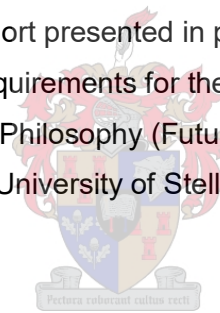


Wicked problems? Israel's discovery of oil and gas

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Research report presented in partial fulfilment
of the requirements for the degree of
Master of Philosophy (Futures Studies)
at the University of Stellenbosch



Supervisor: Prof. André Roux

Declaration

By submitting this research report electronically, I, David Lefutso, declare that the entirety of the work contained therein is my own original work, that I am the owner of the copyright thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

David Lefutso

December 2012

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Lastly, I would like to thank Prof. Roux of the Institute for Futures Research for his guidance in the completion of this work.

Dedication

This work is dedicated to my mother, Elizabeth Mapule Lefutso. Thank you for loving me unconditionally. May your spirit live forever, always!

Abstract

The research thesis seeks to determine whether Israel's discovery of oil and gas poses a wicked problem and, if so, what options could provide desirable and preferable alternative futures. The use of futures concepts such as (1) trends analysis, (2) causal layered analysis and (3) scenario development enables the researcher to analyse and synthesise the problem and suggest possible solutions.

The mapping of key drivers of change reveals that there are at least 16 trends that prevail in the Levant Basin Province and that Israel must take them into consideration for the sake of its continued existence among the community of nations.

A causal layered analysis is performed to obtain a deeper and better understanding of the conflict so as to enable the sketching of the three narratives. The latter seeks to portray alternative futures that the Israelis and Palestinians could embrace.

The use of general morphological analysis allows for the development of the Poseidon scenario, which provides (1) a framework for the resolution of the maritime borders of all the countries of the Levant Basin Province and (2) the 'buying' of peace through the sharing of revenue, oil and gas resources in the Levant Basin Province.

Keywords

Israel

Levant Basin Province

Oil and natural gas

Scenario development

Wicked problems

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List of acronyms and abbreviations

ACG	- Azeri-Chirag-Deepwater Gunashli
AIPAC	- American Israel Public Affairs Committee
bcf	- billion cubic feet
bcm	- billion cubic meters
BTC	- Baku-Tbilisi-Ceyhan
CCA	- Cross-consistency assessment
CLA	- Causal layered analysis
CODESA	- Convention for a Democratic South Africa
DEFRA	- Department of Environment, Food and Rural Activities
EEZ	- Exclusive economic zone
EGAS	- Egyptian Natural Gas Holding Company
EGPC	- Egyptian General Petroleum Corporation
EMG	- East Mediterranean Gas Company
EU	- European Union
GMA	- General morphological analysis
HUMINT	- Human intelligence
IEA	- International Atomic Agency
IEC	- Israel Electric Corporation
LNG	- Liquefied natural gas
MASINT	- Measurement and signature intelligence
MCM-7	- Multinational Commission of the Magnificent Seven
NATO	- North Atlantic Treaty Organization
OECD	- Organization for Economic Development and Cooperation
PNC	- Palestine National Council
SIGINT	- Signal intelligence
tcf	- trillion cubic feet
US	- United States (also known as the United States of America)
UN	- United Nations
UNCLOS	- United Nations Convention on the Law of the Sea
WINEP	- Washington Institute for Near East Policy
WPC	- Wicked problem characteristic

CHAPTER 1

INTRODUCTION

1.1 Introduction

Israel's occupation of land and marine resources of Palestine is the root cause of the Arab-Israeli conflict (Thomsen, 2007). The Palestinians are demanding that all land and sea that they held in 1967 be returned to them in order for them to grant Israel recognition and live peacefully side by side. A significant part of this land has been irreversibly developed during the period of occupation, and Israel's Prime Minister Benjamin Netanyahu has indicated to the United States (US) Congress in 2011 that Israel will never go back to the 'indefensible' 1967 borders. The future of Israel has been in peril since the advent of the Jewish State in 1948, and the situation is not abating.

The recent discovery of oil and natural gas in 2010 by a US-Israeli firm in the Levant Basin Province, eastern Mediterranean, poses enormous challenges and opportunities. According to Peter Odell (2001), "[o]il and gas are the drivers of modern economies and issues relating to them impinge importantly on national and international politics." The future of Israel has never been brighter in terms of its energy security needs, and the recent discovery has the potential to change the geopolitical makeup of the eastern Mediterranean states, including the whole of the Middle East. This natural endowment poses significant political risks for Israel, and the irony of this discovery cannot be underestimated. According to Gal Luft (2010), "[t]his discovery is nothing short of a geopolitical game changer." In addition, according to Walid Khadduri (2011), "[t]his geopolitical dimension is not limited to the Israeli-Palestinian or Israel-Lebanese disputes ... but will also encompass several other Arab countries, particularly those that export natural gas, and especially in the event Israel intends to export to European markets."

The Levant Basin Province discovery has been complicated by the recent and continuing instability in the Middle East; in other words, the Arab uprising is in full swing, including countries such as Syria and Iran. In addition, the ongoing Israeli-Palestinian conflict adds a problematic and complex dimension, especially with the assertion that the military operation in Palestine territory by the Israeli Defence Force, code named 'Operation Cast Lead', was a guise to appropriate these natural resources from the Palestinian Authority in Gaza and the Republic of Lebanon (Pellissier, 2010).

The Mediterranean maritime boundaries of Israel and Palestine have not been negotiated and agreed to. The United Nations Convention on the Law of the Sea (UNCLOS) regulates the manner in which maritime boundaries are demarcated among nation states. Currently, Palestine is not a nation state in terms of United Nations (UN) conventions; hence, the issue of maritime boundaries

in the Levant Basin Province will form part of the negotiations for the establishment of a future Palestinian State. Furthermore, Israel has not signed or ratified the 1982 convention because of its fears that arbitrators appointed by the UN could be biased against it.

1.2 Problem statement

The theoretical basis for this research is what is termed 'wicked theory'. The researcher establishes whether the nature of the problems confronting Israel's discovery of oil and gas in the Levant Basin Province exhibited the characteristics of wicked problems. Wicked problems are social problems [economic and political] which are ill formulated, where the information is confusing, where there are many clients and decision-makers with conflicting values, and where the ramifications in the whole system are thoroughly confusing (Churchman, 1967).

In terms of the wicked theory, "[t]he search for scientific bases for confronting problems of social policy is bound to fail, because of the nature of these problems. They are "wicked" problems, whereas science has developed to deal with "tame" problems" (Rittel & Webber, 1973).

1.3 Research objectives

The aim of the research is to contribute towards the finding of a desirable solution to the impasse in Israeli-Palestinian conflict by applying futures and other associated concepts to deal with their wicked problem. The discovery of oil and gas has opened up the possibility of finding peace and the resolution of the conflict, by being a significant lever to bring all parties to the conflict to a table for the discussion of a desirable and preferable future for both Israel and Palestine. Hence, the objectives of the research are stated as follows:

- a) Mapping the key drivers of change of the Levant Basin Province.
- b) Conducting a causal layered analysis to obtain a deeper and better understanding of the conflict.
- c) Developing possible future scenarios from the interactions of the key drivers of change and other factors in the external environment for the negotiation of an agreement on the future maritime borders of Israel.

1.4 The research questions

This research thesis wishes to explore the extent to which futures concepts and techniques can assist in providing a deeper and clearer understanding of the current conflict and future possibilities of lasting peace between Israel and Palestine in the Levant Province Basin. The discovery of oil and gas has added another complication in the Israeli-Palestinian conflict. From a researcher's critical point of view, the following principal research questions are pertinent:

- a) Are the maritime borders of Israel and Palestine the new frontier of conflict for the two countries?
- b) How would a desirable and mutually beneficial settlement of maritime borders between Israel and Palestine affect the geopolitical landscape of the eastern Mediterranean, especially with regard to Lebanon, Turkey, Egypt and Syria, including Iran?
- c) Can Israel and Palestine 'buy' peace through the sharing of revenue, oil and gas resources in the Levant Basin Province? Or is the burden of the past far greater than the pull of the future?

1.5 Research design and methodology

The identification and selection of the appropriate futures tools and methods for conducting futures research are very important. In the tradition of futures studies, the researcher chose a combination of tools and methods to accomplish the goals of the research. The tools and methods that were deemed suited to the purpose of the research were (1) trend analysis, (2) causal layered analysis and (3) scenario development.

1.5.1. Trend analysis

Trend analysis was used for the Levant Basin Province surveillance and monitoring (as a precursor to the horizon scan), for policy analysis, for risk analysis (uncertainty) and for the projection of a desired and preferred future (Futures for Regional Development, 2007), for both Israel and Palestine. The use of this method in the Levant Basin Province uncovered the drivers of change, risk factors, future impacts and policy implications.

1.5.2. Causal layered analysis

A detailed causal layered analysis (CLA) was conducted to reveal the emerging stories behind the Israeli-Palestinian conflict. This futures tool was developed by Sohail Inayatullah and comprises four main levels of reality, namely (1) litany, (2) systemic causes, (3) worldview and (4) myth-metaphor (Inayatullah, 2009). This method enabled the development of three very rich narratives, which sought to present alternative futures for both Israel and Palestine.

1.5.3. Scenario development

Scenario building was used to assess the key drivers of change and any factors in the external environment that had a bearing on strategies to be adopted for the creation of a desirable and preferred future for the Israelis and Palestinians. It is important to note that scenario building focuses on plausible futures and not trends, which "eventually change direction and speed as time

passes” (Cornish, 2004). Scenario building will assist in developing an array of possible futures from the interactions of the key drivers of change and other factors in the external environment.

1.6 The study area

The location of the Levant Basin Province is depicted in Figure 1.1.

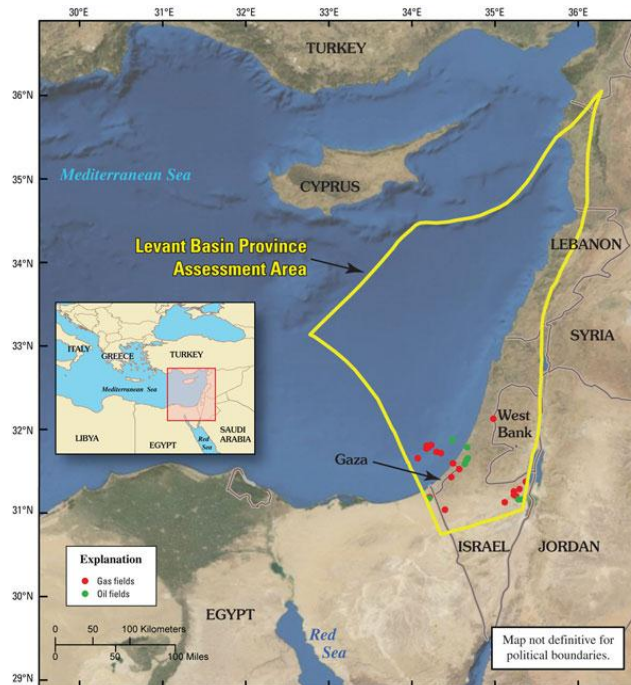


Figure 1.1: Levant Basin Province

Source: US Geological Survey, 2010

The Levant Basin Province is an area of approximately 83 000 km² (US Geological Survey, 2010). Cyprus is located to the west, Gaza and Israel lie to the south, and Lebanon and parts of Syria lie to the east. In addition, Egypt is located in the northwest.

1.7 Outline of chapters

The thesis comprises seven chapters. Chapter 1 presents a general introduction to the research. Chapter 2 presents a background to the oil and gas politics in the Levant Basin Province. In Chapter 3 a trends analysis is conducted to better understand the dynamics and complexities of the recent discovery of oil and gas in the Levant Basin Province. A detailed causal layered analysis is conducted in Chapter 4 to analyse the causes of the Israeli-Palestinian conflict. Chapter 5 discusses literature on wicked problems and its application to the recent discovery of oil and gas in the Levant Basin Province. Chapter 6 develops possible future scenarios from the interactions of the key drivers of change and other factors in the external environment, for the negotiation of an agreement on the future maritime borders of Israel, Palestine and others in the Levant Basin Province. Chapter 7 presents the summary, key recommendations and conclusions of this thesis.

CHAPTER 2

OIL AND GAS POLITICS OF THE LEVANT BASIN PROVINCE

2.1 Introduction

The discovery of oil and gas in the Levant Basin Province has provided Israel with a window of opportunity to enter a phase of peaceful coexistence with the Palestinians and its Arab neighbours. Luft (2010) in his paper states that an “old adage says that when God closes a door, somewhere he opens a window”. The discovery of oil and gas could probably be a window of opportunity to engage creatively in the resolution of the problematic issues that beset Israel rather than a pure commercial opportunity for the country to exploit those natural resources in the Levant Basin Province.

Israel's desire to plug its energy security vulnerabilities by securing energy resources in the eastern Mediterranean and elsewhere has been its lifelong pursuit since the establishment of the Jewish State. The ultimate aim was to “become a reliable energy bridge connecting Europe and Asia” (Luft, 2010), while at the same time enabling the country to achieve a multitude of energy security objectives, namely (1) to reduce reliance on oil, especially in the generation of electricity, (2) to develop alternative energy sources and technologies (to counterbalance the ‘oil weapon’), (3) to increase the use of environmentally friendly natural gas compared to coal (the latter would become an instant backup alternative) and (4) to increase ‘dual-fuel capability’ in the economy (Even, 2010).

The intention of this chapter is to first elucidate the peculiar geopolitical circumstances of Israel in the eastern Mediterranean with respect to its energy security needs and ambitions. The latter are both economically and strategically significant to the viability and continued existence of Israel in its current form and in the future (Even, 2010). According to Chossudovsky (2006), “it was estimated that Israel imports at least 90% of its oil requirements from the Caspian Basin, of which at least 20% comes from the Azeri oil fields in Azerbaijan. In addition, Arab oil was also imported through third countries (Chossudovsky, 2006) that turned a blind eye. For national security considerations, “Israel considers much of the data connected to its energy consumption as classified information, and thus officially publishes statistics on energy trends only after a delay of four years. In addition, Israel does not officially reveal data on its strategic reserves. Consequently, despite joining the Organization for Economic Development and Cooperation (OECD) in 2010, Israel has not sought membership in the OECD-affiliated International Energy Agency (IEA), which coordinates emergency supplies among member states and shares data on reserves” (Shaffer, 2011).

Secondly, this chapter will commence with a discussion on the ‘dangerous neighbourhood’ that Israel must manoeuvre to assert its inalienable right among other nation states to ensure its energy security. In the assessment of the dangerous neighbourhood, horizon scanning was used to “provide anticipatory intelligence for actors in the region” (Futures for Regional Development, 2007). Lastly, a discussion on the economic significance and effect of oil and natural gas in Israel will follow. According to Crandall (2007), “one doesn’t need to have oil to make money from oil. Israel sits between the Mediterranean Sea, the Red Sea and the last great oil producing regions on earth. The Jewish state connects the biggest producers and the biggest consumers.” However, unlike Turkey, Israel’s eastern Mediterranean ally, the country was unable to fully and transparently take advantage of its peculiar geopolitical position due to the political malevolence of its Arab neighbours and other ‘bad guys’.

2.2 Dangerous neighbourhood

The reality of the energy (oil and natural gas) politics of the eastern Mediterranean is such that Israel, Palestine, Egypt, Turkey, Lebanon, Syria and Cyprus are all intertwined due to the location of the Levant Basin Province, a dangerous neighbourhood. The latter is depicted in Figure 2.1.



Figure 2.1: Dangerous neighbourhood

Source: Randolph, 2011

These countries form an oil and natural gas ecosystem of producers, conduits and consumers. In addition, the US, Russia, Europe and other oil- and gas-producing Caspian Sea countries have a vested interest in the exploitation of the oil and gas resources in the Levant Basin Province. According to Professor Ben Israel, “...Israel would no longer have to rely on importing its energy resources from the “bad guys” in the region, which in turn would mean more political independence” (Vesterbye, 2011). Hence, the Levant Basin Province oil and natural gas

discoveries have significantly reduced the 'strategic vulnerability' of Israel in importing from its Arab neighbours (Cohen & DeCorla-Souza, 2011). In 1975, as a result of the Arab oil embargo, the US signed a memorandum of agreement to supply oil to Israel on the proviso that if the latter could not access oil from international markets, the US would supply and transport it. This agreement is still effective and is being renewed every five years by both parties.

2.2.1. Palestine

According to Bryce (2005), "[i]f [the Palestinian] statehood does occur – and even if it doesn't – energy will continue to be the key driver of Palestine's economy. It may also be the flashpoint that leads to more conflict between the Israelis and the Palestinians."

Substantial natural gas deposits were discovered in the Gaza Strip in 1999. This discovery had the potential to economically empower Palestine and provide energy products and services for its fast-growing population. This has not happened to date due to various factors, such as "financial disagreements, concerns that some funds will end up in terrorist organizations hands, the Hamas takeover of the Gaza Strip, and the priority given to the purchase of gas from Egypt rather than from the Palestinians" (Even, 2010). In addition, the efforts of the Palestinians to sell their natural gas to Israel were thwarted by Prime Minister Ariel Sharon in 2003. This is despite the previous undertaking by Prime Minister Ehud Barak to grant "Palestinians the option to search for oil and gas off the coast of Gaza Strip" (Even, 2010). Two years later, Israel entered into an agreement to buy natural gas from Egypt, despite "at least 1.4 trillion cubic feet (Tcf) of gas" (Bryce, 2005) being found in Palestine. According to Even (2010), "[g]as flow [from Egypt] began in mid 2008", a strategic blunder that does not build any confidence between Israel and the representatives of Palestinians. In 2011, Prime Minister Benjamin Netanyahu pronounced that Gaza Marine 1 could be operational once discussions and successful negotiations with the Palestinian Authority were concluded on the matter. His government's intention is to develop Gaza Marine 1 (Palestinian) and Gaza Marine 2 (Israeli) (which is partially located within Palestinian territory) simultaneously for the benefit of both countries. He states, "I think this is good for stability, good for prosperity and good for peace" (Lazaroff, 2011). Furthermore, he articulates the rationale behind the u-turn in Israel's position in dealing with the Palestinian Authority on its natural gas resources: "Israel has, of course, its own gas supplies down the line in the close of the decade, but we have interim gas needs" (Lazaroff, 2011).

