The Question of Information Technology in International Relations
James Der Derian

Millennium - Journal of International Studies 2003 32: 441
DOI: 10.1177/03058298030320030501

The online version of this article can be found at:
http://mil.sagepub.com/content/32/3/441

Published by:
SAGE
http://www.sagepublications.com

On behalf of:

Millennium Publishing House, LSE

Additional services and information for Millennium - Journal of International Studies can be found at:

Email Alerts: http://mil.sagepub.com/cgi/alerts
Subscriptions: http://mil.sagepub.com/subscriptions
Reprints: http://www.sagepub.com/journalsReprints.nav
Permissions: http://www.sagepub.com/journalsPermissions.nav

>> Version of Record - Dec 1, 2003

What is This?
The Question of Information Technology in International Relations

James Der Derian

Against the backdrop of events produced by the InfoTechWarPeace Project at Brown University, including internet interventions, videoconferences, symposia, public forums, multi-media exhibitions and video documentaries, this article seeks to understand through information technology (IT) how the ‘Digital Age’ and an ‘Age of Terror’ converged on 9/11. As an inquiry into the impact of IT on International Relations (IR), it mobilizes the key concepts of ‘infowar’ and ‘infopeace’ to trace the development of network-centric forms of conflict and peacemaking. Two short case studies of 11/9 and 9/11 are presented to assess the dual capacity of IT in IR. Trapped in a new interwar of technological and theological fundamentalisms, we need to tap into the surplus capacity of information networks to awaken a global critical consciousness.

Becoming Digital

It is an honour as well as a challenge to speak at this Millennium conference, for the topic invokes what I believe to be one of the most important issues facing us today: the question of Information Technology (IT) in International Relations (IR). Let us call it the ‘IT/IR Question’, and begin first by asking whether IR, as suggested by your title, has entered a ‘Digital Age’. We need to pose the question because historic moments are supposed to speak for themselves, yet they bear different meanings for different observers. Think of the ‘Middle Ages’, the ‘American Century’, the ‘60’s’. Consider 2001, a year that signified awe for an extraterrestrial future in Kubrick’s film; that is, until kamikaze airplanes piloted by al-Qaeda terrorists brought the year, and the World Trade Center (WTC), crashing to earth.

We must question how the Digital Age came to enjoy a natural hegemony over other descriptors of modernity, and whether, after 9/11 and subsequent crises, it will continue to dominate all other challengers. Fuelled by a revolution in the digitisation and networking of information, the forces driving the Digital Age show no sign of abating. From its embryonic moments in the 1940’s (when Claude Shannon wrote the first paper on information theory, transistors were invented, and ENIAC, the first computer, was built) to its accelerated take-off in the 1990’s (when packet-switching, personal computers, html, and the
Millennium

Internet produced a world wide web), the information revolution has outpaced, outlasted and outperformed all commensurable comers.

However, it might not only be premature but simply wrong to assign the Digital Age the status of a longue durée. Although the Digital Age might stretch in the United States from Silicon Valley to Alley and globally from Bangalore to Singapore, the distinguishing characteristic of the Digital Age is a spatio-temporal intensivity rather than a geopolitical extensivity; that is, a capacity to intensify global effects through a collapse of time and distance. Developing unevenly within and across nation-states, and beset by rapid cycles of dot.com booms and busts, the Digital Age is short on universality and long on instability. When a revolution stops auguring change and begins signifying an age, it usually means that a regime has been stabilised, a cultural shift codified, predictability restored. Not so with the information revolution at the palpitating heart of the Digital Age. The only constant is fast, repetitious, and highly reproducible change: a kind of hyper-speed Nietzschean ‘eternal recurrence’ that defies — in spite of efforts by democratic peace theorists (with Thomas Friedman leading the pundit’s charge) — the predetermined logic of progressivist teleologies. Modernity in a Digital Age manifests not as a more advanced era succeeding an earlier backward one, but as rapid oscillations of message and medium (signal-to-noise ratio), regressive repetitions of images (feed-back loops), and phase-shifts between order and disorder (complexity).

