



THE KNOWLEDGE SOCIETY: CONCEPT AND PROBLEMATICS

INTRODUCTION

The theoretical framework of the Arab Knowledge Report for the year 2010/2011 is determined through addressing the central concept, which the report aims to highlight and discuss thoroughly. This central concept is represented in 'preparing the young Arab generations for the knowledge society' as an objective and a means to achieve the desired Arab renaissance. This chapter addresses the concept of the knowledge society in relation to the preparation of the young along with a number of significant problematic issues relating to the Arab renaissance and involvement in the knowledge society: Cultural development in the Arab region, the inherent contradiction in the knowledge society and knowledge economies, the burning of stages and the change in education systems.

The concept of preparing the future generations for tomorrow is related to the concept of building the knowledge society as a whole. In short, most of the starting points, requirements and elements requested in the Arab Knowledge Report for 2009 for the establishment of a knowledge society in the Arab region are revisited: To expand the area of freedom, education reform, consolidate IT infrastructure, and creativity stimulation. To that end, a window should be opened to communicate with ourselves and the world to bridge the knowledge gap which will increase daily and become more difficult to remedy if ignored.

THE KNOWLEDGE SOCIETY: THE CONCEPT AND ITS RELATION TO THE PREPARATION OF THE FUTURE GENERATIONS

There are many terms that describe the enormous changes we are living through

today and the entities towards which societies have been moving since the end of the 20th Century and the beginning of the 21st Century. The most important of these include the 'information society', 'network society', 'knowledge economy', and 'knowledge society'. These terms can be used interchangeably, even though each term emphasises some aspects, and excludes others, of the transformational phenomenon we are experiencing (Judith Sachs, in English, 2008). The Arab Human Development Report for 2003 considered that knowledge was a tool to expand the options and abilities of human beings, and it was the main key to achieving comprehensive development. It also defined the knowledge society as one based on the dissemination and production of knowledge, employing it efficiently in all areas of community activity, economy, civil society and politics, as well as in private life where knowledge has increasingly become a powerful engine for economic and social transformations (UNDP, 2003). The UNESCO Report issued in 2005 adopted the concept of the knowledge society and used it in the plural form, 'knowledge societies,' considering it most consistent with the transformations taking place in a world in which the technological dimension represents the cornerstone of society and in which the new economy and communication networks represent the main features of its general structure.

The first Arab Knowledge Report for 2009 elaborated on the significance of the term 'knowledge' in the concept of the 'knowledge society' to include cultural and civilisational dimensions, not restricting it to scientific and technological dimensions

The concept of preparing future generations for tomorrow is related to the concept of building the knowledge society as a whole

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as in the fulcrums and indicators of the knowledge economy stated in some literature, such as the World Bank's reports. The Arab Knowledge Report stresses that the knowledge society, which some call the 'digital society,' is a society project and is larger than its tools and internet networks. Thus, it was possible for the Arab Knowledge Report to adequately express that the 'knowledge society' is a step ahead of the 'information society' as agreed upon now by many experts who hold the view that information and communication technology has led to the realisation that 'knowledge' has become the principle and driving force for all dimensions of economic, social, political and cultural changes taking place around us in today's world (the UNDP and Mohammed bin Rashid Al Maktoum Foundation, 2009). In this sense this report emphasises, with respect to the preparation of the young, that the Arab vision of the knowledge society must take a comprehensive course. It tends towards building a society where knowledge becomes the product of combining the cultures of information, experience and ability to govern, in order to rationalise resources, mobilise and use the available means to reach the renaissance and enjoy the gains of human development.

In the context of attempting to understand and explain the new global changes, including the cultural, political, social and educational aspects around us, an Arab researcher (Al-Sayyid Yasin, in Arabic, 2000) adopted a general concept that has spread through social science circles in recent years. This concept, or 'paradigm,' coined by Thomas Kuhn in his noted book 'The Structure of Scientific Revolutions', can be translated into Arabic as 'The Complete Theoretical Model'. The researcher's observation confirmed that the old paradigm, which had prevailed before, had fallen along with its political, value and cognitive meaning, and that a new paradigm was being created with the ascendance of the new revolution in communications

technology, which has emerged since the 1970s: the scientific revolution associated with a new global awareness influenced by the communications revolution, and the knowledge revolution (or 'post-modernism' as it is called in the West). All these revolutions spawned coherent contexts composing of new emerging paradigm which are called by different names - as mentioned above - but the one we have settled on is the term or paradigm of the 'knowledge society'.

