

Knowledge and Global Order

By Dr Nayef Al-Rodhan*

“Why do they hate us?” is a question often asked among the American population since September 11, 2001. At the same time, Arab-Islamic populations around the world find themselves in a similar predicament. Ubiquitous misrepresentations and alienating stereotypes pervade through security discourses, conflating images of an extremist minority with the attitudes of the peaceful majority.

The reticence to alter the confines of our respective knowledge frameworks is critical for transnational and transcultural relations. Nevertheless, this debate seems to be underscored by infinitely complex issues and an overall impasse in establishing common grounds of understanding. In even worse scenarios, the debate is cut short by defeatist claims about the incompatibility of divergent moral truths, or in extremis, by postulates of an irreversible “clash of civilizations”. Yet, as overwhelming as this polemic appears, it ultimately boils down to the nature of our knowledge, the manner and content of what and how much “we know”, or “think” we know.

A first problem that is easy to identify is the limitedness of distinct national curricula which alongside the purpose of education, projects national biases and dichotomies. The education system in nearly every country is usually more concerned with providing knowledge of local and national history rather than global history. However, there needs to be a paradigmatic (and perhaps, also pragmatic) shift toward being open to learning about global histories and cultures. Today, more than ever before, the world is interconnected through globalization in the form of trade, the exchange of ideas, and closer interpersonal contact between people from different cultures and with different knowledge bases.

Globalization can create tension both within and between cultures as a result of increased contact with distant “others” and rapid exposure mediated by social media and information technologies. The solution at hand appears obvious and easily attainable: we need ways of spreading knowledge that can serve to nurture co-existence among people and groups in a globalizing world, reducing ignorance and mythologies that create rigorous classifications and ‘otherness’. Such education is critical in improving intercultural relations and creating a sense of commonness based on our shared histories.¹

*Nayef Al-Rodhan is a Philosopher, Neuroscientist and Geostrategist. He is Senior Member of St. Antony’s College, University of Oxford, UK, and Senior Fellow and Centre Director of the Centre for the Geopolitics of Globalisation and Transnational Security, at the Geneva Centre for Security Policy, Geneva, Switzerland. Author of *Sustainable History and the Dignity of Man: A Philosophy of History and Civilisational Triumph* (Berlin: LIT, 2009).

The virtues of education and its contribution to peace, security and intercultural harmony are therefore undeniably germane in our interconnected world. Nevertheless, beyond this baseline acceptance, education is still bound to remain a contested field, permeated with subjective interpretations, controversies and disputed meanings. For transcending this nationally and culturally-bound limitations, this paper proposes an epistemological analysis that looks into the science of knowledge that is, into “how we know what we know”, what we know for certain, and how our cognitive frameworks, individual and collective, are generated. My theory and conceptualization of knowledge, with insights from neuroscience, hopes to shed further light on how knowledge of the self and of the other is formed both at an individual level and culturally-mediated.

The foundation of knowledge: neuro-rational physicalism (NRP)

Knowledge is a term used frequently and often bandied about, and its definition and meaning are seemingly taken for granted. Knowledge is often equated with `information` or education. Knowledge is understood by most societies to be good and useful, and yet we rarely take the time to probe its origins beyond a general idea that it comes from experience, active learning and advice from others. However, knowledge is a deeply political phenomenon, contingent on a set of circumstantial factors and as such it requires us to take a deeper look at its origins, use and implications.

What do we know for certain?

Much of what we often consider knowledge is actually a point of view held without sufficient grounds: in a word, dogma. Whether this dogma comes from cultural attitudes, family values or religious backgrounds, dogma can undermine our rationality. Often, our dogmatic beliefs are based on the societal norms and customs we observe in day-to-day life. This is not to say that such norms are necessarily bad in themselves — although a life governed by reason is likely to be more dignified — it is just to highlight the possible fallacies of these norms and the role they play in our approaches to knowledge in general, scientific discovery, and ultimately to global order.

Where does knowledge come from?

The nature and sources of knowledge have been disputed for millennia, with two main schools of thought dominating the debate: *Empiricism*, premised on the notion that knowledge originates in direct experience or sense data, and *Rationalism*, which weighs in the major role of reason in acquiring knowledge. These major philosophical traditions left lasting legacies in epistemology and metaphysics and they have also inspired or branched out into other schools.

The innate knowledge thesis, for instance, contends that the source of our knowledge rests in our rational nature. However, this knowledge is not inferred from deduction or induction (as the rationalists claim) but from an inherent moral code, formed in the process of human evolution.² This thesis also accounts for innate concepts and transcendental beliefs, such as the idea of divinity. In the 20th century, constructivist epistemology gained terrain through its

approach of knowledge as constituted through discourse, particularly hegemonic discourse which imposes its authority not by means of scientific indisputability but in a context of power relations. Knowledge is therefore not an objective, neutral fact but the result of inter-subjective exchanges.

