

EXPLORING THE LINKAGES OF COMMERCE, HIGHER EDUCATION AND HUMAN DEVELOPMENT: A HISTORICAL REVIEW

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Abstract

Throughout history, institutions of higher learning emerged in response to a thriving culture of commerce and innovation. Yet, the idea of an entrepreneurial university that seeks to create new employment through the practical application of knowledge in the private sector has stirred up public anxiety. Resistance comes from those who fear that this would result in a loss of academic freedom and those who have a vested interest in opposing change. Often, this leads to unholy alliances that portray themselves as guardians of the public interest at home and the cultural identity of non-Western societies abroad. This paper uses historical evidence to illustrate that the entrepreneurial university is neither a particularly Western invention nor did it subvert academic freedom or discourage the pursuit of wisdom.

African universities, which were either set up by colonial powers or coached by them, were mainly designed to educate local bureaucrats. As such, they represent a historical anomaly because they were not meant to serve the needs of the local growth-oriented private sector. As a result, these universities turned out to be ill-equipped to function as driving forces of endogenous economic development and social empowerment. Institutional reform and financial incentives are required to unleash the power of entrepreneurship at African universities and enable it to better integrate the local private sector into the global knowledge economy.

Introduction

In academic literature, the entrepreneurial university is largely portrayed as a product of the modern knowledge-based economy in which universities are encouraged to employ their human capital, knowledge and intellectual property to create commercially viable technological innovation and contribute to economic development [1][2][3][4][5][6]. Though it is admitted that universities in the United States and Germany were already key in facilitating the national industrialization processes in the 19th century [7], it is argued that these institutions of higher learning did not at that time perceive themselves as independent entrepreneurial entities [8]. This is certainly true in view of recent organizational innovations (e.g. technology transfer offices, technoparks, etc) that improve the formal structures of collaboration between universities and industry and thereby making universities more conscious about the potential economic value of scientific innovation. It has given university researchers more incentives to set up a spin-off firm and become entrepreneurs.

Yet, curious researchers with an entrepreneurial mind

are not a product of Western capitalism but have been a great asset of institutions of higher learning ever since. Depending on the responsiveness of society and its institutions to innovation and private sector development, such entrepreneurial researchers were either allowed to thrive or prevented from doing so. They tended to thrive particularly during periods of economic globalization and intense knowledge exchange. Such periods were characterized by economic and technological change and a geographical expansion of the private sector. The pressure from a growing private sector to make institutions of higher learning more responsive to a fast-changing business environment enabled the renewal of such institutions in spite of strong internal and external resistance from those who benefited from the *status quo*.

Thriving international commerce always resulted in an accumulation of new facts and the development of new technologies that again helped to enrich the research base at institutions of higher learning and encouraged them to be more bold and innovative in the search of new insights. In a more practical sense, they engaged in the classification and application of new knowledge and techniques in different fields of research. Their research findings subsequently provided the local growth-oriented private sector with better orientation in terms of market trends and geography and enabled its actors to reduce uncertainty in strategic decision-making. Moreover, it increased the chances of the local business to gain a competitive edge through innovation.

Did this development undermine academic freedom? The answer is likely to be the opposite. The knowledge collected by private sector explorers helped enrich and improve the quality of research in higher education. Moreover, private sector funding merely represented one additional source of funding that enhanced the choice of potential sponsors of research at universities.

Nevertheless, contemporary universities in affluent societies tend to be split up in two groups of academic departments with rather different views: The first group positively engages with the private sector but also contributes to the advances in the basic sciences. It closely observes business trends, engages in the development of technological innovation in collaboration with research foundations and private firms, files patents and sets up spin-off firms. It could be called the 'entrepreneurial' part of the university. The second group is mainly dedicated to the general advancement of science, art, law and human values. The insights produced by its scholars often contribute to human development and their policy advice has become important to governments and international organizations. However, quite often this second group feels morally superior to the former. Convinced that their normative research has the potential to improve the institutions of

society and make the world a better place, they actively engage in public debates and influence policy outcomes. Their goal is to incorporate normative principles and cultural values into a global concept of sustainable development. Yet, in the course of this endeavor, they hardly ever consult with researchers in the first group implying that they would not care about ethical principles anyway since it would stand in the way of using knowledge for commercial purposes. Even though this second group also reveals considerable entrepreneurial talent in its efforts to gain public attention and funding, its researchers still claim to follow the tradition of the ancient Greek Academy and its detachment from private sector activities.

This article questions this aloofness of the second group by means of historical evidence. The history of institutions of higher learning did not start with the Greeks, and the anti-business ethos of the Greek Academy was mainly a result of the geopolitical context at that time. Its hostile attitude towards commerce should rather be understood as a form of cultural resistance against the first wave of economic globalization that was initiated by the Phoenician trading empire [9].

In addition to the Phoenician case, this paper further uses the examples of the early Islamic World, Renaissance Italy, the Golden Age of Dutch Commerce, 19th century industrialization in Europe and the rise of the United States in the 20th century to illustrate that growth-oriented commerce did in most cases not undermine the quality of research but rather enhance it. The great achievements in arts and sciences were accomplished because scholars were driven by an inquisitive and entrepreneurial mind *and*, at the same time, committed to higher ideals and ethical principles. In other words, there was no divide between the first and the second group. Both were united by humanist values that reconciled the self-interest to take advantage of economic opportunities with a passion for excellence, disciplined scholarship and the pursuit of virtue. Independent of the research area the scholars were active in, their principal motivation was the quest for new insights, an active life and a strong engagement with their social environment [10] [11] [12]. Their research resulted in technological as well as philosophical innovation and eventually transformed society and the natural environment on a large scale.

Such transformations through innovation are however only possible if society approves of them. The willingness to accept change depends again on how people expect to benefit from it. Even though affluent societies are the largest beneficiaries of the advances in business, science and technology, they tend to turn against change arguing that technological and economic advances are producing social inequality and involuntary risks to society as whole [13]. This trend can be observed in many parts of Europe and it helps explain its resentment of the innovation-driven economy of the United States that is perceived to impose unwanted technological and cultural change on the rest of the World.