2.2.2. Egypt

Egypt is a "second source of gas for the Israeli economy" and this "gas supply is one of the most significant reflections of the economic ties between the two countries" (Even, 2010). There is a 15-year agreement (signed in July 2005) for the supply of gas to Israel at competitive rates, and the agreement is renewable for a further period of five years. This agreement has endured its own

upheavals due to the nature of the supply and demand variables of the Egyptian gas fields. The Egyptian General Petroleum Corporation (EGPC) and the Egyptian Natural Gas Holding Company (EGAS) have since cancelled the natural gas supply contract with Israel on 22 April 2012 due to alleged contravention of commercial obligations by the East Mediterranean Gas Company (EMG), a joint-venture company that is owned by both Egyptian and Israeli nationals. Both the governments of Egypt and Israel have reiterated the fact that the cancellation has been the result of a commercial rather than a diplomatic dispute among all parties involved. However, the Egyptian public mood and the reaction of the newly elected Egyptian parliament tell a different story. A day after the announcement, Prime Minister Benjamin Netanyahu confidently stated that “Israel has natural gas reserves that will allow it to be energetically independent, not only from the Egyptian gas supply, but from any other source” (Ravid, 2012). The Israel-Egypt debacle over the termination of the natural gas supply agreement is a blemish on the diplomatic relations of both countries, despite denials from the governments of both countries. This supply agreement provided tangible economic ties and a lifeline to both countries. However, deep-rooted prejudices and acrimony have surfaced openly in the public domain.

It is still a big unknown how the recent political developments (the so-called ‘Arab Spring’) in Egypt will have an impact on this agreement and the treaty between the two countries, “[t]hus, despite Egypt’s abundant gas reserves, dependence on Egyptian gas is a strategic vulnerability for Israel” (Cohen & DeCorla-Souza, 2011). According to Henderson (2011), “[t]he news of the Levant Basin Province finding’s size has also prompted protests from Cairo, which warned that it would closely follow the drawing of the field’s boundaries to ensure they do not infringe on Egypt’s EEZ or its own previously signed maritime agreement with Cyprus.”

2.2.3. Turkey

Turkey is the first majority Muslim nation to sign a peace treaty with Israel. According to the Turkish Energy Strategy, the country “is geographically located in close proximity to 72 % of the world’s proven gas and 73 % of oil reserves, in particular those in the Middle East and the Caspian basin” (Republic of Turkey: Department of Foreign Affairs, 2009). The country has positioned itself as a link between the oil-producing countries of the Caspian Basin and Europe. At least 3.7% of the world’s oil that is consumed daily is shipped through the Turkish Straits (Crandall, 2007), and at least 1.5% of the world’s oil supply is transported through the “Baku-Tbilisi-Ceyhan (BTC) pipeline, which is a dedicated crude oil pipeline system that extends from the Azeri-Chirag-Deepwater Gunashli (ACG) field through Azerbaijan and Georgia to a terminal at Ceyhan on the Mediterranean coast of Turkey, bypassing the environmentally sensitive Black Sea and the Turkish Straits” (Republic of Turkey: Department of Foreign Affairs, 2009). The BTC pipeline is “[c]urrently, the United States’ best access to Caspian oil” (Crandall, 2007). The proposed Nabucco pipeline

(Turkey-Austria gas pipeline) will further enhance Turkey's geopolitical position in the eastern Mediterranean once it is operational.

Turkey's strategic posture as a 'hydrocarbon power' has caused nervousness in both Jerusalem and Washington, D.C. (Crandall, 2007). Furthermore, overtures by Ankara towards Hamas and Moscow have not earned it any favourite status among its traditional Western allies. Russia has indicated that it wishes to pipe its gas through Turkey (Harvey & Nightingale, 2011; Meric & Bierman, 2009) and also "build Turkey's first nuclear power plant by a Russian company" (rt.com, 2010). Future plans for the four undersea pipelines to carry energy (oil, natural gas and electricity) and water from Ceyhan to the Port of Ashkelon are in jeopardy because of strained relations between Turkey and Israel. The ghastly unravelling of the relatively symbiotic relationship is against the spirit and letter of the peace treaty between these two countries. The ongoing hostile tit-for-tat posturing by both countries is obviously not serving their national interests.

2.2.4. Lebanon

The potential oil and natural gas bonanza in the Levant Basin Province could be the source of "[t]he Next Big Lebanon-Israel Flare-Up" between Lebanon and Israel (Blanford, 2011). Traditionally, Lebanon and Israel have not been endowed with abundant oil and gas within their territory (land or marine). According to Blanford (2011), "the maritime border between Israel and Lebanon has never been delineated because the two states are still technically at war." The Lebanese Parliament has not wasted time to protect the interests of its country by passing a law to allow oil and gas exploration in the Levant Basin Province. The *Jerusalem Post* published an article stating "that some of Israel's recently discovered gas fields stretch into Lebanese territorial waters. Israel has denied the charge" (Associated Press, 2010). However, any delay in negotiating and finalising the maritime borders between the two countries will add to oil and gas industry insecurity.

2.2.5. Syria

According to the US Energy Information Service, "Syria is the only significant crude oil producing country in the [e]astern Mediterranean region, which includes Jordan, Lebanon, Israel, the West Bank, and Gaza" (US Energy Information Administration, 2010). Oil production in Syria has destabilised due to the ongoing civil war in the country. In the short term, the country will become a net importer of oil and gas due to violent political conflict. Syrian oil output has been hampered by the political turmoil and civil war engulfing the country. Since September 2011, no oil has been exported due to international sanctions. However, in the foreseeable future Syria will again be a net exporter of energy when new production fields come on stream and the domestic political environment returns to normality, in other words when a political settlement is reached among all the warring parties and when rebuilding efforts of the country are commenced.

Syria, Iraq and Iran have signed an agreement for the construction of a pipeline to transport natural gas for markets in Europe (Iran Times, 2011). The European Union (EU) has indicated that it will not purchase any oil and natural gas from Iran (Reuters, 2010). Hence, the viability of this pipeline would be in jeopardy until the political problems with the EU are sorted out, especially the nuclear question in Iran. However, the EU has not been consistent in applying its sanctions on Iran. It has been reported that Iran's exports to the EU exceed US\$1 billion (Moj News, 2011).

2.2.6. Cyprus

In the race to lay claim to the vast riches of oil and gas resources of the eastern Mediterranean, "Greek Cyprus and Israel signed an accord...demarcating their maritime borders to facilitate a search for mineral deposits in the east Mediterranean, where huge natural gas reserves have been discovered" (Associated Press, 2010). The tenuous relationship between Turkey and Israel has yielded negative pronouncements from Turkey that the agreement violates its "rights and interests in the area" (Associated Press, 2010) and "[is] declaring the agreement null and void" (Henderson, 2011). In addition, Cyprus has signed two military cooperation agreements with Israel, which in the main are meant to protect the newly found riches of the Levant Basin Province. This has enraged Turkey, and in a tit-for-tat move, Turkey signed a maritime agreement with the Turkish Republic of Northern Cyprus, a country only recognised by Turkey, to delineate their maritime borders and exclusive economic zones (EEZs).

Cyprus has commenced with the exploration of hydrocarbons in the Levant Basin Province, with the assistance of the Texas-based Noble Energy. This too has enraged the Turkish Prime Minister, Recep Tayyip Erdogan, who labelled the move "oil exploration madness in the Mediterranean" (Reuters, 2011). He alleged that the "drilling activity is nothing but sabotage of the negotiation process between Turkish Cypriots and Greek Cypriots" (Reuters, 2011). The long-standing demand of Cyprus has been to urge Turkey to sign the UNCLOS and normalise the bilateral relations between the two countries or their ambitions of joining the EU would be blocked. Turkey has rejected this demand.

Furthermore, Cyprus has been positioning itself as a strategic point of convergence in the exploitation of the hydrocarbons in the Levant Basin Province, at both the expense of Turkey and the Turkish Republic of Northern Cyprus. This has been a role traditionally played Turkey, and the move by Cyprus would potentially deter its ambitions of becoming a hydrocarbon power in the eastern Mediterranean. In addition, in a strategic move, Cyprus has also signed a maritime agreement with Lebanon, which the latter has not ratified through its parliament.

2.3 Economic significance

The future of the energy sector in Israel is undergoing major transformational changes due to the recent discovery (Tamar, Dalit and Leviathan) of significant oil and natural gas in the Levant Basin

Province (Ratner, 2011). The recent discoveries are fuelling an oil and natural gas rush in the eastern Mediterranean. According to Even (2010), “[o]ver the last decade there have been impressive developments in the three components of Israel’s natural gas industry: discovery, transport, and consumption.” The Levant Basin Province discoveries have the potential to add a fourth important component to the natural gas industry, namely export potential (or import substitution).

2.3.1. Discovery

For the first time in the aftermath of the creation of the State of Israel, the energy fortunes of the country changed with the discovery of natural gas deposits in 1999. Figure 2.2 depicts the chronological order of these discoveries.

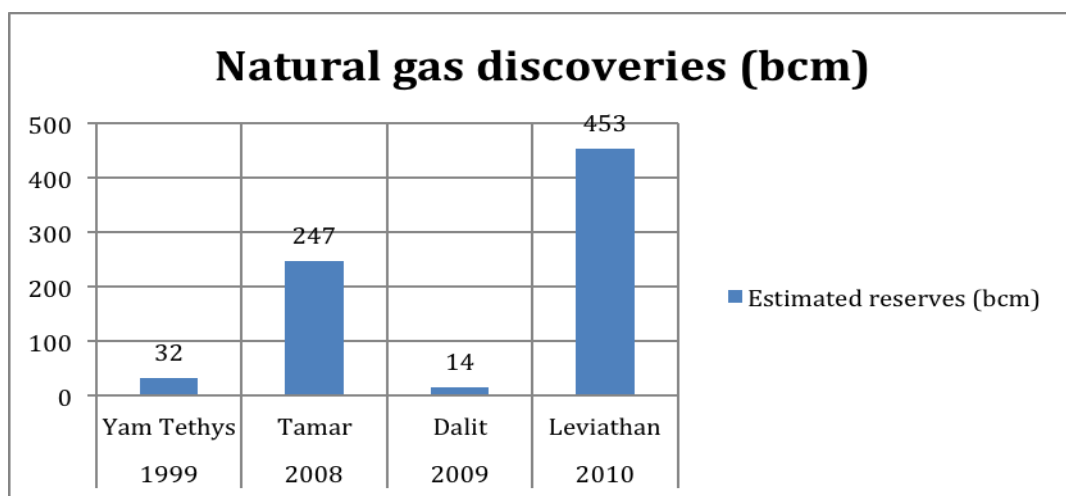


Figure 2.2: Israel natural gas discoveries

Source: Ratner, 2011

These discoveries were made after countless unsuccessful attempts by Israeli patriots and backers. Most of these attempts were carried out with a desire to wean the country of energy sources from ‘bad guys’. Some commentators have described the finds in biblical terms and as a manifestation of a long-held religious prophecy. When all the gas fields come into operation and the natural gas is exploited, imports will probably cease and Israel could possibly be an exporter of this resource (Ratner, 2011). The discovery of significant oil and natural gas in the Levant Basin Province, *ceteris paribus*, has the potential to propel Israel into the big league of energy producers in the Middle East. The significant energy imports (estimated at US\$1 billion) could easily be reduced once production comes on stream in Tamar and Leviathan, saving the country hundreds of millions of dollars per year in foreign exchange and earning the country valuable foreign currency to enable it to build an economic powerhouse second to none, in the Middle East (Even, 2010). However, in reality, Israel is engaged in an expensive and undesirable war with its neighbours, and the situation does not seem to be improving.

2.3.2. Consumption

Prior to 2003, natural gas consumption in Israel was marginal and was met by local production from the Yam Tethys gas fields. This picture has dramatically changed as more natural gas is consumed for the generation of electricity, industrial use and widespread domestic use. Figure 2.3 depicts the consumption, production and imports of natural gas from the year 2000 onwards.

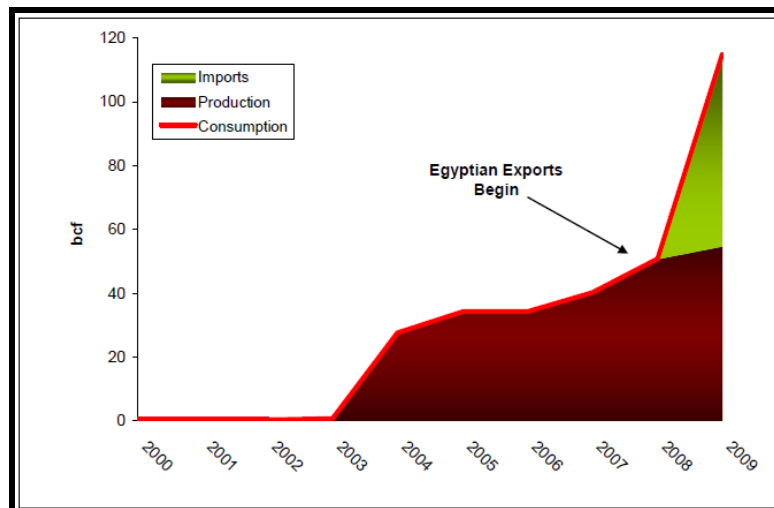


Figure 2.3: Israel natural gas consumption and sources
Units = billion cubic feet (bcf)

Source: Ratner, 2011

The current energy mix is shifting to the use of natural gas in the generation of electricity, away from coal, albeit at a measured pace. Natural gas is more environmentally friendly and burns better than coal. However, coal will still play a significant part in Israel's electricity generation as the country has adopted a dual-fuel capability for energy security reasons.

The ubiquitous natural gas use in Israel has prompted a rush to discover and exploit this resource in the Levant Basin Province and elsewhere. The recent discoveries in Tamar, Dalit and Leviathan form part of a concerted plan and effort by the government of Israel to attain energy security and independence. This plan is taking shape and there is natural gas at the end of the tunnel. In addition, the Egyptian gas pipeline augments Israel's insatiable appetite for natural gas to power and energise its economy. At least 40% of all natural gas that is consumed in Israel is imported from Egypt and transported via a pipeline to Israel.

2.3.3. Transport

According to Even (2010), "[n]atural gas transportation in Israel is carried out by the national transport system, based in the sea off the coast of Ashkelon." The transport system is highly integrated as it "connects between the natural gas suppliers and the gas consumers: IEC power plants; private electricity producers; and industrial plants such as Israel Chemicals, Dead Sea

Works, Nesher Israeli Cement Enterprises, the refinery in Ashdod, and the Hadera Paper group (Even, 2010). This national transport system links up with the 100-kilometre undersea Arish-Ashkelon pipeline from Egypt. The latter is depicted in Figure 2.4. This pipeline is owned and operated by the EMG, which is a joint-venture company comprising Israeli, Egyptian and other interests.



Figure 2.4: Natural gas transmission system

Source: State of Israel: Ministry of National Infrastructures, 2011

The latter natural gas pipeline has been sabotaged several times, and the latest occurrence was in February 2011, when saboteurs blew up the pipeline in Northern Sinai. No disruptions were experienced in Israel as the country can handle temporary setbacks from deeds of terror. Contingency planning in Israel has been perfected into an art form, and the above event fits into some of the scenarios that have possibly been documented by the government. Israel is well aware that it is located in a dangerous neighbourhood and that contingency plans must be put in place to handle any kind of eventuality.

In light of the Arab Spring and February 2001 gas pipeline sabotage, Minister Uzi Landau has ordered the Ministry of National Infrastructure to expedite the exploitation of the three natural gas finds and the “build[ing] [of] a floating platform off the northern city of Hadera to receive LNG (Liquefied Natural Gas) and transport it to shore...in the next two years because there is an emergency which we need to take into account” (AFP, 2011).

2.4 Conclusion

The researcher reiterates Odell's assertion, as pointed out Chapter 1 of this document, that “[o]il and gas are the drivers of modern economies and issues relating to them impinge importantly on national and international politics” (Odell, 2001). Chapter 2 has elucidated relevant issues that confront Israeli decision makers according to the eastern Mediterranean geopolitical context and economic significance. The dangerous neighbourhood is undergoing a profound transformation, which will have an impact on the future exploitation of the Levant Basin Province oil and gas resources.

CHAPTER 3

TRENDS ANALYSIS: ISRAEL, A HYDROCARBON POWERHOUSE

3.1 Introduction

The trend hypothesis that is outlined in this research report is that Israel is set to become a ‘hydrocarbon powerhouse’ in the Levant Basin Province and the world. All the necessary future elements are present, as will be elucidated in this chapter. The trend’s context is the recent discovery of oil and gas and the socio-economic and political environment of the dangerous neighbourhood, which is changing fast, especially after the advent of the Arab Spring. The trend descriptions are discussed in paragraph 3.2 and provide for trend features and conditions, drivers, future impacts and policy implications. The trend projections are discussed in paragraph 3.3 and provide for impacts, uncertainty and key factors.

