The United States of Abraham: A Path toward Peace in the Middle East?

Daniel E. Campbell, David M. Scienceman, Elliott T. Campbell

ABSTRACT

Throughout history, small geographic areas have been united either by conquest or negotiation. The central determining factor has been the supplies of available energy that could be used for creating the initial organization and for maintaining it against depreciation or conquest. The contemporary Middle East and North Africa consists of many nation states that may be too small for long-term individual viability, but perhaps offering the potential for a regional union, because of the large oil and gas reserves that exist in some of these countries. In particular, the present conflict between the people of Israel and the people of Palestine has deep historical roots grounded in the differences in ethnicity, religious beliefs and customs, as well as, a conflict of the hopes and dreams that these two peoples hold for a single small geographic area. The possibility of a United States of Abraham, analogous to the United States of America or the European Union, is examined as a democratic solution that may serve as a path toward peace in this contentious part of the world. Specifically, in the case of the Arab-Israeli conflict, we focus on the fact that both Arabs and Jews are called the Sons of Abraham and through this fraternal relationship each should be able to respect the identity of the other within a broader democratic context in which basic human rights and the freedom of religious determination are recognized. Divisions between Sunni and Shia sects within the Muslim world are also underlain by a fraternal relationship and a common adherence to the principles of Islam. The first step on the path toward peace and reconciliation is to begin to interact positively with one another. In this regard, we recommend that internationally sanctioned discussions based on the underlying fraternal bonds between parties to the multiple disputes present in this geographic region of the world begin immediately.

INTRODUCTION

Conditions in North Africa and the Middle East have changed since the three papers upon which this article is based were written, but the reasons for writing these papers remain, because socioeconomic and political problems in this area of the world remain unresolved. Since 2000, when Israel, the Occupied Palestinian Territories and other countries in the Middle East and North Africa were evaluated using emergy analysis (Campbell et al., 2007), three salient events have affected the region. The first is the War in Afghanistan (ongoing), the second is the War in Iraq or the Second Persian Gulf War (2003-2011) and the third is the so-called “Arab Spring”, a prodemocracy movement that began with the self-immolation of a vegetable seller in Tunisia in December 2010. After this event, prodemocracy protests many of which were organized through social media spread over the region from Tunisia to Egypt, Yemen, Bahrain, Libya, and Syria during the first three months of 2011. During the subsequent three years, new democratic states were established with varying success in Tunisia, Egypt, and Libya, but only the democratic state in Tunisia has thus far been successful. In 2014, Egypt has returned to military
rule and Libya has fallen into civil war as a bloody civil war continues in Syria and conflict continues in Yemen. The current rise of democracy in the Middle East and North Africa has deep antecedents in the aspirations of the people of these nations, but progress has been slow because soldiers, hereditary rulers, and elites backed by strong armies have largely determined the form of government in the modern Arab states, since the European colonial governments gave up power after World War I. Repression of the aspirations of the people for better education and a fair share of wealth and power in these largely autocratic nations has led to modern Islamism, often manifested as a wide-spread movement espousing a strict interpretation of Islam that has been pursued in some cases through terrorists activities aimed at establishing Islamic Republics rather than secular democracies.

In this context, it is interesting that after the fact President George W. Bush added a promoting democracy rationale to his more questionable reasons for invading Iraq (e.g., to capture and destroy weapons of mass destruction). In a speech to the American Enterprise Institute in 2003, Bush stated, “the world has a clear interest in the spread of democratic values because stable and free nations do not breed the ideologies of murder.” The Bush administration turned the Iraq War, at least rhetorically, into a mission to promote democracy not only in Iraq, but throughout the Middle East and eventually the world (Carothers 2007). It is perhaps no coincidence that as the United States withdrew its troops from Iraq in 2011, the democratic aspirations of the Arab people began to become manifest in countries throughout North Africa and the Middle East.