The United States may suffer from a worldwide loss of confidence in its political leadership [14] [15]; yet, the constant ability of its entrepreneurial system of higher education to churn out technological innovation and contribute to the advancement of the arts and sciences is transforming the world to a much greater extent than its political or military interventions. This knowledge-induced transformation should be welcomed because ultimately, the great environmental and development challenges of the 21st century must be addressed by mobilizing people's creativity to find sustainable and innovative solutions not just in rich but also in poor countries [16].

Entrepreneurial universities in the United States and elsewhere also proved that the more they excel in the quality of research and teaching, the more likely they get into a position where they can choose the partners they want to collaborate with in business, government and society. They are also more likely to attract highly motivated students. This strengthens their financial autonomy, raises their capacity to innovate and enhances their freedom of action [17]. And it is not just the first group that benefits from this development. The second group may resent the restless attitude of the first but indirectly it enhances its reputation and its funding base as well.

In this context, it is wrong to merely associate the modern entrepreneurial university with an eagerness to seek funding from the private sector and serve business interests. Its basic philosophy is more related to an independent and positive attitude towards change and an active engagement with society and the global economy. Since it refuses to be elitist or merely address elitist concerns, it also contributes to social empowerment and human development.

Unfortunately, African universities were not designed by the colonial powers to be entrepreneurial and address the needs of the local society and economy [18]. Instead they trained the local population to be local clerks and teachers (in the British case) and loyal bureaucrats (in the French case) that would help run the host country in the interest of the home country [19]. This stands in contrast to earlier institutions of higher learning that were set up by African kingdoms in response to the growing knowledge exchange with the then thriving Islamic World [18] [20] [21].

Unsurprisingly, the institutional set-up of the colonial-style university was not able to properly perform its function as an engine of social, economic and technological change. After independence, many African governments attempted to make their universities more responsive to the goals of national economic development. Yet, in spite of such efforts, there is still a lack the financial and institutional incentives that would induce universities to engage more with the local private sector and contribute to development [20].

African governments may have to revamp the institutional set-up of their national systems of higher education in order to make them more conducive to private sector collaboration and more active in the search for collaboration with relevant partners at advanced research institutes

abroad. Yet, this would also require Western donors to support such efforts. It would enable African universities to re-engage with society, enhance the quality of its research and teaching and contribute to economic development by applying new knowledge to local business development [22].

Successful reform of higher education, whether in Africa or elsewhere, requires that people better understand the influence of commerce on the history of higher education. Its positive role in the general advancement of arts and sciences is hardly ever discussed because affluent societies tend to stick to the popular view of the ivory tower scholar that pursues knowledge for its own sake. This myth, in combination with a general anti-business ethos, is nourished at many academic departments. It has its roots not just in ancient Greek philosophy but also in the Bible. Together they form the pillars that make up the cultural and religious identity of Western societies. The negative attitude towards the commercialization of knowledge may therefore be linked to a feeling of guilt for betraying ancient Greek and Biblical values. The following chapters will show however that the rage against trade and technology in ancient times had little to do with ethical concerns and a lot with incumbent interests. It may therefore be premature to feel guilty about the entrepreneurial university.

1 The origin of the anti-business ethos at Western universities

The hostility towards international trade expressed in the classic works of antiquity must be seen in the context of the first wave of globalization in human history initiated by the business-minded Phoenicians. What they primarily achieved was the effective commercialization of Mesopotamian and Egyptian art, science and technology through large-scale manufacturing of popular goods and trade across the Mediterranean Sea [9]. In this context, Phoenicia seemed to have played a crucial role in the development of Greek as well as Jewish civilization [23] [24] [9].

Both people, the Greeks and the Jews, eagerly learned from the Phoenicians and bought their goods; but they also strongly resented them for imposing a global culture on them that weakened established beliefs and identities and posed a threat to the incumbent interests of the landed gentry. The hostility against Phoenician traders may therefore help explain the strong anti-business ethos in the ancient Greek Academy.

The great Greek philosophers Plato and Aristotle expressed a strong disinterest in private sector activities and resented the practice of using knowledge to advance private material goals [25]. In the dialogue 'Protagoras' [26], Plato particularly resented the sophists who were willing to sell their knowledge and wisdom by teaching rhetoric. Moreover, Plato describes Phoenician traders in 'the Laws' [27] as narrow-minded and greedy

Like Plato, Aristotle strongly emphasized the supremacy of the state and looked at markets as necessary evils. In Book VII of Politics [28] he probably refers to the Phoenicians when he argues that *'[A state] should practice*

commerce for itself, but not for others. States which make themselves market places for the world only do it for the sake of revenue; and since it is not proper for a polis to share in such gain, it ought not to have such an emporium'.

The anti-business ethos also proved to be virulent among the great prophets of the Old Testament who warned the People of Israel not to disregard the Will of God and seek cultural and economic exchange with other cultures. The concern was that this would lead them to adopt foreign religious rites and betray the covenant with God. All the catastrophes that happened to the Jews in the form of foreign invasion and internal division were attributed to the punishment of God for breaching the first commandment against idolatry [29]. This idolatry also included the 'worshipping' of money¹.

The strong resentment against Phoenician merchants expressed in the Old Testament must be seen in the light of the fatal attraction of rich and culturally advanced Phoenician cities such as Tyre and Sidon that bordered the Jewish homelands and led to a significant brain drain of Jews who preferred the intellectually more stimulating and financially more rewarding business of international commerce to farming and animal husbandry back home [9]. The prophets that cursed Phoenicia were essentially defending Jewish identity against the irresistible attractions of international trade and cultural exchange. The power of Tyre and its pragmatic approach to religion and commerce [9] was felt to be a threat and cultural offense to Jewish identity. The resentment against the business-minded Phoenicians is expressed in the Bible [30] in many chapters of the books of Kings (Kg 1: 11, 21; Kg 2: 9) Ezekiel (Ez: 26, 28), and Isaiah (Is: 23). The anti-business ethos then continues in the New Testament. There is, for example, the famous sentence in the gospel of Matthew (Mt 6:24) that nobody can serve two masters (God and Mammon).

