

Scenario writing

A method for long-term tourism forecasting?

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This article examines the use and significance of the scenario method with respect to tourism. Futures research has tended to concentrate on short-term studies but planning for tourism investment and development requires long-term projections of the order of five to 25 years. The tourism environment has become less predictable and a more "activist" approach to the future is required. A classification of scenario types is presented along with several examples. A genuine scenario should comprise: baseline analysis, future images, and connecting future paths which give realistic intermediate images. Consensus on a common methodology must be the next step.

Keywords: tourism forecasting; scenarios; futures research

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The interest in futures research, as an important and necessary ingredient of planning and policy processes, has strongly increased in the last decade. This applies to both the public and private sector as well as to scientific circles. Yet there seems to be a *strong overvaluation of specific techniques for futures research*, especially of methods and techniques which seem to be suitable for short-term forecasting. This trend is also evident within tourism-futures research, in which most attention is paid to methods and techniques for explorative short-term futures research, eg time-series analysis and econometric models; followed immediately by the speculative, medium-term futures research, mostly embodied in the Delphi method. From recent reviews on the subject of tourism-futures research it appears that short-term futures research of one month to one year ahead is dominant, while long-term tourism-futures studies (from five to 25 years) are largely absent.¹

A relatively large part of decision-making processes within the tourism sector is directed at a short period of time (of one year to one month ahead), eg purchasing policy with regard to aeroplane seats; determination of the allotments in the hotellerie; making a reliable guess as to holiday behaviour for the coming summer; etc. But there are nevertheless many decisions which have to be made now, for a period of time which can be years, even decades, away from the present (investment policy with regard to tourism infrastructure and suprastructure; the drawing up of a tourism five-year plan; the accommodation planning in the next 10 years, etc).

In a time of relatively large uncertainty and turbulence, in which changes take place with an ever increasing speed and intensity, forecasting methods which presuppose only minor changes in the system structure, will be less useful.

Unfortunately practically all short-term forecasting methods start from the premise that it is only necessary to consider minor perturbations. But this premise is inaccurate because, especially in the 1970s and 1980s considerable changes took place (and still take place) in world trade, the demographic structure of many countries, technological innovations (from automation and robotization to the information process) and in the sociocultural behaviour pattern.

¹J.W.M. van Doorn, 'Can futures research contribute to tourism policy', *Tourism Management*, Vol 3, No 3, 1982, pp 149-166; Brian Archer, 'Forecasting demand: quantitative and intuitive techniques', *Tourism Management*, Vol 1, No 1, 1980, pp 5-12; and N. Vanhove, 'Forecasting in tourism', *Revue de Tourisme*, No 3, 1980, pp 2-7.

Turbulent environment

We now arrive at what Emery calls “a turbulent environment in which the environment ceases to be a stable ground on which organizations can play out their games and counter games”.² Emery distinguishes four generalized environmental types with different kinds of causal texture:

- placid random;
- placid clustered;
- disturbed reactive; and
- turbulent.

These are ideal types to which reality can only approximate. Since the 19th-century industrial revolution the disturbed reactive and turbulent environments have been dominant.

The critical difference between the turbulent environment and the disturbed reactive environment is that the dynamic properties now arise not simply from the interaction of the organizational actors, but from the field itself. The new environment is called the turbulent field. In such a field, large competing organizations all acting independently, in many directions, produce unanticipated and dissonant consequences in the overall environment which they share. The result is a contextual commotion as if ‘the ground’ were moving as well as the organizations. This is what is meant by turbulence.³

Because of this change from a disturbed, reactive environment to a turbulent environment, it is desirable to decide on another type of planning, another style of management, and last, but not least, another type of futures research — Ackoff speaks of a change from an inactive-reactive planning type to a *pre-active-interactive planning* type. The latter characterized by an active attitude with regard to the future and a type of planning which reacts to expected long-term developments. Pre-activists work mostly in an explorative manner: “they attempt to predict and prepare”, while interactivists prefer the normative approach: “they try to prevent, not merely prepare for, threats, and to create, not merely exploit, opportunities”.⁴

From this one can deduce that both groups are concerned with more than just forecasting actual events in the near future. Pre-activists and interactivists are concerned with the exploration of a large number of future possibilities within conceivable frameworks. This estimation of frameworks, in which *probable, and/or possible and/or desirable futures* will appear, demands a different attitude from that of the reactivists, and also other instruments than those which “seemed” appropriate for the short term. For the new type of planner it is not interesting to know whether or not he is capable of accurately forecasting the number of *y* million tourists which will arrive in country *x* in the year *n*, but it is of great interest to him whether all kinds of (social) developments in various sectors of society within and outside country *x*, will enable *y* million tourists to arrange for their transportation, accommodation and recreation in country *x* in the given year *n*.

Emery as well as Ackoff refers to “another” type of futures research, different from the short-term explorative and speculative futures research which has been predominant up till now. This “other” type of futures research has elsewhere been described as ‘*normative*’ and/or ‘*integrative*’.⁵ Moreover Emery places the organizational context of the decision-making process in a central position, while Ackoff goes into the

²F. Emery, *Futures we are in*, Nijhoff, Leiden, 1977, p 9.

³E. Trist, ‘The environment and systems response capability’, *Futures*, April 1980, p 117.

⁴R.L. Ackoff, *Redesigning the future, a systems approach to societal problems*, John Wiley, New York, 1972, p 25.

⁵J.W.M. van Doorn and F.A. van Vught, ‘Futures research in the Netherlands 1960–1980’, *Futures*, Vol 15, No 6, pp 504–515, 1983.

subject of the long-term perspective and the desired steering qualities of futures research.

Scenario method

A technique of futures research, which will fit into Ackoffs' paradigm, provided it be used in the correct methodological manner, is the scenario method. Emery's contribution to this subject will be taken into account when I deal with scenario writing as a technique of futures research in itself. Apart from this tourism scenarios will be the central focus of this article whose main objective is to give a review of, and provide insight into what the scenario method actually is, and what it represents to the study of tourism.