Nevertheless, in the present, as well as in the past the odds have been heavily stacked against the success of democracy in the Arab world. In the July 5 to 11, 2014 edition of “The Economist”, the tragedy of the Arab states in the modern world was examined and characterized, in part, as a failure of the holders of power to honor the democratic aspirations of the people and the consequent resort of some people to radical ideologies as a response, leading to a stalemate caused by a closed political system and closed mental constructs, which they point out is a recipe for disaster.

In this paper, we examine a possible path toward a political organization and a mental outlook that is capable of producing peace and prosperity throughout the Middle East and North Africa. We consider both what is required for disputing parties to live together in harmony while drawing on the same resource base and what might be possible, if the common heritage of the children of Abraham can be made manifest through a form of political union.

“United States of Abraham”: Origin of the Idea

The Eighth Annual meeting of The International Society for Political Psychology (ISPP) held in Washington DC in June of 1985 contained a workshop entitled “Hope and hopelessness in the Arab-Israeli conflict” chaired by Inge Hoffmann. One of us, David Scienecman, attended this workshop, principally in order to hear the views of others, numbering about 20 persons. At this meeting, he was struck most by the frequently expressed opinion that conflict in the region was a problem. In fact, this had been his opinion until about five years earlier, when he suddenly realized that the Arab-Israeli conflict was no more than the birth pangs of a United States of Abraham, from which vantage point the current conflict appeared to be a normal prelude to a possible union of the nations concerned. From this point of view the problem is more in the minds of the observers than in the situation itself.

Scienecman was surprised that no one else at the meeting seemed to be thinking along these lines and because of his own crude thinking on this controversial point of view on such an important issue, he determined that silence was the better part of wisdom, since it would be easy to be misquoted or to use loose phrases that would have to be withdrawn later. What follows in this paper is a considered attempt at preparing a case for the union of countries from the area known as the Middle East and North Africa into a United States of Abraham, an analogue of the United States of America or perhaps more realistically an organization similar to the present European Union.
Emery Analysis of Israel, Palestine and Countries of the Middle East and North Africa

Campbell et al. (2007) presented an emery analysis of Israel and the Occupied Palestinian territories as well as emery indices of selected countries from the Middle East and North Africa. This paper included data on ten nations from the Middle East and North Africa found in the national Environmental Accounting database, NEAD, available from www.emergysystems.org. The conclusion of this study was that Israel and the Occupied Palestinian Territories are inextricably linked through their dependence on a common, integral environmental resource base that cannot be divided. For this reason the parties to this dispute must recognize that their mutual survival and prosperity depends on accepting their shared responsibility for the land and water resources and the consequent imperative that they respect each other as brothers. It is relevant to achieving this end that Campbell et al. (1998) put forward a new mechanism for social evolution based on Cooperider’s appreciative inquiry ideas, which lead toward the development of mutual respect between disputing parties. Another mechanism that leads toward mutual respect and survival is the development of shared values among competing entities as proposed by Odum (2007). We propose that such positive images of the other and shared responsibility could arise by mutual agreement to manage and benefit from a common environmental resource base.

GEOGRAPHICAL UNIONS

Throughout history, small geographical areas have been unified into larger areas. Usually such areas have been united by conquest or violence. There are many examples of countries, empires, and civilizations, come and gone and several that still survive today including the following: Egypt (united around 3100 B.C. by the conquest of Lower Egypt by Menes, King of Upper Egypt); China (united around 221 B.C. by emperor Shih Huang Ti); the United States of America (united after some 200 years of European colonial wars and finally after the American Civil War (1861-1865) by Abraham Lincoln); the United Kingdom (united after much violence by the diplomacy of Queen Elizabeth I, (1533-1603). Until recently the former Union of Soviet Socialist Republics (1917-1991) was included on this list, which was united after a succession of conquests from Genghis Khan, 1162-1227, to Lenin and Trotsky, 1917-1922.