2 Phoenicians and institutions of higher learning

In addition to their trading activities, the Phoenicians also developed a culture of learning that enabled them to make use of all the fragmentary knowledge and techniques developed by ancient bronze-age civilizations and convert it into new products and technologies. Prior to the rise of the Phoenicians, institutions of higher learning were less engaged in learning but rather the mere reproduction and preservation of art and science that was handed over from previous generations [31]. These pre-Phoenician institutions depended almost exclusively on the funding of the ruling religious (temple) and political (palace) elite [9]. They acted primarily as gate-keepers of knowledge diffusion. This enabled them to ensure that the acquisition of knowledge remained the exclusive concern of the elite and that its use serves elitist interests only. The Phoenician merchant class finally weakened the monopoly of the religious and political elite on access to knowledge. They set up institutions of higher learning that combined the acquisition and preservation of traditional knowledge with the generation of new knowledge in order to create innovation that served a practical purpose. This eventually led to the democratization of access to knowl-

edge and technology and resulted in the empowerment of the people that did not belong to the traditional elite.

In addition to that, the Phoenicians introduced the modern alphabet², maritime technology, modern city culture [32] [9] as well as ancient Mesopotamian wisdom and epics in the Mediterranean area [33]. It is therefore too simple to argue that the great Phoenician cities at the shore of the Levant (Tyre, Sidon and Byblos) were just engaged in trade and money-making. They also established institutions of higher learning that were engaged in the collection and categorization of knowledge and their use for the good of society and the pursuit of wisdom.

In the Book of Ezekiel (Ez 28:4,5) for example, it is stated that Tyre's unique affluence was a result of great and unrivaled wisdom and insight. Moreover, the great wisdom and wealth of king Salomon is widely attributed to his eagerness to acquire knowledge from the Phoenicians and his general openness to trade with other cultures. According to the Book of Kings he excelled all kings of Earth in affluence and wisdom (1 Kg 10:22).

3 Islam and the second wave of economic globalization

The great awakening of trade and its link to flourishing institutions of higher learning was made possible again with the Arab conquest that stretched from India to Spain in early medieval times³. Under the umbrella of Islam, an interregional commerce space developed that also included Coptic, Armenian, Byzantine and Lebanese (formerly Phoenician) Christians, Jews, Turks, Persians, and Hindus. They all represented ancient cultures that were eager to participate in trade and knowledge exchange. The result was a lot of cross-cultural fertilization. In fact, the conquering Arabs employed Coptic, Byzantine and Sassanid artists to build the first great mosques in Cairo, Damascus and Bagdad [34]. Moreover, arabesque decoration used to be an art developed by the Coptic Christians and the abacus and algebra were adopted from Hindu scholars [35]. Considering the thriving commerce and the subsequent accumulation of new knowledge, it is not surprising that the first university was established in the business and trading hub of Cairo (Al-Azhar) and that many great discoveries in science happened at that time all over the Moslem world [36]. It is interesting that one of the pillars of Islam *zakat* (annual payment for helping the poor) was not just meant as alms-giving but to fund hospitals, universities and research establishments. They were meant to empower the people and improve society as a whole. This culture of learning and inquiry used to be part of *tawhid* (total way of life of Islam) [18].

4 Italian merchants and the great awakening in Europe

Italian Renaissance would not have been possible without the intensive cultural cross-fertilization between the Christian and the Moslem World. One of the prime channels of knowledge transfer was trade between Italian and Moslem merchants [37] [38]. Moreover, joint centers of learning were established in Sicily and Spain where European Christians, Jews and Moslems peacefully coexisted [36].

Italian merchants had to handle a lot of complexity and uncertainty when dealing with business partners in the Islamic World. In order to maintain trust and loyalty with their partners, who often spoke different languages and had different cultural habits, Italian merchants were in need of broadly educated people that were not just familiar with accounting skills and commercial law but also able to converse with people from other cultures. Italian universities were ill-equipped at that time to provide this new sort of human capital because its professors were still concerned with highly specialized scholastic and legal debates and took pride in being detached from the real business world. Many successful merchants and bankers therefore resorted to the emerging humanist movement who had little patience with the university elite and a great passion for learning, not by merely looking at books but also at objects, using a method that had no clear ancient counterpart [11]. This humanist movement eventually managed to change the curriculum of universities in a way that made these institutions more responsive to the needs of the growing private sector, and, at the same time, enhanced the quality and innovativeness of its research.

These developments in Italy enabled social mobility for the bright offspring of poor families to become part of an educated middle class, and for the rich merchant and banking families to enhance their social prestige and eventually marry into aristocratic families or win a high position in the Catholic Church [39] [40].

One way merchants used to impress the ruling class was by investing in innovative artists. This again opened the way for the entrepreneurial artist who combined technical, scientific and historical knowledge with a shrewd business instinct, artistic skills and a strong desire to innovate [41].

In this context, humanists realized that there should be no cultural divide between preserving and reproducing the great achievements of great Greek philosophy and using knowledge to create new goods, ideas and technologies, invent new art, develop new methods of investigation and earning money through trade.

They emphasized the importance of leading an active and autonomous life [10]. Such a life however had to be earned through a life-long commitment to learning and self-improvement [11] [42]. In this sense, they thought that it is not just a matter of self-interest but also of ethical responsibility to realize one's own potential in life. They recognized that the acquisition of knowledge and experience is a prerequisite for informed moral judgment. Moreover, they argued that before trying to find out how things should be (normative research) one must first investigate how things actually are (positive research)⁴. To be good meant therefore more than just having good intentions.

5 The birth of modern science in the age of Dutch commerce

Humanism once again flourished in the Golden Age of Dutch commerce in the 17th century. A recent book by Harold Cook [43] shows that international commerce

was not just providing a material basis for excellent empirical and experimental research at Dutch universities but was actually its major stimulus. He argues that the emerging culture of the exchange economy (a predecessor of the knowledge economy) had enormous consequences for the organization of research at universities. Facts collected by the different stakeholders that participated in the Dutch trading empire were brought to the universities and induced professors to abandon their ivory tower mentality and actively engage in this culture of exchange. The basic insight of his book is that, *'like commerce, science arose not from liberating the mind from the world but from the keenly interested engagement with it'* [43: 2]. Determined investigations into matters of fact laid the groundwork for generalizations about nature. These matters of fact could however not just be adopted from previous work but had to be unearthed in risky ventures of exploration. In other words, good science required curiosity and passionate entrepreneurship.

