

An Introduction to Scenario Planning: A Tool to Enhancing Strategic Foresight and to Raising the Effectiveness of Strategic Planning¹

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1. What is Scenario Planning?

Scenario planning is a structured way for organisations to think about the future. Scenarios are stories about how the future might unfold and how this might affect an issue that confronts an organization. They are possible views of the world, described in narrative form, that provide a context in which managers can make decisions. So far, scenario planning has been a foresight methodology extensively used by large multinational corporations (including Royal Dutch Shell, Motorola, Disney and Accenture) for preparing their strategic decision making.

By seeing a range of possible worlds, decisions will be better informed, and a strategy based on this knowledge and insight will be more likely to succeed. Scenarios do not predict the future, but they do illuminate the drivers of change, whose understanding can help managers to take greater control of the situation. Scenario planning provides a structured process for people to start ‘consciously’ thinking about the longer-term future and possible implications for strategy today. Scenarios strengthen a manager’s strategic management toolbox: while traditional methods focus on the past, scenario planning focuses on the future. Combining both the past and the future could make thinking about strategy stronger and could promote responsiveness, flexibility, and competitive advantage.

Paul Schoemaker has found that the greatest merit of applying the scenario planning method for enhancing strategic thinking would consist in simplifying the avalanche of data into a limited number of possible states². Each scenario tells a story of how various elements might interact under certain conditions. Schoemaker further elaborates on why scenario planning differs from other planning methods, such as contingency planning, sensitivity analysis, and computer simulations. Contingency planning examines only one uncertainty, such as “What if X happened?”, while scenarios explore the joint impact of various uncertainties deemed as equal options. Sensitivity analysis examines the effect of a change in one variable, keeping all the other variables constant. This might make sense for smaller changes. However, in reality, if the change is much larger, other variables will not stand still. Scenarios, on the other hand, change several variables at a time, without keeping constant the others. Scenarios are more than just the output of a complex computer simulation model. They attempt to interpret such an output by identifying patterns and clusters

¹ This is an excerpt from the PhD thesis of the author, titled: „WESTERN CONFRONTATION WITH RUSSIA: SECURITY SCENARIOS PLANNING IN THE GEOPOLITICAL AREA FROM THE BALTIC SEA TO THE WIDER BLACK SEA (INTER-MARIUM)”, that has been defended in October 2019 at the National School for Political Studies and Public Administration Bucharest, Romania, and it is going to be published soon.

² Paul Schoemaker- “Scenario Planning: A Tool for Strategic Thinking”, Sloan Management Review, Winter 1995, pp.26.

among the millions of possible outcomes a computer simulation might generate. Hence, scenarios would go beyond objective analyses to include subjective interpretations. He eventually concluded that scenario planning would attempt to capture the richness and range of possibilities, while stimulating decision makers to consider changes they would have otherwise ignored.³

According to Steven Weber, scenario planning has three main objectives: (1) “to draw out fundamental theoretically driven assumptions about the major driving forces that impinge on events”; (2) “to develop and analyze interaction possibilities among those driving forces”; (3) “to organize that complexity into a small or moderate number of possible future scenarios.”⁴ In a word, Weber emphasizes the importance of identifying basic assumptions and arguments for each issue addressed with a view to connecting them into a set of possible scenarios for the future. Therefore, the very purpose of the scenario building methodology would call for identifying connections among a variety of theoretical approaches in the field of international relations.

Given the difficulty of prediction in the social sciences and the complexity of international politics in general, and of the regional studies in particular, there is enough room for both scholars and regional experts or policy makers to use scenario planning as a method for analyzing the logic of the upcoming events, by making use of various insights derived from a variety of relevant theories and approaches.

Despite the difficulty of prediction in world politics some elements of analysis are easy to figure out, regardless of the used theoretical background. For instance, it is hard to deny that U.S. power and influence is one of the critical factors in understanding the present world. In this sense, Robert Jervis argued that: “Since the United States is the most influential power in the world, to predict the future of world politics requires us to predict the future of American foreign policy.”⁵ However, when it comes to the study of a specific region in world politics things seem to become more complicated. While understanding important variables, such as the U.S. foreign policy, may help in analyzing more accurately the future course of international politics in general, in order to predict the future dynamics of regional politics in particular, something more is needed.⁶

Advocates of scenario planning in international relations are therefore right in their assumption that “[scenario planning] is a complementary toolkit that has promise for generating new ideas and arguments, broadening the range of causal relationships that we study, and tracking the evolution of world politics through periods of

³ Ibidem.