3.2 Development of trends

The use of trends analysis, a futures concept, is meant to provide an “[u]nderstanding of the current position and likely future path” and “[p]rovide anticipatory intelligence for actors in the...[Levant Basin Province]” (Futures for Regional Development, 2007). A Futures Wheel has been developed to elicit important trends, issues and their likely future consequences. Figure 3.1 depicts the Futures Wheel.

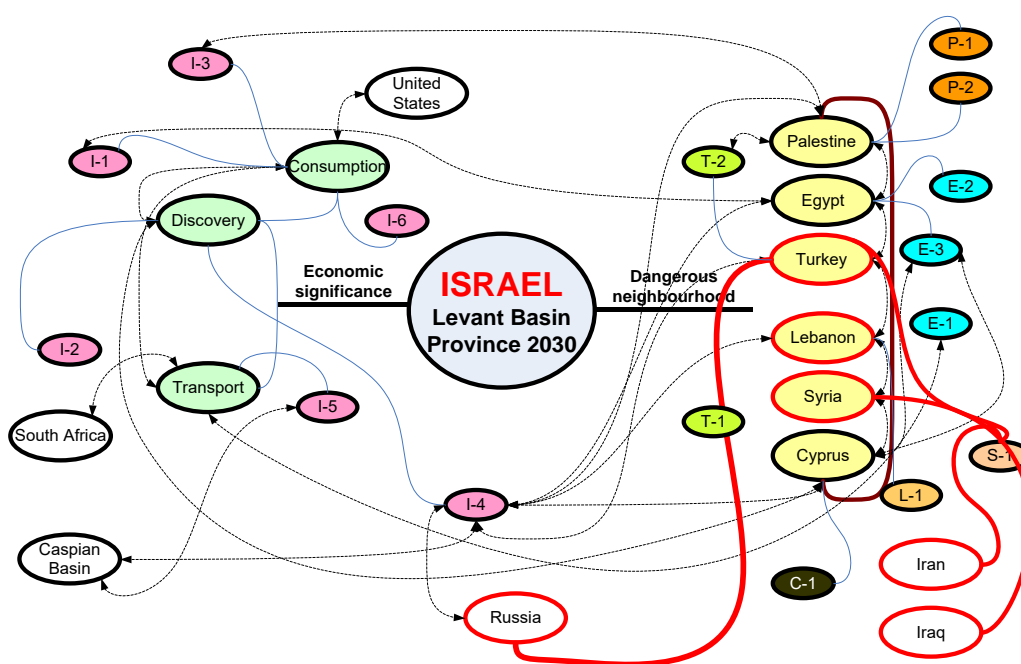


Figure 3.1: Futures wheel – Israel Levant Basin Province 2030

Source: Own elaboration

Legend	
I-1	Ubiquitous use of natural gas and related products
I-2	Hydrocarbon economy
I-3	Thawing of frozen relations with the Palestinian Authority
I-4	Oil and natural gas exploration rush
I-5	Outward foreign direct investment
I-6	Increasing share of natural gas in the energy mix of the country
P-1	Fatah and Hamas have a signed peace pact and cooperation agreement
P-2	Political mainstreaming of Hamas by stealth
E-1	Resurgent hostility towards Israel after the fall of President Hosni Mubarak (so-called Arab Spring)
E-2	Political mainstreaming of the Muslim Brotherhood by stealth
E-3	Economic assertiveness
T-1	Nabucco pipeline (Turkey-Austria gas pipeline)
T-2	Russian and Iranian (Hamas acts as a proxy for Iranian interests) influence
L-1	Political mainstreaming of Hizbullah by stealth
S-1	Islamic pipeline (Syria-Iran-Iraq-Turkey)
C-1	Economic assertiveness
— Dangerous liaisons and cruel intentions	

At least 16 trends and issues have been identified and thereafter structured in a meaningful way in order to prioritise the most important actions for the realisation of a desirable and preferred future for Israel, Palestine and other actors in the Levant Basin Province. It is an insightful and nonjudgmental graphical interpretation of Israel with regard to the Levant Basin Province in the year 2030. The analysis of trends has focused on meticulously gathering key trends that have a significant impact on the future energy security and ambitions of Israel. The backdrop is eastern Mediterranean oil and its natural gas ecosystem (dangerous neighbourhood).

The visualisation in Figure 3.1 has multiple entry and exit points, which will result in different outcomes, contradictory impacts and different implications, depending on interacting factors. The Futures Wheel was drawn up by being mindful of other important variables that dominate the international oil and natural gas discourse. The scope of this research report is limited to the discovery of significant reserves of oil and gas in the Levant Basin Province in so far as it can open up a possibility to find peace and the resolution of the Israeli-Palestinian conflict by being a significant lever to bring all parties to the conflict to the table for the discussion of a desirable and preferable future.

3.3 Trend description

A total of 16 trends in the dangerous neighbourhood that have a direct impact on the future energy security and ambitions of Israel were identified. Each trend is matched with its driver, future impact and policy implication for Israel, as illustrated in Table 3.1.

Table 3.1: Trend description

Country	No.	Trend	Driver	Future impact	Policy implication
Israel	I-1	Ubiquitous use of natural gas and related products	Growing economy and natural gas-fired electric power	Short-term natural gas supply shocks (supply constraints to be eliminated once Tamar goes on stream in 2014)	Diversification of natural gas sources and urgent exploitation of new natural gas finds (i.e. Tamar, Dalit and Leviathan)
	I-2	Hydrocarbon economy	Hydrocarbon wealth in the Levant Basin Province	Energy import substitution and a healthy current account	Ditto
	I-3	Thawing of frozen relations with the Palestinian Authority	Unreliable natural gas supplies from Egypt	Israel and the Palestinian Authority to develop and exploit Gaza Marine hydrocarbons for mutual benefit	Realpolitik: Less rhetoric in negotiating with the Palestinians

Country	No.	Trend	Driver	Future impact	Policy implication
	I-4	Oil and natural gas exploration rush	Levant Basin Province	Emergent hydrocarbon power	Favourable tax policy to encourage Israeli firms and their joint-venture partners to invest in exploration and drilling of oil and natural gas
		Ditto	Natural gas glut (from Russian, Caspian Basin and Middle Eastern sources, etc.)	Significant step towards the setting up of a 'gas OPEC'	Arrange long-term supply contracts with European counterparts (including OECD countries) and South Africa
	I-5	Outward foreign direct investment	Azeri oil fields (Azerbaijan)	Guaranteed foreign sources of oil	Favourable tax policy to encourage Israeli firms to acquire foreign energy assets and investments in the Caspian Sea and elsewhere
	1-6	Increasing share of natural gas in the energy mix of the country	Climate change	Cleaner environment and production	Petroleum substitution and introduction of incentives for the development of technologies that use natural gas
Palestine	P-1	Fatah and Hamas have a signed peace pact and cooperation agreement	Possible recognition of a Palestinian State by the UN in September 2011	Enforcement of International Law, <i>inter alia</i> UNCLOS and resolutions of the UN and its agencies	Proactive and constructive engagement of all political forces in Palestine
	P-2	Political mainstreaming of Hamas by stealth	World acceptance of Hamas as one of the legitimate representatives of the Palestinian people	Full development and exploitation of Palestinian oil and natural gas resources, including possible claims to the Levant Basin Province hydrocarbons	First-mover strategy: Open dialogue and engage Palestinians before EU and US rivals (including Russia, China, etc.)
Egypt	E-1	Resurgent hostility towards Israel after the fall of President Hosni Mubarak (so-called Arab Spring)	Anti-corruption	Intermittent natural gas supplies (including deliberate sabotage) and eventual termination	Diversification of natural gas sources and urgent exploitation of new natural gas finds (i.e. Tamar, Dalit and Leviathan)
	E-2	Political mainstreaming of the Muslim Brotherhood by stealth	Palestinian solidarity and Arab nationalism	Termination of the peace treaty	Proactive and constructive engagement of all political forces in Egypt
	E-3	Economic	Hydrocarbon wealth	Cyprus-Israel Maritime	Alignment with pre-existing

Country	No.	Trend	Driver	Future impact	Policy implication
		assertiveness	in the Levant Basin Province	Accord	EEZs, including those of Turkey, Lebanon and Syria
		Ditto	Framework agreement: Development of cross-median line hydrocarbon resources	Cyprus-Israel Maritime Accord	Ditto
Turkey	T-1	Nabucco pipeline (Turkey-Austria gas pipeline)	Natural gas glut (from Russian, Caspian Basin and Middle Eastern sources, etc.)	Significant step towards the setting up of a gas OPEC	Expedite the construction of LNG handling, transportation and storage facilities (for strategic stockpiling) in Israel and elsewhere, especially in friendly countries such as South Africa
	T-2	Russian and Iranian (Hamas acts as a proxy for Iranian interests) influence	US hegemony	Denial-of-access tactics on the BTC pipeline, etc.	Pre-emptive strike
Lebanon	L-1	Political mainstreaming of Hizbullah by stealth	Hydrocarbon wealth in the Levant Basin Province	Escalation of hostilities towards Israel Hazardous security conditions in the Levant Basin Province	Vanguard: Protection of strategic oil and natural gas assets
Syria	S-1	Islamic pipeline (Syria-Iran-Iraq-Turkey)	Natural gas glut (from Middle Eastern sources)	Significant step towards the setting up of a gas OPEC	Expedite the construction of LNG handling, transportation and storage facilities (for strategic stockpiling) in Israel and elsewhere, especially in friendly countries such as South Africa
Cyprus	C-1	Economic assertiveness	Hydrocarbon wealth in the Levant Basin Province	Cyprus-Israel Maritime Accord	Alignment with pre-existing EEZs, including those of Turkey, Lebanon and Syria

Source: Own elaboration

The above trends are not ranked or valued in any order of importance. By their nature, trends “eventually change direction and speed as time passes” (Cornish, 2004), and the dangerous neighbourhood is no exception. As a central and important actor in the eastern Mediterranean,

Israel has influence and a newfound lever (Levant Basin Province oil and natural gas) to direct the evolution of these trends in its favour and for its eventual benefit.

3.4 Trend projection

The projection of trends was conducted by determining the likely impact of each trend under conditions of uncertainty. An 18-year time continuum was conceptually constructed, up to the year 2030. The results of the exercise are summarised in Table 3.2.

Table 3.2: Trend projection – year 2030

Trend No.	Impact	Uncertainty	Key factor	Projection – year 2030
I-1	High	Low	<ul style="list-style-type: none"> Exploitable gas reserves in the Levant Basin Province Caspian Basin supply contracts (guaranteed supplies) Liquefied natural gas 	<ul style="list-style-type: none"> Demand for natural gas to energise the economy in 2030 projected at 18.4 bcm per year (from 10.3 bcm in 2011), a 78.6% increase (Kugler, 2008)
I-2	High	High	<ul style="list-style-type: none"> Alignment with future Palestine EEZ Alignment with pre-existing EEZs, including those of Turkey, Lebanon and Syria 	<ul style="list-style-type: none"> Finalisation (or stalemate) of the UNCLOS investigation, arbitration and award (Lebanon's claim and Syria's by proxy) Peace treaties (or flare-up of war)
I-3	High	High	<ul style="list-style-type: none"> Unfettered comprehensive peace negotiations in good faith by both Israelis and Palestinians (in a similar format as the CODESA negotiations in South Africa) 	<ul style="list-style-type: none"> Agreement on land and maritime borders (EEZs) Long-term benefit-sharing agreement (Levant Basin Province resources)
I-4	High	Low	<ul style="list-style-type: none"> Realisable gas reserves in the Levant Basin Province 	<ul style="list-style-type: none"> Oil and natural gas autarky (strategic stockpiling) Strategic investment in gas-to-liquid technologies (Fischer-Tropsch process) and refineries – at a scale similar to or exceeding South Africa's SASOL Strategic natural gas exports (limited to friendly countries)
I-5	Low	Low	<ul style="list-style-type: none"> Capital account (effect on balance of payments) 	<ul style="list-style-type: none"> Israeli sovereign fund (for strategic investments abroad) Diaspora energy fund to finance strategic ventures abroad
I-6	High	Low	<ul style="list-style-type: none"> Existence of a national system of innovation 	<ul style="list-style-type: none"> Global market leadership (R&D, process, production and quality)

Trend No.	Impact	Uncertainty	Key factor	Projection – year 2030
			<ul style="list-style-type: none"> • Support by venture capitalists • Public awareness campaign against the 'oil weapon' (which is an undesirable externality from a geopolitical perspective) and concomitant creation of an energy-saving culture 	<p>in technologies that are powered by natural gas (or its by-products)</p>
P-1	High	Low	<ul style="list-style-type: none"> • Unfettered comprehensive peace negotiations in good faith by both Israelis and Palestinians (in a similar format as the CODESA negotiations in South Africa) 	<ul style="list-style-type: none"> • Peace treaties (or flare-up of war, which will lead to further isolation of Israel in the international community of nations. Subsequently, probable punitive UN General Assembly resolutions [suspension of the rights and privileges of membership or expulsion])
P-2	High	Low	<ul style="list-style-type: none"> • Readiness to govern pragmatically • Moderate rhetoric • Conciliation • Establishment of robust constitutional institutions and systems • Continuous confidence-building mechanisms • Creation of a reconstruction and development fund for the rehabilitation of Palestine (a once-off ex gratia contribution by Israel (US\$10 billion to be transferred in equal amounts of US\$1 billion per annum for a period of 10 years) • Foreign aid contributions 	<ul style="list-style-type: none"> • Agreement on land and maritime borders (EEZs) • Agreement on security, refugees, dual citizenship, right of return (both Israelis and Palestinians) – a comprehensive deal! • Long-term benefit-sharing agreement • Creation of a permanent bi-national commission that must meet at least twice a year
E-1	High	Low	<ul style="list-style-type: none"> • Full disclosure • Reparation (where required) • Future transparent dealings (set up robust ethical standards and systems of check and balances) • Confidence-building measures 	<ul style="list-style-type: none"> • Revised long-term contract on mutually beneficial terms • Creation of a permanent bi-national commission that must meet at least twice a year
E-2	High	Low	<ul style="list-style-type: none"> • Readiness to govern pragmatically 	<ul style="list-style-type: none"> • Revised peace treaty

Trend No.	Impact	Uncertainty	Key factor	Projection – year 2030
			<ul style="list-style-type: none"> • Moderate rhetoric • Conciliation • Continuous confidence-building measures • Foreign aid 	<ul style="list-style-type: none"> • Assertive ‘New Egypt’ • Egypt as a secular state • New growth trajectory, positive economic cooperation with Israel
E-3	High	High	<ul style="list-style-type: none"> • Alignment with future Palestine EEZ • Alignment with pre-existing EEZs, including those of Cyprus, Libya, Lebanon and Israel 	<ul style="list-style-type: none"> • Peace treaties (or flare-up of war) • Cooling of political temperament • Creation of an ‘Eastern Mediterranean Economic Community’, thereafter a fully-fledged economic union
T-1	High	Low	<ul style="list-style-type: none"> • Artificially low natural gas prices 	<ul style="list-style-type: none"> • Turkish dominance as a hydrocarbon power that controls all significant pipelines and infrastructure to supply the lucrative market of Europe and Asia • Gas OPEC becomes a reality • Feasibility of Levant Basin Province oil and natural gas will be deliberately put in jeopardy by Turkish and Russian interests (a proxy for Iranian and Syrian interests)
T-2	High	High	<ul style="list-style-type: none"> • High natural gas prices 	<ul style="list-style-type: none"> • High-stakes gambit: Holding Europe to ransom by Russia and its proxies (Turkey, Syria, Iran and other Caspian Basin countries) • Unravelling of the EU as a result of economic nationalism • War – ‘end game’
L-1	High	Low	<ul style="list-style-type: none"> • Readiness to govern pragmatically • Moderate rhetoric • Conciliation • Continuous confidence-building measures 	<ul style="list-style-type: none"> • Peace treaty • Reaffirmation of Lebanon as a secular state • New growth trajectory, positive economic cooperation with Israel
S-1	High	Low	<ul style="list-style-type: none"> • Artificially low natural gas prices 	<ul style="list-style-type: none"> • Turkish dominance as a hydrocarbon power that controls all significant pipelines and

Trend No.	Impact	Uncertainty	Key factor	Projection – year 2030
				infrastructure to supply the lucrative market of Europe and Asia <ul style="list-style-type: none"> • Gas OPEC becomes a reality • Feasibility of Levant Basin Province oil and natural gas will be deliberately put in jeopardy by Turkish and Russian interests (a proxy for Iranian and Syrian interests)
C-1	Low	Low	<ul style="list-style-type: none"> • Alignment with future Palestine EEZ • Alignment with pre-existing EEZs, including those of Turkey, Syria, Libya, Lebanon and Israel 	<ul style="list-style-type: none"> • Creation of an 'Eastern Mediterranean Economic Community', thereafter a fully-fledged economic union

Source: Own elaboration

The above trend projections provide a clear picture of what the future holds for Israel. A key question is, What is Israel going to do about it? The above trend description provides Israel with an opportunity to assess the implications of each trend before executing a course of action (Hines, 2008) as a result of its discovery of oil and natural gas in the Levant Basin Province.

3.5 Conclusion

The strategic significance of the discovery of oil and natural gas must not be underestimated by anyone who has an interest in the geopolitical landscape of the eastern Mediterranean. The discovery procured significant political and economic leverage for Israel over its friends and foes. Israel is no longer a hydrocarbon-impooverished tiny country; rather, it is a country with economic, political, military, scientific and hydrocarbon might. Israel must accept the fact that practical considerations must take precedence over ideology when it comes to the fulfilment of the country's future energy security needs and ambitions. The political and diplomatic isolation of Israel must compel the Israeli government to practise realpolitik. The identified trends highlight vividly the backdrop against which Israel must manoeuvre in order to co-create a desirable and preferred future with the Palestinians. The country's interests need not necessarily be congruent with and subservient to those of the US; rather, they must be symmetrical.