The great philosopher Spinoza who was largely a product of this stimulating academic environment also turned out to be one of the greatest humanists (even though he tends to be classified as a rationalist). In his major work 'Ethics' [44] he uses a geometric method to prove among other things that the evolution of body and mind cannot be regarded separately since we can only think through our bodies. In other words, the fatal split in academia between those who focus exclusively on the body and material issues and those who focus on the mind and immaterial issues would not have happened if modern academic institutions would have embraced his genuinely holistic view. Instead, Descartes' divide of soul/mind (*res cogitans*) and body (*res extensa*) was adopted; primarily because it was more popular and more in accordance with the ruling church doctrines at that time [45] [46].

6 The humanistic roots of the modern concepts of democracy and the market economy

For a long time, the split in academia was not important because it was just a tiny elite that really cared for the advancement of science. However, with the onset of industrialization in the 19th century, it became increasingly clear that the use of factual knowledge to produce new technologies, goods and services was at the root of economic development and the advancement of science [7] [13]. It also induced profound cultural change that manifested itself in increased social mobility, social empowerment and the questioning of the legitimacy of power vested in aristocracy and clergy. The newly educated and entrepreneurial middle-class expressed its desire for democratic change in order to make government institutions more conducive to business needs and more respectful towards ordinary citizens. In fact, not great revolutionary thinkers but the pragmatic attitude of this taxing-paying and civic-minded middle-class strengthened the institutions of democracy and the market economy in the process of early European industrialization. This makes sense considering that the rules of democracy and the market economy are based on the general assumption that

people primarily pursue their self-interest [47]. In best humanistic tradition, there was a general agreement that as long as the individual pursuit of self-interest does not limit the freedom of others to pursue their self-interest, it should be encouraged for the greater good of society. At the same time, everyone was free to participate in particular value or religious communities, as long as there was no attempt to impose their respective belief or value systems on society at large by force. In this sense, democracy and the market economy were primarily designed to serve human development and make war less attractive [13] [47].

7 Capitalism and its enemies in the 19th century

The unleashing of the creative power of economic liberalism and technological innovation did however also produce negative side-effects in the form of social inequality and general threats to public health (e.g. accidents, urban diseases, abuse of technology, labor exploitation). Democracy proved to be a responsive system to address these challenges because it allowed victims to organize politically and fight for their rights. Moreover the emerging mass media was responsive to their concerns and amplified their grievances. Nevertheless, the ceaseless reporting of business scandals and unfair practices generally created widespread resentment against the culture of capitalism. This resentment was especially fuelled by a disillusioned cultural elite that tended to embrace soulful nationalism or romantic socialism as alternatives to soulless capitalism [13]. Ironically, the younger generations that already grew up in relative affluence thanks to the earlier achievements of capitalist society proved to be most receptive to such ideas – especially if they decided to study humanities or social sciences because that is where the cultural elite managed to introduce the general anti-business ethos. It contributed to the shaping of new belief systems that were based on the superiority of one's particular nation, race, class, religious sect or ideology. They also nurtured a feeling of hatred against the alleged agents of capitalism (often associated with Jews portrayed as greedy and soulless merchants) as illustrated in Robert Musil's Novel 'The Man without Qualities' [48], which covers the gloomy mood of the declining Austro-Hungarian Empire at the beginning of the 20th century. These rather bad ideas eventually trickled down into the far-reaching national education system and resulted in a general belief that people must make a choice between the pursuit of wealth in a valueless and decadent society and the heroic fight for better world that is based on a shared cultural, religious or ideological identity.

On top of it, psychoanalysis further confirmed people's belief that 'the iron age of capitalism' [49] would force them to repress their libido and personal development. Freud argued that civilization inhibits a man's instinctual drives, which result in guilt and unfulfillment [50]. Ironically, this sort of reasoning encouraged people to become even more selfish in their eagerness to meet their personal needs. In this sense it is an irony that psychoanalysis may well be one of the major driving forces of Western consumerism.

Psychoanalysis also implies that people should be inward-looking (esoteric) rather than outward-looking (exoteric) in the search for truth. People that pursue an inward-looking life or just interact with those who share their particular views and values, run however the risk of becoming boring to others. They ignore that personal development is a result of active engagement with the world and a willingness to expose oneself to risk and uncertainty in order to learn and evolve [51]. Refraining from interaction across boundaries and merely focusing on personal feelings and their disclosure to other members of one's intimate value community [52] comes close to a voluntary form of stunted development.

All this highlights the deep ambiguity that is inherent in the institutions of modern democracy and the market economy: on the one hand, these institutions unleash unprecedented social, political and economic empowerment and lead to great achievements in arts and sciences, on the other hand, they may breed the very forces that lead to a reversal and eventual demise of this empowerment and civilization process - as happened with the onset of the first World War in 1914 [13] [48].

8 The United States and Occidentalism in the 20th century

The general resentment against capitalism in large parts of society in the late 19th and early 20th century eventually turned into something that could be called 'Occidentalism' after World War II [29]. Occidentalism is a term that refers to stereotypes about the cold, rational, soulless and materialist Western Society. These stereotypes had a lot in common with the earlier stereotypes about the greedy merchant who undermines a society's great and heroic ideals. At that time, they were mainly nurtured by German and French scholars and directed against Jews and the Anglo-Saxon culture. After World War II, such stereotypes became a global phenomenon but were now mainly associated with 'American imperialism'. Today, Occidentalism also provides the mental frame of anti-globalization movements and Islamic fundamentalists.

As the unrivaled new power after World War II, the United States designed the institutions for a new world order that were to prevent another World War by restoring the shattered institutions of democracy and the market economy on the global level [53]. The new world power America turned out to have a lot in common with ancient Phoenicia in the sense that its expansion is based on trade as well as the commercial use of knowledge to generate cultural and technological innovation. In analogy to Phoenicia, its institutions of higher learning are rooted in practicality [54]. The practical approach to science became institutionalized with the US Land Grant College Act (Morill Act, 1862). It demanded that knowledge not be kept inside the heads of a few, but to encourage the men and women educated at these new state-funded colleges to show other people how to transform understandings generated on the campus to meet their everyday needs [55].

