

*A presentation on “**Signs and models of civilizational collapse**” by Lord Alderdice to the 2023 Santa Fe Institute conference on **Complexity and Civilization** held in Santa Fe, New Mexico, 10th – 11th November 2023.*

The fact that civilizations repeatedly come and go was brought home to me some years ago standing atop an old Crusader castle in the country we now call Lebanon. As I looked down on a large archaeological dig, I could see layers of more than a dozen separate civilizations. Some I recalled from history, others I knew nothing about, and yet their way of thinking and being-in-the-world had guided many generations before they disappeared.

As I was coming into my teens the apparent stability of the community in Northern Ireland where I lived began to unstitch and I was unpersuaded by much of the political analysis of the time. I decided to study, analyse, and ultimately to apply some new understandings that I gleaned from a bio-psycho-social approach to psychiatry and to take that into the ‘large group psychology’ of practical politics. Over a period of years, working with others, leading one of the political parties, and learning from that experience, we were able to build a peace process which resulted in the Belfast/Good Friday Agreement, and this year we celebrated the 25th anniversary of that Agreement. It was successful in bringing the killing to an end and facilitating a process of peaceful transition to a new political dispensation which is still emerging.

When I applied the lessons learned in Ireland to analysing the wider global political context, I came to much less positive conclusions. It seemed to me that we were heading into a third global conflict, and I became quite down about this prospect, not only because it would be grim, but because it could actually be terminal for all human civilization.

However, during 2017, when I was reflecting on the 500th anniversary of Martin Luther publishing his famous **95 Theses**, a contributory event to the religious, political, and cultural revolution that we know as the Protestant Reformation, I began to view things a little differently. I concluded that major paradigm shift probably only occurs in the context of existential threat where the existing perspectives collapse and a wholly new way of thinking can emerge. While this did not relieve me of my concerns about a third global conflict, on the contrary, that still seems to me to be the direction of travel, it did lead me to the possibility that, if we did not destroy our civilization through nuclear war or climate catastrophe, we would likely be able to make a step change in our way of thinking, relating and governing ourselves.

It seemed to me that three important elements that contributed to the civilizational changes 500 years ago were as follows –

The invention of Gutenberg’s printing press in the 15th century made possible the large scale, inexpensive, distribution of ideas in the vernacular languages of each country.

By this new means people could communicate their profound disenchantment with the corruption of the religious and political elites across Europe and contribute to a rising tide of anger and revolution.

Through that process, the ideas of thinkers and scientists went beyond the political and religious elites who did not understand the new knowledge and what to do about it. When these ideas were seized upon, the political eruption that resulted did not lead to peace and stability, in fact it resulted in the wars of religion, but enormous progress in almost every aspect of human endeavour was the ultimate consequence.

Today we have also disruptive technologies which make the communication of challenging ideas even more rapid and widespread. We also have a pervasive disenchantment with the corruption of elites in every area of life, and a clear sense that our leaders do not really understand the significance of the new knowledge that is emerging and what to do about it.

Five hundred years ago the 'progressives' knew what they wanted to do – they wanted to shift the seat of authority from princes and bishops to the society as a whole through democratization. That proposition, which was clear, rational, and easily communicated, has been followed through across the world, but we it has not solved our problems as well as we might have imagined, and we seem to have reached the limits of what it can achieve. Instead of leading to 'the -end of history', as Francis Fukuyama expected, it has revealed the limitations of the power of democracy, as well as of other kinds of power too, for example, that of military hardware and liberal democratic political organization.

I do not think that we yet have an alternative agenda to address this dilemma, other than a kind of anarchism that calls for the current structures to be disregarded or pulled down, with the belief that something better will emerge. Something better may emerge, but as John Gray says in his latest book, *'The New Leviathans'*, published earlier this year, the liberal, democratic international rules-based order and all that has gone with it, may prove to have been a brief interlude, followed by a return to authoritarian regimes maintaining themselves through the law of force, rather than the force of law. As René Girard pointed out many years ago, the rapid loss of the boundaries of traditional law, religion, and culture – even where they may be viewed as relatively arbitrary – will result in a descent into mimetic violence of all against all, until some new boundaries are created.

My final comment for the moment comes from research work with colleagues on the different forms of individual and societal thinking when faced with the existential threat of societal collapse. In relatively peaceful stable societies people generally adopt a form of thinking characterised by cost-benefit analysis, based on best socio-economic and power interests – what we might think of as *rational actor* functioning. But a different form of thinking arises in threatening contexts, and it uses different parts of the brain. This thinking operates on a different grammar and syntax of thinking that one might describe as rules-based – 'right and wrong' is an example. When you say to a potential suicide bomber, *"But this is a crime and you will be destroyed"*, they respond, *"You do not understand. I am doing this for a great cause and to right a greater wrong. My life is not what is important. It is the cause that is important."* This cause is described by some of my colleagues as a 'sacred value' not because it is religious – it may be religious, political, or cultural – but it is a transcendent value which is not susceptible to socio-economic metrics.

Comparative fMRI scans show that the dorsolateral prefrontal cortex, inferior frontal gyrus and parietal cortex are implicated in calculating costs and consequences – what one might call *rational actor function* – and this is seen in individuals in relatively stable contexts. Increased activity is seen in the left temporoparietal junction and ventrolateral prefrontal cortex, associated with semantic rule retrieval in what we might call *devoted actors* – those who are prepared to sacrifice themselves for their cause. They are operating under rules of right and wrong as they see it, whatever the consequences. These differences are therefore not just a matter of psychological choice; we can see that different parts of the brain are operating.

How could such a difference convey evolutionary advantage and be maintained when the well-being of the individual is not a primary driver? There are many situations where the sacrifice of the individual is necessary for the survival of the group, and the more we think about and explore this notion, the more evidence we find of such forms of behaviour, particularly those that involve the

fusion of individuals with their group, rather than enhancing individual difference. This is a fundamental challenge to the trajectory of thinking, culture, and political development of recent times based, as it is supposed, on Enlightenment ideas. It seems to me that as the interest, well-being and wishes of the individual are pushed beyond a certain point, there comes a major disjunction between those phenomena that serve the well-being of the individual and those that serve the successful functioning of the large group. A simple example is that it is increasingly difficult to enlist young people in the armed forces in Western societies, especially where there is a risk of engagement in war. This is not because of a shortage of money but is a result of individuals not wanting to risk their personal well-being for the that of the group. The change has been masked by a focus on advanced military technology, much of which does not require 'boots on the ground' but a combination of the massive costs of some of these weapon and defence systems is reaching a limit, and does not address the many other domestic tasks that the military can be called on to perform in the context, not of war, but of pandemic, natural disaster and civil unrest. The interests of the individual are coming into ever greater conflict with the interests of society. This may well be a key indicator that presages the end of the civilization based on the later interpretations of the Enlightenment as we have understood it and require a new perspective.

The reason that I am here at SFI because I have concluded that a bio-psycho-social approach to complexity may perhaps offer us such a new perspective.