The conceit of a discrete and uniform Digital Age further breaks down when we zoom in from a general conception of extensive time to the singularity of intensive global events. Consider the relatively small scale of a decade, from the first to the second President Bush and between the two Gulf Wars, during which we witnessed the rise and fall and rise again of a New World Order. How does the notion of a Digital Age hold up against the crusading character, fundamentalist beliefs, and overlapping authorities of this sordid decade? Does it not emerge first fully-formed from war, as industrial war between states gives way to network-centric conflicts among a variety of digitally enhanced combatants? What if we zoom in closer, to that fateful day, 9/11? Has what little was left of the teleological promise of a ‘Digital Age’ now morphed into the repetitive horror of an endless ‘Age of Terror’? Are we now condemned, like Bill Murray in Groundhog Day, to wake up every

1. After 9/11, epochs were reduced not only to a single day but to hours, as chronicled by none other than one of LSE’s own, Fred Halliday: Two Hours That Shook the World. September 11, 2001: Causes and Consequences (London: Saqi, 2002). Indeed, I considered titling my talk ‘60 Minutes that Shook the Millennium’, but thought ‘The Question of Information Technology in International Relations’ was pretentious enough.
The Question of Information Technology in International Relations
day, not to the horrors of Sonny and Cher on the radio but to O’Reilly, Matthews, and King on cable TV, always the same, unable to change ourselves, the future or even the channel? Or can we learn, as Murray eventually discovers, that this eternal recurrence comes with a highly individuated ethical imperative, that makes every decision, small or large, count, for each one will be revisited with profound consequences.

It should be clear that a revolution’s coming of age is not the same as becoming an age. Hegel, Murray, and other philosophers of history argue that it takes a crisis to bring self-consciousness to an individual as well as to an era. My second question, then: after 9/11, has the owl of Minerva taken wing? If so, is it signalling the arrival of wisdom, or simply leaving the scene of a heinous crime? Obviously, the meaning of modernity cannot be reduced deterministically to a revolution in information technology; nor can it be understood in the context of terror alone. There are powerful political interests working hard to define the age for their own ends. Through 9/11, both President Bush and Osama Bin Laden are intent on establishing a world that brooks no ambiguity in meaning nor negotiation of politics. As we have seen, President Bush was quick to link the remembrance of 9/11 to the necessity of an Iraqi intervention:

We also must never forget the most vivid events of recent history. On September the 11th, 2001, America felt its vulnerability — even to threats that gather on the other side of the earth. We resolved then, and we are resolved today, to confront every threat, from any source, that could bring sudden terror and suffering to America. Members of the Congress of both political parties, and members of the United Nations Security Council, agree that Saddam Hussein is a threat to peace and must disarm. We agree that the Iraqi dictator must not be permitted to threaten America and the world with horrible poisons and diseases and gases and atomic weapons. Since we all agree on this goal, the issue is: how can we best achieve it?2

This manipulation of fear by the White House prompted Maja Zefuss and other revisionists to declare emphatically that we must repudiate all political efforts to forestall the interpretation of events through a selective memorialisation of time: ‘We must forget 9/11.’3

Can we forget the day of terror and reclaim the Digital Age? It is a valiant rallying cry, but not one to assure the fearful or appease the vengeful. Rather than forget, let us try to understand through information technology how the ‘Digital Age’ and the ‘Age of Terror’ converged on 9/11. I do not invest much time or hope in some edenic, pastoral, pre-digital state of nature in which sweet reason and enlightened thought win out over our dark times. Nor do I think, in our media-saturated world, that a realist unveiling of the truth, whether by Huntington on the right or Chomsky on the left, is preferable or even possible. The best I can provide, and the best that I believe the world can support, are critical questions and counter-visions that challenge the ubiquitous surveillance, instrumental rationality, real-time coverage, and fundamentalist beliefs that have transformed IT into weapons of mass distraction, deception, and destruction. We must begin by questioning this totalising tendency of IT, the ‘system of systems’, as the military calls it, that would envelope public ways of being from within and from without. But critique is only a start. We must use micro-, crypto-, and other counter-technologies, as does the CitizenLab in Toronto, InfoWar Monitor in Cambridge, and as we try to with the InfoTechWarPeace Project at Brown University, to provide alternative imaginings of America and visions for global security.

