Iraq's Revolutionary Cul-de-Sacs

Samir Rihani

Introduction

This chapter is not about agonies of Iraq: a simple Internet search will yield thousands of highly depressing documents on the subject. It is also not about a US/Israeli conspiracy against Arab countries: Arabic sources have not left much to be said on this subject. The focus considers instead the sustainability of countries that have met with stress over a long period. Iraq with its coup-de-tats, wars, sanctions and communal conflicts presents a useful case study but the conclusions drawn are applicable to other locations in the Middle East and North Africa (MENA).

Kajikawa (2008) provided an excellent review of papers published in three of the leading journals that cover sustainability and these demonstrate the major strides taken in revealing the factors that enable social systems, such as nations, to sustain themselves (i.e. to continue to operate effectively) under fluctuations in their internal or external conditions. The MENA region is going through an unusually turbulent period at present. The sustainability of most of the countries concerned is now under severe stress; not only as recognisable states but also as coherent social structures.

S. Rihani (✉)
University of Liverpool, Liverpool, UK
e-mail: S.Rihani@liverpool.ac.uk

Samir Rihani, Ph.D. was born in Iraq in a large Christian family. He went to university in Britain, and worked in the Middle East for a while. His professional life in Britain included senior appointments in both the public and private sectors; mainly in planning and development. He has written two books on complexity, one of which was co-authored with Professor Robert Geyer, Lancaster University. Samir Rihani is a research fellow at the University of Liverpool and for the last 16 years he has served as a non-executive director on a number of National Health Service Trusts. He can be reached at: S.Rihani@livperool.ac.uk

Iraq has endured half a century of coup-de-tats, wars, and lately ethnic and religious divisions. Deterioration accelerated rapidly after the 2003 war. That event seems to have been the starting gun for a revised US policy for MENA that emerged openly in 2005/2006 when Condoleezza Rice, US Secretary of State at the time, described an approach based on "creative chaos" to forge a "new Middle East" (Karon 2006 and Global Research 2006). Her statements coincided with a flurry of activity on a project called the "Broader Middle East and North Africa" (see www. bmena.state.gov). Annual meetings were held from 2004 in Sea Island, Rabat, Manama, and the Dead Sea. It is difficult to establish whether current turmoil in MENA is a product of that US policy but it is not possible to dismiss a linkage either.

The chapter seeks to provide explanations of how continual turmoil, intentional or otherwise, seriously compromised Iraq's performance as a complex adaptive system. It is perhaps helpful to point out that reference to "creative chaos" has links to complexity theories. Deteriorating conditions have generated a number of responses; from calls (mainly by foreign commentators) for division of Iraq into statelets drawn on ethnic and religious grounds, to accusations (mainly by Middle Eastern commentators) of ill-intentions, planned and executed by international, regional, and domestic conspirators. However, looking at Iraq as a complex adaptive system that does not respond well to brute force and command and control, see later, provides a more plausible explanation of what befell Iraq, and by implication what might be usefully done to rectify matters. It has become quite clear, however, that the process of regeneration must be seen as a long-term task devoted to improving Iraq's social capital by focus on education and health of all its citizens regardless of religious and ethnic affiliations coupled with sustained improvement to governance throughout Iraq's social and political structure.

Nations Are Complex Adaptive Systems

There are two fundamentally different families of systems: mechanistic systems and complex systems. The first, such as a rocket in flight, are predictable and follow simple rules of behaviour. They are, therefore, easier to manage. During the twentieth century more became known about another group of systems called complex systems, including those able to adapt to changing conditions in their environment. All living entities fall into this category. When human beings come together into social groups (companies, nations, etc.) the resulting structures are also complex adaptive systems. Understanding how these systems behave is, therefore, of key importance to the study of how communities function and respond to internal and external perturbations.

Complex systems are less predictable and hence they require a different style of "soft" management based on constant review and adjustment; a learning process in which the achievement of a desired "direction of travel" is often all that could be accomplished. Cumulative, usually modest, improvements over long periods are

essential for sustainability and progress; evolutionary change being the main route to success (Kauffman 1993, p. 173; Coveney and Highfield 1996, p. 118). Conversely, command-and-control and direction from the top, favoured by military leaders and occupying forces, are counterproductive in this style of adaptive strategy.

