

2000-01-01

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Recommended Citation

Ratcliffe, John and Murphy, Maurice: The architectural heritage industry: fostering awareness through scenario learning. Technological University Dublin 2000.

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The Architectural Heritage Industry: Fostering Awareness Through Scenario Learning

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Summary

The scenario learning approach offers a methodology for projecting potential futures and considering likely long term outcomes in order to plan permissible change and improve current decision making. This technique provided a forum organised by DIT on behalf of the European Foundation for Heritage Skills (FEMP) for the sharing of experience and exploration of imaginative ideas and creative thinking regarding future plans, policies and practice within the emerging architectural heritage sector of the construction industry. A series of workshops culminated in a seminar held during 1999, attended in all by sixty experts from Ireland and overseas. The participants were involved in constructing and exploring alternative scenarios to inform and enhance decision making so as to develop and test possible plans and strategies for future research, education and policy development in this area. The participants identified and explored the driving forces of change affecting the architectural heritage industry and the societal issues that emerged. They were encouraged to challenge conventional wisdom and modes of operation in order to identify future possible opportunities, threats and actions. Finally, they addressed the question of policy initiatives in the field of architectural heritage education and research.

The Architectural Heritage Industry

Throughout Europe there is an increase in activity through a growing market demand for traditional building craft skills and techniques. A number of factors have contributed to this revival:

- An increased awareness of the value of conserving our cultural heritage and landscape.
- Opportunities in cultural and ecotourism.
- A growth in the property market for urban conservation and the repair of older buildings.
- Higher cultural and aesthetic values being placed on indigenous crafts and materials.
- Economic advantages gained in using indigenous skills and materials.
- The reduction in environmental damage where natural materials are used, such as native timber, clay, stone, thatch and the like.

Some regions of Europe have conserved much of their folk and traditional culture, in particular the traditional building skills. Such traditional manual abilities are now being

placed on a par with the skills required for highly specialised and mechanised production. These skills demand a knowledge and expertise in a wide range of materials and techniques used in pre-modern building as well as for crafts, which have now more or less disappeared.

The problem facing the emergent architectural heritage industry is how best to protect, promote and reproduce these skills on a scale, and at a quality, which will meet private property market and public conservation policy requirements. There is currently little common understanding, coherence, or concerted action in this field.

Scenario Learning

Given the diverse, complex and uncertain nature of the architectural heritage industry, the best approach towards augmenting decision makers' understanding of possible futures and clarifying the tasks that must be accomplished if plans are to be fulfilled and policies accomplished was held to be a process of "scenario learning". This involves constructing or developing alternative scenarios and then integrating the context of those scenarios into the decision making process.

The crucial elements of scenario thinking and learning have been described as (Van der Heijden, 1996):

- The aim of changing mental models of decision makers.
- The need to understand predictability and uncertainty.
- The need to take existing mental models of the decision makers as a starting point.
- Creating a reframing of the issues involved, through the introduction of new perspectives.

Scenario learning, as opposed to the more familiar scenario planning, is fast becoming the preferred approach because: it is not just a means of generating or acquiring knowledge, but a way of putting it to use; the strategic conversations that occur take decision makers into new substantive terrain, making them suspend their conventional beliefs and challenge historic ways of thinking and operating; learning implies discussion and dialogue, so that those involved engage each other in a free-ranging exchange of ideas, perception, concerns, alarms, and discoveries; and learning also suggests that scenarios are a continual input to decision making, spawning further reflection, review and revision of plans, strategy and tactics (Fahey & Randall, 1998). In this way, scenario learning is a means to an end, and not an end in itself.