As for the geographical area under discussion, the Middle East and North Africa, there have been at least three grand unifications. First, the period of conquest of Alexander the Great, of Macedonia, from 334 B.C., which briefly included all the lands from Egypt to Persia. Second, the period of the Roman Empire, lasting about 200 years, was founded by Augustus Caesar (63 B.C. to 14 A.D.) and included much of Western Europe, Asia Minor, Egypt, and Carthage. Third, the period of the Islamic Empire, during which the united area was greatest, initiated by Muhammad (570 – 632 A.D.), which included Persia, Mesopotamia, Arabia and North Africa from Egypt westward including part of Spain. What distinguishes all of these unifications from contemporary possibilities is that the motive power was that made possible only by solar energy and its derivatives, e.g., wind, rain, etc.

The Roman Empire

The significance of the Roman Empire to the contemporary conflict must be placed in an energy perspective, for it was the greatest world order ever built on solar energy alone. Odum (1971) provided an overview diagram (Fig. 7-8) showing how the Roman Empire was organized, wherein “the principal energy flows beyond local provincial subsistence were the grain levies from provinces such as Africa, whereas other provinces contributed such things as slaves, recruits for the legions, manufactured goods, literary services… The war work of the legions expended considerable energy in preventing the
surrounding provinces from draining energies from the main Roman provinces. Some of the energy supports for legion forces were drawn from the provinces upon which the war work was done” (p. 232).

Odum continues, 'The fall of the Roman Empire continues to fascinate historians and scientists. Examining the energy diagram, we may consider the various possibilities. If, for example, a shift in rainfall belts lowered the grain production of North Africa, enough energy flow might have been cut off to lower the integrative work of the government below the loop reinforcement thresholds. Since organization is the endmost part of energy flow, it may be the first item to lose function with less energy…another explanation that can be considered in energy terms is Toynbee’s theory of fragmentation associated with loss of a monopoly on the control of innovation …Energy diagram analysis provides a new language for the study of some old theories’ (pp. 232-234).

**Islam**

The Roman Empire was finally split in 395 A.D., the eastern capital being Constantinople, and the western capital remaining Rome. The western empire ended when in 410 A.D. Rome was sacked by the Visigoths under Alaric. The eastern empire continued until 1453 when Constantinople was captured by the Turks. But the decline began long before that when in about 530 A.D. the Emperor Justinian demobilized the frontier posts near the Dead Sea, particularly Lejjun (now Al-Lejjun, Jordan), as being too expensive and unnecessary to maintain. From basic physics we know that nature abhors a vacuum… and the power vacuum left by the decline of Roman organization was waiting to be filled, someway, sometime, by someone. Enter Muhammad and Islam. We observe that Hart (1981) in listing the 100 most influential people in history, placed Muhammad first, followed in order by Newton, Christ, Buddha, Confucius, St. Paul, Lun Tsai (a Chinese eunuch credited with inventing paper), Gutenberg, Columbus, and Einstein.

However, Justinian could not have seen the rise of a great new monotheistic religion and the sudden explosion of the tribes out of Arabia, through the land unguarded by Roman forces. Within a few decades during the early seventh century, Muhammad’s followers had captured the rich lands of Egypt, Syria, and Persia, dealing a devastating blow to the decaying Eastern Roman Empire. The Muslims quickly crossed North Africa, conquered Spain, and were halted only in 732 A.D. at the battle of Tours in France. But all the Muslims gained for their efforts were the diminished solar energy storages abandoned by Rome, so when these were consumed, their empire began to break up into independent caliphates by about 1000 A.D., and effectively came to an end about 1500 A.D. Clearly, it takes a vast amount of energy to create and maintain a civilization over a large area, like the Middle East and North Africa.

**THE AGE OF OIL**

And at this point, but for the arrival of the age of chemical and physical sciences and the technological innovations derived from them combined with the discovery of easily obtained, vast, underground supplies of energy in the form of petroleum and natural gas, would be the end of the story. Therefore, it is no surprise that the great increase in Arab and Muslim activities since the First World War (1914-1918) has been simultaneous with the production of vast quantities of petroleum from Arab lands, most of which has been exported overseas, to build up industrial cultures in other lands as far away as Japan and Australia. Furthermore, with a common language, Arabic, and a common religion, Islam, a perfectly natural wish to be rid of all foreigners has emerged, after many centuries of foreign domination.