Since we are involved in studying the processes of preparing the young for the knowledge society, we must point to the pivotal role of increased investment in rehabilitation, formation and education in order to develop the human resources suited to this quantum leap in the economy and knowledge society. Researchers have predicted what is happening in the world regarding the radical shift in these aspects of society and the movement of production to a new stage. They stressed that cooperation between people and countries was the result of disparity in knowledge and skills and that investment in education would reduce the gap not only between people but between countries as well (Bell, in English, 1973). That idea enjoyed considerable support, particularly at the beginning of the 1990s, because the basis of growth in economic wealth involved knowledge workers. However, the main wealth-producing activities will not be in the use of raw materials, capital or labour; rather, the added value will be produced through innovation and creativity and through the application of knowledge at work. The value of products will be determined in the 'knowledge' retained in the final product (Druker, in English, 1994).

Another researcher (Tuomi, in English, 2001) attempts to monitor the development of the information and knowledge revolution and its growth in three waves. He argues that the first wave - roughly from the beginning of the 1970s to the beginning of the 1990s - was associated with an anticipated

ICT revolution, which was expected to lead to, and did lead to, the convergence of television and telecommunications. This led to a focus on deregulation and network infrastructure and to technology development initiatives, especially in Japan, Europe and the United States. The second wave started at the beginning of the 1990s of the previous century and focused on global competitiveness, economic growth, protection of privacy, and intellectual property rights. Its key difference from the first wave was the emerging concern about the haves and have-nots, i.e., the ‘digital gap’, within the same country and between countries in the world, as well as the stress on the concept of globalisation due to the expansion of networks and progressive accumulation of information technology. The second wave spread rapidly around the world, and quickly found itself surfing an even bigger wave, the internet. What distinguished the information and telecommunication technologies in the first and second waves was the emergence and spread of the internet and personal computers (PCs). The emergence of the so-called ‘digital gap within the same country and between nations in the world’ is the result of the widespread use of the internet and PCs clustered between segments of society and between countries (Omar Bizri, Member of the Readers Committee).

The escalation of these revolutions, and the changes they brought to the world in all aspects of life, culminated in the ‘third wave’ that has emerged since the end of 1990s and the early years of this century. The dimensions of this wave can be described as follows: “The relationship between technological change and social transformation is now acknowledged to be a complex one, and the simple notion of technological changes having social effects, which in turn can be simply controlled by appropriate policies, has now been shown to be false. This brings an added complexity to policy making; it is not enough to develop

and implement appropriate technology policies in isolation. Technology policies and social policies have to be developed in a complementary way and strive for complementary objectives. It is necessary, if we want the ‘society’ in information society to be more than a rhetorical device, to develop a more sophisticated appreciation of these social issues” (Ducatel, in English, 2000).

KNOWLEDGE AND TECHNOLOGY AND COMMUNICATION REVOLUTION

The knowledge society has been based on multiple revolutions in information and communications technology, and the accompanying revolutions in thought, values and culture, as well as in all aspects of social and political life. Knowledge has become the basis for the production and the main driver of economic and social development, resulting in a knowledge-intensive production with a surplus value arising from science, knowledge and creativity in the production process and design. In plain words, the value of products in the knowledge society does not lie in the used raw material, nor in the labour force, nor in the spent capital, but rather in the knowledge retained in the final product.

Knowledge has characteristics different from those of capital. In the first place, knowledge is difficult to measure and it easily crosses borders and nations, lighting up the lives of people everywhere. Once it is produced, it can be easily reproduced or copied. In this regard, knowledge transfer is cheap. Hence, developed countries pay attention to the laws that protect intellectual property rights, patents, the internet, data banks, and all other sources of knowledge. Furthermore, knowledge produces more knowledge, so the critical mass of knowledge-makers is very important in achieving the production of knowledge and building a knowledge economy. This,

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consequently, sheds light on the importance of preparing the young so that we can build this critical mass required to cross into the desired knowledge society in the Arab region. In the world today, we can see some factors which reflect this idea in terms of labour and infrastructure as represented in Silicon Valley in California, the Electronic Belt in Germany, the Hsinchu region of Taiwan, and the Multimedia Super Corridor (MSC) in Malaysia. These are all examples of the idea of critical mass which leads the process of producing knowledge. (Harris, in English, 1998).

If the evolution in information and communications technology is the first pillar of the knowledge society, globalism is the second pillar. Globalism is the increasing spread of information and knowledge among people across the world, increasing similarity between groups, communities and institutions, removing barriers and distances between states and dissolving them into one global arrangement rising above everything, including geographical boundaries, and bringing them together under one global entity.