The above features have profound significance to the fortunes of nations. They, incidentally, illustrate the fallacious nature of declared intentions rapidly to export Western style democracy by dictate to countries such as Afghanistan and Iraq. Essentially, nations could be divided between those who implicitly recognise and work within the rules of complex systems and those who do not. The first group has become known as developed, industrialised, advanced, etc. The second group includes nations that are left behind. It is often said that they suffer from lack of governance, democracy, connection to the rest of the world, and so on (as argued by Barnett, 2005, for instance). Looking at the matter from a complexity perspective explains why these attributes are of such critical importance (as argued by Rihani 2002, for example). Sadly, intentionally or otherwise leading powers apply principles of complex systems to themselves but try to impose mechanistic principles on nations that they occupy or seek to help. The fundamental question is not whether a nation decides to behave as a complex adaptive system but how to do so effectively.

The Dynamics of Complex Adaptive Systems

Complex systems (including adaptive ones that are of primary concern here) are made up of numerous interacting elements, often themselves complex systems. Interactions between the elements are the driving force that enable a complex system to function; well or badly. The human body is a complex adaptive system and interactions between heart, blood, kidneys, etc., keep it in a condition of homeostasis when all is well. The elements, generally people in social structures, must be capable of interacting and able to interact within simple rules. If interactions cannot take place the system stops functioning (death in a living organism) while if the interactions were significantly impeded then the system's performance is reduced accordingly (illness in a living organism).

The parallels with the performance of a nation, or a group of nations, are obvious. Capability of individuals to interact, i.e. to participate in the multitude of activities within a nation, is affected by various factors; especially education and health. However, educated and healthy people might be unable to interact freely; as would be the case under too many regulations imposed by oppressive dictatorship or restrictive religious or social prohibitions. Too few simple and acceptable rules (i.e. inadequate governance) is also problematic; for instance during civil war and absence of effective government, as it results in haphazard interactions that push the nation into wasteful chaos. The task for a nation is to remain in a zone that lies somewhere between "inaction" and "chaos"; a feat that could not be achieved overnight but one that differentiates successful from failed states.

The vast number of interactions reduce the ability to predict outcomes in complex situations. This feature is yet to be fully grasped by too many decision-makers; especially dictators and military leaders. However, even advanced governments with elaborate checks and balances fall into the same trap. They launch costly wars and then find that they are not in control of events; as seen, for instance, in Afghanistan and Iraq. This is not a new discovery. President Lincoln wrote in 1864, "I claim not to have controlled events, but confess plainly that events have controlled me".

These features of complex adaptive systems are understandable intuitively. Lincoln did not have to know anything about complexity to realise that political life was full of surprises. Wilhelm II, German Kaiser from 1888 to 1918, is another leader who was unaware of complex systems. He pursued an enlightened social, education, and health policies that uplifted Germany to world status.

From the middle of the twentieth century onwards intuition was augmented by science. Extensive research on complex adaptive systems was undertaken; including their relevance to economics, development, and public policy; see, for instance, Rihani (2002) and Geyer and Rihani (2010). Actions that would help a nation to maintain and improve its sustainability and resilience as a healthy complex adaptive system are now well understood. Equally, the opposite is also true: actions that could reduce the ability of a nation to perform well are also understood and in some cases adopted as part of domestic and/or foreign policy to control and subjugate.

Iraq: From Complexity Through Rigid Order into Chaotic Disorder

Nations operating efficiently present to the observer features that are orderly (laws applying to contracts say) mixed with conditions that are disorderly; involving crises, changes in government, economic upheavals, and so on. Wise leaders accept a degree of "disorder" as an unavoidable, and creative, part of national life. Presumably that was what Condoleezza Rice meant by "creative chaos". On the other hand, there has to be a measure of order as well and it is not clear whether Rice understood this duality. Trying to shift a nation into a totally "orderly" mode of operation almost invariably proves to be misguided as it could easily lead to stultifying "inaction". This is the sequence of events that military coup-de-tats often unleash, as happened in Iraq from the late-1950s. Up to that point Iraq existed within the messy complexity zone that combined some order and some chaos; an existence that presented successes, reverses, compromises, and many uncertainties. Coup-de-tats (and Saddam's brutal years) were intended to "restore order and certainty". The chaos of post-2003 war then propelled Iraq to the other extreme; wasteful chaos.