Interrogating IT

The first step is to ask what’s new and most transformative about IT in IR. Aside from the familiar technological innovations already recounted, I believe that IT has given rise to a new digital media based on a moving image of the world. In both senses of the word, this multi-media is e-motive, a transient electronic affect conveyed at speed. At the emotional level, this means image-based sentiments of fear, hate, and empathy now dominate word-based discourses of ideas, interests, and power. At the electronic level, the speed of the transmission — with real-time currently the gold standard of media — matters as much as the content of the message. Paul Virilio, urban architect and social critic, has spent a lifetime demonstrating how this media-driven acceleration has produced what he calls an ‘aesthetics of disappearance’, in which the political subject, be it the accountable leader, participatory citizen, the deliberative process itself, is diminished and quickly engulfed by a growing ‘infosphere’.4

---

Secondly, we need to question how IT, increasingly, repetitively, unavoidably, acts not only as trigger and transmitter of the global event, but whether or not we respond to the event by diplomatic action or military intervention. From the actual moment to the eventual interpretation — for better or worse — IT records, relays, represents and informs our response to global events. IT also shapes how we remember or forget their significance: we are back to chronology. We are all familiar with the contemporary production and transformation of multimedia by networked information technologies, from increased CPU speeds and broadband access, to real-time cable news and CNN effects, to embedded journalists and network-centric warfare. The global networking of multi-media has become unstoppable, and I believe that its effects may well have accelerated beyond our political as well as theoretical grasp. A public attention deficit disorder leaves little time for critical inquiry and political action by a permanently distracted audience.

Thirdly, we must interrogate as critical pluralists (rather than corroborate as social scientists) the extant knowledge of how IT operates in IR. Questions insist on a down-shifting, from authoritative, incremental, sequential statements to reflective, critical, and — I hope — consequential deliberations about many of the fundamental assumptions of IT. My predilection for multi-media montage over parsimonious rationalist approaches is as much a response to these technological changes as it is a reflection of my earlier critiques of IR theory’s failure to keep up with the pace of these changes. This is not an anti-theoretical position. Rather, it shifts our intellectual priorities from the slow, incremental development of theory to the more supple and strategic application of concepts. Put pragmatically, theory informs, concepts perform.

In the case of IT in IR, I rely on the theoretical interventions of two German thinkers who politically straddle yet philosophically converge on the question of technology in art, politics, and war: in particular, Martin Heidegger’s Destruktion (‘dismantling’) critique of modernity, and Walter Benjamin’s Jetzeit (‘now-time’) analysis of war aesthetics. In the spirit (if not by the letter) of their investigations into the ontotheological foundations of modern technologies, I consider techne not as a mere tool

but as a way of knowing that ‘enframes’ for better or worse (and often simultaneously) our image of the world (to use Heidegger’s language). Their theoretical orientations inform my adaptations of two of their most performative concepts: *mimesis* and *poeisis*. Over the last few years I have developed Benjamin’s concept of the ‘mimetic faculty’ to interpret how IT in an age of terror reproduces, anticipates, and, if necessary, violently preempts the contingencies, uncertainties and threats that are reduced to a nominal ‘enemy’ that challenges our ways of being. And I have adapted, by montage technique as well as by textual argument, Heidegger’s concept of creative *poeisis* over and against the mimetic and technological fundamentalisms that have plunged global politics into a bipolar disorder.7

In the new and alarming Anglo-American tradition of the pre-emptive strike, let me address those who might be sharpening their knives at my reliance on two thinkers, one a jack-booted philosopher and the other a hashish-smoking literary critic, who are known more for their metaphysics than for a pragmatic approach to global issues. First, although no two times are the same, I do believe that we have entered a period of perpetual crisis that has produced more than a few similarities with their own disturbing experiences in the interwar period.8 Secondly, metaphysics enjoys a comparative advantage over methodology when ways of being precede and dominate our ways of knowing in IR. William Connolly, who has taken good measure of this development, persuasively argues for a metaphysical strategy:

Let me put it this way: a particular orientation to method is apt to express in some way or other a set of metaphysical commitments to which the methodist is deeply attached; and a close definition of a political problem is apt to be infiltrated by similar attachments. I do not mean anything technical by ‘metaphysical commitment’ in this context. It is merely the most