To show how easy it is to see why Arab nationalism and Muslim fundamentalism have been espoused by many people since the break-up of the Ottoman Empire, we can take a quick look at the Energy Systems Language diagram connecting the sale of Saudi Arabian oil to the United States in
Figure 1. In 1979, the United States purchased oil for Saudi Arabia at $23 per barrel, resulting in an energy gain of 3.85:1 on the exchange (Odum and Odum, 1981).

1979 (Figure 1), which is quite similar to the January 1986 situation following the collapse of the Organization of Petroleum Exporting Countries (OPEC) price of oil (Odum and Odum 1982, p. 194). The United States and other oil importing countries are therefore receiving energy in the ratio 1.5/0.39 when purchasing a barrel of oil. In other words, the energy contained in a barrel of oil is about 4 times the energy that can be purchased with the money paid for that barrel of oil. In the United States a large portion of that excess energy may go into wasteful luxury goods, travel, accommodations and cars. However, we point out that most countries exporting indigenous unprocessed energy supplies are in a comparable situation. A question arises as to what will happen to these oil-exporting Islamic countries when the easily exported oil runs out?

HISTORICAL CONTEXT FOR A UNION OF NATIONS

The Arabs and the Jews

Since the entry of the Jewish people into Arabia in the first century A.D. relations between Jews and Arabs have had their ups and downs (Dimont 1962, 1994). Apparently whilst introducing handicrafts and date palms, the Jews were initially welcomed. ‘The Arabs called the Jews “the People of the Book”, and Jew and Arab lived side by side in peace’ (Dimont, p. 191). From his early encounters with the Jewish and Christian religions Muhammad ‘carried away a lifelong respect for “the Book” of the Jews. The Jewish Patriarchs became his heroes, heroes whom he later enshrined in the Koran, the Bible of the Muslims’ (ibid. p. 192). Muhammad later turned on them when the Jews rejected his offer for them to join him and because they would not help him he confiscated their wealth to assist his cause (p. ibid. 193), but soon after his death, ‘the hostility against the Jews, manufactured out of political expediency, vanished’ (ibid. p. 195). The Arabs and Jews are often known collectively as ‘the Sons of Abraham’, the name Abraham meaning ‘the Father of many nations’ (Encyclopedia Britannica, 1985, Vol. 1, pp. 36-37).

The relationship between the Arabs and Jews during the solar energy period of the Muslim Empire was quite extraordinary, according to Dimont (1994). ‘The Muslims intellectually divided the people in their empire into two groups, those interested in and those not interested in science. In the first group, they included Jews, Greeks, and Persians; in the second they lumped Chinese, Turks, and Christians. They looked with respect on the former and with contempt upon the latter. The Christians though they far outnumbered the Jews, produced neither great men nor a distinct culture of their own in the Muhammadan Empire. The Jews, on the other hand, produced a Golden Age during this period, generating great names in philosophy, medicine, science, mathematics, linguistics – in every area of human endeavor except art, which the Jews did not enter until the Modern Age.’ (ibid. p. 194-195).
Zionism and the State of Israel

With such a background of mutual cooperation and success in the past, the contemporary Arab-Israeli conflict seems perplexing, that is, until one studies the history of the Zionist movement in detail. Again according to Dimont (1994), “Actually, “Zionism” was a new name for an old ideology; it simply signifies a “return to Zion” – that is, a return to Jerusalem. The idea of such a return has permeated Jewish thinking ever since the earliest days of the Diaspora” (ibid. p. 413). Although the Jews had lost physical possession of the land of Palestine after the abortive rebellion of bar Kochba in 135 A.D., they had not given up the hope of one day establishing their capital in Zion. Modern Zionism differed from this long held desire of the Jewish people to return to their homeland in that formerly the Jews saw their return as being led by a messiah; whereas, modern Zionism shifted this responsibility to the shoulders of the Jews themselves (Dimont 1994).