The 1958 coup-de-tat replaced the royal family by an army-led republic. The coup coincided with the turbulent transfer of hegemony from Britain to the USA. The 1952 coup-de-tat in Egypt (CIA Project FF) and the CIA coup that temporarily brought the Shah of Iran back to power in 1953 (CIA Operation Ajax) which

preceded the 1958 event in Iraq are examples of that handover. The unintended consequences endured today were hardly dreamt of back in 1958: the coup was popular. The conspiracy by Britain, France and Israel to attack Egypt during the Suez war of 1956 affected events. The Baghdad Pact, a madcap scheme created in 1955 involving Iraq, Turkey, and Britain to confront external aggression (presumably by the USSR) was another factor. The Pact continued the terms of the hated 1930 Treaty with Britain (Tripp 2007, p. 136).

Qasim came to power in Iraq on the back of the 1958 coup-de-tat. Interestingly, in the context of post-2003 focus on religious and ethnic factionalism, he came from mixed Sunni and Shiite/Kurdish parentage and exhibited "evident lack of religious fanaticism…" (Farouk-Sluglett and Sluglett 1990, p. 77). He withdrew from the Baghdad Pact in 1959. The West considered that a big mistake. He relied on the communists to combat the popularity of Arab nationalists inspired by Egypt's Nasser. That was another mistake. Then he laid claim to Kuwait in June 1961 although Iraqi forces were mostly stationed in northern Iraq in anticipation of trouble with the Kurds. Qasim's worst transgression might have been his domestic policies which suggested, to Western powers, leftist leanings. He "…trebled the number of pupils and students at all levels of education", funded school and hospital building programmes, and introduced more enlightened labour laws (Tripp 2007, p. 161). Action to remove him was swift. The CIA mounted an unsuccessful attempt on his life in October 1959 by a group of Ba'thists, including a 23-year-old Ba'th party member called Saddam Hussain! (Sale 2003) Eventually, a coup-de-tat brought the Ba'th party closer to power in February 1963. Qasim was executed together with his close associates. "The months between February and November 1963 saw some of the most terrible scenes hitherto experienced in the post-war Middle East". (Farouk-Sluglett and Sluglett 1990, p. 85) The Ba'th party finally assumed power openly in July 1968 and Saddam was installed officially as president in July 1979. By that stage Iraq had moved into an orderly era of rigidly controlled order founded on repression that lasted until 2003. Iraq was wrongly and wastefully managed as a mechanistic system.

In summary, the USA brought the Ba'th Party, and ultimately Saddam, to power and then after 40 punishing years the USA attacked Iraq to rid that hapless country of the same party and leader! That process unfolded over a long time; spanning several administrations and involving expenditure running into trillions of dollars and many thousands of deaths. This is not an isolated incident confined to Iraq. The Taliban which the USA has been fighting for long in Afghanistan originated as Pakistani-trained and US funded Mujahideen in northern Pakistan set up to combat communist expansion in the region. Similarly, Secretary of State Madeleine K. Albright acknowledged the 1953 Iranian coup's pivotal role in the troubled relationship between the USA and Iran and said, "…the coup was clearly a setback for Iran's political development… it is easy to see now why many Iranians continue to resent this intervention by America in their internal affairs" (Risen 2000).

The reasonable level of governance that existed in Iraq before 1958, relative to standards in the region, evaporated rapidly. Saddam was disposed to war and brutality by nature but he was also easily manipulated. It did not take him long after becoming leader to launch a war against Iran in 1980. On that occasion Kissinger

said: "Let them kill each other" and that seemed to typify attitudes in Washington. Heikal (1992, p. 65) reported, "…whenever one side seemed in sight of victory Washington would begin secretly helping its opponent". US approval of the war was evident. Iraq was placed on the list of countries that supported terrorism when it nationalised its oil industry in 1972. Once the war began US views changed and Iraq was eventually removed from the list in 1982 (Rihani 2002, p. 229; Clark 1998, p. 4). There was obvious hope, by Saddam as well as by the US administration, that the war would bring the Islamic revolution in Iran to an end.