⁴ Steven Weber- “Prediction and the Middle East Peace Process,” *Security Studies* 6-4 (1997), pp. 171-172.

⁵ Robert Jervis- “The Future of World Politics: Will It Resemble the Past?” *International Security* 16-3 (Winter 1991-92), pp. 41.

⁶ Fred Halliday- “The Middle East in International Relations: Power, Politics and Ideology” (Cambridge: Cambridge University Press, 2005), pp. 1-17.

discontinuous change, in ways that promise to better over time both understanding and action.”⁷

In the above quoted article, Paul Schoemaker provided his insight into how scenario planning attempts to compensate for two common errors in decision making: the under-prediction and the over-prediction of change⁸. That would be actually achieved through charting a middle ground between the two that would help in expanding the range of possibilities which could be seen, while keeping us off drifting into science fiction. Scenario planning splits knowledge into two areas: (1) things we believe we know something about; (2) elements we consider uncertain or unknowable. The challenge here will be to separate aspects we are very confident they will remain under the incidence of the momentum of continuity from those that are largely uncertain. However, according to Schoemaker, it is not important to account for all possible outcomes of each uncertainty; simplifying the possible outcomes is sufficient for scenario planning, since the purpose is not to cover all possibilities, but to circumscribe them. Those demarches would enable a broad description of the future in terms of fundamental trends and uncertainties. This dichotomy might create a shared framework for strategic thinking that would encourage diversity and sharper perceptions about external changes and opportunities.

3. Scenario Planning: A Tool for Enhancing Strategic Foresight and Planning

Scenarios are a powerful tool in strategic planning. They are particularly useful in developing strategies to navigate organizations and public institutions (national or international) in highly uncertain times. According to Charles Roxburgh⁹, the following features make scenarios a particularly powerful tool for understanding uncertainty and developing strategy accordingly:

(1) Scenarios broaden the scope of our thinking by enabling the development of a wider range of possible outcomes and the sequence of events that would lead to them. This is particularly important in order to prevent us to expect that the future will resemble to the past and change will occur only gradually. By demonstrating how—and why—things could quite quickly change, scenarios may lead to increased preparedness to cope with future challenges.

(2) Scenarios help uncover inevitable or near-inevitable outcomes. Some of the drivers of change identified during the underlying analysis of a scenario may result in outcomes that are the inevitable consequence of events that have already happened, or of trends that are already well developed. In developing scenarios, it is therefore

⁷ Steven Bernstein et al.- “God Gave Physics the Easy Problems: Adapting Social Science to an Unpredictable World,” *European Journal of International Relations* 6-1 (2000), pp.71.

⁸ Paul Schoemaker- op.cit., pp 27.

⁹ Charles Roxburgh- “The Use and Abuse of Scenarios”, from <http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-use-and-abuse-of-scenarios>, November 2009.

recommended to search for predetermined outcomes—particularly unexpected ones, which are often the most powerful source of new insight into the issue.

(3) Scenarios promote innovative thinking by offering opportunities to challenge conventional wisdom. Particularly in highly hierarchical organizations (such as in public institutions) people are often afraid to disagree with the most senior (political) executives. Scenarios may provide a safer environment incentivizing people to think from “outside the box”. They may also promote innovative thinking that might sometimes counter the core assumptions underpinning the current strategy of the organization. Scenarios may even expose alternative futures in which such assumptions may no longer be true.

From a future oriented perspective, there are three types of knowledge:

1. Things we know we know;
2. Things we know we don't know;
3. Things we don't know we don't know.

Russo and Schoemaker believed that although various biases -like overconfidence, under- and over-prediction, and the tendency to look for confirming evidence- plagued all three, the greatest havoc is caused by the third.¹⁰ However, our efforts at enhancing strategic foresight can gain much improvement by focusing on two and three, since this was where scenario planning would bring added value. In addition, “the scenario method continually pushes the envelope of possibilities since it views strategic planning as collective learning.”¹¹

Strategic foresight can be gained through more than one lens. Supposed to encompass the geopolitical, socio-economic, technological, cultural, and military objectives and constraints of the relevant international actors, scenarios are alternate futures in which today's decisions may play out. According to Jay Ogilvy, a good set of scenarios will contain two to five different narratives. “More than five scenarios tend to get confused with one another. Three scenarios run the danger that people will try to pick the most moderate or most apparently plausible and forget about the other two. Four is a good number — neither too many nor too few. [...] Good scenarios should have twists and turns that would show how the environment might change over time. Each scenario should contain enough detail to assess the likelihood of success or failure of different strategic options.”¹²

Jay Ogilvy also believed that “scenarios by themselves do not determine strategy any more than a forecast does. A strategy needs to be developed in light of a set of scenarios. Given a set of scenarios, there are several routes from scenarios to strategy. Rather than picking one scenario and betting the company, it is far better to

¹⁰ J. Russo and P. Schoemaker- “Managing Overconfidence”, Sloan Management Review, Winter 1992, pp. 7-18.