Description

Although the scenario concept is not yet well known in the tourism field⁶, the word scenario appears more frequently in the general literature — but it may be disguised in many forms.⁷

Three ways in which to use a scenario seem to predominate. First and most common, is the use of scenarios when reference is made to a *description of variables related to sectoral developments*, eg the energy scenarios of the International Institute for Applied Systems Analysis (IIASA) in which the variation range of the scenarios is determined by the world energy-consumption. Variables consist of low, high or average energy-consumption, and from that the consequences for the availability of energy sources are considered. For each scenario the geo-political and the ecological consequences are discussed.⁸

The second way in which scenarios are used is less common but in my opinion more important. In this category scenarios provide *alternatives of societal developments* with regard to one another, eg the OECD scenarios A and D of the Interfutures Project:

Scenario A. "Collegial management and conflicts in the developed countries; increased free trade; increasing Third World participation in world economic changes, but varying as between countries; sustained economic growth in the developed countries, but no rapid change of values. Relative productivities in OECD countries are assumed to converge."

Scenario D. "Breaking up of the developed-country group and mounting protectionism with emergence of zones of influence centered around three poles, the United States, the European Economic Community and Japan. These zones will include regional groups . . . of developing countries; trade and capital flows will develop preferentially within those zones . . . Non convergence of productivities is due here to the differing impact of the break-up process on the main OECD zones."⁹

The third form in which scenarios are presented encompasses all scenarios with two, or more, *differing parameter values of the same variable*: in the one scenario one starts from an expected increase in tourism (the variable) of 3%, in the other scenario this increase is stated to be 4½% (the parameter).

Whichever it may be, whether or not we deal with variables within one sector, alternative societal development sketches or fluctuating

⁶Brian Archer's review of tourism-forecasting techniques (published in 1976) does not mention scenario writing, *Demand Forecasting in Tourism*, University of Wales Press, Bangor. A recent handbook on technological forecasting, Joseph P. Martino, *Technological Forecasting for decisionmaking*, 2nd ed, North Holland, New York, 1983, contains exactly one and a half pages (out of 385) on scenario writing.

⁷G. Tesar, D.L. Edgell and R.L. Seely, 'The development of a conceptual framework to facilitate the collection and processing of information in tourism. Use of modified scenario research in forecasting of tourism in the United States', Paper read at Symposium on Tourism and the Next Decade, George Washington University, Washington, March, 1979.

⁸IIASA Energy Systems Program Group, *Energy in a finite world*, Ballinger, Cambridge, MA, 1981.

⁹Interfutures project: *Facing the future: Mastering the probable and managing the unpredictable*, OECD, Paris, 1979.

parameter values, it is a fact that a specific methodology is gradually developing around these scenarios.¹⁰ A further in-depth study of this methodology with its inherent strong and weak points is important to tourism-futures research, as the poor level of sophistication of the current methodology is in my opinion generally reflected in the present supply of tourism scenarios.

Elements of a scenario

With the description of the different forms in which scenarios are presented, we still have no definition of the scenario 'concept'. Therefore we should first consider some literature: Kahn and Wiener characterize scenarios briefly as "a hypothetical sequence of events".¹¹ Jantsch feels that "the term scenario-writing denotes a technique which attempts to set up a logical sequence of events in order to show how, starting from the present (or any other given) situation, a future state might evolve step by step."¹² Ayres view on scenarios might be described as a sequence of events arranged in time having logical relations, trying to clarify a hypothetical future situation.¹³

So scenarios contain process-related statements about the future. When constructing scenarios the sketching of one or more static images in the future does not suffice; the successive dynamic processes, connecting the present with those images situated in the future, give scenarios their particular characteristics. That is to say that the synchronical analysis which implies studying the system variables and their relationships at a certain point in time, should always be linked to a diachronical analysis (in which one studies the variables and their relationships through time).

Definition

A general definition embracing the various aspects of the scenario technique mentioned in the literature, is the following: "A scenario gives a description of the present situation, of one or more possible and/or desired situation(s) and of one or more sequence(s) of events, which can connect the present and future situation(s)." From this definition it is evident that a scenario contains a minimum of three components:

- a (dynamic) description and analysis of an existing situation, which acts as the starting point for the framing of the two components listed below — this is termed original situation or baseline analysis (BA);
- one or more eventual images of a desired and/or considered possible situation at a future moment—future images (FI); and
- one or more development processes containing a description of the development of an existing situation into an eventual image in the future—future paths (FP).

These are the three crucial components from which a scenario is constructed (see Figure 1). If one of these elements is absent, we do not have a complete scenario. Depending on circumstances when constructing a specific scenario, one or more of the above-mentioned three components can be limited to embryonic proportions, eg when dealing with an exhaustively investigated social problem, an analysis of the original situation could largely consist of references to research

¹⁰H.A. de Weerd, 'A contextual approach to scenario construction', *Simulation and Games*, Vol 5, No 4, 1974; P. de Leon, 'Scenario designs, an overview', *Simulation and Games*, No 1, 1975, pp 39–60; P.A. Julien, P. Lamonde and D. Latouche, *La méthode des scénarios*, La Documentation Française, Paris, 1975; J.M. Thurot, *La technique des scénarios appliquée au tourisme: aspects méthodologiques*, Centre des hautes études touristiques (CHET), Aix en Provence, Serie C, No 65, 1982; H.A. Becker, 'The role of gaming and simulation in scenario projects' in: Ingolf Stahl, ed, *Operational Gaming: An International Approach*, Pergamon Press, Oxford, 1983, pp 187–200.

¹¹H. Kahn and A. Wiener, *The Year 2000, a framework for speculation on the next thirty years*, MacMillan, New York, 1967.

¹²E. Jantsch, *Technological Forecasting in perspective*, OECD, Paris, 1967, p 180.

¹³R.U. Ayres, Based on *Technological Forecasting and long-range planning*, McGraw Hill, New York, 1969.

