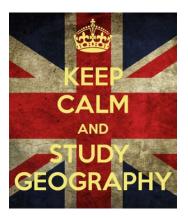
Heroes of the digital age

By John Bruni

influences the political landscape of all nations more human agency or geography? Contemporary international relations abound with scholarly works that argue in favour of one over the other, with the 'other' acting in a secondary capacity. But the world has proven time and again that understanding of the international domain is littered with the complex interactions of both – human agency and geography. In some cases, the triumph of man can overcome geographic obstacles; in other instances geographic obstacles place clear limitations on human ambitions. What is true in the 21st Century is that international relations are being contested in increasingly fragile arena, crowded with existing and new players.



Taken as a whole, planet Earth has never had so many human beings inhabit so many diverse habitats. Human societies have never been so exposed to

bewildering technologies which increasingly challenge who we are as a species, a culture, a faith and a community. Optimists, and there are many, proclaim that the postmodern society we have evolved into, is on the cusp of revolutionising life as we know it. That we may in coming years merge with the technologies we are developing to become 'post-human'. In such a world, old forms and customs will have little meaning. In fact, so different will be the world of tomorrow that even the most fertile of imaginations may find it difficult to comprehend. This real possibility has also led to great pessimism/cynicism among those traditionalists and conservatives who enjoy the benefits of moderate technologies that do not challenge long-held and long cherished assumptions of 'being'. To a great degree, the loosening up of the contemporary Middle East and the proliferation of new technologies among Middle Eastern people (the 'Arab Spring'), has allowed the person on the street (individually and collectively) to wield disproportionate power over existing or would-be elites. This is an act of human agency in which the development of social media platforms (technology) intersect with market forces (proliferation), breaking down physical barriers and consequently dissolve geography as a constraint on action and effect. By its very nature such technology is greatly destabilising. As time goes on, technology will miniaturise even more so and morph into more complex forms. It will society. deeper embedded in he International instability will challenge not just the most intransigent autocrat, the most repressive state apparatus, but every form of governance on Earth, national and multinational alike. The person in the street will the ultimate arbiter he of political

legitimacy, using the domain of cyber-space and virtual violence as a means to challenge. and/or to shake off the shackles of 'the system' which he/she may feel to be unjust. Very different from the barricades-of-old. Face Book and Twitter attacks on political parties and supporting public servants will replace the Molotov Cocktail, assassination and physical 'dust-ups' with the police, as the preferred method of making a political point. However, there is a guid pro guo. States of all persuasions will also ride the tide of social media and exploit its technology. There will be no government that will not view its own techno-savvy citizens as potential threats. They will more overtly utilise their own hackers, their own cyber-warriors to dilute negative propaganda. Just as air power at the beginning of the 20th Century ushered in war in 3 dimensions and created deep strategic instabilities, cyber power at the beginning of the 21st Century is ushering in the potential for war in 4 dimensions. In such a scenario war will be one that not only pits governments against each other in 'nonkinetic' struggles for dominance over critical regions and resources, but a war between governments and their people in an infinite state dragnet on the information superhighway.

This is not the view of a pessimist harking back to the prose of dystopian writers like Wells and Orwell. It is the humble opinion of a realist. Recent history has shown the complexities that we face in integrating new technologies in our lives and how our contemporary governments around the

world are struggling to cope. Were it not for the release of government information by Wikileaks, Bradley Manning and Edward Snowden, the general citizenry might still be convinced of the legitimacy of the dealings of those in authority and accept decisions without questioning.