CHAPTER 4

NARRATIVES OF THE ISRAELI-PALESTINIAN CONFLICT

4.1 Introduction

The hydrocarbon 'blessing' poses a medley of interconnected problems such as "(1) allocative efficiency (pricing, finances, substitutability between energy types, sources, uses and technologies, choice between domestic and foreign consumption, market failures, etc.), (2) equity (regionally for consumers and governments, between nationals and foreigners, on the upside and downside of fluctuating prices, distributional impacts on social groups, etc.), (3) sociopolitical context (treaty obligations, constitutional and regulation-induced constraints, differential adjustment costs and consequent differential social burdens, security of supply, organizational failures, global world competition, [armed conflict, warfare, foreign policy, unresolved international borders and waters] etc.), (4) environment (broad and restricted contexts, secondary and tertiary use of energy, exergy, etc.), (5) industrial strategy (use of natural resources, including energy, as an instrument of economic development and industrial location, etc.), and (6) public acceptance (sense of fairness, paranoias, learning, framing of decisions, etc.)" (Paquet, 1989). These interconnected problems have been comprehensively discussed and outlined in Chapters 2 and 3.

The focus of Chapter 4 is on the underlying stories that define the narrative of the conflict. This chapter reveals the emerging stories behind the Israeli-Palestinian conflict as they manifest themselves in the eastern Mediterranean by using causal layered analysis. According to Sohail Inayatullah (2011), "[c]ausal layered analysis seeks to move away from narrow and shallow readings of the present and the future to broader and deeper perspectives. It moves from the interpretation of particular interest groups to a wider systems and worldview perspective."

The narratives that are elucidated in the chapter are (1) Star of David, (2) Herod's Folly and (3) Wisdom of Solomon. These narratives serve as the basis for the development of scenarios that will describe alternative futures for the creation of a preferable and desired future for Israelis and Palestinians. The development of scenarios will be comprehensively discussed in Chapter 6.

4.2 Narrative 1: Star of David

This narrative is born out of the desire for self-determination of both the Israelis and Palestinians since the end of World War II. To date, the outcome of this noble cause has been a bloody and messy armed conflict of international proportions. Numerous efforts to find a lasting solution and peace have failed, and currently both sides have abandoned the peace process to end the conflict. According to Yuval Diskin, who is a former director of the Shin Bet (Israel Security Agency), the

Netanyahu government is “unwilling [...] to advance peace talks with the Palestinian Authority” (Haaretz, 2012) and this has reduced the international standing of the Jewish state. The fragile domestic political environment mostly informs the belligerent stance of the Israeli government, whereby most successive governments have been formed by coalition governments that have had diametrically opposed views on the plight of Palestinians and the important land question. According to Uri Avnery (2001), “Netanyahu and his band of peace saboteurs want to prevent Palestinian unity at all costs. They do not want peace, because peace would prevent Israel from achieving the Zionist goals, as they conceive them: a Jewish state in all of historical Palestine, from the sea to the Jordan River (at least). The conflict is going to last for a long, long time to come, and the more divided the enemy, the better.”

This narrative reveals a militarised and polarised Israeli society, a sad accomplishment for a nation that has suffered from the worst human tragedy in recent memory. In addition, it has traumatised the Palestinian population. The solutions have been lethal and clinical in nature from both sides of the conflict. As elucidated in Table 4.1, the result has been (1) an increase in security investment by the Jewish state (personnel, high-tech surveillance, eight-metre-high concrete boundary walls, etc.), (2) the occupation and incursion of the Palestinian territories, (3) the establishment of a network of checkpoints to curb freedom of movement, (4) indiscriminate bombing and shooting of Palestinian civilians, (5) state-sponsored assassinations, (6) the destruction of the socioeconomic freedom of Palestinians, (7) the promotion of conflict among Palestinian political factions (Siegman, 2010a) and (8) the perpetuation social decay in occupied territories in order to contrast it with “the only democratic State in the Middle East” (Siegman, 2010b).

Table 4.1: Causal layered analysis – Star of David story

Level of reality	Problem	Solution	Who can solve it?
Litany	<ul style="list-style-type: none"> • “In an unstable Middle East, Israel is the one anchor of stability” (Netanyahu, 2011) 	<ul style="list-style-type: none"> • Support for Israel’s security is a wise investment in our common future 	<ul style="list-style-type: none"> • Israeli government and the US
Systemic	<ul style="list-style-type: none"> • “ Hamas remains committed to Israel’s destruction and to terrorism” (Netanyahu, 2011) 	<ul style="list-style-type: none"> • Occupation and incursion of Palestinian territories and people 	<ul style="list-style-type: none"> • Israeli society, including its security apparatus
	<ul style="list-style-type: none"> • “Israel needs unique security arrangements because of its unique size” (Netanyahu, 2011) 	<ul style="list-style-type: none"> • Network of checkpoints: Controlled movement of Palestinians 	<ul style="list-style-type: none"> • Palestinian demilitarisation by the Israeli government and its allies
	<ul style="list-style-type: none"> • Suicide bombers • Martyrdom 	<ul style="list-style-type: none"> • Collective punishment: Indiscriminate bombing and shooting of 	

Level of reality	Problem	Solution	Who can solve it?
		<p>Palestinian civilians</p> <ul style="list-style-type: none"> • High-tech surveillance: HUMINT, SIGINT and MASINT • Building of an eight-metre-high concrete wall in Palestinian territories to segregate Israelis from Palestinians • State-sponsored assassinations (allegedly by Mossad and others) • Solid security arrangements on the ground (including uniformed and plain-clothes security agents and informers) • Compulsory conscription of young Israeli men and women to serve in the military and other security apparatuses • Secretive nuclear arsenal, to be used as a deterrent or for pre-emptive strike 	
	<ul style="list-style-type: none"> • Economic assertiveness (proxy for financing terrorism against Israel, e.g. use of international aid and illicit funding to buy weapons and ammunition, etc.) 	<ul style="list-style-type: none"> • Economic blockade • Control of Palestinian airspace and maritime resources and waters • Destruction of private Palestinian property (including public property, both economic and social) • Deny employment and economic opportunities to Palestinians • Continued destruction of the Palestinian education system by the Israeli occupation • Chronic trauma of 	<ul style="list-style-type: none"> • Palestinian Authority with the assistance of the international community (including relevant UN agencies) • Israeli government, Palestinian Authority, Hamas, Fatah, civil society in Palestine and Palestinian society

Level of reality	Problem	Solution	Who can solve it?
		<p>Palestinian children</p> <ul style="list-style-type: none"> • High infant mortality rates • Women's rights under siege (reproductive health, etc.) • Promote Palestinian-on-Palestinian attacks • Unprecedented high rates of suicide 	
<p>Worldview</p>	<ul style="list-style-type: none"> • Jewish people are the chosen people of Almighty God 	<ul style="list-style-type: none"> • Getting rid of evil forces in the ancestral land of Jewish people, namely Palestinians and their proxies • Detention without trial of Palestinians • Assimilation of Palestinians in Israeli society, including subjecting them to 'third-class' citizens category • Institutionalised racism and discrimination (job reservation system, etc.) • Intolerance, vilification and ostracising of dissenters among Jewish people • Creation of a single Jewish identity at the exclusion of Arab Palestinians • Worldwide Jewish right of return to Israel, at the exclusion of Palestinians and refugees • Labelling Palestinian dissent and uprising as 'terrorism' and subsequent crushing of this dissent as 'war on terror' • Pronounce Israel's 	<ul style="list-style-type: none"> • Israeli society, including its security apparatus by employing the following mechanisms: <ul style="list-style-type: none"> ○ Media and their international outlets (US) (propaganda) ○ Jewish self-determination (language, arts, culture, indoctrination, etc.) ○ Military and security apparatus (show of military force, might and lethal intelligence agencies) ○ Worldwide presence and vanguard ○ Reminding the world of the atrocities of the Holocaust

Level of reality	Problem	Solution	Who can solve it?
		legitimate right to 'self-defence', i.e. cloak for indiscriminate bombing of Palestinian homes and infrastructure and incursions into Palestinian territory <ul style="list-style-type: none"> • Disregard the UN Assembly resolutions and efforts, including findings on Israeli government atrocities • Passing of legislation in the Knesset that is explicitly against international law 	
Myth-metaphor	<ul style="list-style-type: none"> • Never again! 	<ul style="list-style-type: none"> • Zionism <ul style="list-style-type: none"> ○ "When [Jewish people] say never again, they mean never again. State of Israel always reserves the right to defend itself"(Netanyahu, 2011) 	<ul style="list-style-type: none"> • Archangel Michael: Advocate of Jewish people and protector of Israel

Source: Own elaboration

In response, the Palestinians have also reacted with *intifada* against the Israeli population and security apparatus. Hence, the cycle of violence is never ending!

Since the establishment of the State of Israel, the narrative of successive Israeli governments with regard to the Israeli-Palestinian conflict continues to be myopic and is informed by a painful "[h]istory [that] has taught the Jewish people that they must take calls for their destruction seriously. Jewish people are a nation that rose from the ashes of the Holocaust" (Netanyahu, 2011). According to the Jewish Defence League (2012), "[n]ever again means first and foremost that Jews will never again go quietly and submissively to our deaths." Hence, the conduct of successive Israeli governments could be regarded as rational as they have been seeking to preserve and assert the just and rightful existence of Jewish people in the world. The conduct, morality and ethics of this quest have left Israel more vulnerable (Miller, 2011), have shifted Europe's bias in favour of the pro-Palestine agenda (Martino, 2012) and have caused the US

government to regard Israel as a “strategic liability” (Cooper, 2010), and Israel has become “the only apartheid regime in the Western world” (Siegman, 2010b).

4.3 Narrative 2: Herod’s Folly

According to Rabbi Ovadia Josef, a former chief rabbi of Israel, “[i]t is forbidden to be merciful to [the Arabs]. You must send missiles to them and annihilate them. They are evil and damnable” (Siegman, 2010a). The diatribe does not stop here: “Abu Mazen [President of the Palestinian National Authority] and all these evil people should perish from the world. God should strike them with a plague, them and these Palestinians” (Siegman, 2010a). The Israeli government has never reprimanded and censured the chief rabbi over these comments; instead, this has been and continues to be the narrative of successive Israeli prime ministers and governments in the past 16 years. Brute force by the Israeli government’s military and security apparatus against a weaker Palestinian adversary is well documented and continues to be used under the watch of the US, the EU and the UN Security Council. Despite rhetoric to the contrary, the US always without fail provides a shield from censure and sanctions when it matters most for Israel. Hence, it is safe to say, Palestinians are “damnable” (Siegman, 2010a).

Israel is engaged in a dangerous and wicked adventure; its mission is to expropriate Palestinian land “regularly and systematically” (Siegman, 2010a), without any regard to the creation of a viable future Palestinian state. The latter will never exist in any form; that is the preference, desire and design of successive Israeli governments, a secret covenant that has been exposed by Rabbi Ovadia Josef. The occupied territories are constantly under siege and will continue to be so! Daily land grabs at the behest of the Israeli government are meant to accommodate a prosperous and growing Israeli population. The massacre of innocents continues daily in the form of deprivation of Palestinians of productive land, livelihoods, state and country. Successive US governments have turned a blind eye or have lost influence over their key ally or are complicit in Israel’s engaging in a dangerous adventure, with the assurance that protection is guaranteed.

As part of its zero-sum game, as indicated in Table 4.2, Israel responds by (1) suspending human rights in occupied Palestinian territories, (2) introducing permanent curfews, (3) executing targeted assassinations, (4) clamping down on domestic dissent, (5) censoring the security establishment, (6) conducting cross-border military manoeuvres in occupied territories and elsewhere, (7) introducing draconian laws to legitimise the land grab programme, (8) expropriating economic assets and (9) executing ethnic cleansing of non-Jews.

Table 4.2: Causal layered analysis – Herod’s Folly story

Level of reality	Problem	Solution	Who can solve it?
Litany	<ul style="list-style-type: none"> Israeli intemperance 	<ul style="list-style-type: none"> Support for Israeli 	<ul style="list-style-type: none"> Military and security

Level of reality	Problem	Solution	Who can solve it?
	keeps terrorism alive (Khouri, 2008)	dangerous adventure and bravado in the eastern Mediterranean	apparatus
Systemic	<ul style="list-style-type: none"> • <i>Mad Max: Thunderdome</i> – Permanent feature of Israeli occupation of Palestinian territories 	<ul style="list-style-type: none"> • Suspension of human rights in Palestinian territories • Permanent curfew • Militarisation of Palestinian life • Clampdown on dissent 	<ul style="list-style-type: none"> • Military and security apparatus
	<ul style="list-style-type: none"> • Incursion into South Lebanese territory by Israeli Defence Force 	<ul style="list-style-type: none"> • Prime Minister Benjamin Netanyahu consolidates power and fires heads of Mossad, Aman and Shin Bet 	
	<ul style="list-style-type: none"> • Missile attacks from South Lebanon, with tacit support of the Islamist Lebanese government 	<ul style="list-style-type: none"> • Annihilation of Hizbullah, suspension and abolition of Lebanese Parliament 	
	<ul style="list-style-type: none"> • Appropriation of Lebanese EEZ (economic and political blockage) 	<ul style="list-style-type: none"> • New Law on Foreign Lands and Seas to facilitate the expropriation of Lebanese EEZ territory 	<ul style="list-style-type: none"> • Knesset
	<ul style="list-style-type: none"> • Insatiable appetite for energy security and fulfilment of energy ambitions 	<ul style="list-style-type: none"> • Exploration and drilling of oil and natural gas by Israeli firms in Palestinian and Lebanese waters 	
	<ul style="list-style-type: none"> • Displacement of Palestinian refugees in South Lebanon 	<ul style="list-style-type: none"> • Deportation of Palestinian refugees to Europe and Turkey 	
Worldview	<ul style="list-style-type: none"> • Palestinian civilians are cannon fodder and collateral damage 	<ul style="list-style-type: none"> • Israel has become a ‘thug state’ 	<ul style="list-style-type: none"> • A resurgent, just, religious community and leadership within Israel
		<ul style="list-style-type: none"> • Suspension of the rights and privileges and ultimately expulsion 	
Myth-metaphor	<ul style="list-style-type: none"> • Massacre of innocents 	<ul style="list-style-type: none"> • Proverbs 24:6: “For by wise guidance you can wage your war” 	<ul style="list-style-type: none"> • Collective consciousness of Israeli society

Source: Own elaboration

Israel is under siege – hysteria and paranoia are the new decree to rule God’s chosen people. *Never again* has become a false promise. History has a strange way of repeating itself! Dystopia is the lived experience of many Israeli citizens and all Palestinians.

4.4 Narrative 3: Wisdom of Solomon

In contrast to the previous narrative, which is dystopian in nature, the Wisdom of Solomon story offers Israel a utopian outlook. The fatigue of war, internal strife, international isolation and, more importantly, the long-range nuclear capability of Iran and Saudi Arabia have prompted Israel to change course and offer a conciliatory and fair deal to the Palestinians and the Lebanese. The untold riches of the Levant Basin Province also act as significant lever towards benefit sharing and agreement on lasting peace. This is a breakthrough moment in the eastern Mediterranean – Israel is welcomed backed in the fold of progressive states. Hamas and Hizbullah renounce violence and destruction against Israel and offer voluntary disarmament under the watchful eye of the international community.

Newly elected Prime Minister Meir Dagan delivers a speech in the Knesset to recognise a Palestinian state that will exist side by side with Israel. A two-state solution has become a reality! This is in recognition of the shared biblical heritage and positive strides achieved by international negotiators to bring lasting peace, guarantees and benefits to both Israel and Palestine. Within a period of 24 hours after the delivery of the speech, the US and most members of the international community recognise the formation of a Palestinian state and make declarations to open diplomatic missions on Palestinian soil.

This narrative is compared to the South African experience, whereby a path to nation building and reconciliation was undertaken under similar experiences. However, in both Palestine and Israel, the internal violence ceased and the return of refugees was orderly. As depicted in Table 4.3, in recognition of the breakthrough, the UN Security Council, after consultation with both parties to the conflict, passed several resolutions to level the playing field, namely (1) the rescinding of all negative references towards the State of Israel and its symbols, (2) the declaration of East Jerusalem as a joint territory of both the State of Israel and the State of Palestine, in an indivisible manner, (3) the funding out of the coffers of the UN of a Joint Territorial Management Agency created by treaty between the State of Israel and the State of Palestine for the governing of East Jerusalem for a period of 99 years and (4) demilitarisation under the auspices of the UN.