¹⁴J.W.M. van Doorn, 'An unexplored forecasting area in tourism: scenario writing', *Tourism Problems*, Instytut Turystyki, Warsaw, No 3, 1984, b. (Special issue on Tourism Forecasting.)

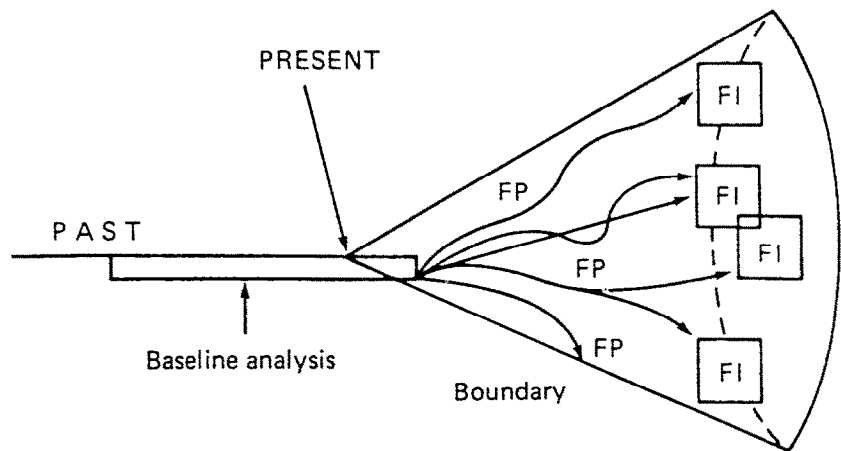


Figure 1. Scenarios: interconnection between three components: baseline analysis; future paths (FP); and future images (FI).

Source:
van Doorn, *op cit*, text reference 14.

publications, statistics, etc, although it will always be necessary to focus general information on specific aspects of a scenario. If the objectives can be reached easily, a future development path does not require a detailed description. And sometimes the future will be so vague and uncertain, that future images cannot be sketched at all and it would no longer be appropriate to speak of a scenario.

Typology of scenarios

It appears from the previous, clearly defined sector studies, as well as normative future sketches, extensive analysis as well as 'outlines' created 'on the spot', are included by the term scenario. Although Godet states that: "*en pratique il n'y a pas une méthode des scénarios mais une multitude de manières de construire des scénarios*",¹⁵ it certainly appears worthwhile to differentiate further the unsystematic field of scenarios.

Projective and prospective scenarios

First it is possible to make a distinction between projective and prospective scenarios. When dealing with projective scenarios one looks into the future from the present and the past. When dealing with prospective scenarios, one looks for one or more 'ways back' to the present on the basis of one or more images in the future. Thurot, in a thorough study on methodological aspects of the scenario method, uses the terms "*scénario exploratoire*" and "*scénario d'anticipation*".¹⁶

Normative and descriptive scenarios

A second distinction is related to norms and values. Normative scenarios are constructed on the basis of normative conceptions (wishes, choices, interests) of designers or users. Descriptive scenarios are constructed on the basis of available facts. Subjectivity is limited as far as possible. Prospective scenarios are always normative; projective scenarios can either be of a descriptive or a normative character. Kahn and Wiener's surprise-free reconnaissance is an example of a descriptive and projective scenario.¹⁷ Clear examples of prospective scenarios are the French DATAR scenarios.¹⁸

Dominant and limits-identifying scenarios

A third distinction can be made by looking into the degree of extremity

¹⁵M. Godet, 'Méthode des scénarios', *Futuribles*, No 71 Novembre 1983, pp 110-121.

¹⁶Thurot, *op cit*, Ref 10, p 5.

¹⁷Kahn and Wiener, *op cit*, Ref 11.

¹⁸DATAR, 'SESAME: une image de la France en l'an 2000 (scénario de l'inacceptable)', in *Travaux et Recherche de Prospective*, La documentation française, Paris, No 20, 1975.

of scenarios. A dominant scenario, also called trend scenario (French *scénario tendanciel*), does deviate very little from developments which are at the moment considered highly probable.

Limits-identifying scenarios, (French: *scénario d'encadrement*) on the other hand, sketch trends and images which at present seem improbable. Dominant as well as limits-identifying scenarios are always projective. An example of a dominant scenario is the OECD 'Interfutures study'. Limits-identifying scenarios are often characterized by exaggeration of present developments to extreme proportions and are (usually) judged negatively. Therefore they are sometimes called 'contrast scenarios'.¹⁹ An example is Thurow's "Zero-Sum-Society", in which a total social stagnation takes place as a result of the unwillingness of certain groups with competing interests to cooperate.²⁰

Preferential and aprioristic scenarios

The fourth distinction arises from the question of how far normative scenarios represent the preferences of large groups of society, or whether they are in fact based on the opinions of (whether or not characterized as 'advanced') minorities (or elites). In the first case we speak of preferential scenarios, in the second of aprioristic scenarios.²¹ As will be demonstrated here, most tourism scenarios are of a projective-descriptive character. Figure 2 shows the various dimensions and how they relate to each other.

Function

Where the function of the scenario technique is concerned there appears to be substantial agreement amongst scenarilogists. In de Weerd's opinion scenarios have the specific task of making suggestions about what could possibly happen, rather than what will happen.²² Helmer states that the purpose of scenarios is not to predict the future, but to show the possibility of a certain future situation.²³ Also Jantsch is of the opinion that it is not the function of scenarios to predict the future.²⁴ The central function of the scenario technique is communicative. Scenarios stimulate imagination and discussion. "The principal objective of a scenario is to provide structure for the thinking aimed at attacking the complexity."²⁵ This demonstrates the policy-supporting function of the scenario technique which may be used when beginning to frame policy plans.