---


8. For instance, shortly after the 9/11 attack, columnist George Will wrote that there were now only two time zones left for the United States: ‘America, whose birth was mid-wived by a war and whose history has been punctuated by many more, is the bearer of great responsibilities and the focus of myriad resentments. Which is why for America, there are only two kinds of years, the war years and the interwar years.’ George Will, ‘On the Health of the State’, *Newsweek*, 1 October 2001, 70. See also James Der Derian, ‘Between Wars’, in *Virtuous War: Mapping the Military-Industrial-Media-Entertainment Network* (Boulder, CO and Oxford: Westview Press, 2001), 23-47.
The Question of Information Technology in International Relations

profound image of being or the world in which your thinking is set. Differences in world image between Plato, Sophocles, Augustine, Epicurus, Spinoza, Kant, Nietzsche, Freud, James, Charles Taylor, Bertrand Russell, Jon Elster and Merleau-Ponty might all be taken to be metaphysical in this sense. Freud, James and Merleau-Ponty diverge not only in the method of dream analysis each pursues, but also in their faiths about the shape of the world in which dreaming occurs. If, however, you flinch at the heavy term ‘metaphysical’, I will drop it in favor of another phrase. Indeed, ‘existential faith’ highlights something that the cold term ‘metaphysic’ downplays.9

What I wish to question is how information technology has come to dominate, in Connolly’s words, our most profound image of being in the world. This is not to deny the power of fundamentalism; it is to acknowledge not only the dependency of a religious fundamentalism on IT for the projection and magnification of its power, but also to recognise the rise of a new techno-fundamentalism, in which secularists seek security, salvation, and transcendence through the fetishisation of technology. The stakes now are very high: as Benjamin said (and I like to repeat), ‘in times of terror, when everyone is something of a conspirator, everybody will be in a situation where he has to play detective.’10 We have entered a new convergence of ages, less Aquarian than Orwellian: let us call it the ‘Age of Infoterror’. Just as the invention of scientific genocide and the management of a nuclear balance of terror weapons became the key issues of the twentieth century, so too shall the new nexus of terror, information, and technology become the most pressing question of the twenty-first.

To put it as simply as possible, the central question considering information technology is how a revolution in networked forms of digital media has transformed the way advanced societies conduct war and make peace. Obviously such a question warrants not one but multiple approaches. I will not spend much time engaging with the usual rituals of IR, in which the virtues of one approach are measured against another. Instead, I will try to provide some strategic concepts and historical context for assessing the most dangerous against the most promising elements of the information revolution in international relations; a cost-benefit analysis, if you will. In that spirit, and in keeping


with our desire to fix a fluid age, I would like to begin with two contrasting stories of potential and peril in IT that took place on a set of singularly inverted dates: 11/9 and 9/11.11

The Inversion of Ages

After the November 9, 1989 opening of the Berlin Wall, which marked the beginning of the end of the Soviet Union, political dissident and playwright Vaclav Havel famously stated (he was actually quoting the historian, Timothy Garton Ash) that what took years in Poland, months in Hungary, weeks in Germany, would probably take days in Czechoslovakia.12 This compression of time has many causes, but in the context of our topic, one bears further scrutiny. In the spring of 1990 I received a small grant to study the role of the media on the transformation of the Soviet bloc. After stops in Berlin and Budapest, I arrived in Prague to cover the first free elections in over 50 years. I quickly realised that the best place to find the press was in the hotel bars, and over drinks at the Palace Hotel, Claude Adams, foreign correspondent for the Canadian Broadcast Corporation (CBC), told me a remarkable story.

On 7 October 1989, the fortieth anniversary of the founding of the GDR, a small protest demonstration in Berlin was violently broken up by the police. However, two days later, 100,000 people in Leipzig staged a peaceful demonstration. Many might remember the grainy images of the incredible night-time, candle-lit procession. That video was taken by Claude Adams. While other Western camera crews travelled by car and were detained at the border, Adams travelled alone by train as a tourist, carrying only a brand new Sony mini-camcorder that fit nicely under his overcoat. He managed to get the images out to the networks, images that then spilled over the borders into Czechoslovakia at a key moment: the 17 November anniversary demonstration for the Czech student martyr Jan Opletal, who died at the hands of the country’s Nazi occupiers 50 years earlier. Bolstered by the broadcast of images that had been smuggled out from the Leipzig demonstrations, 15,000 people showed up that day in Prague, followed by a march of 200,000 a week later, and the resignation of the Communist Party leadership in December 1989.

Now fast-forward to 9/11: to the use of the Internet, mobile phones, flight simulators, hawala fund transfers, and other information

11. I would like to thank Thomas Risse for inspiring this inversion of dates, during a plenary session of the German Political Science Association on the significance of 9/11 for the IR discipline, 24 September 2003, Mainz, Germany.
technologies that made it possible to convert three commercial airliners into kinetic weapons of mass destruction — all, according to intelligence estimates, for less than US$500,000; to the 18-minute gap between the first and second strike on the WTC, which allowed video cameras in a global feedback loop of shock and horror to transform a local catastrophe originally perceived as an accident into a global event that was unmistakably an intentional attack; to Bin Laden’s own strategic use of videotape, like the November tape in which he recounted the need to stop the sharing of dreams before 9/11 because it was threatening operational secrecy within al-Qaeda; to the wars of counter-terror, in which informational, technological, and ethical superiority was used to deadly efficient effect by Great Britain and the United States.