Most analysts confirm these dramatic changes that have taken place in our world today, making it, in spite of differences and existing borders, a 'small village' in the figurative sense. An analyst sees that technology and communications have placed all the people of the world in touch with each other, and provided the fluidity of 'knowledge' for everyone (i.e., the rapid spread of knowledge and its circulation among all), to the extent that China and India have gained an increasing wealth which will represent a challenge to the United States unless it quickly develops to maintain its powerful position in the world. In this connected world, we find that many of the cooperation mechanisms, such as knowledge, imagination, and information and communication technology, have become commodities within everyone's reach. There are many people today who possess the capacity and potential to create their own contexts (i.e. lives). However,

there is only one thing that has not been, and cannot become, a commodity; namely, the human imagination (Friedman, in English, 2005). Therefore, encouraging positive imagination among the new generations becomes a key issue facing educational systems and upbringing and political institutions. It urges them to encourage the people more than ever before to think seriously and focus on the results beneficial to humanity and which can bring about progress and unite human civilisation.

Today's knowledge society provides a wider space to evoke positive imagination (i.e., creativity and innovation), exchanging and disseminating it without limits. Searching the internet, for example, has become one of the most important and strongest factors for enabling individuals in a way that is unprecedented. It is contrary to everything humans have ever experienced or learned. It enables the individual to do all that he/she believes to be true in dealing with the information he/she wants. Moreover, social networking sites on the internet have grown and have become, thanks to 'Facebook', 'Twitter' and others, a communication tool not only from one to many but also from many to many. Such communication has created what is called the 'Virtual Mass Society'. Yet, this virtual society may become a social reality especially in the event of the availability of the conditions of economic, social and political pressure. Social communication sites played a distinct role in mobilizing the crowd around a certain idea or political position.

An emerging mass of youth has formed in the Arab region as a whole, among the upper-middle class, which has managed to embrace digital technologies and open for itself extended horizons under the 'Digital Domain' and the practice of 'Digital Citizenship,' or the practice of citizenship through the internet with its various techniques, which announces the birth of 'Network Citizenship' (Netizen), so to speak. Those youths have created a general view for the emerging mass of youth, becoming a 'digital front and a

nucleus of a soft power, which identifies issues, trends and mottos, and movements followed by the larger public mass' (Samir Murqus, in Arabic, 2011).

The eruption of the knowledge revolution has increased the chances of freedom and democracy for the people. In this respect, human rights movements around the world have made progress, emphasising people's rights to freedom, expression, belief, a dignified life, and employment opportunities where they can realise their humanity, defend women's rights and equality, fight poverty and marginalisation, and confront bullying and all forms of tyranny. Thus, globalism in its positive side, has been associated with the prevalence of key governing concepts stressing democracy, pluralism and respect for human rights. On the other hand, totalitarianism has declined. All of these have become the new pillars of a renaissance of communities from the inside, as well as rules for dealing with other countries. It has become clear that the knowledge society is based on comprehensive sustainable development, as well as the creation of conditions of freedom, growth, and human-supporting values. Moreover, the knowledge revolution has been associated with new concepts in development, population, and environment, and attention has been brought to issues surrounding women and children (Olson, in English, 2004).

The introduction of information and communications technology to industrial production alters the structure of an institution's social organisation and culture. This has resulted in replacing semi-skilled or unskilled workers with skilled technical workers capable of dealing with information and communications technology and high-tech devices for managing the institution. The relations in the structure of the institution's social organisation based on bureaucratic and personal contact are no longer appropriate for the new pattern of management. That pattern has been replaced with a virtual world managed through the internet and

communication technologies. Therefore, we find that the institutions of the knowledge society seek to attract knowledge-makers and information and communication technology users and specialists. This has created huge competition in attracting these kinds of knowledge workers and information technology specialists (Evers, in English, 2001). Time and place are no longer necessary for the establishment of an institutional organisation, as communication can be achieved through communication networks, and meetings and conferences can be held virtually. This has resulted in reducing costs and saving time and effort in project management, decision-making, agreement execution and follow-up.

Perhaps among all these global changes there may be some elements that can facilitate the way for Arab communities to prepare the Arab youth to access the knowledge society. All these changes have penetrated, challenged and influenced the school systems, and rebuilt the structure of school organisation (Wilber, in English, 1993). In this respect, the relations in the new social organisations of schools, in the knowledge society we seek, are no longer based on a bureaucratic hierarchic structure; instead, they have become horizontal and face-to-face relations through technology. Also, the teacher is no longer the only source of information, but has become a learning facilitator undertaking his/her original role in raising generations, not only as a conduit for knowledge (Beare and Slaughter, in English, 1993). Additionally, the relationship inside the classroom has become 'from many to many,' where all, teacher and students, interact together in an all-in-one learning situation.