The resulting system of higher education that combined state and private universities has achieved great advances in basic science but also proved to be very responsive to private sector needs. It encouraged its graduates to innovate and generate welfare for society as a whole [16]. In terms of cultural achievements, one has to bear in mind that the United States is a country of immigrants. This means it absorbs culture from all over the world, transforms it into something new, and finally commercializes it on a global scale [56]. To talk of 'cultural hegemony' is therefore misleading.

There is always the risk of super-power hubris and bureaucratic capitalism that undermines the humanist ideals of an entrepreneurial and active life which characterized the United States especially in its early stage; yet the country also proved to be resilient and capable of renewing itself again and again [16]. There may be lots of reasons to resent the US government for its revealed incompetence [14] [15]. But there is no doubt that the overall hatred against the United States is not related to what it currently does but to what it stands for in general. This symbolic Anti-Americanism manifests itself in a European version reminiscent of the aloofness of the ancient Greek philosophers and an Islamic version that rather follows the tradition of the identity and purity-obsessed Jewish prophets in the old Testament.

8.1 A *Déjà Vue*?

Like the Phoenicians in antiquity, the United States today tends to be perceived by established cultural elites as an unwanted source of social, economic and technological change. Both cultures were and are accused of adjusting religion to their needs rather than restrain their needs to serve religion [9] [54]. In this sense, Orientalism (resentment against the Phoenicians) in antiquity may have become Occidentalism (resentment against the United States) today. Yet, while Orientalism in ancient times nevertheless resulted in great cultural achievements (Greek and Jewish civilization), Occidentalism today is more of a *déjà vue*. It represents a general rejection of holistic humanism (which was not the case in Greek and Jewish culture) in favor of a dividing and self-indulgent postmodernism that basically defines truth as what is generally felt to be true. In other words, there is a general indifference to truth, not meant in a metaphysical but a practical sense [57] [58]. This indifference indirectly endorses all the current forms of self-righteous 'value-Ummas' whether related to religious zeal, neo-luddism, stale rationalism, or the general postmodernist remixes of Marxist and Freudian theories.

8.2 Modern Humanism and Anti-Humanism in Germany

Germany, which pioneered the entrepreneurial research university in the 19th century [8] [59] and boosted European capitalism as a relentless innovation machine [7] also turned out to be the cradle of Occidentalism and anti-capitalist sentiments [29]. The cultural divide at its universities is therefore more pronounced than elsewhere in Europe.

After the end of World War II, one would have expected the Germans to dump their anti-humanist and anti-science

philosophers such as Sombart, Spengler, Schmitt and Heidegger who fuelled Occidentalism and provided the theoretical underpinnings of Nazi Germany. Yet, by enthusiastically embracing the purely negative and elitist dialectics of the Frankfurt School (Theodor Adorno and Max Horkheimer), they once again turned fiercely against a culture of scientific inquiry and humanist ethics [60]. This is all the more astonishing in view of the strong German humanist tradition of which philosophical anthropology is its most modern representative. Exponents of this school of thinking such as Wilhelm Dilthey, Helmut Plessner, Arnold Gehlen and to some extent Norbert Elias put the active human being again at the center of attention [61].

Elias [62] criticizes British empiricism (from Hume to Berkeley), French rationalism and existentialism (from Descartes to Sartre), as well as German epistemology and metaphysics (from Kant to Husserl) for its attachment to the belief in '*esse est percipi*' (to be is to be perceived) which implies a static view of the human being that ignores the life-long process of human development through learning by interaction with the social and natural environment. We never 'perceive' as lonely, passive and detached individuals but as an integral and active part of the social and natural environment in which we evolve [62].

Gehlen [63] argues that mankind is essentially characterized by its instinctual non-specificity (Mängelwesen). Unlike animals that have in-built instincts that allow them to survive in a particular natural environment, men are unspecialized and therefore vulnerable to extinction unless they become actively engaged with their environment by inventing tools and create different forms of social organization. In other words, mankind has to permanently transform nature into culture because it cannot survive in nature alone. In this context, Gehlen maintains that only humans engage in trade and develop new technologies. Trade and technology are therefore not 'dehumanizing' forces, as the German anti-humanists would say, but in fact make us human in the first place.

8.3 Postmodernism as sophisticated Occidentalism

Many influential academic departments today that represent the basic social sciences, law, humanities and public policy tend to ignore the basic insights of humanism and prefer to adopt different forms of postmodernist/constructivist thinking (again largely based on *esse est percipi*). This trend encourages a sophisticated Occidentalism that looks at world trade and advances in science and technology as Western concepts that should not be imposed on other cultures - obviously unfamiliar with the Orientalism that prevailed in antiquity. Academics that have embraced this type of sophisticated Occidentalism largely ceased to look at real life, conduct empirical research or search for best practices in public policy. Instead they are just happy to represent a particular school of thought or a particular value community. The loss of empathy for people's real lives, the outsourcing of empirical research to students and professional firms and the lack of curiosity to look beyond one's own academic boundaries have led to a widespread culture of self-

indulgence and self-gratification in the social sciences that also undermined the overall quality of its research [64].

8.4 Unholy alliances between Occidentalists and vested interests

Occidentalists tend to yearn for a fictitious past when universities were still autonomous, people still lived in harmony with God, their 'inner self' or nature, and when shared common values still provided meaning and orientation [65]. Such views resonate well with a public audience in affluent societies that looks at technological and economic change as a source of unwanted change and rather than an enriching source of new knowledge and wealth. A public that prefers to be in a state of denial regarding the reality of technological change and is mainly concerned with people's personal vulnerability to change may not be in the best position, or simply not willing, to address the challenges and opportunities of technological innovation in a responsible way [66] [67]. Instead it encourages people to abstain from participating in the world of messy politics, withdraw into the intimate sphere of their particular value community and merely endorse those stakeholders in the public arena that claim to defend their particular community values, no matter how intolerant they are towards people who do not share their values [52] [68]. This trend helps explain why Western Occidentalists believe to have many things in common with 'enlightened' Islamic fundamentalists called Reform-Salafism [69].