While by no means exhaustive, the listing of these philosophies of knowledge is meant to emphasize the contentious debate about knowledge and its formation. While aiming for a holistic and definitive theory of knowledge might be a daunting task, insights from neuroscience bring further clarity to the foundations and processes through which our knowledge is formed.

In my previously published theory of knowledge named *Neuro-rational Physicalism* (NRP), I explain that, contrary to many philosophies of the origins of knowledge, knowledge is neither purely based on empiricism nor entirely based on rationalism.³ Rather, knowledge comes from a combination of employing both sense experience *and* reason. Importantly, both these foundations of knowledge are *subject to interpretation*. How we interpret our sense experience and how we frame the questions that generate our accepted knowledge depend on many things, including prior assumptions as well as cultural, spatial and temporal settings. In other words, we use what we think we already know and our understanding of the world based on our own personal experiences as the foundation for our pursuits of new knowledge. Sense data can make great contributions to knowledge, but it is important to keep in mind that such data have a high probability of being incomplete, thus making them subject to error. What we know, we only know with a reasonable amount of certainty, and this is why interpretation of knowledge or perceived knowledge is such a critical part of the knowledge equation.

I also maintain that the acquisition, analysis and retention of knowledge have a physical neuro-biological foundation. In this sense, human thoughts, which are invisible to the eye, have a physical base because *everything is physical*. Thoughts, memories, perceptions and emotions are physical in the sense that they are mediated through neurochemistry. They are rooted in chemical reactions and processes in the brain, all of which are physical.

Neuro-rational Physicalism is thus premised on the neuro-biological foundation of human nature, which implies that thoughts, perceptions or emotions correspond to a physical reaction in the brain. Advanced brain scanning technology supports this premise, showing that different mental processes change regional brain chemistry, thus modifying the initial neurochemistry and, as a result, emotions. The idea, common among neuroscientists, of mental processes as physical has, nevertheless, been less popular in philosophical research. This insight is however, critical. Demonstrating the physical base of mental states shows how knowledge is formed and processed, with certain predispositions that are mediated by neurochemistry. As certain beliefs or emotions are routinely experienced and entrenched - through education, social milieu, cultural and ideological frameworks and so on - this creates a chemical balance and a sense of comfort to those emotions which can be difficult to shatter. This implies that what is accepted as valid in a cultural, temporal and spatial setting will influence our interpretation of ourselves and the world around us. Knowledge is therefore filtered through our own interpretation and, as a result, biased and indeterminate. The positive news is that this neurochemistry is not

immutable or deterministic. Its entrenchment is not bound to be definitive and even firm perceptions and emotions can indeed be altered.

What does NRP inform us about global order?

Being aware that Neuro-rational Physicalism (NRP) is the basis on which human knowledge is built is important when thinking about global order. Because of factors such as different life experiences, cultural backgrounds and societal norms, as well as the unique neurochemical processes that underlie the thought processes of each individual, knowledge and what we think we know are, in many ways, *personal and not at all universal*.

We always impose our own interpretation on the facts. As human beings, we develop particular 'dispositions' formed from upbringing, culture and education. Our truth is a truth derived from this kind of 'formation' within human culture. This may vary according to the geographical and temporal framework within which people exist. Knowledge therefore is often *both temporally, spatially, and culturally constrained* as well as *indeterminate*, although knowledge that is to some extent indeterminate can be capable of transcending a particular place and/or time.

The cultures to which we belong often form our major reference points and may provide the basis for evaluation of people from other cultures. This becomes particularly worrisome when we harbour a moral or cultural sense of superiority, which causes us to denigrate and essentialise other cultures. The all too familiar result is negative cultural stereotyping, which is most often informed by little knowledge of what it actually means to be a member of that particular culture. Negative stereotyping not only represents a simplification of reality, but also reduces the dignity of those being (mis)represented, because their worth as individuals and members of a group is undermined. Without knowledge of other cultural and belief systems, we are likely to judge others through the systems into which we have been socialised and inculcated – ethnocentrism – which can lead to the generation of negative stereotypes that risk degenerating into xenophobia.

A well-known and overwhelming example of such misrepresentation can be found in Western Orientalism, a phenomenon analyzed and popularized by Edward Said. Orientalism refers to a form of knowledge in which Eastern cultural domains were depicted as subordinate to the West. Power and knowledge were, thus, intertwined and helped to structure relations between West and East along the lines of superiority and inferiority. The imagined characteristics and mindset of the East were set up as the contrary of a rational and progress-oriented West. Reason, equality and liberty associated with the spread of scientific knowledge and the Enlightenment were assumed to be synonymous with the West, which is to be contrasted with an East that lacks these forms of knowledge and modes of thought. The Oriental 'Other' has been imbued with fatalism, an incapacity for rationality and a lack of understanding of the meaning of self-government. These characteristics stood in sharp opposition to those associated with the West, resulting in an ascribed incommensurability between the two imagined geocultural entities. Imagined they may be, but such representations have had very

real repercussions in terms of political and physical domination. Such rigid dichotomies have resurfaced in relation to the `war on terror` where fabricated imageries and stereotypes dehumanised and reduced the Other to an entity whose identity fed and sustained pre-existing or reductionist prejudices.