Furthermore, universities in the knowledge society are no longer restricted to producing the basic knowledge. What used to be called the triad of scientific research, industry and university, referring to the production of knowledge, is now conducted in multi-functional institutions. Knowledge networks are set up to connect these institutions, where the industrial institutions

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and labour and production organisations have become intelligent organisations run by high-salaried intelligent management. Similarly, universities are no longer the sole driver for progress science and technology, and thus, inevitably they have become intelligent organisations managed by a highly qualified labour force, and connected to research and development networks and production and service centres.

Thus, the knowledge society has tremendous opportunities and potentials which enable us to transcend history towards creating a more welcoming future in which we can achieve renaissance and progress to let the Arab region access the knowledge society through democratic and economic progress. A researcher confirms (Mourad Wahba, in Arabic, 2011) that Egypt, for example, can establish democracy now thanks to the information and knowledge revolution, which took four centuries for Europe to achieve. Certainly, the scientific and technological revolution in the twentieth century produced two main phenomena: 'mass' and 'electronic'. The term 'mass' has evolved to include, 'mass production,' 'mass society,' 'mass media' or 'mass communication,' and 'mass culture'. As for the electronic revolution, the internet and e-commerce, they gave birth to two phenomena, the first being the 'death of distance' in time and space, and the second is 'Facebook,' in addition to other sites of social communication on the internet. With the death of distance, time can be saved; for example, the four centuries it took for various countries across Europe to achieve democracy can be saved. (Mourad Wahba, in Arabic, 2011).

Economic progress is also possible. To illustrate, there is a new option made possible by the transition from traditional production to knowledge-intensive production as demonstrated by South Korea, Malaysia, and Singapore. This option would condense centuries of progress into only 15-20 years. This would also need a work force enjoying a high level of intelligence and knowledge, and

excellent education, neither of which can be achieved without full care and education in early childhood up to post-university education (Hussein Kamel Bahaa El-Din, background paper for the Report).

In this context, the Arab Knowledge Report for the year 2009 showed that it would be possible to make up for the historical Arab delay in the field of knowledge. It also showed that it would be possible to deal with the knowledge gaps in the Arab region; if there was the political will to overcome them and put knowledge in the service of development; and if energies are mobilised and harnessed and the necessary resources allocated, if efforts are made for building the enabling environments for the desired knowledge society. That way, the acquired, indigenising, employed, produced and innovated knowledge would become a tool and an end for society as a whole, reaching all categories equally and all fields of knowledge, including the scientific, technical, cultural and heritage areas as well as the accumulated communal experiences, thus realising the knowledge, freedom and development triad.

PROBLEMATICS OF ACCESSING TO THE KNOWLEDGE SOCIETY¹

The term 'problematic' involves an inherent contradiction in the issue or matter addressed (Mourad Wahba, in Arabic, 1996). In this part, we present a critical analysis of five important problematic issues that should be tackled when thinking about building the Arab Renaissance and preparing future generations to access the knowledge society: Cultural development, the inherent contradiction between the knowledge society and knowledge economy, the burning of stages and the change in education systems.

THE PROBLEMATIC OF CULTURAL DEVELOPMENT IN THE ARAB WORLD

Despite the multiple definitions of culture, it is, from the practical perspective consistent

Development of European modernisation

Modernisation, along with its achievements of scientific and technological renaissance, was formed through interactive waves of major reforms. The first of those reforms was the wave of religious reform which recognised the freedom of religion and a person's ability to know religion, without an intermediary or religious authority. It overthrew religious authoritarianism imposed on social and political life, and even in religious life itself. The second reform was the political and social movement that embraced the call to the 'Social Contract'. The idea of the social contract was a reaction against absolute political power. It established the principle that people would be the source of powers and promoted individual and social freedom (liberalism), human rights, tolerance, relativism and pluralism. The social contract was founded on secularism

which paved the way for religious reform. The third reform was represented in 'Enlightenment'. The term Enlightenment refers to the totality of the ideas that expressed people's imagination in the eighteenth century. Enlightenment was a reaction against the authoritative dogmas and archaic traditions as well as the domination of the ideas of the past over the production of science and knowledge. Confidence in humans and the mind were the factors behind the tendency towards Enlightenment. Namely, the mind is able to acknowledge the existence of humans and social life through scientific methods and research. It is also able to reform social, political and economic institutions to promote life and achieve direct well-being. In this context, the idea of natural law and natural life in politics and society emerged.

