eating out.

The figures for gardening look strange. It is hard to believe that gardening has not increased when garden centres have been springing up like mushrooms and when gardening programmes on TV seem to be rivalled only by cookery and interior design. Indeed, official statistics [10] suggest that participation has increased for both gardening and DIY, by roughly the amount we forecast. There is some suggestion that our original estimate may, because of regional differences, have overestimated actual participation in 1971 – in the 2001 survey, those in the South East had the highest gardening participation rate.

The second group of activities have participation rates between 15% and 50%:

	1971	2001 forecast	2001 actual
<i>Knitting or sewing</i>	46%	44%	26%
<i>Theatre</i>	37%	45%	35%
<i>Church (includes wedding or funeral)</i>	37%	41%	37%
<i>Car cleaning</i>	33%	50%	59%
<i>Dancing</i>	31%	35%	34%
<i>Swimming</i>	29%	37%	44%
<i>Museum</i>	25%	32%	32%
<i>Darts</i>	21%	22%	15%
<i>Car maintenance</i>	21%	27%	32%
<i>Football (spectator)</i>	20%	22%	24%
<i>Art gallery</i>	17%	25%	20%
<i>Voluntary work</i>	15%	19%	22%

Knitting/sewing was one of the few activities for which we forecast a decrease, but not by nearly enough. That theatre-going, for which we forecast a rise, should have remained static or even declined seems surprising – higher-income, higher-status people go to the theatre more often, so theatre attendance ought to have gone up – but these figures are confirmed by official statistics which show that, at least for the second half of our forecast period (1987 – 1998, to be precise), the only cultural activity that increased was cinema-going [11]. Perhaps our over-estimate of the growth of social class I skewed this forecast particularly strongly.

Swimming, easily the most popular of the active sports and therefore the first to appear in these lists, has risen by more than we said. It is possible that much of this swimming takes place on holiday and, though we correctly forecast an increase in holidays, and particularly in foreign holidays, elsewhere in the report, we did not explicitly take this into account in the swimming forecast.

Our forecasts for the final, and largest, group – the minority activities - are a mixed bag:

	1971	2001 forecast	2001 actual
<i>Collecting stamps etc</i>	12%	13.5%	11%
<i>Billiards or snooker</i>	12%	12.5%	20%
<i>Table tennis</i>	11%	13%	6%
<i>Cricket (spectator)</i>	10%	13%	8%
<i>Caravanning</i>	10%	11%	12.5%
<i>Fishing</i>	9%	10%	9.5%
<i>Playing an instrument</i>	9%	11.5%	12%
<i>Ten-pin bowling</i>	9%	10%	23%
<i>Tennis</i>	8%	10%	9%
<i>Motor sports (spectator)</i>	7%	8%	7%
<i>Golf</i>	7%	10%	12%
<i>Camping</i>	7%	8%	12.5%
<i>Swimming (spectator)</i>	6%	6.5%	9.5%
<i>Football</i>	6%	7%	11.5%
<i>Horseracing (spectator)</i>	5.5%	7%	3.5%
<i>Tennis (spectator)</i>	5.5%	7.5%	4%
<i>Model-building</i>	5.5%	6.5%	8.5%
<i>Cricket</i>	4.5%	5%	5%
<i>Wrestling (spectator)</i>	4%	4%	1%
<i>Rugby (spectator)</i>	3.5%	4.5%	9%
<i>Sailing</i>	3%	4.5%	2.5%
<i>Athletics (spectator)</i>	3%	3.5%	4.5%
<i>Boxing (spectator)</i>	3%	3%	4.5%
<i>Golf (spectator)</i>	2.5%	3%	6%
<i>Bowls</i>	2%	2%	4%
<i>Athletics</i>	2%	2%	5%

The effect of television can presumably be seen in the contrasting fortunes of snooker on the one hand and wrestling (spectator) on the other, the first enjoying hours of air time on a regular basis, the second losing the coverage it used to have. Football also, of course, receives large amounts of television coverage and the figures for football playing seem to reflect this. The figures for watching football (in the previous table) do not show quite such a large rise. The last thirty years have seen the introduction of all-seater stadia that have reduced attendance capacity. This, together with the massive promotion of the sport and increased costs (mainly through player wages), has also raised entrance prices. In fact, given these developments, it is perhaps surprising that football spectating has grown faster than we forecast. But then this is an example of a sport that, at least at the top end of the league, has managed to make itself more middle-class.