Even though these sophisticated Occidentalists may look subversive and progressive at first sight, it actually turns out that they tend to strengthen the position of incumbents. It is therefore not surprising that they are often sponsored not by progressive but rather conservative forces in society. For conservative forces such as large state and corporate bureaucracies this is a 'win-win' situation because they direct the wrath of Occidentalists against uncomfortable agents of change and potential competitors and, at the same time, enhance their own reputation in public as socially responsible actors that are 'concerned' about the environmental and socioeconomic risks of technological and economic change [67]. Sophisticated Occidentalists in turn are also happy to have sponsors that finance their advocacy work and enable them to stay in the public limelight. The victim of this unholy alliance is the innovative entrepreneur who, throughout history, proved to be the most progressive element in society. As an agent of change guided by humanistic principles, s/he ensures that a society maintains its ability to renew itself, facilitate institutional change and enable social empowerment.

9 The ignored human right to innovate and grow

Occidentalism, especially the neo-luddite branch, ignores the fact that uneven access to technology and preserving the *status quo* by advocating preventive regulation of new technologies may be a larger risk for society and the environment than the potential risks

that might emerge from its adoption [22]. Furthermore, Occidentalists in affluent societies tend to denounce the unsustainable 'growth' ideology [70] [71] [72] [73] that would still prevail in Western civilization. This merely reveals a frightening ignorance about the very nature of the human being. Human beings and the societies they form grow by their very nature, physically and mentally [74] [75] [51]. If you prevent them from growing by depriving them of the necessary material conditions, or by limiting their freedom to innovate, it may well result in a sort of stunted development. Stunted development may be acceptable if it is based on a voluntary choice, but to impose it on others raises ethical questions. It may even be regarded as a serious offense against human rights. However, this offense is hardly ever addressed in the human rights discussion because it is primarily shaped by Occidentalists who look at technological innovation and global economic development as a zero-sum game in which some people get rich at the expense of the poor and the environment. That is why they do not understand that genuine social empowerment cannot be ensured by asserting, preserving and defending cultural identity but must happen by enabling the poor to participate in the global knowledge economy and increase their capacity to innovate in order to address their particular economic and environmental concerns in an effective and sustainable way.

10 The entrepreneurial university as a trust-buster of vested interests

The unleashing of genuine social empowerment can only happen through dynamic institutions of higher learning and their outreach activities. Such institutions of change do not, however, emerge naturally but must be eked out from society and its incumbent interests. It requires a particular type of entrepreneur who acts as an agent of change that struggles to make things happen and is willing to confront strong resistance. The golden age of Swiss industrialization in the 19th century is largely linked to such an entrepreneurial leader. Alfred Escher was an industrialist and politician who recognized the crucial importance of human capital, physical infrastructure and a reliable financial system to make Swiss business, science and democracy thrive. He fought for the establishment of a Swiss Federal Institute of Technology (ETH Zürich) arguing that it would be more responsive to the needs of the emerging technology-based industry in Switzerland than the cantonal universities. Moreover, he helped setting up the 'Kreditanstalt' (the first Swiss investment bank) that later branched out into Swiss Life, Swiss Re, Zurich Financial Services and Credit Suisse. It provided the financial infrastructure that helped Swiss business to grow and become international. Finally, Escher was also one of the major driving forces behind the enhancement of the Swiss public transportation network that also enabled Northern and Southern Europe to grow closer together [76]. Often such leaders are not driven by higher ideals but by a strong feeling of discontent about cultural and economic stagnation due to institutions that favor established rents-seekers and discriminate the ordinary hard-working citizens in their efforts to set up businesses and grow.

Agents of change whether in civil society or the private sector have to struggle against incumbents who benefit from the *status quo*. Yet, once these incumbent stakeholders give in due to increasing consumer or public pressure, agents of change eventually become established and mature stakeholders as well. They will become increasingly bureaucratic, defend their vested interests in the political arena and prevent new agents of change from emerging [68]. Therefore, a culture of permanent vigilance is necessary to ensure that especially institutions of higher learning remain committed to free inquiry and resist the temptation to merely address incumbent preferences or become subservient to public opinion.

This culture of vigilance is a distinctive feature of the entrepreneurial university that quickly responds to the new economic and technological opportunities and finds practical solutions to new social and environmental challenges by means of a process of trial and error. As an agent of change, the entrepreneurial university also assumes the role of a trust-buster who enables the disruption of powerful rent-seeking coalitions. In earlier times, it dismantled feudalist coalitions (clergy, aristocracy) and gave birth to a new middle-class that created more wealth and new knowledge - knowledge that was not just relevant to the elite but to society at large. Its focus on the needs of an emerging innovation-oriented private sector helped disbanding rent-seeking state monopolies and enabled economic prosperity in Europe in the 19th and early 20th century [77].

The formation of rent-seeking coalitions (government, big business, unions) in the mid 20th century turned out to be more difficult to bust because university departments were increasingly co-opted by the rent-seekers [78]. This is even more true in the early 21st century. The unions may have lost some of their influence in the rent-seeking coalition of bureaucratic capitalism but, at the same time, Occidentalists in academia and civil society have moved from a progressive force outside the establishment in the 1970s to a reactionary force within the establishment today. For example, they inadvertently contributed to a highly burdensome regulatory environment and an increase in non-tariff trade barriers that essentially benefits bureaucratic capitalism at the expense of innovative entrepreneurship and poor developing countries.