The low point of Jewish presence in Palestine occurred following Napoleon’s capture of Jerusalem in 1798 and his subsequent failure to capture Acre from the Turks. After this, the Turks recaptured Jerusalem and “by 1860 the “land of milk and honey” was a barren desert that could barely support 12,000 Jews. (ibid. p. 415)... It was at this juncture of Jewish Diaspora history that the idea of transforming the Palestinian desert back into a land of milk and honey took hold. Under the stimulus of Zionism, the Jews once again became active agents in Palestinian history. But it was not until the 1920s, when the Ottoman Empire was disbanded by the allies after World War I, that the Arabs, too, became active agents in Palestinian history’ (ibid, p. 415). Thus, “the chain reaction from the idea of Zionism to the reality of Israel was touched off about 1860, at which time the messianic concept of a “return to Zion” began to change into the political concept of a “return to Palestine” (ibid. p. 416)...The road from the Diaspora back to Jerusalem was paved with a succession of ideas contained in a series of books published between 1860 and 1890’ (ibid. p. 416).

Oil was not discovered in the Middle East (Iran) until 1908 and it began to flow by pipeline to the coast in 1912. Oil was not discovered in the Middle East (Iran) until 1908 www.wired.com/science/discoveries/news/2008/05/dayintech_0526 and it began to flow by pipeline to the coast in 1912. www.freerepublic.com/focus/news/918168/posts Discovery of oil occurred much later in most countries in the area.

Thus, since the founder of modern Zionism, Theodore Herzl lived from 1860 to 1904; it would seem that the entire movement was set in motion unaware of the enormous energy ultimately available from oil that could be used by the Arabs to oppose it. We observe that since the formation of the Israeli state in 1948, there has been a stalemate situation that may be illustrated by the following equation derived from Figure 2 (Odum and Scienceman, 1984).

From the perspective of an emergy balance of opposing forces based on the relative knowledge and experience of the people of the opposing sides, a stalemate situation exists when:

\[
(#\text{ of industrialized people, i.e., Israelis}) \times (\text{emergy of an industrial person}) = (#\text{ of agricultural people, i.e., the Arabs}) \times (\text{the emergy of an agricultural person}) = \text{a constant.}
\]

For the situation that existed circa 2000 between Israel on one hand and Egypt, Jordan, Syria and Lebanon on the other, this equation evaluates to:

\[
(6.0E+6 \text{ Israelis})(3.33E+8 \text{ semj/person}) = (9.3E+7 \text{ Arabs}) (2.15E7 \text{ semj/person}) = 2.0E+15 \text{ semj}
\]

based on population estimates found in the NEAD and literacy rates found at http://world.bymap.org/LiteracyRates.html. The transformity of Israeli and Arab individuals was estimated from the illiteracy rate in each country times the transformity of an individual with no school from Odum (1996) plus the number of people in the literate population times an average education of high school for Arabs and college+ for Israelis (transformities from Odum 1996). We point out that this relationship is a first order estimate and that it is uncertain, but nevertheless, it shows that the technological empower of Israel approximately balances the empower of greater numbers of the less skilled in the Arab countries that have been engaged in active conflict against it in the 21st century.
Figure 2. Log of the total annual energy inflow to the 17 countries of North Africa and the Middle East that might potentially be part of a United States of Abraham (data on Palestine was not available). Energy inflow is given for 8 categories in order of increasing transformity.

The graph in Figure 2 implies that when energies of all kinds have been added together, by calculating the extent to which each has been generated from transformed solar energy, and are compared for their impact in the system, we find the domain of human activities is characterized by the right-hand slope from roughly $10^7$ to $10^9$ semj per joule of work. Manual or simple agricultural activities require much less energy input to sustain than educational or industrialized activities. Scattered through the Diaspora around the world, the Jews returning to Palestine are bringing very valuable social and educational structure in the form of energy that has been transformed into knowledge and other forms for which we now use the word “emergy”. This knowledge should be of very great importance and value to the mostly agricultural Arabs who, as it were, stayed ‘at home’ instead. In 1947, owing to pogroms and the holocaust, and possibly as a consequence of their claim to be “the chosen people”, the Jews needed to find a safe homeland, at the same time when the Arabs needed modern scientific and technological knowledge in all its social and physical ramifications to apply their oil energies effectively both for themselves personally and for future generations. In short, they needed each other, equally, in a very difficult and unfriendly human and ecological environment.