The grim aftermath of the 1980–1988 Iran–Iraq war was summarised in a report for the Journal of the Singapore Armed Forces: "it was estimated that the total war dead was 262 000 Iranians and 105 000 Iraqis… Iraq spent between US$74-US$91 billion on the conduct of the war and another £41.94 billion on military imports, whereas Iran's costs were US$94-US$112 billion and £11.26 billion respectively. As for the indirect cost due to the loss of income from oil and agricultural produce, it was estimated that the sums were US$ 561 billion and US$ 627 billion for Iraq and Iran respectively". (Dexter Teo 2003). The end of the war in 1988 was itself only a halt on a downward spiral. The war was an economic catastrophe to Iraq. Debt repayments alone amounted to half Iraq's oil income in 1990 (Tripp 2007, p. 242). Agricultural production declined and by the end of the war, 70 % of Iraq's food had to be imported (Simons 1998, p. 137).

The Iran–Iraq war was inconclusive. It left Iraq with severe economic and social problems but with powerful and experienced armed forces and a leader who was now seen as a "loose canon" by Washington. Problems with Kuwait soon emerged and observers are evenly divided in apportioning blame for the escalation of hostilities. Conditions were ideal to push someone of Saddam's psychological nature into a disastrous war. He thought, mistakenly it seems, that he had been given a green light for an invasion of Kuwait. In August 1990 Iraq was devastated by an attack by a coalition of forces led by the USA. Sanctions were imposed by the UN Security Council ostensibly to force a withdrawal from Kuwait. As Simons documented, food became a weapon of choice in degrading Iraq as a functioning nation. The damage caused by the Gulf War was described by a United Nations survey team as being "apocalyptic". The Ahtisaari report concluded the bombing has relegated Iraq "to a pre-industrial age" and warned that the nation could face "epidemic and famine if massive life-supporting needs are not rapidly met" (Lewis 1991). Iraqis' capability and ability to interact continued on their downward spiral.

The grounds for justification of the sanctions imposed on Iraq only a few days after Iraqi forces invaded Kuwait were expanded to cover weapons of mass destruction. In essence, once introduced the sanctions proved too useful to lift; they were finally rescinded only after the 2003 war. Many publications are available that detail the impact of the UN sanctions on Iraqi society. A Cambridge University paper provided an excellent list and summary of United Nations agency reports on the subject (Rowat 2000). The scale of human deprivation caused by the sanctions was revealed by Denis Halliday; appointed UN Humanitarian Coordinator for Iraq in September 1997, when he resigned in October 1998. He suggested the overall effect was akin to genocide. His successor, Hans Von Sponeck also resigned for the same reason.

On the other hand, Madeleine Albright, US Secretary of State, described the consequences as a "price worth paying". For full and up-to-date analysis of the sanctions see Al-Ani and Al-Ani (2012).

The sanctions ostensibly imposed to weaken Saddam had the opposite effect. Iraqis were living on food handouts provided by his government. Education and health facilities Iraq enjoyed previously had virtually ceased to exist as coherent systems. The same could be said of water, electricity and fuel. The exhausted population was not in any shape to overthrow Saddam's regime. On the other hand, George W Bush, possibly influenced by the neoconservatives and certainly by the tragic events of 11 September 2001, decided to declare a "war on terror" and launched a war in Afghanistan in 2001 and Iraq in 2003. The decision to attack Iraq remains a controversial one to this day. A few years after the 2003 war, the CIA and other agencies had to admit they found no weapons of mass destruction. The links to terrorism were also found to be unfounded. Books have been published about the cost of the war (see Stiglitz and Bilmes 2008), supposed American mismanagement and incompetence (see Ricks 2006) and the fiasco of post-war reconstruction (see Phillips 2005). Casualties of the war are difficult to estimate. A 2006 report in the Lancet, a British medical journal, suggested about 600,000, while the Iraq Body Count estimated the number at about 100,000. U.S. authorities reported in July 2010 that another 77,000 Iraqis were killed from the beginning of 2004 to August 2008. A representative of the Iraqi government commented, "This number has social consequences. Behind the number of dead are scores of handicapped people, widows and orphans". (Fadel 2010) Two million Iraqis are now refugees abroad and two million more are internally displaced. Few Christians, a significant element in Iraq's professional sector, remain in the country (Jenkins 2010).