¹¹ A de Geus- “Planning as Learning” Harvard Business review, March-April 1988, pp 70-74 and P. Senge—“The Fifth Discipline”, New York: Doubleday, 1990.

¹² Jay Ogilvy- “Scenario Planning and Strategic Forecasting” from <http://www.forbes.com/sites/stratfor/2015/01/08/scenario-planning-and-strategic-forecasting/#4852c7226b7b>, published on 8 January 2015.

find a strategy that is robust across the range of scenarios. [...] No brainers¹³ would create such a strategy, but not all scenarios have no brainers. Sometimes the relevant scenarios are sufficiently diverse that no single strategy will prevail across all of them. In that case it's a good idea to have a strategy appropriate to each, then attend very closely to early indicators that would tip you to the likelihood of one scenario over the others."¹⁴ However, sometimes scenarios may be developed after a strategy has been determined. In that case, the scenarios may serve as a kind of benchmark to stress-test the strategy.

Proponents of the scenario method have suggested forward reasoning as a useful tool in making scenarios of future events in international politics¹⁵. However, the emphasis on forward reasoning does not necessarily mean that scenario thinking simply ignores the lessons of the past. Rather, by emphasizing looking forward, scenario analysis enables policy makers to "march into the future looking backward, guided by the accumulated lessons of past experience."¹⁶ Similarly, some scholars have underscored the advantage of forward reasoning since it "opens our analyses to the possibilities of alternative futures, but forces discipline in tracing likely paths created by important drivers in combination with significant uncertainties."¹⁷ It is critical to distinguish between important driving forces which mostly make the course of future events, and some uncertainties which are important yet impossible to figure out at the present moment.

Some scholars, however, emphasize the advantage of using the theories of international relations in predicting future world events. For instance, in his article about the future of Europe, John Mearsheimer pointed out that to better understand the future we need to understand the past and learn how to apply the lessons of the past into unfolding history: the main task of scholars who are willing to project into future uncertainties is "to decide which theories best explain the past, and will most directly apply to the future; and then to employ these theories to explore the consequences of probable scenarios."¹⁸ As Mearsheimer reminds us, in the field of international relations, the dominant type of theory used for the analysis of the future involves the use of one paradigmatic approach to provide the most plausible upcoming event, based on that specific theoretical reasoning. Even if using theories to predict linear courses of events is clear and straightforward, it is also risky, given that in the process of applying these theories there is always some possibility for the rise of uncertainties and surprises. The problem, however, is that making predictions based on established theories and approaches can easily be disrupted by unexpected contingencies. In other words, in the real world of politics, too many uncertain factors are involved, and thus politics can be understood as a non-linear process toward

¹³ According to Jay Ogilvy, "no brainers" are strategic options that look good in any and all scenarios.

¹⁴ Jay Ogilvy- Op.cit.

¹⁵ Dong-ho Han- "Scenario Construction and its Implications for International Relations Research", *The Korean Journal of International Studies*, Vol. 9, No. 1 (June 2011), 39-65.

¹⁶ Allen Hammond- "Which World? Scenarios for the 21st Century", Washington, D.C.: Island Press, 1998, p. 14.

¹⁷ Steven Bernstein et al. op.cit., pp.69.

¹⁸ John J. Mearsheimer- "Back to the Future: Instability of Europe after the Cold War," *International Security* 15-1 (Summer 1990), p. 9.

unpredictable outcomes¹⁹. This is why, after observing the abrupt end of the Cold War, John Lewis Gaddis pointed out that “we tend to bias our historical and our theoretical analyses too much toward continuity... we rarely find a way to introduce *discontinuities* into theory, or to attempt to determine what causes them to happen.”²⁰

Professor Torsten Wulf argued in a working paper²¹ that a scenario-based approach to strategic planning can serve as an innovative management tool in the field with the potential to overcome discrepancies between the planning and process schools of strategy. The scenario-based approach to strategic planning is an open and creative approach that considers multiple strategy options and takes multiple perspectives into account. Simultaneously, it overcomes the weaknesses of traditional scenario planning by offering a systematic process to scenario creation that is built on specific management tools and is thus easy to implement. The outcome of this approach would be a core strategy that is complemented by several strategic options derived from different scenarios.