With camping and caravanning, as with swimming, it may be that we would have done better if we had specifically taken account of holidays. It seems likely, for example, that some of the growth in caravanning is in fact an increase in the number of people taking a

second holiday at a caravan park. Similarly, the success of Eurocamp and the like in providing summer holidays in France and the rest of Europe must have boosted the camping figures. (Whether purists would consider these as real camping or caravanning is another matter.)

Ten-pin bowling was perhaps our worst forecast. Many bowling alleys were built in the 1960s but the initial enthusiasm wore off and, by 1971, the Rank Organisation had closed many of them and the sport was in the doldrums. They, or other providers, must have decided that they had over-reacted and restored some of the provision. Our survey snapshot of this activity caught it at a bad time.

Four of the spectator sports make an interesting group. The people who watched rugby, golf, tennis and horseracing were very much the same – higher income, car-owning, professional and managerial classes – so our forecasts were for a modest increase in all four. In fact the first two have risen sharply, the other two have declined. The result for rugby is in part an artefact of our regional problem mentioned earlier. Watching rugby is much more popular in the north than the south (league versus union), as is confirmed by the 2001 survey, so our original estimates for the country as a whole (based as they were on a survey in the South East) were almost certainly lower than they should have been. Hence our lower forecast and hence the discrepancy with today's national figure. Even so, attendance at club and international matches in rugby union shows that some of the increase is genuine [12]. These four sports highlight an important aspect not included in our forecasting method: marketing. Rugby and golf have both been marketed aggressively and, it seems, effectively. Tennis less so and horseracing hardly at all [13].

Some of the figures seem strange. The proportion of adults watching swimming seems extraordinarily high. Are they parents watching their children in swimming galas? The figures from our 2001 survey suggest this is the case with parents three times as likely to be swimming spectators as other people. And it is surprising that sailing, an activity closely related to income, should have remained static or even gone down at a time of rising incomes. We noted that supply constraints could affect the growth of sailing and other water sports but it seems unlikely that a ceiling had already been reached in 1971. The answer for the discrepancy here is again likely to be our original national estimates based on a regional survey. Sailing is much more popular in the south than it is in other parts of the country (4.1% for the South East and 5.0% for the South West and Wales compared to 1.3% in other parts of the U.K. according to our 2001 survey). In contrast to watching rugby where we under-estimated participation, in this case we probably over-estimated it and thus produced a higher forecast for the country as a whole than was appropriate.

There are some absentees from these tables that need a word of comment. Television viewing, a huge leisure-time activity, is not in the tables at all. This is because our standard measure – people who had taken part in the activity at least once in the last twelve months – is useless for television since the figure would be close to 100%. We did produce a forecast for television viewing in the report, but using time-diary data rather than the questionnaire results. The time-diarists were composed entirely of married people aged 30 to 49, so the viewing times did not apply to the whole population, but we forecast, for this group, a reduction in the weekly viewing from about 13 hours to about 11. Official figures for 1998 put the average weekly viewing for this group at about 23 hours and it has been suggested to us that this figure has not changed

much since the 1960s [14]. It seems that our time-diary data for TV viewing was not comparable to the official figures for the population as a whole in 1971. But, it remains the case that, even with a different figure at that time, we would still have forecast a decline in the activity – something we return to below.

There were actually 69 activities listed in our 1971 report, of which 48 were chosen for the 2001 survey. The omitted ones include various small-minority sports such as water-skiing, fencing and horseriding, some indoor hobbies including handicrafts, cards, chess, crosswords and cooking, and also adult education and bingo. Winter sports, though appearing in the list of spectator sports, are absent from the participant sports; this was possibly an oversight in the original survey. Basketball was also absent from the original survey, perhaps being considered too obscure, though it would probably deserve inclusion today. Cycling was another strange absentee.