The Exercise

A series of three scenario construction workshops were organised during the early part of 1999 with participants drawn from industry, government, the voluntary sector and education with the aims of introducing the principles of scenario planning and learning, identifying the key strategic question, establishing the critical decisions to be addressed and exploring the driving forces of change surrounding the architectural heritage industry. At the same time, a number of interviews along the lines of a 'strategic conversation' were conducted with leading figures from the industry to solicit

their best hopes and worst fears for the future. These soundings and surveys culminated in a scenario learning workshop in Dublin in November 1999 funded by the EU Leonardo Da Vinci programme at which some sixty experts from Ireland and overseas tested various strategies for the promotion and development of the European architectural heritage industry against alternative possible future scenarios for Europe. The process can simply be described as follows:

1. The Strategic Question

Resulting from the first workshop, and re-inforced by early interviews, the strategic question was set as:

“What measures should be set in train now to secure the effective promotion and development of architectural heritage skills for the future?”

In defining this question, so prosaic in appearance yet so pertinent in practice, participants in both the initial workshop and the opening interviews were asked what were the one or two vital issues that would affect the nature and direction of the architectural heritage industry over the next twenty years. Unsurprisingly perhaps, the two things they would most wish to know were:

- i. the level of government intervention in conservation and heritage
- ii. the relative degree of economic prosperity prevailing in Europe

These two fairly familiar factors were used to form the scenario matrix within which the alternative scenario logics or story lines were developed. At this stage the time horizon of 2020 was established.

"The best way yet to compare and contrast colleagues ideas and concerns"

2. The Driving Forces of Change

A combination of environmental scanning (which produced a context document), a brainstorming session at the second workshop and the later interviews identified the driving forces of change. These were the most significant elements at play in the external environment determining the operation of the architectural heritage industry. In this exercise, the “six sector system” developed by Philip Kotler (1997), and widely used in strategic planning and business management was used, whereby all aspects of change were placed in one of six categories: Culture, Demography, Economics, Environment, Governance and Technology. This is a simple convenience for assembling material and ordering thought. It is neither prescriptive nor proscriptive in intent.

"Education and training seem to be the key"

3. *Issues and Trends*

From the exploration of the general driving forces of change more particular issues and trends pertaining to the architectural heritage industry were identified. Again, these were the result of brainstorming sessions at the second workshop, and were to drive the plots of the alternative scenarios and help determine their outcome. In all, some 125 issues and trends were diagnosed and classified according to sector – cultural, demographic, economic, environmental, governance and technological. No clustering and little refinement took place at this stage.

"The best results will obviously come from collaboration"

4. *Impact and Uncertainty*

Next, the issues and trends identified at stage 3 were evaluated for the likely impact and degree of uncertainty they would have upon prospective priorities, policies and plans. For clarity and simplicity these issues and trends, once analysed, were then plotted on a grid according to their perceived impact and uncertainty. This is shown in Exhibit 1 below:

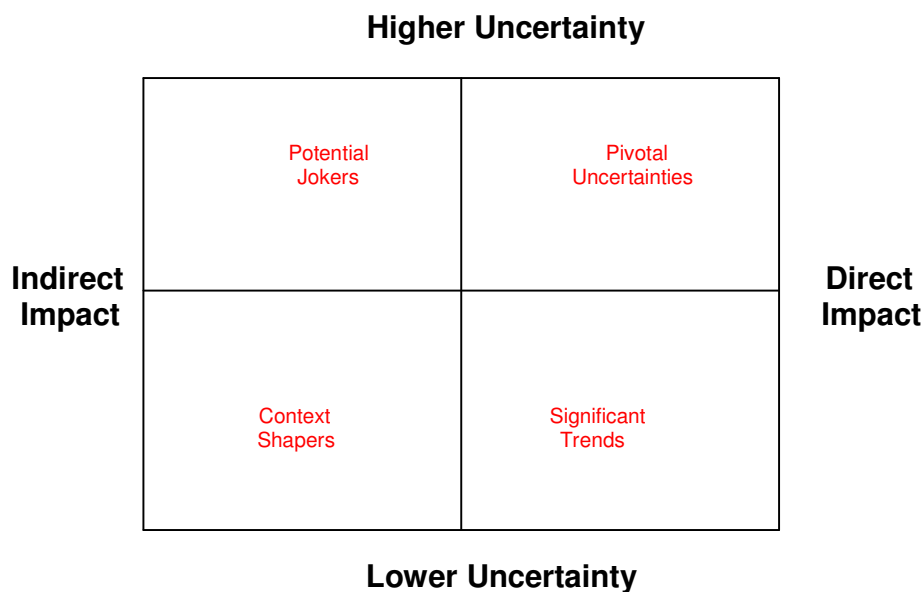


Exhibit 1: Positioning Issues and Trends

Each factor was taken in turn and positioned following discussion. Relative, rather than absolute, positioning being the point. Each quadrant has a different interpretation as follows (Galt *et al*, 1997):

Pivotal Uncertainties: these are likely to have a direct impact, but their outcome is uncertain. They are pivotal in the sense that the way they turn out may have strong

directional consequences. These are the areas that will determine the shape of different scenarios.

Potential Jokers: these are pretty uncertain as to their outcome and less relevant. However, it could be dangerous to treat them as mere 'noise'. They represent factors to monitor on the 'corporate radar' in case they move strongly to the right.

Significant Trends: these impact more directly upon the question in hand and it should be possible to anticipate their effect.

Context Shapers: these are relatively certain and, therefore will surely shape the future context.

In the scenario building exercise described here, the factors in the context shapers quadrant were woven into every scenario when fully written-up. The significant trends also ran through each scenario, but the way in which they were developed was different in each one. The potential jokers were also useful factors to bring into a scenario when a surprise or distinguishing element was felt desirable (Ibid). It was the pivotal uncertainties, however, that were central to the construction of alternative scenarios.

I gained some valuable insights into what has to be done

5. Creating the Scenarios

It was decided to construct a set of four plausible, differentiated, internally consistent, yet challenging, scenarios of Europe in 2020 against the two axes of economic growth and government intervention. The story line summaries are described below, and illustrated in Exhibit 2.

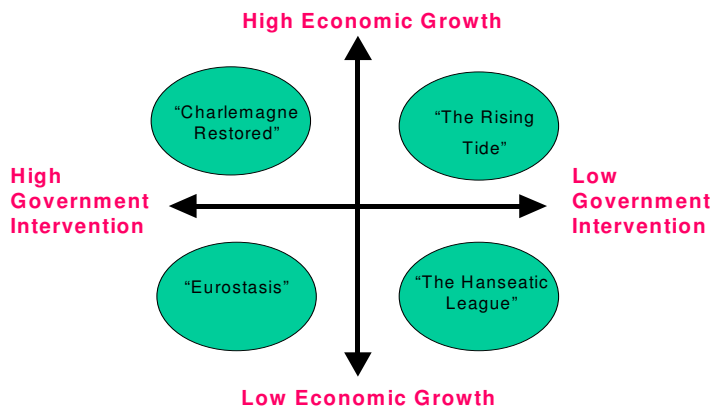


Exhibit 2: Four Scenarios of 2020

“CHARLEMAGNE RESTORED”

- High Economic Growth
- High Governmental Intervention

It is a 'transformed world' where social and economic change gives rise to enlightened policies and voluntary actions that shape or supplement market forces. Civic society has the power to frame social and political agendas; there has been the 'greening' of a growing number of global corporations; and the imaginative use of new technologies has expanded communications networks and services world-wide. There is a trend towards a more peaceful, equitable and environmentally stable world. Greater access to information exists, power is more widely shared, new grass roots coalitions shaping what governments and institutions have sprung-up, and the form of governance has generally been broadened. Communities make use of market forces and private enterprise, but align free market forces with social and environmental goals, accepting economic competition but not losing sight of the need for making deliberate social choices and meeting basic human needs.