Strategic planning first emerged in the 1960s. Its main aim was to create – on the basis of specific analytical tools – the one ‘best’ strategy that was then transformed into a catalogue of actions and executed²². In his influential book “The Rise and Fall of Strategic Planning”, Henry Mintzberg laid the foundation for the process school of strategy, arguing that successful strategies cannot be analytically planned but rather emerge in a process that involves creativity, intuition and learning²³.

Scenario planning originated in the 1970s²⁴. The main goal of scenario planning is to develop different possible views of the future and to analyze their possible consequences. Thus, scenario planning helps managers to challenge their assumptions and to be better prepared for possible future developments. The value of scenario planning does not lie so much in the creation of scenarios, but in the discussion of their consequences. Therefore, professor Wulf argued that scenario planning would provide the flexibility and openness of strategic thinking postulated by Henry Mintzberg.

The Scenario Planning Methodology

There are many authors who offered scenario planning methodologies. These include the steps taken from the identification of the issue and of the main drivers and critical uncertainties, all the way through to scenario writing and testing. In principle, scenario planning methodologies are quite similar. However, for the sake of this research

¹⁹ Robert Jervis- “System Effects: Complexity in Political and Social Life”, NJ: Princeton University Press, 1997, pp. 29-91.

²⁰ John Lewis Gaddis- “International Relations Theory and the End of the Cold War,” *International Security* 17-3 (Winter 1992-93), p. 52.

²¹ Torsten Wulf and al.- “A Scenario-Based Approach to Strategic Planning”, Working paper 1/2010, Center for Scenario Planning.

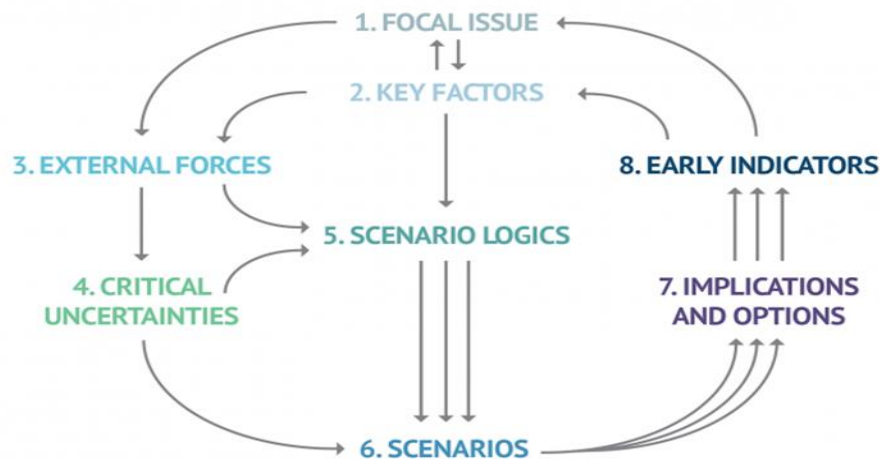
²² Ansoff, H. Igor- 1965, “Corporate Strategy”. New York: McGraw-Hill.

²³ Mintzberg, Henry- 1994, “The Rise and Fall of Strategic Planning”. New York: The Free Press.

²⁴ Phelps, R., C. Chan and S. C. Kapsalis- 2001, “Does scenario planning affect performance? Two explanatory studies”. *Journal of Business Research*, pp. 223-232.

report, I have chosen to display in parallel the methodologies proposed by the Virtual Staff College²⁵, and by Stratfor's Jay Ogilvy²⁶, respectively. The former is mostly self-explanatory on the steps required by scenario planning, while the latter is linking scenario planning to geopolitical analysis, and it is highlighting how the two methods may work together.

THE EIGHT-STEP SCENARIO PLANNING PROCESS



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Scenarios can be built in a number of different ways. Two common approaches are categorized as normative and explorative. Normative scenarios start with an ideal and work back towards the present, whereas explorative scenarios follow a more inductive process. The Virtual Staff College's and Stratfor's methodologies are both based on explorative scenario processes. The key steps are the following:

(1) Scope, trust and permission/ Focal Issue^σ

This initial stage involves research identifying key assumptions about the future and scoping the exact theme of the scenario planning process. The most frequently asked question at this stage of the process, is 'What is the Work?' In the case of my current research the focal issue of the scenario planning process would be: What would be the status of the confrontation between Russia and the West in the geopolitical area stretching from the Baltic to the Wider Black Sea (Intermarium) in 2025-2030?