Table 4.3: Causal layered analysis – Wisdom of Solomon story

Level of reality	Problem	Solution	Who can solve it?
Litany	<ul style="list-style-type: none"> International community recognises the Palestinian State (two-state solution) 	<ul style="list-style-type: none"> The Knesset passes a law to recognise the State of Palestine The State of Israel recognises and accepts the jurisdiction and 	<ul style="list-style-type: none"> UN States of Israel and Palestine

Level of reality	Problem	Solution	Who can solve it?
		resolutions of UNCLOS	
	<ul style="list-style-type: none"> EU commits and disburses US\$200 billion in foreign aid to the new State of Palestine 	<ul style="list-style-type: none"> Israel and EU to assume a shared responsibility for the reconstruction of Palestinian territories and society 	<ul style="list-style-type: none"> EU
	<ul style="list-style-type: none"> Other countries pledge to build a modern maritime port and airport in Gaza and the West Bank 	<ul style="list-style-type: none"> Prime Minister Benjamin Netanyahu pledges US\$10 billion in foreign aid for the reconstruction of Palestinian territories 	
Systemic causes	<ul style="list-style-type: none"> International isolation of the State of Israel 	<ul style="list-style-type: none"> UN Security Council passes a resolution that rescinds all negative references towards the State of Israel and its symbols 	<ul style="list-style-type: none"> UN
	<ul style="list-style-type: none"> UNCLOS awards the State of Palestine (and Lebanon) significant land and maritime boundaries 	<ul style="list-style-type: none"> East Jerusalem is declared a joint territory of both Israel and Palestine Joint Territorial Management Agency created by treaty between the State of Israel and the State of Palestine for the governing of East Jerusalem 	
	<ul style="list-style-type: none"> Significant Levant Basin Province oil and natural gas reserves fall within the jurisdiction of the new State of Palestine 	<ul style="list-style-type: none"> Israel and Palestine enter into a benefit-sharing agreement, by way of a treaty, which allows for the sharing of all Levant Basin Province oil and natural gas reserves on an equal basis 	<ul style="list-style-type: none"> States of Israel and Palestine
	<ul style="list-style-type: none"> Arab League boycott lingers 	<ul style="list-style-type: none"> Arab League passes a resolution to rescind its boycott of Israel and begin normalisation of relations 	<ul style="list-style-type: none"> Arab countries and society

Level of reality	Problem	Solution	Who can solve it?
		<ul style="list-style-type: none"> Israel opens its new embassy in East Jerusalem and a consulate in Ramallah Palestine opens its new embassy in East Jerusalem 	<ul style="list-style-type: none"> State of Israel State of Palestine
	<ul style="list-style-type: none"> Militarised Palestinian Authority, militias and population 	<ul style="list-style-type: none"> Demilitarisation under the auspices of the UN 	<ul style="list-style-type: none"> State of Palestine, Fatah, Hamas, Palestinian society All military security in the Palestine (excluding law enforcement) to be provided and controlled by Switzerland on a nonpartisan basis (to be paid for by the UN, as an expenditure line item for a period of 99 years)
Worldview	<ul style="list-style-type: none"> US hegemony in the eastern Mediterranean and its waning popularity and legitimacy in the region 	<ul style="list-style-type: none"> Pursuit of fairness, equality, justice and poverty eradication among all peoples of the world and nations 	<ul style="list-style-type: none"> UN States of Israel and Palestine EU People of the world
Myth- metaphor	<ul style="list-style-type: none"> Peace and prosperity in our lifetime 	<ul style="list-style-type: none"> Land of milk and honey 	<ul style="list-style-type: none"> Humanity

Source: Own elaboration

The biblical metaphor that Israel is a land of milk and honey rings true again. God’s chosen people have finally found their peace, and manna is flowing from the heavens again.

4.5 Conclusion

There are positive and negative aspects in all the above stories. The three narratives strive to portray alternative futures that the Israelis and Palestinians could embrace. What is desirable and preferable among the different stakeholders to the conflict is a maze or a conundrum of all the three stories. Horst W. Rittel describes these as wicked problems, which are “social [economic and political] system problems which are ill formulated, where the information is confusing, where there are many clients and decision-makers with conflicting values, and where the ramifications in the whole system are thoroughly confusing” (Churchman, 1967).

These narratives are controversial and they are intended to elicit deeper dialogue among all decision makers in the conflict. The challenge is to “[d]eepen... our focus by moving from litany to inner story, myth, [which] allows for more potent and transformative change” (Inayatullah, 2011).

CHAPTER 5

ADDING FUEL TO THE FIRE: A WICKED PROBLEM IN THE MAKING

5.1 Introduction

Leading experts and social commentators who are involved either directly or indirectly in the Israeli-Palestinian peace process believe that with enough commitment and an inclusive process, Israel can attain peace and a lasting solution to its problems in the eastern Mediterranean. In addition, according to Arik Segal (2011), “[t]o ensure its security, Israel needs a foreign policy that speaks to the Arab people, not just to their leaders.” Furthermore, “[c]lose ties with Gulf countries are certainly likely to enhance Israel’s security situation, bestow legitimacy on other nations seeking to jump onto the peace bandwagon, and encourage more positive Israeli public opinion regarding Arab gestures to promote peace, thereby making it easier for the Israeli government to make more concessions to the Palestinians” (Guzansky, 2011). However, all these well-meaning interventions and propositions have not yielded any positive outcome. It appears from the foregoing that the Israeli-Palestinian conflict has all the makings of a wicked problem.

This chapter examines the development of the wicked problems concept. Secondly, the relevance and application of this concept to the discovery of oil and gas in the Levant Basin Province is argued. Lastly, it concludes with the use of the general morphological analysis (GMA), a futures concept that “is a method for systematically structuring and analyzing the total set of relationships contained in multi-dimensional, non-quantifiable problem complexes” (Ritchey, 2011). The results of the GMA will produce an inference model, which will be the basis for “developing scenario models and mapping of alternative futures” (Ritchey, 2011).

5.2 The wicked problems concept

In 1967, Horst W. Rittel described the wicked problems concept for the first time as “social [economic and political] system problems which are ill formulated, where the information is confusing, where there are many clients and decision-makers with conflicting values, and where the ramifications in the whole system are thoroughly confusing” (Churchman, 1967). Furthermore, this concept was comprehensively defined in 1973 in a treatise by Rittel and Webber that distinguished wicked problems from tame problems (Rittel & Webber, 1973). The formulation of a tame problem is definitive. For example, the solving of a complex mathematical problem can be penned exhaustively. The solution can be definitively tested and mistakes identified. The results can be easily recognised and verified. In addition, there is a correlation between the problem and the solution, which allows repeatability and replicability under the same conditions. According to Hal Lawson (2005), “[e]ssentially, tame problems are simple, predictable, and certain. They are amenable to reduction, easy categorization, and isolation. Here, each special problem can be

paired with a special solution or intervention.”

In contrast, wicked problems exhibit “at least ten distinguishing properties” (Rittel & Webber, 1973), namely:

(1) There is no definitive formulation of a wicked problem: There is no agreement on the expression of the problem, and it is never understood until a solution is found or comprehended. According to Jeff Conklin (2005), “[e]very solution that is offered exposes new aspects of the problem, requiring further adjustments of the potential solutions.” Furthermore, Rittel and Webber (1973) state that “in order to describe a wicked problem in sufficient detail, one has to develop an exhaustive inventory for all conceivable solutions ahead of time.” In order to overcome the latter condition, general morphological analysis (GMA) will “strive...to represent the total problem space, and as many of the potential solutions to the given problem complex as possible” (Conklin, 2005). The GMA concept is fully discussed and comprehensively applied in Chapter 6.

(2) Wicked problems have no stopping rule: There is no agreement when the problem has been solved because the ‘problem’ cannot be definitively formulated. Hence, it is difficult to conclusively demonstrate that the problem has been categorically solved by any of the various ‘solutions’ that are put forward by interested stakeholders. According to Jeff Conklin (2005), “[t]he problem solving process ends when you run out of resources, such as time, money, or energy, not when some optimal or ‘final and correct’ solution emerges.”

(3) Solutions to wicked problems are not true or false but are good or bad: According to Kenneth J. Menkhaus (2010), “[s]olutions to wicked problems are not true or false, but better or worse, and difficult to measure objectively because they are judged in a social context in which different stakeholders have different values and goals.” The process to arrive at a solution is by way of sufficient consensus (based on available information at the time) by the decision maker(s) and is either implicit or explicit. In contrast, ordinary or tame problems have solutions that can be judged as either right or wrong, and there is general acceptance of the solution’s correctness among subject matter experts.

(4) There is no immediate and no ultimate test of a solution to a wicked problem: For example, the traditional desire to get married and start a family “...after being implemented, will generate waves of consequences over an extended – virtually an unbounded – period of time. Moreover, the next day’s consequences of the solution may yield utterly undesirable repercussions which outweigh the intended advantages or the advantages accomplished hitherto” (Rittel & Webber, 1973). The consequences of being married are wide ranging, for example everlasting love or a loveless marriage, raising children or a childless marriage, support or lack thereof from in-laws or ‘out-laws’, money issues, sexual desires or politics, career, culture, personal power, and so forth. The list is endless; so is the configuration of these consequences over time, space and mind. The outcomes could be bliss, divorce, trauma, death, violence, abuse, apathy, exile, regret, and so

forth. The consequences of marriage, for instance, cannot be predicted or prevented from ending in sorrow or resulting in the 'happily ever after'. The expression "only time will tell" is possibly applicable.

(5) Every solution to a wicked problem is a 'one-shot operation' because there is no opportunity to learn by trial and error; every attempt counts significantly. In the built-environment, resources such as money, expertise, land, water, energy and so forth are scarce. The efficient and effective use thereof should be paramount to policy makers and implementers. A badly conceived social or economic programme cannot be undone without leaving a bitter and expensive lesson to those who are accountable for it. The consequences of a misjudgement are dire, if not fatal, and cannot be easily reversed without leaving a blemish or scar in the minds of those involved and those who are affected.

(6) Wicked problems do not have an enumerable (or an exhaustively describable) set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated into the plan. The realisation of a preferable and desired end-state is *in tenebris salto* – a shot in the dark. Hence, it is impossible to factor in all externalities and consider all or any options prior to executing the desired and preferred policy choice. Rittel and Webber (1973) succinctly state that "... [i]t is then a matter of judgment whether one should try to enlarge the available set or not. And it is, of course, a matter of judgment which of these solutions should be pursued and implemented." However, the use of GMA and other innovative analytical futures concepts such as mess mapping (developed by Robert E. Horn) and resolution mapping (developed by Robert P. Weber) has been beneficial in the attempt to resolve wicked problems. According to these authors, "Resolution Mapping and Mess Mapping are each powerful process and analytic tools for helping stakeholders resolve Wicked Problems. These tools can be successful where others have failed (or have feared to tread) because they incorporate or address:

- uncertainty and risk;
- complexity;
- systems interacting with other systems;
- competing points of view and values;
- different people knowing different parts of the problem (and possible solutions); and
- intra- and inter-organizational politics" (Horn & Weber, 2007).

Hence, according to Rittel and Webber (1973), "[i]n such fields of ill-defined problems and hence ill-definable solutions, the set of feasible plans of action relies on realistic judgment, the capability to appraise 'exotic' ideas and on the amount of trust and credibility between...[the decision-maker] and clientele that will lead to the conclusion, 'OK let's try that'."

(7) Every wicked problem is essentially unique: The prevalence of wicked problems is ubiquitous in all spheres of life; however, it does not mean that they are the same. They are

different and should be treated as such. The prevalence of wicked problems in social, political and technological strata is endless, and they can be found in different socioeconomic contexts such as sport (Lucidarme, Willem, Magherman, & Balduck, 2011), morality (Wexler, 2009), defence planning (Blackman, 2007), town and city planning (Rittel & Webber, 1973) and design (Buchanan, 1992). In addition, they are found in areas such as public policy (Head, 2008), information and communication technologies (Borko, Whitcomb, & Liston, 2008), health care (Vartiainen, 2005), water (Lach, Rayner, & Ingram, 2005) and oil and gas (Paquet, 1989). Decision makers often opportunistically elect to apply solutions that seem to work elsewhere on the assumption that they can be retrofitted to local conditions. This compulsion to apply a one-size-fits-all solution to societal problems often results in unintended consequences or in unfortunate cases is fatal.

(8) Every wicked problem can be considered to be a symptom of another problem: The nature of wicked problems is such that it is difficult to pin down or diagnose the root cause of the problem. For example, "...the 'education mess' of South Africa is co-produced (or is the result of multiple causation) by factors associated with the various stakeholders and the various dimensions of education. Simple statements such as 'the South African education crisis is caused by Apartheid' or 'by the lack of funds' or 'by the pupil explosion' or by any other 'single' cause are always 'partial truths' and as such false.... Rather, the education crisis is co-caused or co-produced by all these factors and many more" (Dostal, 2008). The causes could be confusing, complementary, contradictory and paradoxical. Hence, wicked problems are shape shifters – their true nature is unknown.

(9) The existence of a discrepancy representing a wicked problem can be explained in numerous ways. The choice of explanation determines the nature of the problem's resolution. Unlike tame problems that are "amenable to reduction, easy categorization, and isolation" (Lawson, 2005), wicked problems exhibit inconsistent explanations because each decision maker has a different perspective on what the solution is or should be. There is disagreement on the cause of the problem and the effect of the intervention. How problems are solved is open to different interpretations. In the words of Rittel and Webber (1973), "[t]he analyst's 'world view' is the strongest determining factor in explaining a discrepancy and, therefore, in resolving a wicked problem." Where there is dissonance, wicked problems are explained through a mechanism of sufficient consensus, which represents the dominant perspective among those affected by the decision – "[t]hat is to say, the choice of explanation is arbitrary in the logical sense. In actuality, attitudinal criteria guide the choice. People choose those explanations which are most plausible to them" (Rittel & Webber, 1973).

(10) The decision maker has no right to be wrong: With regard to *scientia*, the creation of hypotheses that could be later refuted by peers is the foundation of the discipline. The objective is to find the ultimate and irrefutable truth about the universe. Rigorous peer review is encouraged to

lend credibility to or refute the findings. The decision maker has the luxury and the right to be wrong, and this is accepted practice within the community. However, with regard to social science, there is no such leeway. The decision of the social scientist could have far-reaching consequences that are fatal and disruptive in the lives of those affected by it. Hence, whenever a decision is taken, it must always enhance the quality of life of those who will be affected by it. This is not an easy proposition. According to Rittel and Webber (1973), “[s]ocial science has simply been unable to uncover a social-welfare function that would suggest which decisions would contribute to a societally best state. Instead, we have had to rely upon the axioms of individualism that underlie economic and political theory, deducing, in effect, that the larger-public welfare derives from summation of individualistic choices.”

In conclusion, in the words of Jeff Conklin (2005), “[i]t may be convenient to describe a problem as wicked or tame, but it’s not binary – most problems have degrees of wickedness.” The tame--wicked continuum as depicted in Figure 5.1 elucidates the differentiation.

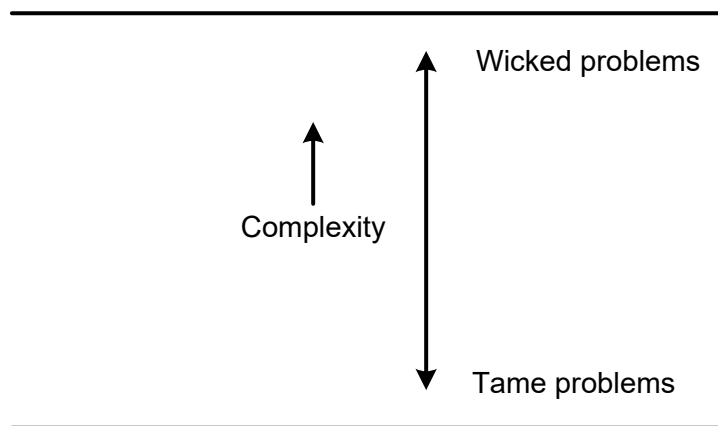


Figure 5.1: Tame-wicked continuum

Source: Kreuter, De Rosa, Howze & Baldwin (2004)

He further states that “[p]utting a man on the moon was a problem with a lot of wickedness, for example, but also with some tame elements” (Conklin, 2005).

5.3 The dangerous neighbourhood is ablaze – a multinational wicked problem

Arab states have used and continue to use oil as a weapon to punish and isolate Israel in the community of nations. Egypt has been the exception to the rule until the recent cancellation of the natural gas supply contracts in April 2012. It is unclear how Israel will react, either by using its newfound energy bonanza to conduct its energy diplomacy to strengthen political and economic ties with its Arab neighbours or by adopting a policy of autarky, as it has done in the past. All the countries in the eastern Mediterranean are engaged in a process of adjusting their energy policies and strategies to benefit first and foremost their own interests.

5.3.1. Who and what are stoking the fire?

The international dimension of all the issues depicted in Figure 3.1 cannot be underestimated. According to Andrea Crandall (2007), “Syria, Iran and Lebanon are the pieces of the oil puzzle that America has not yet taken. Israel’s disastrous incursion into Lebanon, as well as [President George W.] Bush’s warmongering against Syria and Iran suggest the US will try to complete the puzzle. Once the U.S. controls these three countries, it can begin shipping crude out of Israel’s ports in Eilat and Ashkelon (the terminals of the Trans-Israel Pipeline, Tipline).”

The ‘silent partners’ who will produce, store, distribute, procure and consume most of the Levant Basin Province’s hydrocarbons are located nearby in the EU and far away in the US. Somehow, these two power blocs have permeated the domestic socio-political fabric of the eastern Mediterranean countries to their own advantage, by using brute force in the form of military intervention; through media onslaught, using international cable networks to frame public opinion in their favour; by destabilising tactics through the alleged funding of civil society groups, to organise mass discontent demonstrations and revolutions; and by using *bona fide* international instruments that were designed to bring about world order and peace against their adversaries, in other words the hauling of hostile powers to the International Court of Justice for alleged human rights abuses and the use of the UN Security Council to punish those who do not serve their agenda, under the guise of humanitarian consideration. A multinational approach to devise a benefit-sharing mechanism would possibly bring about a resolution to the conflict.