11 Liberating African universities from sophisticated Occidentalism

The plight of African universities goes back to the colonial period when many of them were set up by the European colonial powers. The colonial powers were mainly interested in educating and indoctrinating a local elite that would then serve as loyal bureaucrats and run their country in the interest of the home country [19]. Investing in natural sciences, engineering and entrepreneurship never had priority for these powers because the main goal was to develop an emotional attachment to the home country, create respect for its great scientific achievements and foster a contempt for the achieve-

ments of the own native culture [20]. Yet, the native cultures used to be much richer in entrepreneurial activities than Western scholars dare to admit. Africa used to have many kingdoms that actively participated in the previous waves of economic globalization. For example, the firm integration of large parts of Africa into the Moslem trading empire enabled many African kingdoms to benefit from the resulting knowledge exchange. They responded by creating their own depositories of practical knowledge and set up early types of institutions of higher learning [20] [21]. The imposition of new systems of administration, law and education by colonial powers largely obliterated the previous tradition of higher learning that came with an Islam that still looked at science and trade as integral parts of the way of life of a devout Moslem. Western education instead taught the colonized to accept a distorted version of their own history and to regard their own science as not being 'real science' [18] [20].

After the process of decolonization even the newly established African universities remained rather artificial constructions because they largely remained in the tradition of the colonial-type university. National governments may have undertaken serious efforts to upgrade the quality of natural sciences and engineering at universities because they realized that they can no more rely on imported human capital from the former colonial power. Yet, the African rulers themselves were often former graduates of these same universities and therefore were trained as bureaucrats rather than entrepreneurs. They developed an enthusiasm for European ideologies and longed for greatness and acknowledgment by the European cultural elite in order to eventually become part of their social clubs. At the same time, they tended to neglect the needs of the growth-oriented local private sector – or, if they cared, they addressed them with the mindset of a Western-educated bureaucrat rather than an innovation-oriented entrepreneur. Because African universities were never meant to contribute to endogenous economic development and African leaders continued to regard them mainly as training centers for bureaucrats, they failed to function as engines of economic and social change. In fact, since the skilled graduates often had no other choice than to enter government (unless they wanted to move elsewhere), this led to inflated government bureaucracies that tended to make conditions worse for small entrepreneurs through overregulation (falsely assuming that is what governments are supposed to do).

The bitter irony is that Western donors and investors also refrain from supporting innovation-oriented research projects at African universities arguing that this would either be of no priority to the local poor or not desirable because it would eventually breed local competitors. In this sense, a new unholy alliance is taking shape once again. It consists of governments, the international aid bureaucracy and big multinational companies with corporate social responsibility strategies. None of them is really committed to economic and technological change in Africa. Instead, they try to pri-

marily gain the favor of Occidentalists by embracing and funding the new ideology of development. It is based on the assumption that poverty in Africa can be eliminated if only the international community would show sufficient financial commitment. This assumption is neither new nor did it prove to be successful in earlier periods. It implies that development needs to come from above and sees in the growth-oriented local private sector a necessary evil rather than the seed of prosperity [79].

11.1 The way forward

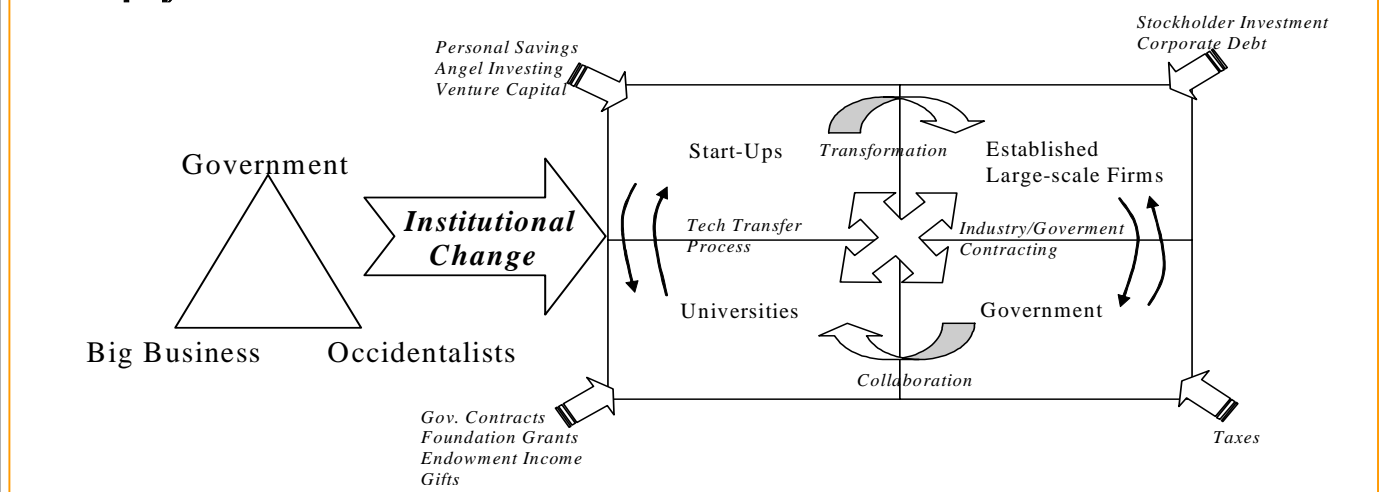
Fortunately, not all institutions involved in African development are responsive to Occidentalist views. In fact, there is a growing divide within these institutions between those who want change and those who do not. For example, African governments slowly realize that they must invest in new knowledge and human capital (and retain it) in order to facilitate economic growth and increase tax revenues. Big multinationals may have an increasing interest in the emergence of a reliable and local private sector that is able to supply it reliably with services and components. Finally, Western donors tend to question the current social planning approaches of development and experiment with new concepts that focus on social empowerment through entrepreneurship.

If the reform-minded parts in each of the three groups would join forces and invest in the emergence of entrepreneurial universities then trust-busting would be possible. Governments would cease to merely cater to incumbent interests and instead strengthen their collaboration with universities and conduct institutional reforms that create incentives for researchers to use their knowledge for practical purposes. Technology transfer offices would be in charge of coaching an emerging new breed of spin-off companies and improved access to venture capital would ensure that they grow by continuously investing in innovation. Finally, established firms would become interested in the emerging new companies and eventually integrate them into their global system of subcontractors (see Figure 1).