Source: (Mohsen Ziyadah, 1988 and Butts, 1995).

with the objectives of this report, all the experiences, skills, and system of values and attitudes that have accumulated and are rooted in society which uses it to shape its world and satisfy its needs, and produce the means for this satisfaction, thus generating structures, relationships and achievements (Mahmoud Qamber, in Arabic, 1989). Therefore, culture must be at the heart of efforts of renaissance, change and development. However, the heart of a society's culture itself may

involve ideologies, i.e. systems of values and beliefs, which distort people's awareness and implant regressive attitudes as a result of a long cultural legacy of oppression, occupation and tyrannical power. Also, the inherited old traditions may result in some ideologies nurturing regression, dependency, historicism, formalism and superstition. This raises the problem of the ability of the initiators of the renaissance project to develop new cognitive and perceptive models, new values and ethics of public

Cultural reform in the Alexandria Document

The Alexandria Document issued by the Conference on 'Arab Reform Issues,' held at the Bibliotheca Alexandria from March 12 to 14, 2004, stated a number of ways of reforming culture within a comprehensive vision of other paths of reform. There are five key recommendations for cultural reform we mention due to their importance for the present report. They are listed as follows:

- Work on establishing the principles of rational and scientific thinking by promoting the institutions of scientific research, through providing the required funding, and releasing the freedoms of civil society to develop them. Meanwhile, the sources of religious extremism, whose residue still exists in the curricula, mosque sermons, and formal and informal media, should be eliminated.
- Encourage further renewal of religious discourse in order to reflect the enlightening cultural nature of religion, which necessitates the releasing of intellectual freedom, opening the gates of ijtihad (i.e. intellectual reasoning) wide for scientists and researchers with respect to societal issues to benefit both the individual and society, and confronting all forms of extremism and rigid literalism in understanding religious texts which take them away from their purposes and comprehensive principles. This requires that the reform of religious discourse should proceed in a direction consistent with the spirit of science, the rule of reason,

and modern requirements. Doing so would remove the harmful contradiction between the freedom of thought and creativity and the commandments imposed by some in the name of religion which, in fact, calls for argument in a way that is best and does not impose intellectual terrorism on those adopting different opinions.

- Proceed with the liberation of women to achieve equality between men and women in education and employment, stressing the effectiveness of social participation in all its senses.
- Create a cultural atmosphere to promote democratic development and peaceful transfer of power through working to confront the rigid traditions and cumulative effects of corrupt political methods and conditions preventing any effective political participation. Such confrontation will change the political and social look of women and stress their cultural contribution, scientific achievement, and necessary role in development, taking into account that cultural development is the basis of any development. The first step for any radical reform cannot succeed without spreading the culture of democracy in the educational curricula and media.
- Confirm that science is a key component of culture and an established path for a future vision which implants in the public's cultural awareness the need for the knowledge society, which is the best way to realise progress in each area.

Source: Alexandria Document, 2004.

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awareness, and new cultural structures pushing the efforts of development and change and meeting the requirements and objectives of renaissance.

Among the main elements of the cultural structure are the knowledge models by which people understand the world around them, or what is called by one of the researchers "building a new Arab view of the world". This vision includes three basic approaches to discovering the world: Experimental, rational and logical consistency, and religion. They are intended to work in three key areas of knowledge: experimental science, philosophy or intellectual thinking, and religion. Because reality is more complicated, these three key areas do not have clear fixed limits but they overlap and interact in reality. Such overlapping and interaction produce an integrated world view changing from one place to another according to the resulting cultural interactions. In addition, there is no possible dissemination of scientific culture from one society to another, through translation, transfer by scientists or others, without a cultural atmosphere possessing a suitable world view which absorbs science and scientific methodology and calls for following the practical traditions in theoretical and technical research (Samir Abu Zeid, in Arabic, 2009). Hence, many Western experts called at the end of the last decade for 'a fresh mind for a new world,' so that the West could access the 21st Century, the era of information and knowledge society (Ornstein and Ehrlich, in English, 2000. Translated by Ahmed Mustajir).

The so-called 'scientific facts' are only human exertions that change constantly; both reality and knowledge are relative. However, science involves a continuous discovery of reality in terms of what happens and how it evolves. Scientific activity is an integral part of the intellectual and cultural structure. That is, science is just one, not all, of the patterns of human knowledge. Yet it needs a fostering cultural structure. Simultaneously, science is the main driver of economic and social development in any country pursuing progress and achievement

of a knowledge society. Nonetheless, attempts by Arab societies to nurture science have been limited to the pragmatic utilitarian use of science and the attempt to import the products of technological science without the science itself; thus, Arab societies have become consumers of science and technology as commodities to be used, not indigenised, employed and produced (Samir Abu Zeid, in Arabic, 2009). Perhaps the inability of Arab societies to indigenise, employ and produce science lies in the absence of cognitive and perceptive models coping with 'modernity' from the structure of Arab culture and knowledge.