(2) Drivers/ Key Factors and External Forces^σ Identification

The list of drivers of change should include a range of social, technological, environmental, economic, political, legislative and ethical (STEEPLE), as well as geopolitical factors which may change the long-term direction of trends. The drivers of change should be succinct and indicate a direction of travel. A verb should be applied

²⁵ ADCS Virtual Staff College- "Scenario Planning: A strategic process for those concerned with the provision of public services", 2015, from <http://www.virtualstaffcollege.co.uk/>

²⁶ Jay Ogilvy- "Scenario Planning and Strategic Forecasting", 2015, from <https://www.stratfor.com/weekly/scenario-planning-and-strategic-forecasting>

^σ Stratfor's methodology.

to provide a sense of movement and communicate the direction in which the driver is pushing the future, e.g. 'Shrinking workforce and ageing population'. The drivers are then clustered and the relationship between the clusters explored. This throws up hidden drivers and 'cues' (individual key episodes or occurrences which might act as a trigger for change or can be viewed as examples of change).

External factors are geopolitical, economic, social and technological forces that are often left out of the usual business plan. Strategic plans that disregard such forces — war is an obvious example — often fail. But a good set of scenarios may also offer insight into less obvious dynamics such as migration patterns, cultural differences, new technologies, currency fluctuations, environmental issues, and/or epidemics.

(3) Ranking Drivers by Importance

The drivers are put in order of importance. The drivers placed on the importance / uncertainty matrix are relative to one another, so while all issues may feel highly important, a natural hierarchy should emerge.

(4) Ranking Drivers by Uncertainty

The drivers are then ranked by uncertainty; whether or not the outcome of the driver is certain or uncertain. Stereotypically, demographic drivers tend to be fairly certain, whereas issues of technological advancement tend to be more uncertain. This is an important part of the process and will determine what drivers are used to form the scenario architecture (i.e. the 'critical uncertainties' and the 'predetermined elements').

(5) Importance-Uncertainty Matrix/ Scenario Logics^o

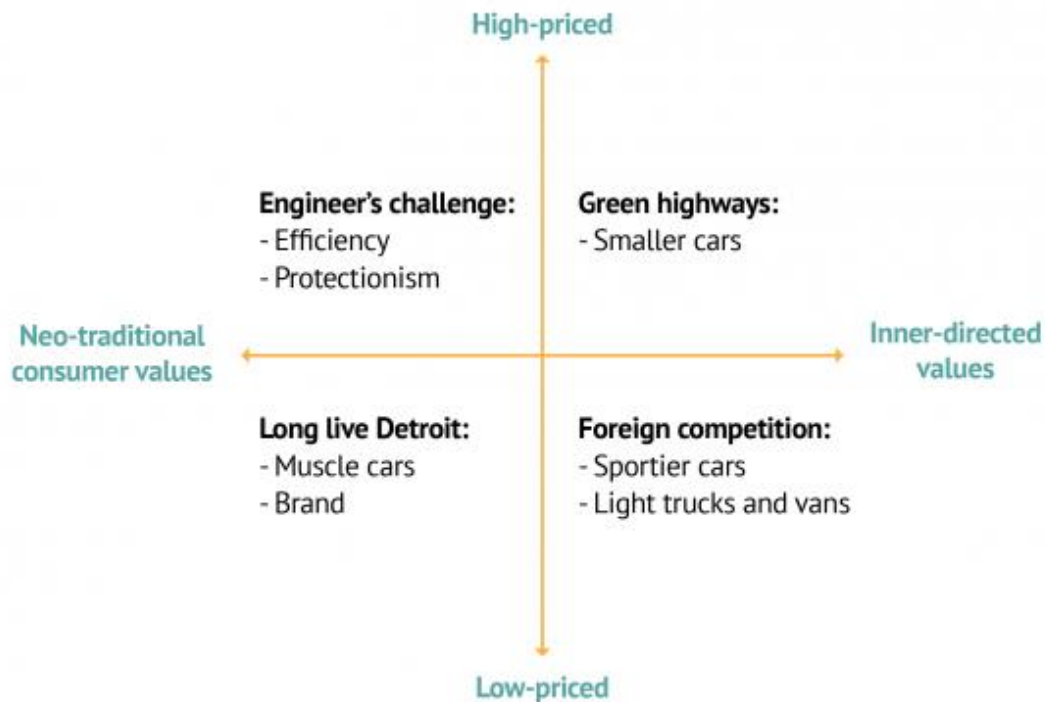
A matrix of drivers defined by importance and uncertainty is constructed. The purpose at this stage is to identify clearly the role the key drivers will have in the generation of the scenarios. That is, the 'critical uncertainties' in the 'scenario space' upon which the different futures will depend, and the 'pre-determined elements' in the 'forecasting space' which will feature in each of the different scenarios.