9/11 and 11/9. One date speaks of toppling towers, terror, and trauma; the other a falling wall, joy, and hope. Viewed in tandem, we see how the repetitive images and patriotic stories of 9/11 effectively trumped the diverse perspectives and cosmopolitan promise of 11/9. These dates exemplify yet exceed conventional categorisations of information technology as a neutral tool of human agency. IT aesthetically and strategically produced these dates, transforming them from local into global events. IT is not only the means by which we grasp the significance of the events; it determines our way of being in the wake of them. In an age of infoterror, the question of IT in IR cannot help but be metaphysical.

Conceptualising the Question

Much of my analysis, based on a montage of images, ideas, and technology, is drawn from web interventions, videoteleconferences, symposia, public forums, art exhibitions, and video documentaries produced over the last few years by the InfoTechWarPeace Project. Central to this effort has been the refinement of terms and the development of new concepts for understanding the power of IT in IR. Our goal has been to produce the kind of networked knowledge, critical thinking, and ethical sensibility that can raise public awareness and inform new policies on global technological issues in war and peace. We seek to open the blackbox of technology and decodify the information by which it operates.

The first step to take, as long as we recognise it as the beginning rather than the end of an argument, is one of definition: what do we mean by information technology? Max Weber once remarked that academics are as proprietary about their definitions as they are of their toothbrushes. When one considers that the electric toothbrush now comes with 300 lines of proprietary code etched in a microchip, the problem of definition becomes much more complicated. Although IT is
Millennium

currently and most commonly identified with binary software, computer hardware, and networked systems, the need to access and communicate information has a long and rich pre-digital history. The rise and fall of just about every civilisation follows a narrative of innovative as well as destructive applications of information technologies. From the gods’ messengers to the diplomats’ notes, from the telegraph and typewriter to the satellite and computer, power has been organised and instituted by the ability to collect information, convey messages, and secure a knowledge base. Ultimately, IT is defined by the interaction of power, knowledge, and technique, in which archives are created, knowledge is codified, information is transmitted, and effects are produced by remote control.

Advances in microprocessing power and software functionality, coupled with a general decline in cost, have made information technology much more widely available and accessible. Areas of computation and communication have been bridged by the advent of network technologies, primarily in the form of Internet access. A global (if uneven) spread of networked technologies accelerates the pace of cultural, political, economic, and military transformations.

In the twenty-first century, information technology has become essential for the global circulation of power, the waging of war, and the imagining of peace. Information technology is now an unparalleled force in the organisation, execution, justification, and representation of global violence, as witnessed in the first Gulf War, the Kosovo air campaign, and the terrorist attacks on 11 September. After the recent war in Iraq, the global effects of IT in IR became inescapable. We witnessed how anti-war organisers used the Internet globally to muster millions of protesters in large metropolitan areas; US military commanders leveraged technological superiority to wage network-centric warfare; and embedded journalists provided influential battlefield reports by satellite videophones in realtime. A glut of information (if a dearth of knowledge) drew viewers by the millions, not only to primetime TV and cable news, but also to instantly up-dated online press sites and unofficial war blogs. We witnessed the first, but certainly not the last, networked war.

Moreover, the darker side of networks, although freighted in the occasional media spasm, continues to evade the sustained attention of IR theory as well as the concern of international institutions. Networked terror, network-centric warfare, network attacks by the Blaster, Nachi,

13. This was born out at the December 2003 World Summit on the Information Society recently held in Geneva, at which the techno-optimists, vamping the political, cultural, and developmental promise of technological interconnectivity, had centre stage while critics — especially American ones — were marginalised and kept out of the main planning sessions.
The Question of Information Technology in International Relations

and SoBig viruses, and a hot summer of electrical network failures had a tremendous transnational impact.¹⁴ Networked technologies merged issues of national, corporate, and personal security (and liberty) into an interconnected global problem. Yet the new global risks of interconnectivity, including negative synergies, unintended consequences, and the pathologies of networks like viruses, worms, and Trojan horses, often fail to make the global political agenda at all.