The Point of Parliaments

The conclusion to which this reasoning leads us is one which has had many examples already in history, which is that whenever people get sick and tired of murdering each other, or of being murdered, no matter what their race, religion, sex, nationality, ideology, or education, they have to make a choice. The choice is either to go on murdering each other indefinitely, and as a result waste most of their energy and that of future generations in pointless warfare, or to form a parliament of some kind or other, the word parliament, of course, coming from the French word “parler”, to talk. In the particular case in question, we must ask if the Arabs and Israelis wish to go on murdering each other for the next thousand years, or if they can see any merit in the solution being tried in Europe today, where nominally peace-loving Christians have been busy murdering each other for centuries. This question must also be asked to the Sunni and Shia factions of Islam, who are presently killing one another with an intensity of blood lust forged by an unholy alliance of religious zealotry with excess oil wealth (Odum, 2007).
While the direction toward peace is clearly to begin serious dialog between the disputing parties that can lead to a clear understanding of their respective positions and an understanding of the hopes and dreams held by each group, bringing the two opposing parties to the table, initially, has proved to be a difficult problem. As we have seen from Campbell et al. (1998) and Odum (2007) the long term prosperity and survival of two parties dependent on the same resource base depends on establishing mutually reinforcing links between the disputants. Such links may be established by chance, when one side takes an action that has perhaps unintended positive impacts on the other, as well as through mutual recognition of shared values, even values as simple as disgust with killing each other or alternatively an agreement to manage shared common resources. Once established, such links act as positive feedback loops that are self-reinforcing, thus a transition to peace may occur rapidly once the necessary, underlying, feedback structure is in place. The results from Campbell et al. (1998) showed that high power levels are necessary to maintain positive relationships between coexisting disputing parties dependent on a common resource base. In this case the vast oil wealth held within the region may be a significant guarantor of peace, if it is applied to stabilize the political and socioeconomic situation in, e.g., the Occupied Territories of Palestine, Syria, Libya, etc.

In Europe today, we can now observe the creation, slowly but surely of the European Parliament (in 2013 the European Union included 28 countries). After two horrendous wars involving all the world, fought mostly by wasting valuable energy resources contained in indigenous coal and oil, preceded by many other European Wars down through the centuries, the countries of Europe have decided to unite voluntarily, forging common ground to prevent further murderous wars. The negative attitude of Marxists to parliaments in general need not concern us, particularly, since their belief in monolithic conformity has not prevented the emergence of two main Marxist factions in Moscow and Beijing, which are comparable to the emergence much earlier of the Catholic and Protestant religions, and the corresponding Sunni and Shiite Muslim factions of Islam (Scienceanman and Caldwell, 1984).

THE UNITED STATES OF ABRAHAM

Our conclusion is that the Jews in Israel and the Arabs in the Middle East and North Africa (Egypt, Syria, Jordan, Lebanon, and Iraq are the Arab states that have attacked Israel in the past), can continue murdering each other indefinitely, or they can unite into a larger community, in which each preserves its basic identity, which was the principal conclusion of the 1984 ISPP workshop held in Washington DC. If they choose to unite they can do it the hard way through a catastrophic war to choose a winner, as in the American Civil War, or by the present parliamentary approach being used to unite Europe. With so much common background over the centuries, the Sons of Abraham, Israeli and Arab and the sons of Muhammad, Sunni and Shia, have an opportunity to unite into a United States of Abraham, a second renaissance for all, focused on the Parliament of Abraham, e.g., governing body of several hundred members from 18 or so (Turkey and Iran may be problematic members due, respectively, to a greater affinity for Europe and ethnic differences from the Arab peoples) participating nations linked by modern methods of electronic communications, fast transport and social media, in such a manner, that most representatives might have to leave home only occasionally.