- * A confident, prosperous and united Europe.
- * True feeling of 'European' identity.
- * A movement towards a discovery, or rediscovery, of certain fundamental values.
- * Education accessible and affordable.
- * 'Greying' of the population.
- * Mounting inward migration pressures from the east and south.
- * Europe and America vie for trade with China.
- * Transnational corporations start to clash with European government.
- * Pensions time-bomb beginning to tick.
- * A dynamic and fast-growing European economy creates jobs and wealth with low unemployment.
- * The Commission for the Regulation of European Environmental Protection (CREEP), directs, monitors and enforces strict sustainable policies in all areas of planning and development.
- * Tax reforms favour ecologically beneficent industries and punish polluters.
- * Grey Party climbing to power. Teenage anarchists subverting societal protocols and policies through internet activism.
- * Electric powered transportation an economic and efficient reality.
- * Threat of urban terrorism (nuclear and toxic) from disadvantaged developing world.

“THE RISING TIDE”

- ❑ High Economic Growth
- ❑ Low Governmental Intervention

It is a 'market world', where the United States extended economic boom shows that free market policies, corporate restructuring and entrepreneurship offer a model for the rest of the world leading to increased global market integration, unprecedented technological innovation, pressures for independence of thought and action, and rising standards of literacy in most parts of the world. Free market reforms have moved governments everywhere to downsize, deregulate and privatize. The pace of innovation breeds new opportunities at astonishing speed. Generally, the thesis is: let markets work, turn loose the private sector, break down the barriers to free trade, and all will be well. Sooner or later, rapid economic growth and increasing prosperity will happen in virtually every region of the earth. The rising tide floats all boats.

- * A prosperous but fragmented Europe sees government decline and private sector agencies dominate.
- * Europe a cluster of city states.
- * Trans- and multinational corporations determine economic policy. Chambers of Commerce influence political agenda.
- * Concern about social and environmental issues diminishes.
- * Security provided by private operators.
- * Social framework under stress.
- * Massive inward investment and acquisition from China. Massive outward investment likewise.
- * Commoditization in commerce through de-integration of business a potent force.
- * Widescale in-migration leading to a polarisation in society with consequent conflict and the formation of ghettos.
- * Increasing convergence in production methods and consumption patterns.
- * Education available at a price.
- * Euro accepted and used, but highly volatile against the US Dollar and the Japanese Yen.
- * Major moves to completely liberalise still regulated aspects of European markets.

“THE HANSEATIC LEAGUE”

- ❑ Low Economic Growth
- ❑ Low Governmental Intervention

It is a ‘Mad Max’ world, where oil production declines and no serious alternative energy resources emerge. The notorious ‘greenhouse effect’ is kicking-in, as the earth’s climatic and ecological systems begin to malfunction. In the financial markets the bubble has burst. Both physical and social infrastructure have gradually been deteriorating along with the natural environment, and a series of pandemics have weakened the world’s population. There have been disastrous regional famines, and a spate of water wars. National governments have become mere symbolic relics, and city states begun to emerge as the bastions of civic power and authority. The disparity of wealth is more and more skewed, and severe social upheaval results. Global criminal organisations operate with seeming impunity, corrupting many developing nations, while new and more deadly forms of terrorism proliferate.

- * Europe divides into three broad zones: a league of rich, orderly cities and provinces in the north and north-west; a slumbering and relatively docile, ‘club mediterranean’ in the south; and a strife-riven east and south-east.
- * European government collapses in economic ruin and political intrigue. Euro discredited, and the American dollar and Chinese Renmenbi more widely used.
- * Fortress communities are established around and within cities.
- * New barriers towards movement are erected.
- * Incomes and living conditions decline in rural areas.
- * Health conditions deteriorate in deprived areas. Threat of plague.
- * Organised crime grows and criminal fraternities control governments in parts of south and east Europe.
- * Disenfranchised and disadvantaged voices grow louder, but there is no one to listen.
- * Asset stripping abounds from American corporate interests in northern regions and from Far and Middle Eastern families elsewhere.
- * Nihilistic and terrorist groups grow. Breakdown of law and order in the inner cities.
- * Information increasingly sparse and unreliable. Communication networks spasmodic and unsound.
- * Heritage sites and buildings vulnerable and deteriorating.
- * Sanitized North contrasts with polluted East and decaying South.