More interestingly, communicating via the computer, playing computer games, surfing the web – now all major leisure activities – are completely absent from the forecasts. Computers in 1971 were mainframes run by governments, universities or large organisations. They resembled collections of metallic wardrobes and were tended round the clock in air-conditioned rooms by trained operators. We suggested that people might communicate with them from terminals in their homes (another of our forecasts was that people would do more work from home, and there is some evidence that we were right). But computers that people would have on their desks, or in their homes, or carry around with them, were in the realms of science fiction. It is, of course, another shortcoming of our forecasting method that it cannot forecast an activity that does not already exist.

The other big absentee was what is now labelled “keep fit” which would include jogging (which might be one of the reasons why the athletics figure is significantly higher than we forecast), going to the gym, yoga and the like – all of which are reasonably commonplace nowadays. (For example, according to Future Foundation research the proportion of the population practising yoga has increased from 1% in 1986 to 6% today. [15]) This is another area where cultural change – in this instance increasing health awareness and in its extremes an obsession with the body – has had a major impact on the nature of leisure.

What, then, can we conclude from a review of our forecasting exercise of thirty years ago? First, we are pleased, if somewhat surprised, that the forecasts were not too bad. We were right in many areas and wrong in some – spectacularly so in a few instances. But overall, we got the general drift right.

This review has highlighted some important points about forecasting as a science and the nature of social and economic change. To summarise these:

1. Any forecast is only as good as the assumptions that go into the model – a point generally recognised within the forecasting community. If your views about demographic or economic developments in the future turn out to be incorrect then, of course, your forecasts will suffer. This suggests that the development of scenarios that allow for a variety of different assumptions can be a useful tool.
2. Governments and other, external global forces (that promote competition, for example) continue to be important in influencing the development of markets – in this instance leisure activity. The policy changes (or global pressures, it

matters not which for the purposes of this argument) that changed the trend in income distribution from the mid 1970s onwards had a direct impact on our forecasts.

3. Cultural factors are clearly important in forecasting leisure activities. We include in this the regional variations we have highlighted but we also note those activities that become fashionable or *passé*. An example of the latter is knitting (although there is clearly an economic element to this too – clothes prices have fallen so much in real terms that there is little to be gained economically from producing your own clothes); one of the former would be keep fit. It is difficult to know how one can forecast the development of a whole new category of leisure like going to the gym.
4. Market initiatives by suppliers (or governing bodies) can clearly have a major impact on the development of a sector. Our forecasts were wrong for ten-pin bowling because of supply-side developments. Conversely, horse racing (with some notable exceptions like Ascot and Cheltenham - see footnote) has failed to adapt sufficiently to appeal to developing consumer demands and expectations, and has failed to market itself properly.
5. Finally, new technology. It can be an extremely difficult aspect to forecast although a few people (for example, Arthur C Clarke) have been reasonably successful in predicting technological advance. And people like Clarke are good at the general rather than the specific. Were many people in 1941 – 30 years before we were first analysing the leisure data – predicting the role and importance of television in people's lives and use of time in 1971, let alone 2001? And, as we pointed out, it was hard to even comprehend in the early seventies the potential impact of the digital revolution on people's leisure and wider lives.

But, all in all, we are left with two main conclusions. First, that the oft-predicted movement towards a more leisure-focused society continues at a steady pace [16]. In some instances, this results in a form of self-imposed pressure as we try to do more and more leisure activities in a not sufficiently expanding volume of leisure time (a direct comparison of the two surveys shows that the total number of any given activities that an individual will do in a year has increased by 20% over the 30 years – and remember this does not include 'new' categories like keep fit). But overall, this is surely a positive development and even, as Jonathan Gershuny has argued, one that is good for the economic development of the country [17].

The second point that is particularly pleasing for forecasters is that the simple assumption that what certain groups in society do now is a good predictor of future trends has held up reasonably well; on the whole what the rich and famous do today, the mass of people will do tomorrow.

Appendix – London Region data, U.K. forecasts

Our leisure data were from the London Region; our population forecasts were for the U.K. Did it make any sense to combine them? Well, yes and no. Of course it would have been better to have had leisure data for the U.K. as we could then have taken account of regional variations – the weekend sailors in the south west, the golfers in Scotland, the rugby league supporters in the north, and so on. But we had to make the best of what we had. What we did was to make estimates of the level of participation in leisure activities in the U.K. in 1971. We did this by using exactly the same method that we were using for 2001, only with figures on income, car ownership and so on for 1971. We then compared our 2001 forecast with our 1971 estimate. Of course, some of our 1971 estimates will have been wrong, because of the sort of regional variations just mentioned, but we argued that this did not invalidate the forecasts. Basically we were saying that, given the social profile of an activity and given the likely changes in the population, we could expect roughly this many more (or fewer) people to be taking part in that activity by 2001.