The accumulated burdens of coup-de-tats, sanctions, and wars must be seen as components of one process. Education, health, governance and other essential components that enable citizens to be capable and able to interact have assumed secondary importance at best. Iraq has entered a "chaotic" phase that is just as wasteful as the "orderly" phase that crippled it before 2003.

Physical Damage Tells Only Part of the Story

Destruction of the infrastructure as well as casualties of coup-de-tats, sanctions, and wars is an important element in Iraq's decline. Sustainability and resilience are influenced greatly by factors that do not capture the headlines. Successive events in Iraq set a trend that has endured: at each bout of turmoil a whole strata of experienced people were dismissed, imprisoned, or liquidated and replaced by a new cadre of less experienced people, supposedly loyal to the new masters. The same is happening at other locations in MENA. The negative effect on governance and public administration requires no elaboration. However, after the 2003 war this informal process assumed the power of "law" under the US campaign for "de-Ba'thification of Iraqi society" as specified in Coalition Provisional Authority (CAP) Oder No. 1.

Bremer, the US ruler of Iraq, had strict instructions from Rumsfeld, conveyed by Under Secretary Feith, to issue the order immediately on arriving in Baghdad "even if implementing it causes administrative inconvenience" (Bremer 2006, p. 39). It might have been "administrative inconvenience" to Rumsfeld and Feith but it was a catastrophe for Iraq; a quantum step in stifling healthy interactions. Some of those dismissed (or worse) were Ba'thists in name only. They had to be to secure employment during Saddam's era.

De-Ba'thification was part of a two-pronged process. In May 2003 Bremer signed CAP Order No. 2 that dissolved the Iraqi army and all other "entities" (Bremer 2006, p. 57). In this case the driving force behind that action was Deputy Under Secretary of Defense Wolfowitz besides Feith. Iraq was left at the mercy of domestic and foreign troublemakers and looters. In that chaotic absence of governance, ability for people to interact was substantially reduced. Significantly, one of the first locations for serious looting was the Iraqi Museum, followed by theft and destruction of Iraq's archives (BBC 2003). There was a focus on the country's symbols of culture, history and unity. Rightly or wrongly, location of US military bases on archeological sites such as Babylon, exposed in a report by experts from the British Museum, was interpreted as such (McCarthy 2005; BBC 2005). Such actions were viewed by some as "cultural cleansing" (Baker 2010).

Lack of appreciation of Iraq's culture and history was accompanied by an equally dismissive concern for its social harmony and national unity. These traits were shared by the occupying forces as well as by many of the newly emerging local leaders. Von Sponeck, who resigned in protest as UN Humanitarian Coordinator for Iraq during the sanction years, expressed amazement at the presumptuousness of "foreign voices" pronouncing on the future of Iraq: "The proposals to divide Iraq into three parts or the introduction of quota system in public services based on ethnicity and religious affiliation is frightening in its callousness" (Adriaensens et al. 2012, p. 32).

Focus on ethnic and religious divisions plunged Iraq into a state of conflict that is proving difficult to overcome. Dr. Haseeb (a well-known Iraqi political economist and past Governor of the Central Bank of Iraq) at a talk he gave at Georgetown University on 5 April 2006 pointed out "The CPA never used the term Iraqi people in their different dealings with Iraq. They started using "Kurds", "Turkmen", "Arabs", "Sunnis", "Shias". He added, "Of the different prime ministers who took office between 1920 and 2003, eight were Shia and four were Kurds. Out of 18 military chiefs of staff, 8 were Kurds. As for the Baath party itself, the majority of the members were Shia… Out of the 55 people on the "Wanted List" that the occupying authority published, 31 were Shia. So what the occupying authority was practicing in Iraq was something new…" (http://www.iraqsnuclearmirage.com/articles/Haseeb_Wash_DC.html).