5.3.2. Quelling or igniting the fire?

Israel’s quest and unilateral action in the offshore exploration and exploitation of the hydrocarbons of the Levant Basin Province has been rejected by all parties in the dangerous neighbourhood as a gimmick and a cunning manoeuvre by Prime Minister Netanyahu. In the words of Saeb Erakat, “Netanyahu wants to build confidence through this?... [t]he world is expecting him to stand up and say he will accept a Palestinian state and stop building Jewish settlements” (Boudreaux, 2011). This response should be seen in the broader context of resolving both maritime and national border disputes among all countries in the Levant Basin Province. By implication, the treaties that have been signed by Israel and its neighbours delimiting each country’s EEZs will require a review as they have a direct impact on the national and economic interests of Palestine, Egypt, Turkey, Lebanon and Syria.

5.3.3. The good, the bad and the wicked

According to Brenda Shaffer (2011), “Israel’s near-obsession with the security of its oil supply has stemmed from Arab producers’ dominance in the world oil market...[furthermore], Israel treats its energy policies as a national security issue.” This is informed by the prime objective of protecting, preserving and growing the Jewish state.

Cyprus, which is a full member of the EU, stands to gain immensely from the oil and natural gas bonanza. Hence, it is no coincidence that the US and EU have expressed full support of the Israel-Cyprus Agreement on the Delimitation of the Exclusive Economic Zone, which was signed in December 2010. The implied purpose of this manoeuvre by Israel and Cyprus is to facilitate offshore hydrocarbon exploration and exploitation in the depths of the Levant Basin Province. It is important to note that Cyprus has signed similar agreements with Egypt in February 2003 and with Lebanon in January 2007.

Egypt's political transition has not been smooth, and dangers are lurking; hence, the 1979 Egypt-Israel Peace Treaty is in peril and could be the collateral damage of Egypt's future assertiveness in reclaiming its dominance in the region. Egypt's future political and economic trajectory could be fatal to Cyprus and Israel were it to align itself with Turkey. However, the signing of a framework agreement concerning the development of cross-median line hydrocarbon resources in May 2006 has provided certainty on arrangements for the offshore exploration and exploitation of hydrocarbons in the Levant Basin Province. However, the content of the confidentiality agreement that was signed in January 2007 by both countries remains unknown.

Turkey's geopolitical influence has been curtailed and its ambitions derailed by its strategic allies in the West. This was due to the country's perceived belligerence in the eastern Mediterranean, especially its support of Iran's nuclear ambitions, the continued occupation of northern Cyprus and its stance on the plight of the Palestinians. In contrast, the incremental restoration of Cyprus's pivotal role in the eastern Mediterranean could be attributed to its newfound influence in the EU (and its concomitant economic and military support), Turkey's waning influence in Washington and London as a result of its strategic blunders, and the newfound hydrocarbons of the Levant Basin Province. Turkey's response to the geopolitical developments has been vociferous, especially after the EU refused it membership because of its continued occupation of another EU country. The rationale for Turkey's conduct has been documented in a book (titled *Strategik Derinlik, Turkiye'nin Uluslararası Konumu*) written by Ahmet Davutoğlu, Turkey's Minister of Foreign Affairs, wherein he states that "[e]ven if there was not one single Muslim Turk over there, Turkey would have to maintain a Cyprus question. No country could possibly be indifferent to an island like this, placed in the heart of its vital space" (Ellis, 2012). Hence, the diplomatic and military manoeuvres by Israel and Cyprus and Turkey's swift retaliation have not been helpful to quell the acrimony among all parties involved. The fear is, "Turkey feels it is going to be lost amid the struggle for gas as long as the Nabucco project is late. Since the "Nord" and "South Streams" exclude Turkey, Turkey knows quite well that the gas of the Eastern Mediterranean has become distant from Nabucco, and thus beyond Turkey's influence" (Shueibi, 2012). Hence, the continued and perpetual presence of Turkey in Northern Cyprus remains key to its long-term strategy and ambitions of becoming a hydrocarbon power. Lastly, "...according to the Washington Institute for Near East Policy (WINEP,

the think tank of AIPAC) which also speculates that [the] struggle between Turkey and Cyprus would heat due to Ankara's inability to bear its losses of the "Nabucco" gas" (Shueibi, 2012).

The tripartite maritime border dispute between Lebanon, Cyprus and Israel has escalated into an undesirable diplomatic row in the midst of an energy bonanza. Each country stands to benefit; however, self-interest, intransigence and ideological prejudice has turned the maritime border issue into a farce. The major problem is the unilateralism among the three countries, especially in light of the discovery of oil and gas in the Levant Basin Province.

Lebanon has taken the legal route by presenting evidence in the form of charts and lists of coordinates to the UN Secretary-General as proof of alleged violations of its sovereignty by Cyprus and Israel. The argument by Lebanon is plausible and its legal options are very strong; however, the fact still remains that it was strategically outmanoeuvred by Cyprus and Israel. The main allegation is that "[t]he agreement between Israel and Cyprus used similar coordinates to the Lebanon-Cyprus Maritime Agreement" (Wählisch, 2011). There are legal mechanisms to resolve the impasse between the tripartite in terms of the UNCLOS prescripts; however, these have not been pursued by Cyprus and Israel. As indicated in paragraph 1.1, Israel does not want to subject itself to the arbitrators of the UNCLOS because of perceived bias. Lebanon is a signatory to the treaty and has readily subjected itself to its jurisdiction by submitting the required formal protestations and appeals for intervention. However, Lebanon does not wish to enter into direct talks with Israel to negotiate all border issues (land and maritime) as these two countries are still technically at war. The negotiation of any borders between Israel and Lebanon in the short term does not seem possible due to the public display of malice and bravado by both countries. However, negotiations will only be lubricated by the harsh economic reality of oil and gas security, demographic changes and the desire to reduce public debt.

5.3.4. Flare-up in the Levant Basin Province

According to Imad Fawzi Shueibi (2012), "[w]hen Israel started oil and gas extraction in 2009, it was clear that the basin of the Mediterranean had entered the game and that Syria was either to be attacked or that the whole region was going to enjoy peace since the twenty-first century was said to be the century of clean energy. What we know about this issue is that the Mediterranean basin is the wealthiest in gas and that Syria would be the wealthiest state. Hence, it is no coincidence that since late 2011 Syria has been involved in a civil war – the latter being "a war from abroad" (Malas, 2012). Russia and China have acted as a shield against the alleged foreign onslaught in the UN Security Council by jointly vetoing any adverse action against Syria.

According to Imad Fawzi Shueibi (2012), "[e]mbracing the secret of the Syrian gas will let all know how big the "game over gas" is. According to China, who controls Syria could control the Middle East, grip on the gateway to Asia, possess the key to Russia's house (as Catherine II put it), and

could set foot on the Silk Road. Most importantly, they who could penetrate Syria for gas have the ability to dominate the world, especially since the coming century will be the Century of Gas.” The race to the bottom has begun and it is unclear who will withstand the heat or sink in the Levant Basin Province. Russia and Turkey are waiting for the ignition.

5.3.5. Maelstrom, embracing the Leviathan

The scramble to explore and exploit the hydrocarbons could unleash the Leviathan, the sea monster and the Prince of Hell; the consequences could be fatal and contaminate the dangerous neighbourhood for more generations to come. In the words of Brenda Shaffer (2011), “[t]he heated rhetoric of this emerging conflict flies in the face of a number of facts relating to development of oil and natural gas production: foreign investment tends to shy away from locations that are embroiled in conflict and where borders are not demarcated; and Lebanon and Israel are not in competition over being the first to discover significant natural gas riches. In fact, the larger the reserves discovered in the Eastern Mediterranean region, the greater commercial interest will be in developing the energy riches.”

In other words, there is enough oil for each country and its people; however, greed and animosity are turning the Levant Basin Province into a zero-sum game. The solution is not unilateral action by one country to the detriment of others; ideally and preferably, a multilateral approach and conscious pursuit and development of symbiotic relationships would yield a better outcome for all in the dangerous neighbourhood. The history of the latter has shown that anything short of this would be fatal. Importantly, the hydrocarbons of the Levant Basin Province are not going anywhere; sufficient consensus on a way forward by all affected countries is vital.

5.3.6. Energy bonanza or abyss

The complexity in the Levant Basin Province is multidimensional in nature and can be categorised into three pertinent issues, namely (1) international relations and cooperation, (2) domestic considerations and (3) the Palestinian land question. The trends analysis has elucidated the widening value divergence among all countries in the Levant Basin Province, which is mainly informed by self-interest (ideology, religion, economics, etc.), insecurity (national trauma, political violence, natural resource endowment, etc.) and history (prejudice, dispossession, intolerance, etc.). Since the discovery of oil and gas in the Levant Basin Province, the political and socioeconomic environment of the dangerous neighbourhood has become more turbulent and has evolved rapidly; more volatility and uncertainty have engulfed the region. However, these pertinent issues do not comprise all the problems confounding the discovery of oil and gas in the Levant Basin Province.

5.3.7. One-of-a-kind problem

It is undeniable that there are conflicts among countries in the world. These conflicts include disputes regarding oil, water, environment, air quality, nuclear armaments, religion, borders, and so forth. However, each of these conflicts is unique in nature and is not similar to any other conflict. The issues and problems of the Levant Basin Province are also unique; at least seven countries are involved, namely Israel, Palestine, Egypt, Turkey, Lebanon, Syria and Cyprus. No conflict in the world has so many countries involved on matters of maritime borders and hydrocarbons; hence, in many respects, the conflict of the Levant Basin Province is a one-of-a-kind phenomenon.

5.3.8. Blinkered by vested and self-interests

Pinpointing the cause(s) of the conflict in the dangerous neighbourhood is very difficult, as each potential cause could be a potential symptom of another problem. The conflict could be categorised into the following broad biases, namely (1) hindsight, (2) theo-sight, (3) peri-sight and (4) foresight.

In the Levant Basin Province, the predisposition to a *hindsight* bias has been the interpretation of the past to construct a distorted future based on that knowledge to justify the brutality meted out to neighbours and the accumulation of a horrific weapons arsenal. In addition, it has and continues to provide cover for the preservation of the status quo; aptly stated by Benjamin Netanyahu (2011), "Israel needs unique security arrangements because of its unique size." The reduction of the conflict in the latter manner is clearly the promotion of self-interest by the Israeli government at the expense or exclusion of other members of the dangerous neighbourhood. Every (mis)calculated step that each country takes unilaterally or bilaterally enables other members of the dangerous neighbourhood to adjust their energy policies and strategies to benefit first and foremost their interests. This inevitably has led to a vicious cycle of tit for tat.

The reduction of the conflict to the matter of religion has been beneficial to vested interests on both sides of the religious spectrum. A *theo-sight* (looking up to God) bias has been and continues to be a red herring and a diversion of attention from the more pertinent issues, such as those elucidated in Table 5.1. Religious extremists from the Christian, Jewish and Muslim faiths have held sway over the construction of the narrative of the conflict. These factions are very resourceful and powerful. Their agendas are executed with fiery religious fervour and in most instances are fatal and very disruptive. As aptly articulated by Rabbi Ovadia Joseph, "...all these evil people should perish from the world. God should strike them with a plague, them and these Palestinians" (Siegman, 2010a).

Peri-sight (looking around) and *foresight* bias is another capability that has been harnessed by the Israeli government to promote both its vested and self-interests. It is born out of a need to provide

anticipatory intelligence to counteract its adversaries. Benjamin Netanyahu (2011) has categorically stated that “[i]n an unstable Middle East, Israel is the one anchor of stability”. This narrative is easily bought by and accepted in the US as it serves the stated objectives of ‘A Clean Break: A New Strategy for Securing the Realm’ (Perle et al., 2000), which are as follows:

- A new approach to peace – the promotion of Western values and traditions in the eastern Mediterranean.
- Securing the northern border – attacking and containing Syria (and its proxy Hezbollah) and Iran, with the express view of retaining the Golan Heights.
- Moving to a traditional balance of power strategy – bringing Turkey and Jordan to the fold, at the same time eliminating a common foe, Saddam Hussein, former Iraqi president.
- Changing the nature of relations with the Palestinians – explicit preference and desire to pursue and remove any Palestinian that could be regarded as a foe, in other words the promotion of state-sponsored extra-judicial killings. Forging a new US-Israeli relationship – “Israel can make a clean break from the past and establish a new vision for the U.S.-Israeli partnership based on self-reliance, maturity and mutuality — not one focused narrowly on territorial disputes. Israel’s new strategy — based on a *shared philosophy* of peace through strength — reflects continuity with Western values by stressing that Israel is *self-reliant, does not need U.S. troops* in any capacity to defend it, including on the Golan Heights, and can manage its own affairs.” *Transcending the Arab-Israeli conflict – Israel must contain and surpass its foes.*

In the above policy, Israel is the centrepiece on which all light must shine, while at the same time, it diminishes and ignores the interests of the countries in the dangerous neighbourhood. A multilateral approach to resolve the hydrocarbon conflict has never been advocated or is muted. Israel’s ‘junior’ partners are encouraged and given a role to support its bidding, a role that Turkey took very seriously in the invasion of Iraq, as it was required in terms of its North Atlantic Treaty Organization (NATO) treaty obligations.

5.3.9. Self-preservation

The default position of the Israeli government has been to secure energy autarky and to adjust its energy policies and strategies to benefit first and foremost Israel for generations to come. This has been and continues to be the *de facto* position of the Israeli government, and there is no available evidence to the contrary that disputes this observation. According to Brenda Shaffer (2011), “Israel possesses unique energy security needs, since its energy infrastructure and ports are targeted during wartime, precisely when the military needs specific energy supplies. In addition, Israel’s energy policies are intertwined with its water supply policies, since the state produces much of its water supply through desalinating of sea water, which demands significant amounts of energy.”

The problems of the Israelis have been informed mainly by their persecution during the Holocaust and the fear of the existential threat from Palestinians and the Muslim world (which collectively holds the largest known hydrocarbon resources in the world). Hence, the 'promised land' shall be protected and preserved at all costs. The other members of the dangerous neighbourhood are left to scramble to find their own place under the sun.

5.3.10. The power of virtue or veto

Israel is the only non-permanent member of the UN Security Council that wields (through its US proxy) a veto. The Israeli government has literally committed many acts of aggression in the dangerous neighbourhood and escaped any consequences from the UN Security Council. This is despite the condemnation by the latter and swift vetoing by the US. However, in the court of public opinion, Israel does not wield such a veto, and its reputation has been tarnished because of its alleged illegal conduct in the dangerous neighbourhood and elsewhere. The Star of David has been waning and the repercussions have been fatal to the Zionist agenda. The virtues of the latter have been superseded by the compelling power of the veto. None of the other members of the dangerous neighbourhood enjoys the same privileges as Israel, albeit a loathed position.

5.4 Conclusion

The dangerous neighbourhood exhibits all of Rittel and Webber's (1973) 10 distinguishing characteristics of wicked problems. Hence, Israel's discovery of oil and gas in the Levant Basin Province is a wicked problem. It is no surprise that the matter has reached boiling point in all seven countries. The failure to resolve the problems of the Levant Basin Province could have far-reaching consequences for the world.

CHAPTER 6

SCENARIOS

6.1 Introduction

The preceding chapter has established that the discovery of oil and gas in the Levant Basin Province is a wicked problem. In addition, that it is a multinational wicked problem that involves directly at least seven countries in the dangerous neighbourhood, the US, the EU and Russia. There are three issues that are known with a measure of certainty: (1) The dangerous neighbourhood has become extremely wealthy since the discovery of oil and gas; therefore, the stakes have become much higher. (2) The Palestinian land question cannot be resolved exclusively by a bilateral arrangement between Israel and the Palestinian National Authority. The issue of borders must now at least include terrestrial, marine and benefit sharing of maritime resources. (3) There is controversy about and questionable validity of the current EEZs, and possibly all of them would require a review and renegotiation in a multinational forum at some stage, under the auspices of the UNCLOS.

The combination of the 16 trends described and projected in Chapter 3, the narratives that have been developed in Chapter 4 and the conclusions on the determination of the discovery of oil and gas in the Levant Basin Province as a wicked problem in Chapter 5 is the basis for the development of the scenarios in Chapter 6. The rich analysis from these chapters lends itself to multiple plausible scenarios that could evolve in the dangerous neighbourhood. The researcher has chosen to develop three scenarios instead of four from the key broad drivers of change, which are in line with the three narratives that have been elucidated in Chapter 4. The modelling of the Poseidon scenario involved the use of the GMA concept in conjunction with the Wisdom of Solomon narrative. The application of the GMA concept is elucidated in paragraph 6.2. The Apate and Diaspora scenarios were solely developed from the Star of David and Herod's Folly narratives, respectively.

6.2 General morphological analysis

According to Tom Ritchey (2011), "[g]eneral morphological analysis...is a method for systematically structuring and analysing the total set of relationships contained in multi-dimensional, non-quantifiable problem complexes." A GMA that incorporated all the key drivers and other key factors in the external environment that have been comprehensively discussed in the preceding chapters was used. The researcher has made an optimistic judgment, based on the principle of sufficient consensus, that an energy bonanza instead of an abyss in the dangerous neighbourhood is preferable and desirable. Hence, the following eight parameters are relevant and ripe for analysis:

- International relations and cooperation (energy bonanza, political mainstreaming of arch-foes, peace and security, and UNCLOS).
- Domestic considerations (energy security and energy consumption).
- Palestinian land question (recognition of a Palestinian state and national borders).

These parameters are depicted in Table 6.1 in the form of a morphological field matrix.