Modern historicism in the West continues to privilege a linear conception of European history guided by progress in rational scientific knowledge and to sideline the existence of diverse and entangled histories. Such political biases in the interpretation of history originate from entrenched reflexes of approaching the world from a hegemonic perspective. This historicism relies on a highly selective account of the West's genealogy, and of that of the East. Reluctance in the West to acknowledge its intellectual debts to the East persists in school curricula, the media and the entertainment industry. This obscures the extent to which the Enlightenment was the result of a collective effort and creates frustration among the representatives of the geo-cultural domains that are sidelined. The West's essentialising representation of the East is being critiqued not only by scholars, but increasingly by the common people, as a colonizing form of knowledge bound up with Europe's history of imperialism. Through technological advancements, historical and dialectic differences have become ever more salient, on occasion creating undercurrents of hostility and polarization, resulting in outbreaks of violence and political turmoil. The violent demonstrations throughout the Muslim world prompted by the publication of cartoons satirizing the Prophet Mohammed in the Danish newspaper *Jyllandes-Posten* in late 2005 were a prime example of the growing rejection of Western essentialist depiction of Arab-Islamic culture.

Enduring tendencies of "self-enclosure", which emphasises separateness and erases instances of borrowing and mutual influence, and denies the possibility of learning, borrowing and even synthesis, is extremely worrisome as the processes of globalisation is bringing people into closer contact and, thereby, bringing differences, whether real or perceived, into starker relief. As a result of increased human mobility linked to the economic division of labour in an era of globalisation, societies are increasingly culturally plural and human nature is such that people need to feel that they belong and have a positive identity. Part of what constitutes a person's identity is their membership within a broader collective identity, be it national, ethnic or religious. If they feel that this collective identity is not recognised and positively defined, their own identity as a member of that community will be negatively affected. This is only likely to breed tension, securitization of that collective identity and defensive actions.

In addition to cultural diversity at home, people are being increasingly exposed to diverse opinions and cultures as a result of advances in communications and information technology. Although knowledge societies have been present in different forms in the past, the current knowledge society is functioning at an ever-increasingly rapid level through the existing network society. Where previously printing capacity put a limit on the amount of knowledge that could be disseminated for public consumption, today anyone who owns a computer Internet access can function as an independent printing press, disseminating not only facts and opinions, but also propaganda, half-truths, and calls for action against others. Tension may be generated between people of different ethnicities, religions and cultural background when participants to the network society lack a proper knowledge basis. Also, with such a society

comes a heightened awareness of global problems, ranging from poverty, environmental degradation, migration, and global diseases to terrorism and other global security threats. Yet knowledge of the causes of these phenomena and awareness of the way they are understood and interpreted by different people in different cultures is lacking. In order for today's network society to be a tool for the advancement of human dignity and not an additional factor of conflicts, it is crucial to nurture some sort of global literacy and, for that matter, a strategy for demystified knowledge acquisition at the global level.

Conclusion

Applying the concept of Neuro-rational Physicalism (NRP) to the interplay between knowledge and global order may seem disconcerting as it shows how biased most of what we consider knowledge is. Yet, the lack of certainty about what we know also has a positive side. If we accept that we can be absolutely certain of very little, we can be dogmatic about very little. Recognition of the limits to our knowledge ought therefore to facilitate respect and dialogue. This is all the more important if we recognize that humanity is closely interdependent and indivisible, and realize that many threats make no distinction between cultures and nations.

New generations have to strive to understand their own cultures in relation to other cultures in order to be able to develop self-awareness when facing diversity and to promote tolerance and peaceful understanding. Education should teach important lessons of the past and communicate the challenges and risks that will be faced by humanity in the future. This needs to be aided by educational material, the media and the entertainment industry. Populist political speeches that are meant to unite and excite, must also avoid irresponsible and culturally-insensitive sound bites that may trigger alienation and insecurity. This bid for greater knowledge however, does not end here. In `knowing how we know what we know` rests the premise for a less vicious and confrontational world and, conversely, for a more patient and accommodative one. This epistemic project, aiming to discuss the neuroscientific dispositions and limitations in our knowledge is an invitation to introspection and humility. By this, I do not imply humility of one culture in relations to another, but in relation to our own human constraints in knowing and grasping the world.

REFERENCES

- ¹ Nayef Al-Rodhan (Ed), *The Role of the Arab-Islamic World in the Rise of the West. Implications for Contemporary Trans-Cultural Relations* (New York: Palgrave, 2012).
- ² See Marc Hauser's arguments in *Moral Minds: How Nature Designed Our Universal Sense of Right and Wrong* (New York: Ecco Press, 2006).
- ³ Nayef R.F. Al-Rodhan *Sustainable History and the Dignity of Man: A Philosophy of History and Civilisational Triumph* (Berlin: LIT, 2009), p 101-134.