A brief look at Iraq's history since the 1920s demonstrates the degree of polarisation that has now gripped that country. Apart from calls by the Kurds for independence, an ongoing activity that involves Turkey, Iran, and Syria as well, Iraq was a stable and well-functioning country with highly developed health and education sectors and a rich multicultural life. Conditions were not ideal but, on the other hand, Iraq was most certainly not "a country that never worked" as suggested by Peter W. Galbraith (see below). The biggest headache for the government was walking the tightrope between looking after the nascent national interest, on the one hand, and

satisfying demands coming from the British government and oil companies, on the other. These pressures led to the suicide of the Prime Minister in November 1929.

It is worth pointing out that Jewish Iraqis played a prominent role in the cultural, official, and business life of Iraq. Heskel Sassoon was the first Minster of Finance and went on to occupy the post again later on. Abraham Elkabir, another prominent Jewish Iraqi, was Accountant-General and Director General of Finance between 1927 and 1948 (see The Scribe at http://www.dangoor.com/issue76/articles/76060.htm). Christians were to be found at all levels of business and government. They were especially conspicuous in the professions such as medicine, engineering, law, and journalism. Saddam's Foreign Minister was Christian. Finally, it is necessary to record that the Department of Education selected the best students each year for further education abroad and those listed were chosen on educational ability rather than religious or ethnic grounds.

Iraq was not a model of tolerance and harmony. Few countries could claim that level of idealism. The MENA region, including Iraq, has a combination of attributes that create ideal conditions for conflict. Oil and Israel are obvious causes that do not need much elaboration. It is assumed by powerful consuming countries that oil security lies in keeping the states in the region small, weak, and divided. Sadly, this is also seen by successive Israeli governments as the best strategy for Israel's security. Whether these assumptions are right or otherwise is besides the point: they are there and they form the foundations of the foreign policies of several powerful states. Calls for the subdivision of Iraq into smaller statelets are part of that unarticulated strategy. However, there are factors at the domestic and regional levels that allow these policies to gain traction. The ancient religious animosity between the two major sects of Islam has developed a geopolitical dimension as well in the shape of two contending regional hegemonic aspirants: Iran and Turkey. That rivalry has localised spinoffs: Iranian influences on parts of Iraq and some of the Gulf States and Turkish influences on parts of Syria and Iraq. Jordan does not escape cheaply as there are Israeli calls to turn it into "the" Palestinian State. At the same time, Turkey, Iraq, Syria and Iran are grappling with Kurdish calls for independence.

Suggestion that Iraq is ripe for subdivision into three statelets; Kurdish north, Sunni middle, and Shiite south should be seen in that broader context Anderson and Stanfield (2004) exemplify the pro-division lobby. To underline the argument Peter W. Galbraith stated in his comments on the dust jacket of the book, "This is a provocative, readable, and realistic examination of a country that never worked". This last assertion would come as quite a surprise to most Iraqis. Galbraith is also the author of The End of Iraq (see in particular 2007, p. 191, The Three State Solution). After the 2003 war he advised Kurdish leaders on the best negotiating means to achieve autonomy. As Galbraith related he put the finishing touches to The End of Iraq while staying at the "Baghdad headquarters of the Kurdistan president Massoud Barzani".

The onslaught on Iraq's credentials as a viable unified state hardly faltered since 2003. The viewpoint was expressed most directly in the report of the US Special Inspector General on Iraq reconstruction efforts after the 2003 war. He wrote, "In their efforts to build an independent state, British officials faced the challenge of melding three distinct social structures (tribal, clerical, urban), three ethno-religious groups (Sunni Kurds, Sunni Arabs, Shi'a Arabs), and three territorial regions (north,

central, south)" (US Special Inspector General 2009, p. 4). That, one assumes, summarises the US official viewpoint on the subject.

It is perhaps helpful to mention that the wish to divide MENA into small states has been on the agenda of western powers since the end of the First World War and the demise of the Ottoman Empire. A secret agreement was negotiated by Sir Mark Sykes on behalf of Britain and Georges Picot representing France in May 1916 to that end. The agreement was contrary to pledges given by Britain to Arab leaders to encourage them to mount a revolt in the Arabian Peninsula against the Ottoman Empire. Since that time there have been two conflicting lines of argument: a local wish for greater levels of unity and cooperation (see AHDR 2004, figures 6.3 and 7.2) and an opposite determination to retain the model of divided Arab states championed by Western powers and implicitly supported by existing domestic leaders.