11.2 The way backward

In turn, if there is no desire for change among the main sponsors of development, then this would be a clear sign that Occidentalism prevails. In this case, African universities should become more wary about Western donors because the few research projects they tend to sponsor largely reflect their priorities and particular concerns – not the local concerns. For example, there is great fear among Occidentalists in Europe that their universities may lose their intellectual autonomy as a result of increasing private sector collaboration. They therefore tend to sponsor research projects in Africa that are of no interest to the local private sector. It gives them the good conscience of not having endangered the cherished autonomy of the university. They seem to be unaware however that they themselves are undermining the autonomy of these universities by imposing particular research priorities on them through their funding. Moreover, Africa is already the continent with

Figure 1: Enabling institutional change and empowering the entrepreneurial university (adapted from Schramm 2006 [16])



least private sector investment in local universities (with the exception of South Africa and a very few excellent universities in other African countries). No one celebrates this as a great achievement of intellectual autonomy in Africa.

11.3 Rediscovering the roots of the African entrepreneurial university

Instead of waiting for new signals among Western donors, African governments could also initiate action themselves by setting up new (or reform existing) institutions of higher learning that are guided by a culture of humanism that has strong roots in the history of their own culture. Such modern institutions of higher learning would be in constant exchange with the respective international research community and, at the same time, collaborate with the local private sector to make the new knowledge work for development. The chances of success to make it work may increase through the more effective use of Information and Communication Technologies (ICTs).

These newly empowered institutes of higher learning could embark on a bold step by only selecting the best bits of the existing compartmentalized social sciences and integrate them into a more comprehensive and integrated humanistic approach to social science that follows the tradition of Spinoza rather than Descartes. It would avoid the artificial and fatal divide of mind and body and embrace cultural and economic change as a precondition for human development and an active life. It is very likely that this approach would also be more compatible with the previous traditions of higher learning in the African kingdoms that participated in the Islamic trading zone before the European expansion. Yet, as it was the case with 'Zakat' in early Islamic times, African universities need support from wealthy and enlightened donors that are genuinely interested in facilitating change and contributing to the general improvement of the quality of life in Africa.

Conclusion

Institutions of higher learning emerged in response to the needs of a growing local private sector that had to compete in international commerce and aimed at gaining a competitive advantage through innovation. Great achievements in the arts and sciences as well as the acquisition of virtue and wisdom were welcome side effects, but never the primary purpose of institutions of higher learning. Phoenicia, the first empire that became wealthy and powerful through trade rather than military conquest, proved to be a civilizing force in the Mediterranean area by bringing knowledge and prosperity to its different regions. It was not a zero-sum game.

The Phoenicians realized that their success in international commerce depends to a great extent on the constant acquisition and use of new knowledge in the area of geography, history, culture, technology as well as economic and political organization. The private sector, however, would be unable to produce this knowledge all by itself and is not in a position to generate the necessary human capital to convert this knowledge successfully into new goods and services. A thriving business is therefore dependent on a government that invests in people, promotes the production of new knowledge and encourages its concrete application in the private sector. Through its institutions of higher learning it supports the local private sector in its efforts to remain competitive and innovative in the international market. The private sector in return invests in the specialized training of its employees as well as in the art of converting crude ideas and prototypes developed at general institutions of higher learning into commercially viable products and services. The increasing wealth that results from this successful public-private partnership benefits not just the private sector but also governments, which get higher tax revenues, and society at large, which enjoys more public and private goods as well as a rapid expansion of widely accessible new knowledge.

Moreover, people find exciting new employment opportunities and enjoy a greater choice in the market. Technological innovation that results from the commercialization

of knowledge again feeds back into university research by supplying researchers with new knowledge, tools and technical instruments that can be applied to improve measurements and make new discoveries. As a consequence, research becomes more specialized and accurate and this again enhances the range of research activities and improves their quality. At the same time, increasing collaboration with the private sector often turns out to enhance rather than subvert academic freedom if the university shows sufficient entrepreneurial spirit and public leadership to make autonomous choices and prevent the internal divide within the university into two academic groups that refuse to collaborate. Yet, basic conditions for a university to be in a position to set its own terms of references are high quality in research and teaching as well as a general ability to innovate and actively engage with society. This makes it an attractive partner for many stakeholders in society because demand for its high-quality research and advice is outstripping supply. It therefore has more freedom to choose with whom to collaborate and under which terms.

Renaissance Italy and Dutch enlightenment already had these holistic and empowered institutions of higher learning, partly inherited from the Phoenician and Islamic trading empires. These highly cultured societies did not see a contradiction between the use of new knowledge for commercial purposes and the achievement of scientific excellence. Instead they were still guided by the principles of humanism that emphasized the need of human beings to pursue an active life in order to become virtuous as well as to live in peace with oneself and the social environment.

The sophisticated Occidentalist today would argue that this is all just a Western strategy to impose capitalism on African tribalism. Yet, African tribalism is not as 'wild' as they wish it to be and their view of the entrepreneurial university as a Western construct turns out to have its origin in the Orient. The African continent was part of the first two waves of oriental economic globalization. African kingdoms actively participated in trade and knowledge exchange within the Phoenician and later the Islamic trading zone and in response to this knowledge accumulation, they used to have their own entrepreneurial institutions of higher learning. The rediscovery of the entrepreneurial roots and its successful integration into a new concept of higher education could lead to a genuine African Renaissance of endogenous economic development – but only if the incumbent stakeholders are willing to collaborate with agents of change in a joint effort to promote the freedom to innovate.

Endnotes

1. Karl Marx, whose grandfather was a Jewish Rabbi remains in the strong tradition of the Jewish prophets when he attacks capitalist Jews in the following words: 'The bill of exchange is the real god of the Jew. His god is only an illusory bill of exchange'[80].

2. According to Herodotus [81], the Greeks referred to their letters as Phoenician-things (*phoinikèia*) because the Phoenicians introduced them
3. The Roman Empire had of course also the potential to initiate economic globalization but it did not really encourage it. Its infrastructure mainly served military purposes and it saw its cultural heritage in the Stoic school, a branch of the ancient Greek Academy rather than in the more merchant friendly philosophy of Phoenicia [49].
4. This kind of positive research has nothing to do with positivism as practiced in modern social science. Positive research as pursued by the humanists started with the important inductive process of searching for possible explanations (creating a working hypothesis out of many observations). Subsequently, a method was developed to test the theory empirically. Positivism today has cut off the inductive part and dedicates itself exclusively to the deductive process of testing already existing theories [81].

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