¹⁹Rédaction Futuribles, 'Les scénarios contrastés correspondants d'écrivent une évolution de l'environnement notablement différente de celle du scénario de référence' (tendenciel), in *Quelques concepts clefs, Futuribles*, Novembre 1983, p 111. Examples of contrast scenarios can be found in Bar-On's article 'Forecasting tourism theory and practice', in TTRA, 10th Annual Conference proceedings, University of Utah, Salt Lake City, 1979, pp 27-42. See also R.R.V. Bar-On, 'Forecasting tourism and travel series over various time spans under specified scenarios', paper presented to the Fourth International Symposium on Forecasting, London, July 1984, Ministry of Tourism, Jerusalem, (mimeo).

²⁰L.C. Thurow, *The Zero Sum-Society*, Basic Books, New York, 1980.

²¹Leon, *op cit*, Ref 10.

²²de Weerd, *op cit*, Ref 10.

²³D. Helmer, *Social Technology*, New York, Basic Books, 1966.

²⁴Jantsch, *op cit*, Ref 12.

²⁵T.H. Allen, *New methods in social science research*, Praeger, New York, 1978.

Figure 2. Typology of scenarios based on English and French distinctions.

Sources:
See references included in text reference 10.

	Projective (scénario exploratoire)	Prospective (scénario d'anticipation)	
Descriptive	Dominant/TREND (scénario tendanciel)	Limits identifying (scénario d'encadrement; scénario contrasté)	
		I	III
Normative	Dominant	Preferential	IV
	Limits identifying	Aprioristic	Preferential
			Aprioristic

Methods pluralism

The working methods which could be used while in the process of writing a scenario are remarkably enough still the least developed aspect of the scenario technique. When taking a further look at the relevant literature one can conclude that the scenario technique is characterized by methods pluralism—all sorts of techniques are mobilized to give the scenario technique a clearly outlined methodical appearance.²⁶ Also, where working methods are concerned, the three central components of the scenario technique (baseline analysis, future images and future paths) will have to be supplied with clearly formulated steps. Fortunately the present popularity of the scenario technique has resulted in research programmes in this direction. It is safe to assume that in the near future the scenario technique will be characterized by standardized procedures.

Tourism scenarios: examples

Various forms of scenarios have been mentioned—the most important are:

- forecasting techniques disguised as scenarios;
- parameter variations of one single variable;
- variables related to sector developments; and
- alternatives for societal developments.

The first category has quite often been the cause of confusion among tourism researchers. It should be quite clear that a technique presented as a scenario, but containing not one single element of the three-component definition (baseline analysis, future images and future paths) by no means deserves the title scenario. An example of a supposed scenario is found in a paper by Tesar, Edgell and Seely.

The subtitle of this paper: 'The use of modified scenario-research', is promising, but it turns out to be a 'Delphi in disguise', which can be demonstrated easily from their own words:

The modified scenario research technique (MSR) is based in part on the Delphi-based paradigm for normative system-building . . . The MSR technique consists of three major components: (1) a panel of experienced and recognized experts on the subject being researched, (2) a research specialist familiar with . . . the problem researched . . . and (3) a set of scenarios formulated by the researcher for the purpose of guiding the discussion among the panel-members.²⁷

To consider parameter fluctuations as a scenario has also little to do with scenarios as understood here, as they provide neither the original situation (baseline analysis) nor future images, while the term future paths (development lines into the future) aims at a very complex system of intended and unintended actions. Thus the term future paths embodies considerably more than just a (whether or not intelligently) varying of the parameter value of a tourism variable. This does not mean to say that parameter fluctuations can not be used as *input* for tourism scenarios, specifically to elucidate the approximated course of future paths.

The two remaining categories will be dealt with in more detail. Variables associated with sector developments, in which tourism developments are central, will be sketched briefly and I shall, concentrate on alternatives for societal developments in which tourism

²⁶van Doorn, *op cit*, Ref 14.

²⁷Tesar, Edgell and Seely, *op cit*, Ref 7, pp 5 and 6.

is regarded as one of the subsystems of society. The aim has been to give examples, gradually increasing in complexity and quality. Instead of a complete summing up of all possible examples published under the heading 'tourism scenarios', I have chosen to select some striking examples. In line with the objective of the article the instructive character of the examples is more important than their complexity.

Sector variables

This category deals with scenarios, in which in one way or another a number of variations of tourism developments are sketched. Mostly they concern well considered variations of tourism developments based on trend extrapolation of previous tourism developments. In the central position is tourism, which appears to have a certain autonomy. A rather good illustration of such a scenario can be found at the Hudson Institute (which owes its fame, not least, to its founder and one of the fathers of modern futures research, Herman Kahn).²⁸ The example gives equal weight to two components—this is almost always the case with the coupling of the baseline analysis component to the future image component only. (According to our own three-component definition the term scenario might be a bit misleading here). Staff-members of the Hudson Institute have compiled a chart which reviews the development of tourism in the past (baseline analysis) and outlines the possibilities for tourism in the future (future images). Part of the chart is shown in Table 1. Though the staff-members believe that the data given in their chart are "quite reasonable" one could still have doubts about their inductive way of trend setting.²⁹ There is no reason to believe why shortcomings of other extrapolation techniques (especially the predictive weakness in the medium and long term) should not be applicable to their method. Moreover tourism is not a system in itself which develops quite apart from other social developments. Therefore it seems to me more rewarding to seek the starting point for scenarios in those societal developments which have the most profound impact on tourism, rather than elaborating on tourism as a system in itself.

Alternatives for societal developments

In the previous section tourism development formed the central point of discussion. This category of scenario focuses on societal developments. Tourism developments are considered to be the resultant of the forces of society—forces moving freely and/or subject to outside influences.

Although there is a lack of consensus in the use of the scenario concept, it seems to be fair to judge the existing literature on tourism-related scenarios with our three-component definition in mind. From this standpoint it is clear that most scenarios are handicapped, lacking at least one, but more often two, of the constituent components.

²⁸The example has been taken from *Travel News Edition*, 50th anniversary issue, January 31, 1979.