Based on these recent events, I offer three general propositions about how IT is changing IR. First, the most obvious: IT is producing new networks of power in IR. By now there should be no need to rehearse the fall-of-the-Wall and rise-of-the-Internet story. Yet the social sciences have been slow to take into account how the coeval devolution of the Soviet Union into Russia and of ARPANET into the Internet has produced new constellations of power and security. Many scholars saw the end of the Cold War as an occasion to consider the loss of bipolar stability and to argue the merits of multipolar over unipolar state-systems. Though these perspectives on world order are vital debates, they continue to be circumscribed by state-centric as well as realist interpretations of how power works.

I take and advocate a different worldview, in which networks, best defined by Kevin Kelly as ‘organic behavior in a technological matrix’, are challenging and changing the nature of state power through new lattices of relatedness and responsiveness.¹⁵ Obviously, the United States has emerged as the dominant military and economic power, and even in the worst-case nightmares of global realists, it is difficult to identify a potential ‘peer competitor’ on the horizon. However, post-Cold War, post-9/11, we have witnessed the emergence of competing sources and mediations of power: what I call a global heteropolar matrix, in which different actors are able to produce profound global effects through interconnectivity. Varying in identity, interests, and strength, ranging from fundamentalist terrorists to peace activists, new global actors gain advantage through the broad bandwidth of information technology rather than through the narrow stovepipe of territorially-based sovereign governments. Enhanced by IT, non-state actors have become super-empowered players in international politics. Traditional forms of statecraft have become transformed and in some cases undermined by infowar, cyberwar and netwar. The technologies of weapons of mass

¹⁴. These global viral attacks were surpassed by the Mydoom virus, which targeted the SCO Group (which is in a legal fight for control of the Unix operating system) and Microsoft (every hacker’s favorite bad guy), and managed to infect over 1 million computers and 40 per cent of all email.

Millennium
destruction, networked terror, accidental crises, and global media have transformed the meaning and discourse of national security.

Networked IT provides new global actors the means to traverse political, economic, religious, and cultural boundaries, changing not only how war is fought and peace is made, but making it ever more difficult to maintain the very distinction of war and peace. The ‘West’ might enjoy an advantage in surveillance, media, and military technologies; but the ‘Rest’, including fundamentalist terrorist groups, non-governmental organisations, and anti-globalisation activists, have tapped the political potential of networked technologies of information collection, transmission, and storage. We need to undertake a full-scale investigation of how global political actors force-multiply their influence in IR through networked IT.

Secondly, if we are to challenge as well as understand the role of IT in IR, we must use networked knowledge. New informational and technological networks of power in IR require new modes of comprehension and instruction, and the social sciences have not been quick to take up the challenge. The virtual nature and accelerating pace of IT is partly responsible: actualising global events in realtime across traditional political, social, and cultural boundaries, IT resists the social-scientific emphasis on discerning rational behaviour, applying static models, and conducting incremental research projects. Moreover, the study of IT requires a dialogue among technological, scientific, military and other non-academic circles that has been notably lacking in discipline-bounded university programs and politically oriented think tanks. Taking into account the heteropolar as well as multicultural nature of global politics, we need a strategy that endorses plural, conceptual and multidisciplinary approaches to investigate what we consider to be the most challenging issue of the twenty-first century: the global application and management of IT in war and peace. We need a strategy that produces, sustains, and extends global networks of knowledge and authority that will help raise public awareness and inform new policies on IT in IR.

Thirdly, the information transformation of IR requires new conceptual approaches. The signs of rapid change are in the system: information, to paraphrase William Burroughs, has become a virus, and the immune response is often worse than the original contagion; densely networked systems produce negative as well as positive synergies with cascading effects; and everywhere global institutions of governance are failing to keep up with the new global risks of interconnectivity. We must adopt new strategies, concepts, and polices for the new dangers and opportunities presented by IT. Again, as a preliminary step, I adapt and update a pair of concepts from the interwar, *mimesis* and *poeisis*, to understand the dual capability of IT to enable the continuation of
violence through infowar, as well as to provide the means to prevent, 
mediate and resolve conflicts through infopeace.