One Arab researcher has attempted to monitor the Arab Renaissance, trying to diagnose regressive attitudes using the works of a considerable number of experts concerned with the Renaissance and through identifying two key trends: religious reform and the liberal trend dominated largely by secularism. These two trends were found to have several common denominators. The first, the conviction of the importance of science and the need to rely on rationality and reason. The second common denominator was the call for openness to the world and conditional borrowing from the West. The third, was the adoption of the principles of freedom, justice, equality and the rule of law, and the conviction that reform, change or modernisation must be done gradually. It should not be applied from above, but it should have a comprehensive communal quality, covering the political system, women's conditions, issues of language and education, and people's lifestyles and morals (Al-Sayyid Yassin, in Arabic, 2010). Many Arab intellectuals have attributed the failure of the spirit prevailing during the Arab Renaissance to the intellectual rupture in the Arab culture of tolerance, openness, freedom, enlightenment, pluralism, relative truth, and the importance of cultural interaction, which were all present in the climate of the Arab Renaissance project. Instead, other trends characterised by closure, intolerance, unilateralism, clinging

to absolute ownership of truth and scepticism about the other, (previous reference) thus Enlightenment relapsed and the march of Arab modernisation stopped (Mourad Wahba, in Arabic, 2011).

The solution to the contradiction between a culture we aspire to; embracing science and depending on relativity and rationality and the common culture, embracing trends based on intolerance and claiming absolute ownership of truth, cannot be solved except through a renaissance project that achieves cultural development, sponsoring a new mind aimed at building a new society.

THE PROBLEMATIC OF THE INHERENT CONTRADICTION IN THE KNOWLEDGE SOCIETY AND KNOWLEDGE ECONOMY

Knowledge societies constitute the economic heart of society, and they involve, like other capitalist economies, contradiction. The knowledge economies evoke the forces of growth and welfare, but they seek, at the same time, to reap the greatest profit and self-interest, which tears at and disturbs order in society, serves to widen the gap between rich and poor, sparks terrorism and crime, and undermines the pillars of security and stability in the world (Hargreaves, in English, 2003).

There is a fundamental contradiction in the issue of knowledge society and economy. To explain, the neoliberalism dominating contemporary global capitalist thinking emphasises a set of rights sponsored under the banner of democracy, including

public freedom, freedom of expression, and freedom of religion and belief, along with another set of rights such as equality and social justice, the right to knowledge and work, and the right for all citizens to lead a decent life. Meanwhile, the prevailing neoliberalism stresses a set of rights in contradiction with the mentioned rights, with respect to individual ownership, which gives legitimacy to capitalism through the right to profit and ownership. These rights involve inequality. Put differently, the right to ownership is available to those who 'have' the means according to their capacity and efficiency, but also result in its opposite, because of course there are those who 'have' and those who 'have not'.

This contradiction between the principle of the right of ownership and its independence for all, and the principle of equality and social well-being, or what can be expressed as 'the inherent contradiction between economic freedom and social justice in the capitalist system,' has highlighted a need for change in the capitalist system through social policies which have not achieved their desired results, especially in many developing countries, including some Arab countries, and has caused the foundations of social and political stability in these countries to shake. The question remains open about the possibility of the coexistence of 'Civil Equality' with 'Economic Inequality'.

If we move from the level of theoretical analysis to the procedural level, this problematic issue, or rather this contradiction, is seen particularly clearly in developing societies that aspire to progress towards the knowledge society. That is, the

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BOX 1-3

The absence of political and social dimensions from economic growth - Egypt case

New economic experiences, which focused on economic growth as a single factor in the development process while neglecting the political, economic and cultural factors, cost their countries a very heavy price in terms of poverty, increasing

unemployment and aggravating inequality at home. All this led to social problems, and soon it became clear that this economic growth itself was not homogeneous, thus its impact was not felt by the broad masses.

(Source: Carnegie Endowment website, www.carnegieendowment.org, February 23, 2011).

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knowledge economies are, by definition, based on intensive knowledge, unlike the traditional industry economies which are based on intensive labour. Additionally, the knowledge-intensive economies attract a small segment of knowledge workers who possess knowledge, skills, and high potentials. This segment contains those with high incomes and those who benefit from knowledge economies. The majority of those belonging to this segment are professionals who raise the prices of the services they offer in the knowledge economy, resulting in their achieving substantial economic returns. In return, the other segments with lower levels of knowledge and skills are excluded, giving rise to what can be called a 'digital gap', which is in essence a social gap between the relatively small segment that possesses knowledge, culture and skills required for the knowledge economy and other social segments that do not possess them. While the first segment grows richer, the second grows poorer and more desperate.