“EUROSTASIS”

- ❑ Low Economic Growth
- ❑ High Governmental Intervention

It is a ‘fortress world’, where the global market boom remains highly concentrated. Fewer than two dozen developing nations benefit to any significant degree from private investment, while in more than 70 countries incomes are lower than they were in 2000. Islands of prosperity co-exist within an ocean of poverty and frustration. Economic stagnation spreads as wealthy enclaves devote ever more resources to maintaining security and stability. Inevitably, there is growing conflict between rich and poor, with a future threat of escalating violence and social disorder. Coupled with this, a rising tide of illegal immigration washes around the world. Furthermore, the dark side of capitalism is all too evident in the sweatshops and horrendous pollution of industrialising Asia, and in the expanding popularity of gated communities in the United States. Europe, however, remains as a relative haven of comfort and security – but at a high economic cost.

- * America dominates the high ground of research and development, and the Far East the foothills of technology transfer and mass production.
- * A collaborative and enlarged Europe experiences relative stability, but comparatively slow income growth and low productivity.
- * Quality of life becomes as, if not more important than gross national product.
- * Disparities in wealth diminish through programmes of equalisation.
- * A slightly slower pace to innovation and development allows people to feel a restored sense of competence, and a confidence of operating in a local environment which they trust and understand.
- * Workfare as opposed to welfare predominates.
- * Steady influx of migrants and the formation of significant ethnic communities.
- * Transition to the euro has worked smoothly and is free from speculation.
- * Europe establishes a strong reputation for jurisprudence, environmental performance measurement, and dispute resolution.
- * High unemployment, coupled with ageing population, leads to adverse dependency ratio and pressure on public finances.
- * Disappointing economic performance, however, is leading to protectionist tendencies and a slackening commitment to the single market.
- * Youth Oppose Brussels party (YOB's) gaining in popularity.
- * Tax riots starting to break out in a number of cities.

These scenarios were developed at various levels, which have been likened to the theatrical production of a play (Galt, et al, 1997):

- i. **The Stage** – where the ‘context shapers’, which are pretty inevitable, tend to underpin all the scenarios at a given time and are common throughout.
- ii. **The Scenery** – where the ‘significant trends’, which can be quite complex because of the way they interact with each other, are modified from one scenario to another, whilst retaining their basic condition.
- iii. **The Dramas** – where the ‘pivotal uncertainties’, which are highly differentiated, tell fundamentally contrasting stories of possible future events.
- iv. **The Actors** – where the highly personalised, and greatly uncertain, ‘potential jokers’ give a wild card interpretative element to each of the tales.

In line with this analogy, the actual delivery of the scenarios to seminar participants took the form of staged presentations – a funeral oration, a short story, a mock meeting to design an architectural skills syllabus, and a news broadcast from 2020.

"It was like test flying heritage policies in an environmental windtunnel"

6. Scenario Testing & Interpretation

Following the presentation of scenarios, which took the form of stories told by actors set against a background of images and sound, participants at the seminar drawn from across Europe were allocated between four different workshops to tackle the respective scenarios. Policy proposals formulated from an analysis of the issues and trends, the scenario construction process and the selective interviews were tested against each vision of the future. The general policies that performed best across the range of scenarios can usefully be summarised as follows:

- Foster an awareness of the need for sustainability through radical initiatives in education at all levels.
- Conserve all aspects of cultural heritage as well as architectural with an integrated approach towards heritage policy.
- Introduce innovative fiscal measures to promote architectural heritage skills and building conservation.
- Require every community area to identify key architectural heritage priorities for protective preservation and active conservation.
- Set suitable ‘benchmarks’ of best practice against which the execution of policy and the progress of change can be gauged.
- Nurture the revival of traditional craft skills through incentives, collaboration and competition.
- Place greater emphasis upon the implementation and enforcement of policy.
- Promote the re-use of buildings and the re-cycling of materials.