Information warfare, or infowar, has become the umbrella concept 
for understanding cyberwar, hackerwar, netwar, virtual war, and other 
network-centric conflicts. It has a history that goes back at least as far as 
Sun Tzu, who considered defeating an enemy without violence to be the 
‘acme of skill’ in warfare. From its earliest application in the beating of 
gongs and drums, to more sophisticated uses of propaganda and 
psychological operations, infowar has traditionally been deployed by 
the military as a ‘force-multiplier’ of other, more conventional forms of 
violence. In this sense, infowar is an adjunct of conventional war, in 
which command and control of the battlefield is augmented by 
computers, communications, and intelligence. With the development of 
mass and multiple media, infowar has taken on new forms and greater 
significance. As the infosphere engulfs the biosphere, as the global 
struggle for ‘full spectrum dominance’ supplants discrete battlefields, as 
transnational business, criminal, and terrorist networks challenge the 
supremacy and sovereignty of the territorial state, information warfare 
has ascended as a significant site for the struggle of power and 
knowledge. Infowar wages an epistemic battle for reality in which 
opinions, beliefs, and decisions are created and destroyed by a contest of 
networked information and communication systems.

Infowar couples sign-systems and weapons-systems. Command 
and control, simulation and dissimulation, deception and destruction, 
virtual reality and hyperreality: all are binary functions — sometimes 
symbiotic, other times antagonistic. Networks of remote sensing and 
iconic representation enable the targeting, demonisation, and, if 
necessary, killing of the enemy. In its ‘hard’ form, infowar provides 
‘battlespace domination’ by violent (GPS-guided missiles and bombs) as 
well non-lethal (pulse weapons and psychological operations) 
applications of technology. In its ‘soft’ form, infowar includes a virus 
attack on a computer network or the wiping out of terrorist 
organisations’ bank accounts. In its most virtualised form, infowar can 
generate simulated battlefields or even create *Wag the Dog* versions of a 
terrorist event. In any of these three forms, information warfare can be 
offensive (network-centric war, Trojan horse virus, or intelligence 
dissimulations) or defensive (ballistic missile defence, network firewall, 
or preventive media).

In spite of the official spin, infowar is not a precision munition. It 
might seek to discriminate in its targeting of enemies, but it is as 
broadcast forms of media that it is likely to produce all kinds of collateral 
damage, blowback, and newly resentful enemies.

At the other end of the IT spectrum lies infopeace: the production, 
application, and analysis of information by peaceful means for peaceful
Millennium

ends. Starting with Gregory Bateson’s definition of information as ‘a difference that makes a difference’ — this is war, that is peace, this war is here, that war is over there, this war is now, that war was then — infopeace seeks to make a difference through a difference in the quality of thinking about the global contest of will, goods, and might. Measuring information in terms of quality rather than quantity, and assessing quality by the difference it makes in the reduction of personal and structural violence, infopeace opens up possibilities of alternative thought and action in global politics. Unabashedly utopian yet pragmatic, it counters a ‘natural’ state of war with an historicised state of peace.

Infopeace seeks to prevent, mediate, and resolve states of war by the actualisation of a mindful state of peace. Positing the eventual abolition of violence as a global political option, peace-mindedness ranges from the prevention, admonition and mediation of violence, to the outright disavowal of violence to resolve problems in the international arena. It draws on a long tradition of peace-thinking, exemplified in early Christian pacifism and Eastern philosophies, in which the need for peace begins internally and proceeds outwardly. It starts by embracing a wholeness of the individual, and expands to families, communities, countries, and beyond. The notion of Gaia as a self-regulating biosphere contributes to the rhetoric of peace thinking, but it is the networked reality of an expanding infosphere that makes peace an attainable and ever more vital necessity.

Infopeace stresses the actualisation of peace through the creative application of information and technology. As a form of critical imagination, infopeace resists a technological determinism that increasingly circumscribes human choices. Further, infopeace integrates a strategy in which difference, conflict, and antagonism are recognised as essential aspects of human relations. It aims to develop an awareness of how these aspects can be addressed by non-violent means.

From Mimesis to Poeisis

We must not stop asking the question of IT; but at some point wheels begin to spin, critique runs out of gas, and the world moves on, unaffected by our inquiry. My strategy has been to fight fire with fire, concept with concept, media with media. Against the imitative, repetitive, regressive practices of infowar, I have posited the imaginative, creative, visionary strategies of infopeace. But how do we get from mimesis to poeisis in an age of infoterror?