Table 6.1: Morphological field matrix: Levant Basin Province

Energy bonanza	Political mainstreaming of arch-foes	Peace and security	UNCLOS	Energy security	Energy consumption	Recognition of a Palestinian state	National borders
Government revenue	Expansionary government policies	Social and economic programmes	EEZs	Positive capital account (balance of payments)	Import substitution	Viable national treasury	Sovereign wealth funds
Energy hub	Industrialisation	Prosperity	Benefit sharing	Exports	Ubiquitous use of oil and gas products	Oil and gas industry	Downstream processing and value addition
Construction boom	Economic empowerment	Social and economic infrastructure	Cooperative governance	Joint economic infrastructure projects	Dual-fuel capability	Reconstruction efforts	Productive and competitive national infrastructure
Employment	Labour absorption	Social cohesion	Protection and preservation of marine life and ecosystem	Prudent and responsible exploration and exploitation	Alternative energy sources and technologies	Social inclusion	Improved standards of living
High-end skills	High-calibre workforce	Return of Diaspora			Cleaner production and energy efficiency	Modernisation	Productivity and competitiveness
Environment	Exploration concessions	Shared marine resources				Rehabilitation of the maritime environment and coast	Viable maritime sector

Source: Own elaboration

Each parameter has at most six values that represent relevant states or conditions in the Levant Basin Province. According to Tom Ritchey (2011), “[a] morphological field is constructed by setting the parameters against each other in order to create an n-dimensional configuration space...[Table 6.1]. A particular configuration (the darkened cells in the matrix) within this space contains one “value” from each of the parameters, and thus marks out a particular state of, or possible formal solution to, the problem complex.”

Table 6.1 contains a morphological field with at most 622 080 formal configurations. This large number of configurations was deciphered with the use of MA/Carma™ (computer-aided resource for morphological analysis) software, which was accessible with the generous support of the Swedish Morphological Society. A cross-consistency assessment (CCA) was conducted by using the software to “examine all of the configurations in the field, in order to establish which of them

are possible, viable, practical, interesting, etc., and which are not” (Ritchey, 2011). A judgment process was undertaken to evaluate each condition pair-wise against each other to determine whether there was mutual consistency; if not, the configuration was discarded. The product of the exercise is a fully completed CCA matrix, as depicted in Table 6.2.

Table 6.2: Cross-consistency assessment: Levant Basin Province

		Energy bonanza					Political mainstreaming of arch-foes					Peace and security					UNCLOS			Energy security				Energy consumption				Recognition of a Palestinian State											
		Government revenue [GR]	Energy hub [EH]	Construction boom [CB]	Employment [E1]	High-end skills [HS]	Environment [E2]	Expansionary government policies [EP]	Industrialisation [I]	Economic empowerment [EE]	Labour absorption [LA]	High-calibre workforce [HW]	Exploration concessions [EC]	Social and economic programmes [SP]	Prosperity [P]	Economic and social infrastructure [EI]	Social cohesion [SC]	Return of the Diaspora [RD]	Shared marine resources [SR]	Exclusive economic zones [EZ]	Benefit sharing [BS]	Cooperative governance [CG]	Protection and preservation of marine life and ecosystem	Positive capital account (balance of payments) [PA]	Exports [E3]	Joint economic infrastructure projects [JP]	Prudent and responsible exploration and exploitation	Import substitution [IS]	Ubiquitous use of oil and gas products [UP]	Dual-fuel capability [DC]	Alternative energy sources and technologies [AT]	Cleaner production and energy efficiency [CE]	Viable national treasury [VT]	Oil and gas industry [OI]	Reconstruction efforts [RE]	Social inclusion [SI]	Modernisation [M]	Rehabilitation of the maritime environment add coast [RC]	
Political mainstreaming of arch-foes	EP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HW	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Peace and security	SP	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SC	x	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UNCLOS	EZ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	BS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CG	-	-	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PE	x	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Energy security	PA	-	-	x	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E3	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	JP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PR	-	-	-	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Energy consumption	IS	-	-	-	-	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UP	x	x	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	DC	x	-	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	AT	x	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Recognition of a Palestinian state	CE	x	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	VT	-	-	-	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	OI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SI	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
National borders †	RC	-	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SF	-	x	x	x	x	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	DV	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	PI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	IL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	PC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Legend† SF = Sovereign wealth funds
 DV = Downstream processing and value addition
 PI = Productive and competitive national infrastructure
 IL = Improved standards of living
 PC = Productivity and competitiveness
 VS = Viable maritime sector

Source: Own elaboration

The 622 080 possible formal configurations were reduced to 2 926 fully consistent configurations. The following keys were used to conduct the assessments in the problem space (Ritchey, 2011):

- “-” (hyphen) = Good fit, or best fit, or optimal pair
- “k” = Possible, could work, but not optimal
- “x” = Impossible or very bad idea

The outcome of this process produced a solution space and when synthesised further yielded an inference model, as depicted in Table 6.3.

Table 6.3: Morphological field matrix: Levant Basin Province (EEZ)

Energy bonanza	Political mainstreaming of arch-foes	Peace and security	UNCLOS	Energy security	Energy consumption	Recognition of a Palestinian state	National borders
Government revenue	Expansionary government policies	Social and economic programmes	Exclusive Economic Zones	Positive capital account (balance of payments)	Import substitution	Viable national treasury	Sovereign wealth funds
Energy hub	Industrialisation	Prosperity	Benefit sharing	Exports	Ubiquitous use of oil and gas products	Oil and gas industry	Downstream processing and value addition
Construction boom	Economic empowerment	Social and economic infrastructure	Cooperative governance	Joint economic infrastructure projects	Dual-fuel capability	Reconstruction efforts	Productive and competitive national infrastructure
Employment	Labour absorption	Social cohesion	Protection and preservation of marine life and ecosystem	Prudent and responsible exploration and exploitation	Alternative energy sources and technologies	Social inclusion	Improved standards of living
High-end skills	High-calibre workforce	Return of Diaspora			Cleaner production and energy efficiency	Modernisation	Productivity and competitiveness
Environment	Exploration concessions	Shared marine resources				Rehabilitation of the maritime environment and coast	Viable maritime sector

Source: Own elaboration

Table 6.1 presents the best possible configuration out of the 2 926 fully consistent configurations. Hence, according to the researcher, the finalisation of the agreement on the EEZ is the major driver of the Poseidon scenario, which is based on the Wisdom of Solomon narrative. The morphological field was used as an input-output model, which found that the conclusion of a successful EEZ agreement would have the largest impact among all drivers. In contrast, the failure to reach an agreement would lead to a conflict of ghastly proportions, as portrayed in the Apate scenario, which is based on the Star of David narrative. The furtherance of the current sea grab arrangements under the guise of bilateral cooperation among some countries in the dangerous

neighbourhood bears the hallmarks of embracing the Leviathan, which results in the Diaspora scenario, which is based on the Herod's Folly narrative.

6.3 Poseidon scenario

In Greek mythology, Poseidon is the God of the Sea, the one who brings calm to the seas and lives on the ocean floor. The Poseidon scenario illustrates a 'prosperous neighbourhood' in the Levant Basin Province, where the pursuit of a long-term desirable and preferable future becomes the collective responsibility of each country.

Eli Moshe is a 48-year-old underwater archaeologist from the desert town of Bedouin, Israel. Many years earlier, while a teenager, he found work in the Port of Ashkelon as a cleaner on an oil exploration vessel, which was owned by Noble Energy. He remembers those years as the beginning of an end – an end to hopelessness. The job, no matter how menial it was, brought pride and dignity to his family, as he was the first Bedouin to work on a ship. His family, clan and community are desert people, the so-called 'gods of the sand,' as they are commonly known in the eastern Mediterranean. The term originates from the nomadic lifestyles that most Bedouins lead.

While he started as a cleaner at the bottom in conditions not fit for humans, Eli Moshe made an effort to learn the new ways of the sea. The breeze from the ocean mesmerised this young man and unleashed an interest in all matters maritime. Luckily and unknown to him, the dangerous neighbourhood was turning a corner. It was on a journey fraught with dangers that could be fatal for all those who were committed to it. A 50-year Treaty of Convenience was signed at the time by all heads of government in the Levant Basin Province, to commit, *inter alia*, to the following:

- a) The State of Israel must recognise and accept the jurisdiction and resolutions of UNCLOS.
- b) The Knesset must pass a law to recognise the State of Palestine.
- c) East Jerusalem must be declared a joint territory of both Israel and Palestine.
- d) A Joint Territorial Management Agency must be created to govern East Jerusalem by both Israel and Palestine.
- e) The UN Security Council must pass a resolution that rescinds all negative references towards the State of Israel and its symbols.
- f) The members of the dangerous neighbourhood must enter into a benefit-sharing agreement, by way of a treaty, which will allow for the sharing of all Levant Basin Province oil and natural gas reserves on an equitable basis (determined by an agreed formula).
- g) Demilitarisation under the auspices of the UN must take place.
- h) Fairness, equality, justice and poverty eradication must be pursued in the dangerous neighbourhood.

Unbeknown to Eli Moshe, he was a beneficiary of this treaty, especially Article 278, which reads as follows: "All nation states under this agreement shall pursue and enforce policies that ensure an

absolute right to fairness, equality, access to justice and the elimination of poverty.” As with most Bedouins, Eli Moshe is diligent, resilient and intelligent. When a scholarship opportunity to study underwater archaeology at the University of Malta presented itself, Eli Moshe volunteered for the four-year degree programme. He passed his studies *cum laude*. Interestingly, Bedouins are natural desert archaeologists and the interest to learn the same discipline underwater was second nature to Eli Moshe.

The dangerous neighbourhood was experiencing a new buzz; a construction boom was underway in the quest to build an unrivalled energy hub in the centre of the world. The return of the Diaspora with their high-end skills was supplying some of the scarce skills that were required to build a viable maritime sector. The newly found knowledge by Eli Moshe at university and the practical work experience he earned while doing his internship added to the pool of scarce resources to propel the dangerous neighbourhood to prosperity. A significant number of the so-called ‘lost generation’ found employment both onshore and offshore, as riggers, seafarers, cooks, cleaners, welders, and so forth. According to anecdotal evidence, the labour absorption rate even exceeded the levels of the oil boom in the Middle East. Furthermore, women also joined the bandwagon and supported the growing economies by being gainfully employed in social and economic programmes and the protection and preservation of the environment, especially the coastline that had been neglected for decades. In addition, significant amounts of money were poured in to protect and preserve the vulnerable marine life and ecosystems in the Levant Basin Province.

Expansionary government policies and programmes became possible due to new sources of government revenue from mainly exploration concessions and royalties from hydrocarbon production. National treasuries became flush with revenue, which was used mainly for reconstruction efforts, economic development and the building of a dual-fuel capability infrastructure for the generation of energy. Any surplus was invested in nest eggs, in the form of sovereign wealth funds. Funds deposited or invested in the latter were ring-fenced for a minimum period of 50 years, which was at the time half the estimated life of the Levant Basin Province hydrocarbons. The funds were designed to be a safety valve or net for future generations, for the purpose of reinventing themselves to sustainably continue to have a higher standard of living. In addition, the funds were meant to enable future generations to invest in alternative energy sources, cleaner production and energy efficiency.

The cities of Gaza, Cairo, Tel Aviv, Nicosia, Beirut, and so forth were developing knowledge-intensive industries at a very fast pace. Social and economic infrastructure was upgraded and city living spaces were modernised to take care of decades of neglect, as a result of overcrowding and relentless wars. Joint infrastructure projects, which were coupled with the prudent and responsible exploration and exploitation of hydrocarbons, were executed with military precision. These projects were mainly on time, on budget and beneficial to all the countries that were part of them. The

levels of cooperative governance in the dangerous neighbourhood surpassed even those of established economic unions, customs unions, and so forth. Multilateral summits were held every quarter to thrash out programmes, especially the benefit-sharing programme, export quotas, downstream processing and value-addition capabilities, and the two important social programmes for cohesion and inclusion. The funding of the latter two programmes was budgeted for centrally, at the level of the Multinational Commission of the Magnificent Seven (MCM-7) (the formal name created by treaty). This body monitors and enforces the treaty and is permanently based in East Jerusalem. The head of the Secretariat serves a maximum period of five years on a rotational basis among the members of the dangerous neighbourhood.

For Eli Moshe, born a goatherd boy and now an underwater archaeologist who works undersea in the great depths of the Levant Basin Province, these positive developments are dreams come true. His generation has lived all these experiences and will continue to live them for many years to come. His friends and family call him Poseidon, the God of the Sea, due to the nature of the work he does. Figuratively, his palace (workplace) is on the seabed; his daily tasks are to keep the sea calm (monitor seismic activity and undersea earthquakes) and to restrain the Leviathan (prevent fatalities related to oil and gas rigging). The small contributions that working people like him make the spirit of the 50-year Treaty of Convenience. This has made the dangerous neighbourhood great again, as it once was. The undisputed observation by people from outside the dangerous neighbourhood is the ubiquitous higher standards of living and the lived experiences of the population.

6.4 Apate scenario

Seattle, Washington, is experiencing one of its wettest and coldest Decembers in recent memory. It is 2 December 2030, and Mrs Sarah Barel, a native of 'The Evergreen State', has a visitor, Ms Beth Smiths, a young journalist from *Postremo Daily*. Sarah was detained without trial in an underground maximum security prison in Tel Aviv on suspicion of collaborating with the enemy. Her alleged crime was the ownership and operation of an orphanage for children who were victims of a war that had been raging for more than 16 years. She pleaded her innocence and alleged that she was a victim of mistaken identity and unfair treatment. She was released after spending four years and six months in the women's section of the prison. Her release was part of an agreement by all warring factions to clear prisons of women and children in order to 'humanise' the war.

The purpose of Beth's visit was to highlight the suffering of women and children in the so-called 'Operation Guardian Angel', a war that was declared by US President Moat Roomys on his first day in office. The military action was meant to retaliate against the 'unprovoked military attack' on Israel's hydrocarbon interests in the Levant Basin Province, specifically, the egregious aerial attacks of Guernica Drilling Ltd oil and gas installations, which caused massive loss of life (at least 872 people were confirmed dead) and the economic devastation of Israel's energy sector. Beth's

brief was to write a human interest story to fill the middle pages of the following Wednesday's print edition. However, Sarah had a different agenda. She narrated her story as follows:

It was not them, it was us from the word go! While in prison I befriended a lady from Tucson, Arizona, by the name of Mary Finkelstein. She died of pneumonia while in prison. She worked for 'The Firm' and was assigned at a young age to the Tel Aviv Bureau as an analyst for the Middle and Near-East Region. She worked hand in hand with her counterparts in Mossad to collect, analyse and report on intelligence to her superiors both in Jerusalem and Langley. In the summer of 2012, she and her colleagues intercepted a signal communication. An undisclosed large donation was made to one of the political action committees that supported the election of one of the candidates in the 2012 presidential race. It was nothing extraordinary at the time. The elections were bitterly contested and Governor Moat Roomys won the election (and went on to be re-elected for a second term) with the thinnest margin in history. The bombshell was when he declared war on Iran on his first day in office as president. The pretext of the war was the alleged hostile attack on Israeli hydrocarbon interests in the Levant Basin Province. The war wreaked devastation in Iran, which still remains without any form of a government in control. Its cities, towns and neighbourhoods have been made inhabitable, probably for many decades to come. The military retaliation by Israel and the US was unprecedented and callous. Lebanon, Palestine and Syria met the same fate, albeit less severe. The US and Israel took occupation of all three of these countries, including their oil and gas interests. The beneficiaries of the war were the US, Israeli, United Kingdom and French energy firms. Israel and Cyprus became complementary world energy hubs. Most of the oil and gas to Europe was transmitted to Europe via an undersea pipeline from Israel. Turkish and Russian energy interests lost out and were severely affected.

In 2020, most of the conventional war was concluded and the next phase of the conflict was the containment and elimination of insurgents who operated in all countries of the dangerous neighbourhood. This phase of Operation Guardian Angel inflicted deep wounds on Israel, the United Kingdom and France. These countries swiftly reciprocated. The war was fought on many fronts; many continents and many nations were feeling the brunt. Oil and gas prices became unaffordable for many nations, and economic development either stagnated or declined in many of them.

On her routine visit to Lebanon, Mary overheard a conversation in a bar area of one of the swanky hotels she was staying in. A Swiss couple that was watching Sky News were lamenting that POTUS 45 and his acolytes manufactured the war in the

same hotel. They alleged that a Lebanese businessman and his US business counterparts had a 4th of July moment, an exchange of pleasantries to support the campaign and candidacy of POTUS 45. When she arrived at her Tel Aviv office, she used her analytical skills to trawl the database of the The Firm and other related agencies for any 4th of July logs, issues and matters that have been marked as out of the ordinary that related to Lebanon. No entries were found, except the signal communication she worked on. The origin of the message was the US headquarters of Guernica Drilling Ltd, based in Omaha, Nebraska. The Chairman of Guernica Drilling Ltd, a Lebanese businessman of Jewish descent, was confirming a donation of US\$10 million to one of the political action committees that was advocating the election of Governor Moat Roomys to be President of the US. Mary was flabbergasted. She had missed the most important piece of the puzzle in 20 years! It was all there for her to see, in her personal logs and trove of files. The paper trail started in 2009 when an agreement sealed in blood for a 'better future' was made by 12 gentlemen of substantial means, in Cheyenne, Wyoming, to complete the "securing of the realm". General Oliver Patriot (ret) (and now deceased) was the forerunner, and his operations were located in his vast farmhouse, which was located 18 miles north of McLean, Virginia, away from prying eyes yet within spitting distance of The Firm. The agreement was that each member of the group would fund the operations via his investment holdings to avoid any suspicion. The plan was executed mainly in four countries: the US (central command, aka The Barnyard), Lebanon (finance, aka The City), Israel (intelligence, aka Pinocchio) and Taiwan (high-tech manufacturing and logistical support, aka Hawkeye). Each country had an operations head with a core staff of four people, except in Lebanon where there was only one person. All people involved were US citizens, except the Lebanese businessman.