The possibilities for and potential impediments to establishing such a union may be seen by examining Table 1, where the emergy flows and indices for 18 possible member states are given. Indices for these nations were compiled from data in the NEAD (www.emergysystems.org) modified using the baseline of Campbell (2000) and transformities from Campbell and Ohrt (2009). Indices for Algeria, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Saudi Arabia, Syria, Tunisia, Turkey, United Arab Emirates, and Yemen were calculated from the NEAD. The indices for Palestine come from Campbell et al. 2007. Half of the candidate nations export more than twice as much emergy as they import and these are led by the major oil exporters Iraq, Libya, Kuwait, and Saudi Arabia. Palestine and Lebanon are almost entirely dependent on the import of purchased resources, while Israel, Jordan, and Turkey export about half of the emergy they import. Exports approximately balance imports for the UAE and Turkey, while Egypt imports about 30% more emergy than it exports. Israel, Kuwait,
The case of Israelis and Arabs in spite of the clear historical evidence in their mutual view. This situation persists in the case of Israelis and Arabs in spite of the clear historical evidence for and now a theoretical understanding of the stalemate based on an emergy balance, which indicate that the current situation, if it continues, will prevent the dominance of one side over the other for a very long time. While we did not demonstrate that this situation exists for the struggle between Sunni and Shia Arabs, we may surmise that a similar situation may exist from the fact that a stalemate in their dispute is manifested by continuing acts of violence and sectarian strife. Our solution is to make every effort to generate common ground upon which the Palestinian and Israeli as well as Shia and Sunni disputing parties can establish a basis for moving forward, i.e., a path toward breaking the stalemate. In the case of the Israelis and Palestinians, the first step toward common ground is to recognize their mutual interests or responsibilities, e.g. the common environmental resource base (water) upon which both

<table>
<thead>
<tr>
<th>Country</th>
<th>Renewable Empower Density (semj m⁻²)</th>
<th>GDP (US $)</th>
<th>Em$/ Ratio (semj/$)</th>
<th>Total Energy Use (semj y⁻¹)</th>
<th>Exp./Imp. (total)</th>
<th>Percent Renewable (Exp./Imp.)</th>
<th>Fraction of Use (Purchased)</th>
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</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>1.13E+10</td>
<td>5.45E+10</td>
<td>2.28E+12</td>
<td>4.33E+23</td>
<td>4.44</td>
<td>6236%</td>
<td>0.744</td>
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<td>Egypt</td>
<td>3.60E+10</td>
<td>1.03E+11</td>
<td>3.39E+12</td>
<td>3.75E+23</td>
<td>0.70</td>
<td>9560%</td>
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<td>Iran</td>
<td>8.75E+10</td>
<td>1.0E+11</td>
<td>9.36E+12</td>
<td>1.2E+24</td>
<td>2.47</td>
<td>1164%</td>
<td>0.192</td>
</tr>
<tr>
<td>Iraq</td>
<td>5.86E+10</td>
<td>1.8E+10</td>
<td>2.32E+13</td>
<td>4.1E+23</td>
<td>10.14</td>
<td>613%</td>
<td>0.125</td>
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<td>Israel</td>
<td>7.33E+10</td>
<td>1.2E+11</td>
<td>2.25E+12</td>
<td>2.7E+23</td>
<td>0.59</td>
<td>556%</td>
<td>0.908</td>
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<td>Jordan</td>
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<td>8.5E+09</td>
<td>1.94E+13</td>
<td>1.2E+23</td>
<td>0.47</td>
<td>1195%</td>
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<td>3.58E+10</td>
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<td>6.89</td>
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<td>7.51</td>
<td>1926%</td>
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<td>7.08E+09</td>
<td>3.86E+12</td>
<td>1.61E+22</td>
<td>0.16</td>
<td>2000%</td>
<td>0.930</td>
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<tr>
<td>S. Arabia</td>
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<td>1.89E+11</td>
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<td>1.39E+24</td>
<td>6.13</td>
<td>363%</td>
<td>0.768</td>
</tr>
<tr>
<td>Syria</td>
<td>4.93E+10</td>
<td>2.5E+10</td>
<td>4.51E+12</td>
<td>1.5E+23</td>
<td>3.83</td>
<td>607%</td>
<td>0.150</td>
</tr>
<tr>
<td>Tunisia</td>
<td>7.27E+10</td>
<td>1.94E+10</td>
<td>7.84E+12</td>
<td>1.49E+23</td>
<td>0.97</td>
<td>760%</td>
<td>0.566</td>
</tr>
<tr>
<td>Turkey</td>
<td>1.38E+11</td>
<td>1.99E+11</td>
<td>6.37E+12</td>
<td>1.1E+24</td>
<td>0.54</td>
<td>967%</td>
<td>0.512</td>
</tr>
<tr>
<td>UAE</td>
<td>4.35E+10</td>
<td>5.33E+10</td>
<td>1.42E+13</td>
<td>7.56E+23</td>
<td>1.03</td>
<td>400%</td>
<td>0.521</td>
</tr>
<tr>
<td>Yemen</td>
<td>4.54E+10</td>
<td>8.53E+09</td>
<td>5.81E+12</td>
<td>1.03E+23</td>
<td>2.77</td>
<td>2331%</td>
<td>0.415</td>
</tr>
</tbody>
</table>