In the late 19th Century, while strategists such as Sir Halford Mackinder were talking



the un importance land power to control the geography ofthe 'Heartland' of the Eurasian landmass, and Alfred Thaver Mahan spoke about the

importance of sea power to constrain the movement of land power, today in the 21st Century, we have yet to have a scholar of note explaining the implications of cyber power on international strategy. Perhaps this is because the rate at which cyber technology is evolving is too fast to see where it will lead us. Suffice to say that with the plethora of social media platforms in the international domain and the growing efficiencies of signal networks, it will make cyber-space more rather than less of an effective facilitator to anti-government agitators, protestors, ideological crusaders of all stripes, terrorists and others who seek a broader audience to influence. Disrupting their information flow will be a difficult, if not impossible task. In fact, it is likely that

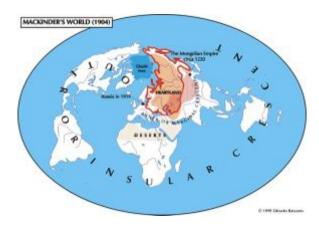
governments will use the 'sledgehammer to kill a gnat' approach, just as they did in the aftermath of 9/11 to stamp out Al Qaeda. More nuanced techniques may be possible but they necessitate a closer collusion between those who create the technology government, turning corporate and technology giants into quasi-government agencies. Overarching government power, either through people movements being tracked via smart platform GPS, or in the virtual domain of cyber space, will remove any semblance of privacy and rights of the individual that wars were once fought over.

And what of the strategic implications? Can major international conflict arise from the exploitation of one country's ability to manipulate or undermine the cyber domain of another? Ironically, a state that is relatively poor in cyber infrastructure does have some interesting advantages. Military equipment, especially land, sea and air power assets, are in such cases not as dependent on networks that can be made redundant by hacking. Where training of military personnel is high and technological dependency modest. low to critical information passed along in slower, manpower intensive ways will be more difficult to intercept and degrade. Quite possibly Russia and China, key states on the Eurasian landmass, have this ability to confound the more technologically wealthy countries of Western Europe, Japan, South Korea and North America. Creating a battleground for a protracted defensive conflict favours the technologically poor. Though a technologically wealthy state has

ability seamlessly the to overcome geography, to succeed, cyber infrastructure during the course of a war is crucial. An unexpected cyber attack from a country considered technologically limited that degrades some of the primary systems needed to support Western military operations, would be considered a major blow and could alter the course of a conflict. The shape of things to come from a military perspective seems to indicate that for every technological 'shock and awe' campaign (e.g. Gulf Wars 1991 & 2003; Afghanistan 2001), there will be many more Sarajevos; Bosnias; Somalias; and Afghanistans (2002-), where technology is negated by the baser instincts of players who rely on the terror of the bullet, the bomb and the cudgel to create their set-piece victories.

Upon reflection, the rise and rise of social media and its multitude of supporting mobile platforms has neutralised international tyranny of distance and in some instances has challenged and removed tyrannies. But, they have also made us vulnerable to our own governments' paranoia. While those who advocate in favour of this social interaction and argue that it makes life more interesting, colourful and perhaps even more meaningful, selling this 'dream' has come at the cost of more stable concepts such as family, community, faith and trust. We are weaker as a society, not stronger as a consequence of this. Militarily, embedded networks within networks may supply the average soldier, sailor and airman a super-hero's volume of data, but all of this is useless when the

average human brain has not been augmented to make sense of the constantly incoming information streams. Overcapacity of data does not make a supersoldier. Good training does. And this good training includes being able to operate in the field with nothing other than his/her weapon and understanding the importance of the geography he or she is operating in. Human agency has its limits and the old constraints geography imposes on all of us will outlast all the fads we have been sold.



P.S., at the time of writing a group known as the Syrian Electronic Army (a clandestine group of pro-Assad cyber-warriors) hacked and brought down The New York Times and Twitter through what was called a "malicious external attack", using an Australian-based IT company located in Melbourne.

- Views expressed in this article are not necessarily those of SAGE International -

Images Accessed: 28/08/2013

'Keep Calm' image

http://sd.keepcalm-o-matic.co.uk/i/keep-calm-and-study-geography-41.png

Sir Halford Mackinder image

http://farm6.staticflickr.com/5320/5883764277_fcc935a54c_z.jpg

Mackinder's Heartland image

http://threeman.org/wp-content/uploads/2012/01/Mackinder-heartland.jpg