The challenge of step five consists in deciding how to narrow down from the virtually infinite number of possible futures to settle on just two to five that will lead to strategic insight. In the case study exemplified below, Jay Ogilvy^o has chosen two critical uncertainties to serve as the axes of a 2-by-2 matrix. Four scenario logics have been generated from the labels on the ends of the two axes.

This set of scenarios, developed for one of the Detroit Three automakers, in 1984, contained "the official future" in the lower left quadrant: low-priced fuel with neo-traditional consumer values. This was the kind of future Detroit had been planning on for many decades. But higher fuel prices and changing consumer values required them to think of new kinds of vehicles that would be appropriate for different environments. As a result, the client started thinking harder about smaller cars, as well as the minivans and SUVs that would appeal to consumers with non-traditional values.

^o Ibidem.

SCENARIO MATRIX FOR ONE OF THE DETROIT THREE AUTOMAKERS



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Geopolitical forecasts can help to formulate the “official future”. Scenario planning can then supplement the base case forecast with other scenarios that will further illuminate the base case. Scenario planning guards against the dangers of placing all of the organization's eggs into the basket of just one forecast, however well founded that forecast may be.

(6) Roll-out of Key Drivers

The notion of causality is central to scenario building. The relationship between cause and effect to reach multiple, plausible futures should be understood. In this stage it is necessary to start looking at the relationships between the drivers and also for hidden drivers or ‘cues’. Drivers chosen to construct the scenario architecture are decided at this point in the process.

(7) Scenario Building

At this stage in the process, the scenarios should be a bullet point narrative, combined with a short description that encapsulates a sense of each future. Once the scenario worlds were created and named the plausibility test of the described world or scenarios would be run by considering the question “how did we get to here?” and, through this, produce an event timeline which can be used to plot the main influential episodes which set the context for the scenarios.

(8) Scenario Writing

In depth storylines are then written as descriptive narratives. Various literary devices are used to convey a sense that the scenarios are written from the perspective of the

future. Each scenario could be used as the playing field on which plans should be drawn up, and each scenario should be plaid out to its conclusion.

(9) Scenario Testing/Implications and Options^o

After drafting the scenario sketches, a number of factors can be tested against the evidence, views and assumptions collected thus far:

- Plausibility: How believable are your stories?
- Internal consistency: How logical are your scenarios? Are there any 'leaps of faith', where the data doesn't support your scenarios?
- Surprise: The scenarios should contain an element of surprise that should capture the reader's attention.

Gestalt: How do the scenarios look on an overall level?

Then, considering the lists of strategic options appropriate to each scenario, those that show up on all or most lists may be pulled out. These are the "no brainers," that is the strategic options that look good in any and all scenarios.

The options that look good in every scenario are often associated with what are called "pre-determined elements" — aspects of the future that can be reliably predicted. And here is the realm where geopolitical analysis aligns most closely with scenario planning. Whatever can be predicted should be predicted. For the unpredictable remainder, the critical uncertainties, scenarios will capture the alternatives in coherent bundles.

(10) Immersion/ Early Indicators^o

One of the most important aspects of the process is to immerse groups of people within each scenario and prompt them to think about what the realities of living and working in that world might be. A number of prompts can be used to immerse groups in the worlds who are also encouraged to think about what would need to happen, what near term change would have to be effected to either avoid or move towards any of the world-views described in the scenarios.

The "early indicators" are the first signs of the big changes that differentiate one scenario from another. Sometimes early indicators are found in the behavior of other international actors, sometimes in the small stories within a newspaper. Sometimes early indicators take the form of new journals or publications indicating the rising popularity of a new geopolitical issue. Other times a few words in the speech of an important politician may signal some new policy changes.

^o Ibidem.

^o Ibidem.