The push to subdivide Arab states even further is not confined to Iraq. Following the overthrow of Gadaffi there were regular reports about the possible break-up of Libya along ethnic and/or economic lines (Macalister 2011; Stephen 2012; Radhwan 2012). The same was said later about the likely carve up of Syria into separate state-lets (Adnan 2012; Imad al-Deen 2012). Arab suspicions invariably drift back to the Sykes-Picot agreement mentioned above. Heikal, an Egyptian political commentator, suggested that the aftermath of the Arab Spring is in some ways a rerun of the Sykes-Picot plan. In the modern scenario, he added, the USA, Europe, Turkey, Iran, and Israel are all involved in pursuit of their own diverse interests (Ezzat 2011). In each instance, the emergence of a well-organised and properly functioning Arab country, or countries, is contraindicated for obvious reasons.

The division, and further subdivision, of Arab states generally, and Iraq in particular for the present purpose, was highlighted as it has a key bearing on the functionality of nations as complex adaptive systems. Good performance of such systems relies heavily on connectivity. This is a feature that is recognised even when commentators are not directly concerned with complex systems. A small country focused on ethnicity or religion remains shackled by that burden of exclusivity. Cooperation within and between such states becomes difficult as might be reasonably expected with the three state "solution" for Iraq. The current friction between Turkey (and some Gulf states) on one side and Iran and Iraq on the other is a case in point. Israel of course is an extreme example of the same preoccupation with religious and ethnic purity. A large state by contrast is better able to embrace diversity; ethnic or religious, and turn it into a positive asset. The USA is a perfect example of the utility of size in accommodating, and valuing, diversity.

Long-Term Degradation of Iraq's Human Capital

Both capability and ability of Iraqis to interact within rules that command popular acceptance were drastically reduced through coup-de-tats, wars, crippling sanctions and questionable decisions by occupying authorities after 2003. The previous section highlighted the deterioration in Iraq's current human stock and ethnic and

religious fissures that have emerged which exacerbated the situation. However, there are other threats to the country's human capital that will have even longer term implications. These mainly relate to health and education factors.

After years of uninterrupted turmoil, there is an "epidemic of mental illness" that Iraq is "ill-equipped to cope with" (The Washington Post 18 June 2010). More disturbing, there are credible reports of large increases in cancers and birth defects in certain locations in Iraq; including Fallujah and Basra that have been linked to "neuro-toxic metal contamination" such as lead, mercury, and depleted uranium (BBC News Channel 4 March 2010, The Independent 14 October 2012, and The Guardian 25 October 2012). A WHO report on the subject was expected in 2013.

After 2003 another sinister element emerged that is just as significant; an attack on Iraq's future human capital. Professional people, especially doctors and senior academics became a primary target. The activity involved kidnapping accompanied by demands for ransom and threats of further action unless the persons concerned left the country. There were also unexplained assassinations. Targeted people soon expanded to include journalists, artists, and other communicators. The overall picture could not be worse: "…deaths of over 1 million civilians; the degradation in social infrastructure, including electricity, potable water, and sewage systems; the targeted assassination of over 400 academics and professionals and the displacement of approximately 4 million refugees…" (Baker 2010, p. 4). The effects on women have been highly significant. About 65 % of Iraqis are now women, of which approximately one million are widows.

The proceedings of a seminar held at Ghent University in March 2011 which were published under the title of Beyond Educide give a comprehensive view of the dire state that education has reached (Adriaensens et al. 2012). The chapter penned by Hans von Sponeck is especially significant as he discusses the use of the expression "educide" and links that to the "genocide" of the sanctions that resulted in his resignation from his post at the United Nations.

Conclusion

Iraq's vulnerability when it crumpled after few hours of war in 1991 and then shattered into scores of antagonistic factions after another brief war in 2003 stands in sharp contrast, for instance, with the way Britain managed to survive through 5 years of gruelling war between 1939 and 1945. Clearly Britain enjoyed resilience and sustainability that Iraq does not possess. Looking at events from 1958 to the present as components of one process and analysing Iraq as a complex system helps to explain the fundamental reasons why Iraq had exhausted what resilience it had previously.