²⁹Stephen Papson, 'Tourism: world's biggest industry in the twenty-first century?', *Futurist*, Vol 13, No 4, 1979, pp 252–253.

³⁰M. Schwaninger, 'Szenario: Freizeit und Tourismus im Zeit Horizont 2000–2010', *Tourist Review*, 1983, No 3, pp 16–21.

One component scenarios

First scenarios that only consist of one component (future image) will be discussed. A good example here is the work of Schwaninger.³⁰ Here future developments in several environments are viewed with respect to their impact on tourism.

Environments used quite regularly are:

Table 1. Variables of selected tourism development 1929-2029, sectoral approach.

Variable	1929	1949	1969	Present	1989	2009	2029
Weather prediction	Barely useful next-day predictions in a few localities	Useful nationwide predictions	Some tourist planning on basis of weather	Good short-term predictions; days	Better short-term predictions; week or less	Consistent travel planning by weather; weeks ahead. Resorts with controlled environments	Planning months ahead; cost discounts for bad weather periods
Tourist pollution	Practically none	Negligible	Emerging	Frequent discussion; sometimes limiting	Quite limiting, but locally variable; local rationing; quotas; anti-tourist policies	Receding as a controversial issue; largely controlled by improved management	Not conceived as problem; fully managed; but various local limits are understood
Travel/tourism leisure	Some leisure; travel expensive; tourism for relatively few	More leisure; travel cheaper; tourism available to many	$\frac{\text{Tourism: T}}{\text{Leisure: L}} = \text{growing}$	T/L still growing; new leisure options proliferate	T/L probably still growing, but vast new leisure competition	T/L stabilized but all options growing absolutely	Vast range of aesthetically satisfying and fulfilling activities including travel
Time spent working	US average work week — 48 hours	Average work week — 41 hours	Average work week — 40 hours	Average work week — 38 hours	Average work week — 35 hours	Average work week reflects choices; could be about 20 hours	Working time largely a matter of individual choice; could be slight; very many choices

Source: Hudson Institute, 1979; Travel Trade, *op cit*, text reference 28; and Pappson, *op cit*, text reference 29.

- the economic environment;
- the rural and urban environment;
- the natural resources environment;
- the sociocultural environment;
- the political environment; and
- the technical environment.³¹

So Schwaninger in his study '*Szenario: Freizeit und Tourismus im Zeithorizont 2000 – 2010*', starts to describe six environments (economics, energy, socioculture, ecology, politics and technology) and their future developments—his obvious aim being to sketch the relationships between the developments in those environments and the tourism system. With regard to energy he states for example:

It is remarkable how rarely the energy problem is addressed in connection with future trends in tourism . . . If, as predicted, fuel costs rise appreciably, we can expect:

- that there will be an accelerated shift from private to public means of transport;
- that long-haul tourist flights will be replaced by shorter ones;
- that business trips will be replaced by communication via satellite to a greater extent than would otherwise have been the case; and
- that unprofitable domestic flights will be cancelled and high speed trains will come to the fore.³²

It would not be fair to classify Schwaninger's contribution solely under the heading of a one-component scenario. As he also provides us with qualitative reasoning on how one will reach a future energy image, this type of scenario will be called a one-dominant-component scenario.³³

Under this heading a researcher:

- puts emphasis on one component (future image);
- provides information on another component, but on a much less detailed (embryonic) level (future paths); and
- has a keen eye for qualitative reasoning rather than for empirical quantification.

Another study along the same lines is by MacGregor.³⁴ In his paper on 'Future Scenario Forecasting' he deals with future images of the Latin-American tourism industry in nearly the same way as Schwaninger did—with one remarkable difference however: as Schwaninger uses Krippendorf's Delphi³⁵ as an input to his future images, MacGregor works the other way around by using his speculations about the future as inputs to a Delphi design to be carried out by others. Having the same characteristics as the Schwaninger scenario the MacGregor scenario has the advantage of having been constructed on the basis of systematized expert opinion. A disadvantage of the latter is that the Delphi method, although fairly well set in a time framework, for the greater part neglects the roads of attainment (or future paths).

Taking into account the examples given so far, all studies have been dealing with just one future image, to be reached by one, rather vaguely described, future path. Of course it is true that there is only one future that will come to be realized. Yet it is plausible – given the inherent uncertainties about the future – to think in terms of images and paths, rather than one image and one path. (Hudson's forecasts assume an almost closed and deterministic worldview in which the developments in certain environments will spring off autonomously and/or automatically.)

³¹G. Kibedi, 'Future trends in international tourism', *Tourist Review*, No 1, 1981, pp 3–6.

³²M. Schwaninger, 'Forecasting leisure and tourism, scenario projections for 2000–2010', *Tourism Management*, Vol 5, No 4, pp 251 and 252.

³³Note: This is quite different from a dominant scenario.

³⁴J.R. MacGregor, 'Latin America — future scenario forecasting for the tourism industry in some of its developing nations', in D.E. Hawkins, E.L. Shafer and J.M. Roveltstad, eds, *Tourism, Planning and Development Issues*, George Washington University, Washington, 1980, pp 429–442.

³⁵J. Krippendorf, *Tourismus im Jahre 2010, eine Delphi-Umfrage über die zukünftige Entwicklung des Tourismus in der Schweiz*, Forschungs institut für Fremdenverkehr, Bern, 1979.

Two-component scenarios

In a study on Thailand, it was Bar-On who added a dimension absent from those studies mentioned previously—alternative future images. He deserves credit for adding alternative assumptions relating to the environment for international tourism, to the “one-track minded” scenarios. On the basis of these alternative assumptions he arrives at a range of forecasts.³⁶ But the Thailand scenario still lacks a visible link from the past to the present. So the following section will deal with tourism scenarios which devote equal attention to all three components (BA, FP and FI).