In fact, the aspects of social and economic inequality do not only lead to undermining social harmony and political stability, but they also contradict the spirit of democracy itself and encourage corruption and favouritism, which are among the factors that cripple development. Whereas economic globalism, when set loose without control, may increase the intensity of inequality, poverty and exclusion, managing it wisely (including the adoption of legislation and motivating and responsible procedures) is a necessary prerequisite to promote the individual's economic and social rights. This sharp division, in societies seeking to access knowledge economies, between the elite controlling the information economy (about 20%) and the poor majority in the information economy (about 80%) results in increased unemployment, poverty and marginalisation, a decline in workers' rights, and a deterioration in the state of social welfare (Hijazi, Mustafa, background paper for the report).

The contradiction involved in the problematic issue we are dealing with lies

in the ability of the countries seeking to catch up with the knowledge society to follow development policies that achieve balance between society's need to grow and progress towards the knowledge society, and society's need to employ all its members, eradicate poverty and unemployment, and achieve justice, this can be achieved through the promotion of productive development and service projects in agriculture and industry, at the level of large and small enterprises.

Sustainable development based on the establishment of knowledge societies requires removing the contradiction between the 'knowledge economy' and the 'knowledge society'. The knowledge economy is a capitalist economy serving the private interest and promoting the profit motive and mechanisms unleashing market freedom. However, the knowledge society is a comprehensive social process in political, social and cultural development, targeting public interest (Hargreaves, in English, 2002). Herein lays the importance of directing social systems and institutions, including educational systems, to work to serve both goals, 'private interest' and 'public interest', under integrated policies.

BOX 1-4

Equality and the Knowledge Society

Knowledge economy is likely to be achieved under capitalist conditions within the framework of a capitalist society in which the rates of poverty and unemployment are kept within 'acceptable' limits along with 'palliative prescriptions' similar to those we see in capitalist societies today. In summary, the knowledge society is not, in principle, a utopian society involving all forms of equality. Rather, there is a need for various changes at many levels in order to achieve the desired equality and access to the 'fair' knowledge society.

Source: Omar Bizri, Member of the Readers Committee

BURNING STAGES PROBLEMATIC

Under the waves of global evolution from the industrial to the knowledge

society, the Arab, like other developing societies, witnesses the transition, without introduction, from agricultural settings and the oral or semi-oral cultures to the digital knowledge (Bin Hafeez, Abdel Wahhab, background paper for the report). Consequently, the developing societies, witnessing a rapid flow of revolutionary knowledge, contains generations that have not yet changed and many who still live in the darkness of past stages since they have been left behind by the developed world.

Arab societies are still preoccupied with many key foundational issues such as literacy and the building of modern states following independence, which require the provision of infrastructure, knowledge and skills. “For example, we find the child or young person in the countries of the developed North opening their eyes every morning to see a computer and life in a family or social environment relatively well versed in information, while the Arab child or young person opens their eyes in an atmosphere that has not yet reached the degree of satisfaction in initial knowledge” (Bin Hafeez, Abdel Wahhab, background paper for the report). Thus, if building a knowledge society in the West, as explained earlier, was based on knowledge revolutions, in successive stages of history, is there a chance for Arab societies to burn past these stages and work simultaneously, intensively and comprehensively to fulfil the requirements of this historic achievement and participate in the knowledge society?

The possibility of burning these stages for Arab societies still exists. This possibility lies in a number of factors. The first is realised thanks to the nature of the flow of knowledge and its rapid spread transcending time and space by means of advanced information and communications technologies. This knowledge flow, which should be utilised to reduce the knowledge gap and organise development projects, is now directly identifying the areas of social behaviour and shaping relations and management patterns in a boundless space where borders have dissolved. The second

factor is represented in the accelerating rate of the spread of digital knowledge in many Arab countries. The third factor is that a number of Arab countries have launched serious initiatives in their educational systems, even though these have not been generalised or assessed yet, to activate and indiginise knowledge with the construction of infrastructure for information and communication technologies necessary for the success of these initiatives, and support for research and development. The fourth factor revolves around the capacity of the Arab renaissance movement in building an enlightened political will to overcome the culture problematic and achieve cultural development through which a new Arabic mind appears. These four factors constitute a strong motive for Arab societies to become engaged without delay in the intense knowledge revolutions covering all sectors of life at the same time, to be able to remove the contradiction underlying the issue of burning past the stages.