The Question of Information Technology in International Relations

It would seem that the deck is stacked against us. We have moved from an aesthetic to a pathological condition of mimesis, medically defined as ‘the appearance, often caused by hysteria, of symptoms of a disease not actually present.’ In such an atmosphere of pervasive terror, virtuous war, and mimetic politics, one seeks the counsel of thinkers who have faced similar hazards in a different, yet increasingly familiar, interwar. On the nature and dangers of mimesis, Walter Benjamin has no rival. Consider when Benjamin warns in ‘The Work of Art in the Age of its Technical Reproducibility’ of new forms of technologised war in which self-alienated humans become ‘their own showpiece, enjoying their own self-destruction as an aesthetic pleasure of the highest order’; when he writes in ‘On Aesthetics’ that mimesis and violence have a linked origin going back to ‘the human from the stone-age’ who ‘sketches the elk so incomparably, only because the hand which leads the crayon still recalls the bow with which it shot the animal’; or when he states in ‘Theories of German Fascism’ that ‘the harshest, most disastrous aspects of imperialist war are in part the result of the gaping discrepancy between the gigantic power of technology and the minuscule moral illumination it affords’, concluding that ‘any future war will also be a slave revolt of technology.’

Do we not hear our own latter-day crusaders and jihadists at work?

For Benjamin, the first essential step one must take to escape the mimetic trap of the interwar was an awakening of critical consciousness. Citing Marx, he says we must ‘awaken the world from its dream about itself’, seeking not the ‘false liberation of violence’ but the way of ‘cunning’.

Benjamin refutes not only a Rankean realism that would reduce history to a narcotising story of how it ‘really was’ and ever shall be; he also rejects the mimetic homogenisation of humanity into self-maximising units. The challenge is to confront the alterity, contingency, and paradox — meaning, fundamentally, the terror — of the human

17. Walter Benjamin, ‘Das Kustwek im Zeitalter seiner technischen Reproduzierbarkeit’, in Gesammelte Schriften I.2, eds. Rolf Teidemann and Hermann Schweppenhauser (Frankfurt am Main: Suhrkamp, 1974-89). I rely here on Jeneen Hobby’s translation and interpretation of the ‘second version’ of the essay (discovered by Gary Smith in the Max Horkheimer Archive in the 1980s and included in the collected works), as it includes the epilogue as well as material on mimetic theory that is missing from other versions. See Jeneen Hobby, ‘Raising Consciousness in the Writings of Walter Benjamin’, Ph.D. dissertation (Amherst, MA: University of Massachusetts, 1996), 254, fn 1.

18. Teidemann and Schweppenhauser (eds.), Gesammelte Schriften, VI, 127, quoted by Jeneen Hobby, 270


455
condition, and to have the courage to make our choices in the face of those who would want necessity to decide for us.

It might seem tendentious to invoke thinkers and concepts drawn from an earlier period of war, totalitarianism, and genocide. But after my own travels into the cyborg heart of the Military-Industrial-Media-Entertainment Network, I have come to realise that the interwar is not so much a demarcation of past history and future peril as an invocation of a bad dream — all in the guise of a virtual and inevitable reality.²² Hence, the dream’s long and intimate relationship to the ultimate necessity, war. Benjamin writes:

Dreams have started wars, and wars, from the very earliest times, have determined the propriety and impropriety — indeed, the range — of dreams. No longer does the dream reveal a blue horizon… Dreams are now a shortcut to banality. Technology consigns the outer image of things to a long farewell, like banknotes that are bound to lose their value.²³

In our period of interwar, in which the Bush Administration and al-Qaeda have produced a pathological bipolarity that goes beyond the ideological binaries of the Cold War, we must revitalise the power of poeisis in the service of infopeace. This might have a utopian ring to it, were it not for the tool at hand, the networked computer. We have seen first hand how networks enable anti-war movements as well as acts of war. Unlike other dual-use technologies, the networked computer has an excess capacity; or, as simply put by Bruno Latour (reducing Alan Turing’s more complex idea): ’you get out of it much more than you put in.’²⁴ In the Digital Age, power devolves upon those who best understand and channel the surplus value operating in networks.

Under the weight of states of emergency and conspiracies of terror, cunning becomes not a choice but a new necessity. We must tap into the powers of IT and find new ways to network cunning into a collective awakening from our current nightmare.

James Der Derian is Research Professor of International Relations at the Watson Institute for International Studies at Brown University and Professor of Political Science at the University of Massachusetts at Amherst

---

²² See Der Derian, _Virtuous War_.
²³ Ibid.