Three-component scenarios

In an elaborate study on this subject, prepared for the Fourth International Symposium on Forecasting, Bar-On gives ample information on how to construct scenarios using baseline analysis and future paths together, in order to arrive at a set of future images.³⁷ He states:

In order to prepare forecasts, several approaches may be used:

(1) Naive, (2) Exogenous and (3) Comprehensive. For approaches (2) and (3), Judgement Aided Models (JAM) may be most appropriate. For these, it is desirable to prepare detailed *scenarios* of what might happen in the future in the most relevant fields (economic, political, marketing and other developments). Since there usually are several possibilities in each field, it is often desirable to list the possible events and parameters for each field under the headings: *Optimistic, Intermediate, Pessimistic*.³⁸

Of course this presents methodological problems of the first order. For it is quite logical (or plausible) to credit one scenario with all favourable circumstances, and compare it to the one scenario which contains the negative developments. For example, in some cases, a highly unfavourable technological development could be connected to a positive economic development or vice versa. This is however quite well understood by the author: “It is unlikely that all the favourable or the unfavourable conditions will occur together (despite ‘Murphy’s law’), but in some cases for contingency planning and to ensure adaptability, *Ideal and/or Crisis scenarios* may also be prepared”.³⁹

Although this does not solve the methodological problem completely, the contrast scenarios (ideal and crisis) might counterbalance the widespread belief in the dominant-trends scenario. If we understand Bar-On correctly, he uses his scenarios as a reference to actual or potential developments and to other scenarios.

Let us continue investigating Bar-On’s study on Israel-related tourism development:

In January 1983 a joint committee of the Israel Ministries of Tourism and of Transport, the Airport Authority and El Al, met to prepare scenarios for 1983 and forecasts by months for 1983 and the *fiscal year 1983/4* for:

- a. Tourism by air to Israel, distinguishing direct charters to Eilat;
- b. Air-travel abroad by Israel citizens.

These forecasts were based on scenarios *for factors* like:

World wide factors (the economic situation in the main tourist-generating countries; the exchange rates of the U.S. dollar compared to European currencies and increased air fares).

Specific factors (such as: the operation in the Lebanon of June 1982; the cancellation of all flights by the national air-carrier from September 1982 to January 1983 and increased charter operations of other Israeli carriers).

³⁶R.R.V. Bar-On, Forecasting on tourism to Thailand, Tourism Research Seminar, Bangkok, August, 1975; *Thailand Travel Talk*, Vol 15, Nos 10 and 11; and Bar-On, *op cit*, Ref 9, pp 36–37.

³⁷Bar-On, *op cit*, Ref 19, 1984.

³⁸*Ibid*.

³⁹R.R.V. Bar-On, Previous mimeopaper, prepared for the Third International Symposium on Forecasting, Philadelphia, June, 1983.

Additional factors (e.g. the tourism promotion budgets and publicity campaigns and price policies in Israel). The monthly seasonally adjusted data on tourist arrivals in 1982 (total and from the major source countries) were studied and estimates made of the period necessary for the level of their trend to recover to the level of May 1982.⁴⁰

A disadvantage of this scenario technique is that it has reduced the time span to one year/18 months. It reflects more the explorative/speculative field of forecasting than the speculative/normative field, for which the scenario method could also be a valuable tool.⁴¹

Why then, is so much emphasis put on this example? Simply because of its wider possibilities of application. The Israeli method contains all the elements for the design of long-term scenarios, namely:

- well detailed baseline analysis with regard to tourism development;
- an explorative way of dealing with future paths: pessimistic, optimistic and intermediate ones;
- the use of expert opinions;⁴² and
- a time-dependent framework.

In comparison with most scenarios which are in a sense time independent – although the magic year 2000 might have been added – the three-component short-term scenario presented, is quite a big step towards other, long-term types of scenarios.

So far we have only had examples of tourism scenarios which belong in the first quadrant of the scenario typology: projective–descriptive (see Figure 2). In most cases they belong to the upper part of this quadrant, which encompasses trend scenarios (French: *scénario tendenciel*). With Bar-On we see for the first time some tentative steps towards setting outlines and establishing frameworks in order to arrive at limits identifying scenarios (French: *scénario d'encadrement*). Prospective scenarios however are unknown in tourism. Thurot concludes that prospective scenarios (French: *scénario d'anticipation*) could only be developed under very strict conditions.⁴³ There remain the normative projective scenarios. An example of this category, which can be considered as aprioristic and which contains characteristics of a dominant as well as a limits-identifying scenario, is a study by Krippendorf, Kramer and Krebs.⁴⁴

Normative projective scenario: example

This study is considered to be aprioristic due to the fact that a group of writers has clearly acted as 'vanguard' and translated, interpreted and 'valued', from their concept of work and leisure time, the various transformations which can take place when changing from an industrial to a post-industrial society. They do not only consider trend developments but also personal choice with regard to work, tourism and leisure time. Besides being aprioristic, the study is clearly of a normative nature.

Wir fragen nach sich abzeichnenden Veränderungen und zeigen möglichen Wege aus der Krise der Arbeit auf. Reisperspektiven werden sowohl in Sinne der Trendentwicklung als auch vor dem Hintergrund der Gesellschaftlichen Wende entworfen und hinterfragt.

[We are looking for latent changes and possible ways out of the crisis in the Work Society. Travel and tourism perspectives are designed and questioned against trends and societal changes.]⁴⁵

⁴⁰Bar-On, *op cit*, Ref 37, p 28; Information on seasonally adjusted time-series analysis is given in R.R.V. Bar-On, 'Forecasting tourism and travel series', *Tourism Problems*, Warsaw, No 3, 1984.

⁴¹J.W.M. van Doorn, Tourism forecasting and the policymaker; criteria of usefulness, *Tourism Management*, Vol 5, No 1, pp 24–39, 1984.

⁴²Recent articles on the use of systematized opinion in tourism are: T. Var, 'Delphi and GSV-techniques in tourism forecasting and policy design', *Tourism Problems*, No 3, 1984; and E. Kaynak and J.A. Macaulay, 'The Delphi technique in the measurement of tourism market potential' *Tourism Management*, Vol 5, No 2, June 1984.