The absence of proper U.K. leisure data for 1971 is, however, more of a drawback for the present exercise since we now have U.K. data for 2001 and would like to have data, rather than estimates, for 1971 for comparison. If we find that participation in some activity appears to have gone up more, or less, than we forecast, we cannot be sure how far the forecast was wrong; it might simply be that the 1971 estimate was wide of the mark.

[1] R. Mitton, Leisure in the United Kingdom in 2001: a report to the Post Office, Institute of Community Studies, 1972 (<http://eprints.bbk.ac.uk/archive/00000345/01/mitton1a.pdf>)

[2] M. Young, P. Willmott, The Symmetrical Family, Routledge and Kegan Paul, London, 1973

[3] R. Mitton, 1972, op. cit.

[4] We did at least cross-check our own assessments. This was done by taking a dozen activities for which the two of us produced weightings independently. Although our weightings were not identical, the differences were sufficiently small that they made no appreciable difference to the forecasts. The method we used was simply to look at large numbers of three-way cross-tabulations, such as swimming by income, age and car ownership and then to give a weighting to each variable that reflected how important we judged it to be. For swimming, for example, we produced the following:

Age	0.35
Income	0.20
Social class	0.20
Education	0.10
Car ownership	0.15

[5] UK adult population by age, Census 2001.

UK adult population by years of education from Future Foundation 2001 survey of 1000 adults in the UK, modified to take account of figures on highest qualification from Census 2001 and Labour Force Survey.

UK households by ownership of car or van, Census 2001.

UK household income, British Household Panel Study, Institute of Social and Economic Research, Essex University (authors' analysis)

[6] Authors' analysis of British Household Panel Study data – this should be treated as indicative only.

[7] Living in Britain 2000, Table 3.14

[8] For example, the forecasts of the proportion of the population over the age of 85 by 2011 have been regularly raised over the last 30 years. In 1972 for England and Wales, the forecast for 2011 was 160,000 men and 518,000 women, figures that were actually passed by 1989 – a good 20 years ahead of the original forecast. Source: E. Grundy, Centre for Population Studies and Centre for Ageing & Public Health, London School of Hygiene & Tropical Medicine

[9] *Changing Lives/nVision*. *nVision* is a subscription service from the Future Foundation that combines an extensive on-line data and analytic resource with workshops and briefings about future trends. It includes a consumer research programme, *Changing Lives*, that conducts surveys on a regular six-monthly basis. Trends can be tracked back to the early 1980s. The leisure questions analysed here were asked in the January 2001 survey.

[10] Between 1977 and 1997, gardening increased by about 6% and DIY by 7% according to the General Household Survey, Office of National Statistics.

[11] Social Trends 2000, Table T13.11

[12] In a report in *Touchline Online*, Sally Price noted that '*Record crowds, thriving community schemes and success in Europe - The Zurich Premiership has never been as strong. The last weekend of 2001 saw the 12 elite clubs in England attracting the biggest weekend attendance since the game turned professional.*'

http://www.rfu.com/index.cfm/fuseaction/RFUHome.TouchLine_Detail/storyID/790/storytypeID/2/

[13] Horse racing generally has not until recent years (with the introduction of the British Horseracing Board) had an effective agency to market its product and even today the individual owners of courses have considerable responsibility for marketing their own meetings. Some, like Ascot (where attendances for the Royal meeting in June are at record levels) and Cheltenham (for its National Hunt Festival – that thanks to its success has recently been increased from three to four days) are particularly adept at this but most are not. In the past the smaller courses have had neither the experience nor the industry support to be able to compete with other leisure attractions.

[14] Personal conversation with Professor Martin Collins, South Bank University

[15] *Changing Lives/nVision*, op. cit.

[16] See, for example, J. Gershuny, *Changing Times*, Oxford University Press, 2000.

[17] *Ibid.*