THE CHANGE IN EDUCATION SYSTEMS PROBLEMATIC

Perhaps the issue of the change in education systems is one of the problematic issues most relevant to the processes of preparing the youth for the knowledge society. This is because education is a system existing in the context of a society which political, social and cultural characteristics and conditions are already determined. Education influences, and is influenced by, society at the same time in a strong dialectical relationship.

It is one of the most important foundations of economic growth; but it is also its major determinant. Education derives its resources and inputs from the economic and cultural growth of society. Education is a cause and an effect at the same time. The key problematic issue with respect to the question lies in its starting point: Should we start from the educational system and its input, governance and processes to get learning output that is

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able to achieve democracy and social and economic progress and engage in the era of knowledge? Or should it be from the society and its economic, social and cultural contexts, which build the educational system, provide its resources and shape its educational environment so society can get the desired output from the human elements supporting access to the knowledge age? This problematic issue has been reflected in sharp intellectual debate between the proponents of human capital theories, and social critical theories (Hassan Al-Bilawi, in Arabic, 1986).

As all agree, the logic of the human capital theory is based on the principle that education is an investment in people, and when successful individuals acquire knowledge and skills, they become human capital. The educational process, according to the theory of human capital, is an activity which grows with the individual's human experience. In this regard, educational achievement is governed by the individual's efforts. Therefore, this concept introduces a model outside the influence of social class, race and gender. Here, school is a neutral mechanism whose quality guarantees 'equal opportunity' for all. Equal opportunity is the focus of social justice. School, according to this theory, is the place where the human capital is efficiently and fairly developed. To put it another way, justice is learned and implemented in school.

The classical liberalism, or social liberalism, sought to resolve the contradiction between the individual's pursuit of his/her own interest, and society's interest, on the basis of determining the state's role in the care of public interests (in defence, education and law) and the building of policies to create stability (which ensure the public interest and public services, address the disadvantages or failure of the market, and mediate between the competing groups). While we find that neoliberalism, advocated by the neo-conservatives heavily dominating the knowledge economies in the West, offers a concept which is contrary to the role of the state and which is

determined only on building an appropriate market in terms of preconditions, laws and institutions necessary to preserve that market's independence and allow the exercise of economic freedom.

In contrast to the human capital theory, the efforts of critical sociologists grew in the 1960s and 1970s and were reflected in very important experimental field surveys. There was, for example, research in the 1960s (Coleman, in English, 1966) that emphasised that the school as an independent factor had little impact on the students' academic acquirement. Other studies confirmed that the impact of factors outside the school (e.g. the level of poverty and social class) were much stronger on the academic achievement of students with respect to determining the individual level of educational outcome (Jencks, in English, 1972). Thus, we should focus on achieving equity and social justice rather than focusing on achieving social activity. According to these experts, the role of the school in achieving social justice and progress and preparing young generations for the knowledge society remains marginal, unless it exists within a framework of fair social policies and a just economy. In the four case studies included in the report, a questionnaire was conducted in the context of that study among the Arab youth. It showed that 52% of students decisively agreed on the idea that 'he who has the money has a better opportunity to get a better education,' while 23.1% of students partially agreed. This result is consistent with the thought of the proponents of the critical school.²

The experimental field research helped social critical theories in education to grow in popularity, such as the theory of political economy (Bowles S., and Gintis H., in English, 1976), the theory of cultural capital (Bourdieu and Passeron, in English, 1970), and the critical theory in education (Giroux, 1981 and Apple 1982, in English). These theories are similar in their analysis of the

environment of social organisation that show that the school and the prevailing culture represent the mechanism for reproducing the capitalist system and the dominant culture in society (Hassan Al-Bilawi, in Arabic, 1986).

Based on the above, the elimination of the contradiction in the problematic relationship between education and building human capital, within the overall framework of preparing the young for the knowledge society, lies in adopting comprehensive and complete policies of educational reform and economic and social development, and making educational reform an integral part of comprehensive development plans in the context of freedom and democracy in society led by a strong political will and supported by an active communal will. The understanding of reform would change the general view by seeing that the preparation of 'human capital' is not only limited to the preparation of the means of production but also relates to the preparation of 'human competence capital' through the cognitive capital. Moreover, school should be viewed as a comprehensive system of goals and incentives, information systems, technology, flexible management and distinguished leadership. Therefore, education will become a transformative factor able to prepare a new generation, in a new society, that can deal with a new world. It should be fulfilled within the knowledge, freedom and development triad.