The plan to secure the realm was very simple; it had two prime directives, namely (1) to secure the election of an amenable US President who represented the strongest values of the Conservatives and (2) to topple the remaining countries that formed part of The Clean Break: Securing the Realm. The prize was the control (not ownership) of all oil and gas interests in the Levant Basin Province for the US in order to preserve the American way of life.

- The Barnyard identified and vetted POTUS 45 and promoted his candidature as the 45th President of the US. Members of the group and their surrogates (private individuals and corporations) funded the 2012 presidential campaign handsomely. Their candidate won in November 2012, and the rest is history.

- The City was used as a front to launder money to finance the operations and had set up 36 business entities in the US to channel funds for the activities of the group, including surrogate entities such as political action committees. There is no evidence that funds were ever donated or channelled to the official campaign of POTUS 45 by The City.
- Pinocchio sourced detailed blueprints and key software for operational military drones for cloning. In addition, key materials for stealth enablement and radar deflection were also stolen and shipped to Taiwan via diplomatic bags. Pinocchio lubricated and fed the hostile rhetoric of war.
- Hawkeye was under a tight schedule to build, test and deploy a drone that was fit for the purpose of attacking a sea-based target. The artillery in the drone was Israeli designed; however, it was manufactured and assembled in Taiwan. The oil and gas assets of Guernica Drilling Ltd in the Levant Basin Province were the targets. Guernica Drilling Ltd was a Tel Aviv-listed company of mixed financial performance, albeit with a strong balance sheet and cash reserves. The company had 1 217 employees in three countries on its payroll.

Before Mary died, she gave me this newspaper clip and a key to a safety deposit box in Switzerland. God bless her soul. All the necessary bank codes and authorisations are handwritten on the back of the newspaper clip.



Figure 6.1: News clip – Postremo Daily

Source: Own elaboration

Beth was stunned and in tears. She clutched the piece of paper and the key from the elderly woman and mumbled inaudibly, “Apate is alive, we have been deceived.” In Greek mythology Apate is a goddess of deceit, fraud and deception.

6.5 Diaspora scenario

The US Congress tasked Dr Isaac Dunovich, a research fellow at the Kennedy School of Government, Harvard University, in May 2029 to investigate the disintegration of Israeli society under the successive governments of the Likud Party. Dunovich’s report titled *Israel’s oil and gas riches and the suffocation of the masses* was tabled at a special sitting of both chambers in December 2029. A PowerPoint presentation was made to the joint sitting of the US Congress as follows:

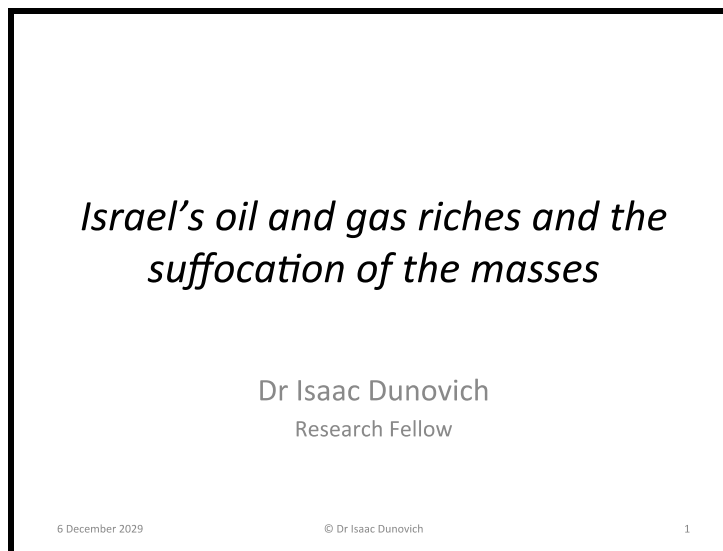


Figure 6.2: Slide 1: Cover page

Source: Own elaboration

Presenter notes:

I wish to thank the members of the US Congress for affording me the opportunity to investigate the disintegration of our long-time ally, Israel, under the successive governments of the Likud Party. A 1 449-page report, in three volumes, has been produced and submitted to the Clerk of the US House of Representatives for consideration. I have prepared a seven-slide presentation to provide a concise account of the investigation in terms of the Congressional Brief provided to me by the Clerk of the US House of Representatives.

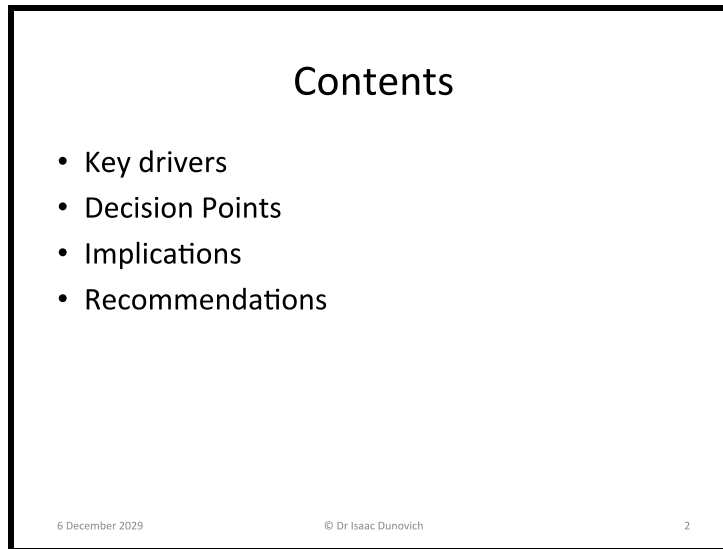


Figure 6.3: Slide 2: Contents page

Source: Own elaboration

Presenter notes:

The report is structured in four parts, namely (1) Key drivers, (2) Decision points, (3), Implications and (4) Recommendations.



Figure 6.4: Slide 3: Key drivers

Source: Own elaboration

Presenter notes:

Oil and gas bonanza: In 2010 Israel was blessed with the discovery of untold riches of undersea oil and gas resources in its territorial waters. The Levant Basin Province bonanza was the second largest hydrocarbons find in more than a decade. The oil and gas rush brought in the best and worst of compatriots from all over the world.

Corporate greed: The ruling political factions in Israel, led by the Likud Party, collaborated with private sector oil companies to allocate lucrative long-term oil and gas concessions. The scheme was run on the basis of “I scratch your back, you scratch mine”. The major benefactors were the traditional political funders of the party; hence, the fleecing and looting of the state became a self-serving enterprise. Legitimate funds that were supposed to be paid over to the Treasury ended up in tax havens such as Switzerland and the Caymans.

Restrictions of press freedom: In 2014 the Likud Party and its coalition partners passed legislation in the Knesset that limited press freedom. All media outlets and journalists in Israel were required to register with the newly created Bureau of Information, a division within the Israeli Defence Force, or face closure. Journalists who did not comply faced a mandatory 10-year imprisonment and subsequent banishment from Israel. Journalists who operated in Israel were forced to be the government’s pied piper, and they readily obliged under the guise of patriotism. The political-media complex became an effective tool to spread a distorted political and economic narrative that allowed atrocities against ‘enemies of the state’ and the gagging of legitimate concerns. The media turned out to be complicit in the oppression of Jewish people, especially the sowing of divisions in a nation that has endured persecution during the Holocaust.

Religious intolerance: Israel, once a multireligious country, outlawed all other religions, except Judaism. The Knesset passed a law to protect the character of the Jewish state. English and other languages were outlawed in government buildings and synagogues. This was a very divisive development. This law caused at least 36% of the population to leave the Promised Land. Ironically, all Israeli Arabs left all parts of Israel and sought refuge in neighbouring countries, including in occupied territories. This was a process of forced removal at gunpoint!

Spatial aesthetics: Most Jewish people who came to Israel since the creation of the State of Israel did so under the auspices of the creation of a homeland and a safe refuge for people of Jewish descent. They never wanted or imagined a country that looked like a garrison. Israel had become an eyesore! Since the Likud Party had gone rogue, every community had multiple checkpoints manned by both permanent and reservist members of the Israeli Defence Force. Freedom of movement was severely restricted. There were soldiers everywhere and the usual tourists were nowhere in sight. Eavesdropping by government security agencies became legendary and ubiquitous. Most communities became ghost towns due to the exodus of people to greener pastures elsewhere.

International isolation: An embattled Israel became the target of successful international cultural and trade sanctions. At the forefront of these punitive developments were Jewish people who had left Israel in protest. However, the US remained a steady ally and a reluctant accomplice in the destruction of the “land of milk and honey”. Over the period 2012–2029, Israeli trade with the world shrank by an estimated 83% in real terms.

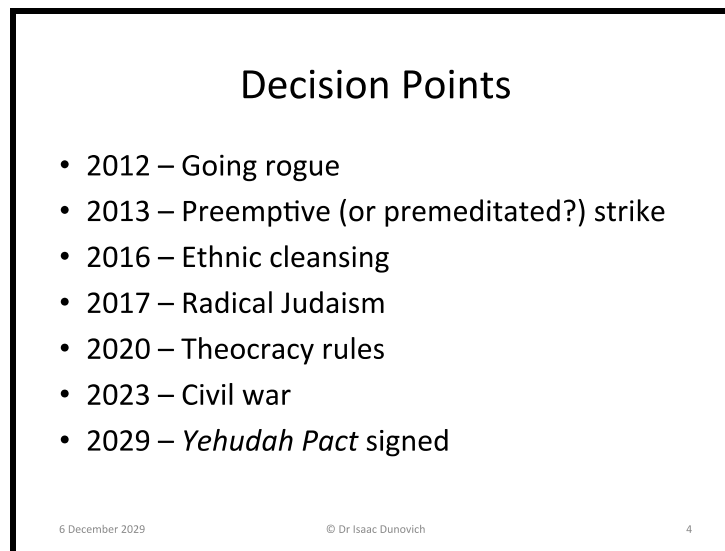


Figure 6.5: Slide 4: Decision points

Source: Own elaboration

Presenter notes:

2012 – Going rogue: Sometime in 2012, the Jewish population lost patience with and its appetite for the continued belligerence and lawless conduct of the Israeli government. Life in Israel had become unbearable for the Jewish people. Only the elite were benefiting from a system that was skewed to benefit the wealthy and its influence-peddling cronies. Unbearable policies and legislative measures were introduced by the Knesset to reverse the gains of democracy and freedom, which were taken for granted by ordinary citizens. In 2012, Prime Minister Benjamin Netanyahu began the process of taking Israel back to the dark ages, a process described as ‘going rogue’ by a member of his ‘inner circle’. Freedom of speech became a luxury reserved for members of the inner circle and it was decreed as such. Even members of the Knesset who spoke ill about the conduct of the government within the precinct of the legislature were banned and lost their privileges. What was at stake were the untold riches of the Levant Basin Province, which were concessioned to business associates in Israel and the US. According to the ‘rule book’ of those in the know, national interests had to meet one critical

requirement: the furtherance of the business interests of the political elite and its business tycoons.

2013 – Pre-emptive (or premeditated) strike? In January 2013, the Israeli Defence Force conducted a massive aerial attack on Iranian strategic military sites. That action took both the US and Israeli society by surprise. The aerial assault lasted 13 days and disabled both the air and sea defences of the Iranians. The UNCLOS acted swiftly in condemning the unprovoked action; however, the US vetoed any action against Israel. In hindsight, this was a strategic mistake by the US as the veto emboldened the Israeli government to continue with its premeditated military attacks against Palestine, Lebanon and Syria. These attacks were primarily designed to pave the way for the concessioning of oil and gas fields in the Levant Basin Province.

2016 – Ethnic cleansing: All Israeli Arabs were removed from Israel at gunpoint or under threat of detention without trial. A house-to-house raid was undertaken to rid Israel of non-Jewish influences. Hebrew became the only language of communication in government and most social spheres. This led to a permanent damage of relations with the Arab world. Jordan and Egypt severed all ties with Israel.

2023 – Radical Judaism: The ‘character of the Jewish nation’ was protected at the insistence of the radical Jewish rabbis. The Jewish population became very restless, and this led to the second exodus, whereby at least 17% of households emigrated back to Europe permanently.

2024 – Civil war: The unthinkable happened: a civil war among Jewish people living in Israel was officially acknowledged by the UNCLOS. The unfair and repressive Likud governments that had ruled Israel for more than 16 years allowed the bloodletting to occur and were indifferent to it. The civil war lasted for a period of five years, after which Israel was turned into a wasteland, a shadow of its former self.

2029 – Yehuda Pact signed: A peace agreement was signed among all the warring factions. However, it is uncertain whether it will hold. Israel has become the laughing stock of the world. Its most important ally, the US, has been embarrassed by the dark developments, and the mutual relationship of admiration and trust has been broken. The Jewish Diaspora feel only humiliation and pity for their homeland.



Figure 6.6: Slide 5: Implications

Source: Own elaboration

Presenter notes:

Legitimacy and morality questioned: Israel has become a failed state under the leadership of consecutive Likud governments. It has lost both its legitimacy and moral compass in the eyes of ordinary Jewish people.

Jewish State – viability and existence: There has been no semblance of a viable democratic state since 2012. The country fell into an abyss when the Likud Party went rogue. Israel at the moment is not viable economically, socially and politically. The continued existence of the country has been threatened by greed and callous elites.



Figure 6.7: Slide 6: Recommendations

Source: Own elaboration

Presenter notes:

Conditional US support: The US should continue to support Israel under strict conditions. For instance, the country must return to its democratic roots and traditions, and no more wars are to be waged against its neighbours. The Knesset must adopt a constitution that upholds the humanity, dignity and equal rights of all those who live in the country.

The US should provide security to Israel for a period of at most 30 years, to be reviewed at five-year intervals. A non-interest-bearing loan for rebuilding efforts should be provided to support reconstruction and the building of democratic institutions. The revenues from the oil and gas resources of the Levant Basin Province must be used as collateral for the loan. The period of the loan should not exceed 30 years, payable in equal annual instalments.

Israel under UN administration: The UN Security Council should place Israel under administration until a new constitution is adopted and elections are held. An administrator will run the country for a period not exceeding five years, up to 2035, whichever comes first.

In conclusion, there is hope for Israel. I hope that the Jewish people will one day return, as they always have.

6.6 Conclusion

The process of synthesising the essence of the future of the Levant Basin Province has been clearly articulated mechanically with the use of GMA for scenario generation. In addition, the Poseidon, Apate and Diaspora scenarios narrated alternative futures of the Levant Basin Province explicitly. The use of these futures concepts has distilled a preferable desired end state for the dangerous neighbourhood in the form of the Poseidon scenario. The other two scenarios (Apate and Diaspora) are neither preferable nor desirable.

CHAPTER 7

SUMMARY, CONCLUSIONS AND IMPLICATIONS

7.1 Introduction

This chapter culminates the thesis to assert that Israel's discovery of oil and gas in the Levant Basin Province is indeed a wicked problem. Secondly, it reveals the extent to which the objectives of the research have been met. Finally, it confirms conclusively that the principal research questions that were posed in Chapter 1 have been answered.

7.2 Summary of findings

7.2.1. The discovery of oil and gas as a wicked problem

The main finding of the thesis is that Israel's discovery of oil and gas in the Levant Basin Province exhibits all of Rittel and Webber's 10 distinguishing characteristics of wicked problems.

7.2.2. Key drivers of change

The mapping of key drivers of change revealed that there are at least 16 trends that prevail in the dangerous neighbourhood and that Israel must take them into consideration for the sake of its continued existence among the community of nations. Importantly, Israel is no longer a tiny, hydrocarbon-impooverished country; rather, it is a country with economic, political, military, scientific and hydrocarbon might. Israel must accept the fact that practical considerations must take precedence over ideology when it comes to the fulfilment of the country's future energy security needs and ambitions. The power of virtue rather than veto must drive Israel in its pursuit of its Zionist agenda and sustainable economic development.

7.2.3. Narratives that create

The causal layered analysis obtained a deeper and better understanding of the conflict in the dangerous neighbourhood. Three narratives were developed and strove to portray alternative futures that the Israelis, Palestinians and the other members of the dangerous neighbourhood could embrace. The narrative archetypes are (1) the Star of David, (2) Herod's Folly and (3) the Wisdom of Solomon. These narrative archetypes formed the basis for the development of the Apat, Diaspora and Poseidon scenarios, respectively. The latter scenario when presented describes a preferable and desirable alternative future from the researcher's point of view.

7.2.4. Modelling an alternative future

The use of GMA enabled the development of the Poseidon scenario, which provided the following: (1) a framework for the resolution the maritime borders of Israel, Palestine and other members of the dangerous neighbourhood and (2) the 'buying' of peace through the sharing of revenue, oil and gas resources in the Levant Basin Province.

7.3 Conclusions

This research is a small contribution to the Levant Basin Province's body of knowledge. It is intended to elicit both controversy and debate for the development of preferable and desirable futures for a region that has been mired in conflict for many decades. The Poseidon scenario has demonstrated that it is possible to set a positive trajectory. The responsibility for the latter rests solely with the leadership and constituent members of each country.

7.4 Implications

While great care and rigour have been exercised in the production of this thesis, cognisance needs to be taken by the user or decision maker that the Levant Basin Province is evolving rapidly. The trend descriptions (and concomitant policy implications) in Table 3.1 and the trend projections in Table 3.2 provide real anticipatory intelligence, which, if acted upon, would be valuable to potential users or decision makers in the Levant Basin Province.

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