⁴³Thurot, *op cit*, Ref 10, pp 70 ff.

⁴⁴J. Krippendorf, B. Kramer and R. Krebs, *Arbeitsgesellschaft in Umbruch — Konsequenzen für Freizeit und Reisen*, Forschungsinstitut für Fremdenverkehr der Universität, Bern, 1984.

⁴⁵Citation taken from a German brochure of the book *Arbeitsgesellschaft im Umbruch*, *op cit*, Ref 44.

Against the background of great social and economic changes which have taken place in Western society in the last decades, three scenarios are formulated which succeed each other but also overlap:⁴⁶

- the Work Society (until the beginning of the 1990s);
- the Work–Leisure Society (from the start of the 1990s onwards);
- the Life Society (21st century).⁴⁷

The authors indicate the most important characteristics of these scenarios on the basis of a number of general socioeconomic factors, eg employment, economic growth, income position, attitude towards work and leisure, degree of individualization (the dependency of individuals on peer groups, institutions and society), etc. Several of these characteristics are given in Table 2.

Seen from this general (subjective) and normative development sketch as regards work, leisure time and 'life itself' the authors make a very detailed, mainly qualitative, step towards the prospects of the demand for tourism within each of the three scenarios. (See Table 3.) However this step forwards at the same time embodies the weakness of the proposed scenario method—what is gained from a qualitative point of view might be lost from a quantitative viewpoint. So Tables 2 and 3 are open to criticism, eg:

- It is not clear, at the end of Table 3, what the differences are between the three aspects under the heading *Accommodation*—growing popularity of self-catering accommodation; diminishing demand for expensive accommodation; increased trend towards cheap accommodation.
- At the same time it remains unclear to what periods the *level of demand* refers, within the context of the Work Society—does short, medium and long range cover a period of just five years; and if so is a "high degree of attraction of exotic destinations" a possible or highly probable development at the end of the 1980s?

In general, as with all aprioristic scenarios the foreseen structural changes in society merely reflect the opinions of an intellectual elite rather than the interests of the masses. So, with regard to the Life

⁴⁶The following has been extracted from an English summary of Ref 44 called 'Social economic change: achievements, negative aspects and outlook for the work society'.

⁴⁷Life society is based on a fundamental transformation of values resulting in people restoring the act of living to its central position in social and economic development.

Table 2. Selected tourism development 1980–21st Century.^a Work – home life – leisure time: old and new structures in the course of radical social changes.

I Work Society <i>Until beginning of 1990s</i>	II Work-Leisure Society <i>1990s</i>	III Life Society <i>21st century</i>
Protestant work ethos (people live to work)	Work as a job (people work to live)	Work as a satisfying activity
Full time occupation as norm	Trend to part-time work	Meaningful employment as target
Slight growth in income	Stagnating income	Diminishing cash income with stable level of prosperity.
Leisure time as left-over time with no intrinsic value, time for recreation/consumption	'Moonlighting' during leisure time (heightens individual and social status of freedom)	Personal activity during leisure time as necessity and opportunity for more self-determined time.
Less satisfaction with life and work plus growing distance to work	Growing desire for meaningful work and control over own time plus even less satisfaction with life and work	Increasing satisfaction with life and work, along with greater autonomy, co-determination and say in management

Note:
^aSocietal development approach.

Source:
Krippendorf, Kramer and Krebs, *op cit.* text reference 46.

Table 3. Selected prospects as regards demand for travel based on societal development scenarios.

I Work Society Until beginning of 1990s	II Work-Leisure Society 1990s	III Life Society 21st century
<i>Potential demand</i>		
Growing number of people eager to travel	Every member of industrial society as a potential tourist	Everyone travels from time to time
<i>Level of demand</i>		
Swelling flood of tourists	Feeble increase in overall level of travel	Ebbing wave of tourism
Short range: Highest growth rates	Short range: Increase in demand (limited travel budget)	Short range: Increasing importance in context of changing values
Medium range: Slight increase in volume	Medium range: Stagnation demand but in absolute terms, largest holiday field	Medium range: Traditional holiday fields becoming less important and fall-off in demand
Long range: High degree of attraction of exotic destinations	Long range: Stagnation (preserve of groups with greater purchasing power)	Long range: possibility of long-term stays opens up new possibilities
Excursion traffic: Growing crowds on excursions	Excursion traffic: Recreational areas in the immediate urban area over-taxed	Excursion traffic: More welcoming everyday environment dampens excursion boom
<i>Expenditure structure</i>		
Slowly expanding travel budget	Stagnation budget/more leisure time	Falling travel budget
<i>Accommodation</i>		
Growing popularity of self-catering holiday accommodation	Diminishing demand for expensive types of accommodation	Increased trend towards cheap accommodation

Source: Krippendorf, Kramer and Krebs, *op cit*, text reference 46.

society the element: “Increasing satisfaction with life and work, along with greater autonomy, co-determination and say in management” could be viewed as:

- a *probable development* logically emerging from previous statements;
- a *hypothesis* to be validated against developments taking place at the end of the 20th century; or
- a *future image situation*, wanted by a group of social scientists not satisfied by recent developments in the Work Society.

It might be true that the English summary does not reveal all subtleties contained in the original German book. But even in the original the qualitative synthesis is not always based on sound quantitative analysis, which means that bridging the gap between descriptive projective scenarios and normative ones is still problematic. One should, however, try to balance positive and negative points. So whereas the attentive reader will have some reservations upon seeing the resemblance between the trend scenario of the Hudson group and Bar-On’s short-term limits-identifying scenario, at the same time the reader will note the major steps forward by Krippendorf and his co-workers. For the great value of this approach is:

- the embodiment of tourism developments in expected, desired and/or undesired, social developments;
- broadening of the time perspective from initially one to 10 years up to 25 years;
- the time phasing of a scenario, because of which intermediate future images seem to succeed one another in a plausible way; and
- the normative and aprioristic character—the policy function is strengthened considerably, because the assumptions and choices upon which the developed scenarios are based can be explained to the policy-makers while at the same time the consequences of the various scenarios for tourism developments are made clear.

