found from experience that predictions and forecasts about the future can be wildly out when based on such calculations. The story of the changing forecasts of national population in Britain during the post-1947 period is a salutary lesson for those in the business of forecasting the future and also for those relying on those predictions for plan making. The other major difficulty with the forecast is that it can become a self-fulfilling prophecy. For example, the prediction of fast-rising car ownership and usage in the 1960s provided the rationale for Government policies. These policies gave priority to road-building programmes to the detriment of pursuing vigorous investment in public transport. The extra road miles built on the strength of Government policy stimulated demand for the use of those same roads. With that stimulus in demand, came the inevitable increase in car ownership and the use of the car, even for short journeys. The forecast for the growth in car ownership was therefore shown to be true, or to some extent to be a 'self-fulfilling prophecy'. This analysis of the growth in car ownership in Britain over the last forty years may have been overstated, nevertheless there is some truth in the belief that this prediction, particularly about car usage, has some of the characteristics of a circular argument where the forecast reinforces the trend. Trends in the changing patterns of lifestyle are evident, even under the most superficial of examinations. An analysis of these trends may stimulate ideas about the nature of the problem being investigated and also actions which may be necessary to modify a trend leading to an undesirable outcome. The apparent trends in changing lifestyles, however, are no more than an indication of what might happen in the future. And only if the conditions governing these trends remain the same. If trends are viewed in this light, then there is little danger that they may evolve into a forecast leading to an authoritative prediction of future conditions. The only certainty about a prediction is that it is more likely to be misleading than to give an accurate picture of the future.

The ways in which some factors governing everyday activity and current lifestyle are changing may critically affect development, or the designer's view of development, potential in the project area. It may, therefore, be appropriate to analyse such economic, social and cultural factors. For most development projects, forming an understanding of the dynamics of population change is standard procedure. A knowledge of what might happen to the target population is fundamental for many urban design projects. This study may be a simple attempt to gauge the rate of growth or decline of population, or it may aim to discover which sections of the population, in terms of age, sex, race or socio-economic group, are growing or declining and at what rate.

Population studies are the starting point for determining the land requirements and for the allocation of space for competing activities or land uses. A knowledge of present population is necessary in order to make some prediction for the future. The most basic information is the size of the present population. This may not be as straightforward as it sounds. The resident population may be supplemented by tourists and a daily commuting population. For some projects this visiting population may be extremely important. It is often essential to have some knowledge of the breakdown of the population in terms of age, sex, race and socio-economic group. From this information the specific needs of the community for services and facilities can be gauged. It may, if the project area is large enough, be necessary to examine the physical distribution of the various groups which comprise the population. The physical distribution of the population gives some indication of the location of facilities. An assessment of the population can be made by conducting a specially designed survey. This is both expensive and time consuming. It is more usual to use the Registrar General's Census of Population, adjusted to allow for assumed changes between census dates.

Predicting future population is based upon an examination of existing trends. It is important to know if there are any signs of change in the factors governing population size. For example, it is useful to know the birth, death, marriage, and fertility rates, together with the levels of migration. The underlying tendencies in the population should be examined to see if there is a trend in the population towards ageing, or a trend towards a greater number of working females, or towards more but smaller households. The designer would want to know the tendency towards the physical distribution of changes. Knowledge of the existing population, together with any trends and tendencies which can be discovered, together form the basis of forecasting future population.

Forecasting population is a speculative business. Demographers are extremely guarded about attempting to forecast the future particularly of small districts of the city. The smaller the area of study, the less reliable are the forecasts. If it is decided to engage in this hazardous enterprise then there are a number of techniques for making population forecasts. The most basic is a continuation of the recent past into the future by extending a straight line graph based on the assumption that current trends will persist. A popular technique for forecasting future population is the Cohort Survival Method.[1] This technique adjusts census figures in forward steps, by age and sex groups, year on year, until the date of the project completion. Adjustments are made to the figures for changes in birth, death, fertility, in- and out-migration: 'In essence what it does is to trace a particular age group, for example 0–4 years through their estimated life cycle making deductions for projected deaths based upon life tables, and amendments for net migration. The next 0–4 age group is calculated by reference to the fertility rate of the number of 'survivors' remaining in preceding groups or cohorts'.[2]

There may be other areas, as well as population, for which projection may prove useful. For example, further information about population and its changing patterns of employment, income and expenditure may throw light on possible demand for housing or other goods. The rates at which the housing stock is declining in numbers and quality of maintenance or the changes in patterns of ownership, or, indeed the general changes in land-use patterns may be of significance to the project. The nature of the project and its goals will determine the factors to be investigated and which particular trends, when analysed, will prove useful for the development of the project.

The analysis of trends becomes a more useful design tool when comparisons can be made between the study area and the city, its region, or the nation as a whole. A knowledge of population trends in the study area may be essential for design purposes but when those local trends are compared with those in the larger community the significance of local change may be highlighted. This comparative element in trend analysis applies equally to employment, housing conditions or car ownership patterns. All trend analyses should embody a comparative element.

A more imaginative technique than trend analysis for assessing future possibilities is scenario design. Using this technique the designer constructs possible futures imagining the major factors which may affect the way people live. Major events such as a sea change in political attitudes; an oil crisis; a stock market crash; joining or not joining the EURO; and many other possible future events can be built into a series of different scenarios. These scenarios can be fed back into the forecasts, which in turn result in a set of different trends for any topic analysed. The trends can then be presented graphically. It is usual to present three trends and their resulting forecast for each topic; one where the assumptions are favourable, one where they are unfavourable and the third somewhere between the extremes. Scenario building is, above all else, a tool of the imagination and therefore most useful for the designer seeking ideas.