Lebanon, and Palestine rely on purchased emergy inflows to satisfy over 90% of their emergy use. These countries have small territories that would not be stable or self-sufficient without massive inflows of emergy, which must be paid for by value-added industries or other businesses. Israel and to a lesser extent Turkey are technologically advanced countries that could serve as a core for building knowledge-based industries that are crucial for success in the modern world. The nine nations that are large net exporters of wealth could divert some of these resources to build the union and to ensure its success by supporting the weaker or marginal states of the region, e.g., Palestine, Lebanon.

**CONCLUSION**

As a result of our analysis of the data on the nations that might form an Abrahamic Union, we can see that the resource wealth in the form of the oil and natural gas needed to support such a union appears to exist within the candidate nations. The intellectual capital needed to make the union a viable entity in the “Information Age” also exists within the region, although there are barriers to its application, because it is centered in Israel, a state not currently accepted by many of the potential members of the union. The second technologically advanced state, Turkey, is considering membership in the European Union. The greatest impediments to union are the intransigent attitudes of disputing parties toward their rival’s point of view. This situation persists in the case of Israelis and Arabs in spite of the clear historical evidence for and now a theoretical understanding of the stalemate based on an emergy balance, which indicate that the current situation, if it continues, will prevent the dominance of one side over the other for a very long time. While we did not demonstrate that this situation exists for the struggle between Sunni and Shia Arabs, we may surmise that a similar situation may exist from the fact that a stalemate in their dispute is manifested by continuing acts of violence and sectarian strife. Our solution is to make every effort to generate common ground upon which the Palestinian and Israeli as well as Shia and Sunni disputing parties can establish a basis for moving forward, i.e., a path toward breaking the stalemate. In the case of the Israelis and Palestinians, the first step toward common ground is to recognize their mutual interests or responsibilities, e.g. the common environmental resource base (water) upon which both...
Israel and Palestine rely. The second is for each side to begin to talk to the other, for in talking we recognize our common humanity and come to understand each other’s hopes and dreams for the future. One problem is that a tremendous energy barrier created by past animosities must be overcome to begin such reconciliation. It is here that the combination of oil wealth and enlightened self-interest can serve to set in motion the discussion needed to bring the idea of a parliament of the sons of Abraham into reality.

The founders of the Parliament of Abraham need not feel that they are just copying western institutions, since they could increase the importance of their parliament by offering it to the world also as a home for a potential World Parliament (Scienceman and Caldwell, 1984). According to Bertram Russell, St. Augustine applied the Jewish pattern of history to Christianity and Marx applied it to socialism; therefore, in its various forms the Jewish pattern of culture has spread throughout most of the world already as a template. A World Parliament sponsored by an energy rich country or countries somewhere near Jerusalem (Arabic word meaning City of Peace) could offer a world leadership role to the people of the Middle East and North Africa.

REFERENCES