The analysis points unerringly to what needs to be done to restore Iraq's functionality as a healthy system. The recipe is simple: improve education and health for all and rebuild governance to allow citizens to be capable of interacting and able to do so within simple rules that are acceptable to most Iraqis. This might seem like an impossible task; especially when it is recalled that complex systems do not respond

to command-and-control and rigid planning. The lengthy process will have to happen at many levels and through a multiplicity of organisations; both official and unofficial. The natural response to such a proposal is scepticism. How could a nebulous "project" of that description come about? In reality that happens routinely. Complex adaptive systems destined to survive have a "network of processes" and sets of beliefs and understandings that allow them to reproduce themselves despite major changes in their environment (Chapman 2002, p. 42).

The remedial process offers no guarantees, but there is enough evidence to suggest it is already in operation in Iraq. This could be seen even at government level and despite the obvious fact that those currently in power are inexperienced to say the least. Some are accused of counterfeiting university qualifications and of widespread corruption. Most owe their position to this or that religious or ethnic faction. Nonetheless, despite all that some progress does inevitably go on. For instance, a Scholarship and Capacity Building Program was announced recently by the Ministry of Higher Education to fund 10,000 scholarships for postgraduate studies at universities abroad. A previous scheme launched in 2009 involved the provision of scholarships to 50,000 students over 5 years. The ambitious programme might not be implemented in full and some graduates might remain abroad but some would go back with positive contributions for the future. Additionally, infrastructure projects are being implemented and these also would have a positive impact.

Other countries have their own programmes to assist in rebuilding the region's human capital. The Middle East and North Africa Scholarship Programme (MENA Scholarship Programme) initiated and fully funded by the Netherlands Ministry of Foreign Affairs is an example. The programme has a specific module related to Iraq (see MENA Scholarship Programme 2012, Netherlands Ministry of Foreign Affairs, Organisation for International Cooperation in Higher Education).

However, the most effective means to restore resilience and sustainability to Iraq lies beyond official channels; into civil society, and this is where the Internet is playing a major role. In the chaotic aftermath of the 2003 war and the absence of even rudimentary levels of governance there was an explosion of television stations and newspapers (see www.menavista.com/iraq for listing). These did belong in the main to the plethora of factions that emerged after the war. However, they provided an outlet for virtually every conceivable point of view. This media frenzy was soon followed by a vast number of websites that provided access to writers of an even wider spectrum of opinions. Some of the websites specialise in promoting the artistic and cultural life of Iraq (see for example Iraqi Art Gallery at www.iraqi-art.com and www.shebeketeldur.info). Others focus more specifically on its long history and traditions (see for example www.nbraas.com and www.Iraq4all.dk).

A third tranche that has become noticeable is the associations that have come into being with the declared purpose of addressing social and political issues relating to the Middle East including Iraq. Space does not allow a full listing but the following represent only a sample:

Centre for Arab Unity Studies: www.caus.org.il.
Arab Center for Research and Policy Studies: www.dohainstitute.org

Arab Scientific Community Organisation: www.arsco.org
The Middle East Research and Information Project: www.merip.org
Association for Middle Eastern Public Policy and Administration: www.ameppa.org

Finally, articles are being published throughout the Middle East that address social, and religious, issues in an open and provocative manner that would have been virtually unthinkable only a few years ago. An article penned by F. Al-Qasim (and published in Arabic in the Qatari Sharq newspaper on 9 December 2012) suggested that "changing people is better than changing heads". There are indications also that Islamic extremism has produced an almost inevitable backlash. This is taking the form of humour and satirical commentary, arguably unusual in Arabic culture.

Will all the above set Iraq on a different direction of travel? Almost certainly the answer is yes. Will it create a better Iraq? That, as in most matters relating to complex systems, is unpredictable. Will it take Iraq back to an earlier, some would say happier, past? This could be answered with confidence: no it would not. Complex adaptive systems never go back to an earlier state. Equally, that is what makes the study of the evolution of nations both irritating and exciting at the same time.

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