Although this approach shows that it is possible to create normative future images without being utopian, it remains to be seen whether the authors have succeeded in adequately connecting the baseline analysis to the future images. In other words, it may be asked whether this qualitative approach is (or can be) sufficiently supplemented with quantitative development paths? Take, for example, the case of a scenario study of leisure time and work: 'Leisure and Work; the choices for 1991 and 2001'.⁴⁸ On the basis of four societal scenarios per scenario, this study draws very detailed and quantified future images for the developments in various leisure-time sectors. The four scenarios have been defined by two attributes: economic development and the value system. The scenarios are specified as follows:

- *conventional success*—economic growth and same values as today;
- *transformed growth*—selective economic growth and transformation of social values with regard to work and leisure;
- *frustration*—stagnated economy and conventional values;
- *self restraint*—economic decline and transformation of social values related to quality of life spheres, in order to cope with a situation of soberness.

This quantification of future images is connected to the likewise qualitative description of intermediate future images and paths.

Implications for tourism scenarios

The combination of this last descriptive–projective scenario with Krippendorf's normative–projective approach could bring the tourism scenario to maturity. A start towards this objective, with regard to method as well as content, has already been made by Smaoui and Thurot, who have framed scenarios in a very thorough and detailed study for the tourism development in (part of) the Mediterranean Sea area. In this study forecast changes in demand and supply related to tourism are linked with (undesired) changes in the environment.⁴⁹

As mentioned before, Thurot made some objections as regards the realization/possibilities of preparing prospective scenarios, while in some of his later work he offers a framework which could advance a fruitful alliance of descriptive–projective and normative–projective scenarios.⁵⁰ As a result of this the door to prospective scenarios has been opened.⁵¹

Recommendations and conclusions

Though van Doorn has proposed to evaluate scenarios in terms of

⁴⁸W.H. Martin and S. Mason, *Leisure and Work, the choices for 1991 and 2001*, Leisure Consultants, Sudbury, UK, 1982.

⁴⁹A. Smaoui and J.M. Thurot, *Tourisme Méditerranée-Environnement, Scénario pour l'an 2000*, Plan bleu/PNUD, 1982.

⁵⁰Thurot, *op cit*, Ref 10; and J.M. Thurot *La technique des scénarios appliquée au tourisme. Cas d'application: le bassin Nord-Méditerranée*, CHET, Aix-en-Provence, Février 1983.

⁵¹Lewandowski operates in an even more quantifiable way to integrate medium-term and long-term forecasts, eg his computerized forecasting method, called FORSYS, in S. Makridakis, A. Andersen and others, *The forecasting accuracy of major time series methods*, John Wiley, Chichester, 1984.

usefulness criteria this appears premature: in none of the social sciences has scenario design evolved into an established component of the professional repertoire.⁵² Special problems in using scenarios include:

- the quantitative analysis of the past and present of tourism systems is mostly inadequate;
- baseline analysis and the preparation of future paths require well developed and more detailed time series than most countries generally have at their disposal;
- the theoretical basis for tourism is weak, making tourism modelling hazardous; and
- ways and means of optimizing the results of scenarios are still being developed and tested; the exogenous development of alternative scenarios prior to major policy decisions is limited outside the tourism field and almost non-existent within tourism.

However, we stress the strong points of scenarios, especially:⁵³

- the generation of alternative policies;
- their adaptability to the participation and involvement of various interest groups, eg policy makers, researchers and others;
- their ability to prepare the ground for *ex-ante* evaluations;
- the possibilities of developing a closer relationship between people involved in policymaking and the researchers; and
- the establishment of normative future images.

Taking into consideration the methodological 'state of the art' of scenario writing it seems best for the near future to adopt a modest approach, focusing upon the development of mini-scenarios with a limited scope and timespan (eg scenarios on the development of ski-areas in a specific geographical region or the future of an already existing beach resort). The evaluation of such mini-scenarios could provide valuable tools necessary to design more comprehensive tourism scenarios—projective as well as prospective ones/descriptive as well as normative ones—containing the three basic scenario components (baseline analysis, future path(s), and future image(s)) quantified as much as possible. Five more conclusions that can be derived from our text are:

- In tourism scenarios far too little attention has been paid to the effects of unexpected events (illustrated by Bar-On for tourism to Israel).⁵⁴ In most scenarios discontinuities in trend developments and LPHI-events (low probability, high impact events) are neglected or barely considered in the situations most often considered: the optimistic, the pessimistic and the intermediate (the latter often corresponding to the organization muddling on).
- Forecasting techniques disguised as scenarios which seemingly will not have much bearing on policy-making processes are nevertheless not without value; these techniques are sometimes able to give important stimuli either to processes of political awareness or to tourism scenarios proper, which might influence policy making and policy acceptance.
- Consensus on a common scenario methodology is needed. Furthermore scenarios should be developed and applied together with other forecasting techniques, eg time-series analysis, Delphi and cross-impact analysis.⁵⁵
- Systematic gathering of knowledge about tourism in the long run is needed for both strategic planning and strategic management

⁵²van Doorn, *op cit*, Ref 41, pp 34–38.

⁵³Becker, *op cit*, Ref 10, p 199.

⁵⁴Bar-On, *op cit*, Ref 37.

⁵⁵van Doorn, *op cit*, Ref 14.

purposes; at a national level as well as at local levels of government and industry.

- To develop scenarios further for use in tourism theory, methodology and practice, I would recommend the formation of an international group of expert researchers, under the auspices of an international organization (eg WTO, OECD, EC, Vienna Centre, UNESCO)⁵⁶ and have them design and develop *long-term scenarios for, eg European tourism in the 21st century.*

⁵⁶The European coordination centre for research and documentation in social sciences is in short called the Vienna Centre. It stimulates all kinds of social (cross-cultured) research.