- Establish a set of parameters or criteria by which planning policies and development decisions are made in the context of architectural heritage against such fundamental principles as irreversibility, precaution, subsidiarity and empowerment.
- Finance and inaugurate skills training courses as an imperative whilst the economic climate is relatively healthy.

These policies ran across all countries participating and, with only slight variation, in all the scenarios explored. They were all considered to be sufficiently robust to withstand significant change, yet eminently flexible in prospective operation. The hallmarks of good policy.

For the Irish participants two particular policy proposals were proposed:

1. A study of the need for architectural heritage skills training and education within the construction industry in Ireland.
2. A feasibility study conducted to identify the location, accommodation, funding, operation and management of an Architectural Heritage Skills Centre for Ireland.

Both these projects are now underway.

"Boundaries between architectural heritage and other aspects of culture heritage will begin to blur"

LESSONS LEARNED

Whilst some tangible and positive results emerged from this exercise for the *European Foundation for Heritage Skills*, and more especially for the Irish hosts of the project, a number of lessons were learned for future events of a similar kind. These can briefly be summarised as follows:

- The main outcome of such exercises is the fostering of an ability to think, converse, understand and act differently and with others. In this, the exercise in question was a great success.
- There is invariably a problem of conveying the essentials of strategic scenario planning and learning to participants new to the process. This could be overcome by producing a video film of an exemplary scenario exercise to initiate participants, or by conducting a short simulation exercise at the outset of a project.
- The role of facilitators and rapporteurs is crucial. Special skills are required, and special training required. Inexperienced people in these roles can seriously prejudice the process and outcome.
- There was a lack of 'remarkable people' to stimulate lateral thinking or inject novelty into the process.

- Participants were somewhat random and eclectic in selection, and insufficiently diverse by background.
- Inadequate attention was paid to identifying the leading indicators, triggers or signposts that alerted or pointed to changing future directions or end-states. This was seen as a major weakness.
- There is a need to develop the art of interviewing leading figures and engaging them in a strategic conversation. This was found to be very different to conducting the conventional structured interview.
- Too much focus was placed upon significant trends, and too little on pivotal uncertainties.
- Throughout the entire process the art of asking ‘the right question’ needs to be cultivated. This is both a matter of ensuring adequate preliminary research is undertaken and of promoting the necessary interrogatory skills.
- The scenarios could have been better named to evoke more memorable and meaningful situations and circumstances.
- The use of a sympathetic and experienced journalist to write-up the scenario stories pays dividends.
- Greater attention could have been paid to constructing a more suitable framework within which the results of the scenario testing and interpretation stage could have been placed.

Notwithstanding the above reservations, however, there was a common consensus among all those involved that scenario learning provides an incomparable vehicle for future proofing present policy. To echo the words of T.S. Eliot in his ‘Four Quartets’:

*“Time present and time past
Are both perhaps present in time future,
And time future contained in time past*

*At the end of our exploration
Will be to arrive where we started
And know the place for the first time”*

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Biographies for the Authors

John Ratcliffe

John Ratcliffe is a chartered surveyor with over thirty years experience as an academic and a consultant in the fields of urban planning and real estate development. Currently he is Director of the Faculty of the Built Environment at Dublin Institute of Technology in Ireland.

The author of a number of books and numerous articles on land and property matters, John Ratcliffe has also acted as a consultant to national and international organisations and agencies in both the public and private sectors.

Over the past six years or so he has become heavily involved in the application of the Foresight Principle and the use of Scenario Planning and Learning in the exploration of issues and policies relating to the built environment .

Maurice Murphy

Maurice Murphy is a Lecturer in Construction Management in the Faculty of the Built Environment at DIT. He has extensive experience as a consultant in the field of architectural and building heritage skills, and was the project manager for the European Foundation for Heritage Skills in this scenario learning exercise.