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## Google Earth and the nation state:

### Sovereignty in the age of new media

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#### ABSTRACT

This article analyzes the nature of sovereignty in a globalizing world and the role new media entities play within it. It studies a protracted engagement between Google and nation states on the ability of the newly launched software Google Earth to zoom in on classified locations. Reading this tussle as an engagement between an older form of sovereignty and a newer one, this article argues that new media entities such as Google represent a new modality of power, increasingly making inroads into the Westphalian nation-state system. This new mode of power operates by presenting itself as 'centerless' thus claiming to operate in the interests of the larger global good. Given their architecture as a 'distributed network' they are increasingly difficult to regulate, thus making their challenge hard to counter. Interrogating their claim of having no interests of their own, this article argues that digital networks continue to reify older hierarchies within the global order even as they claim to erase those very hierarchies.

#### KEY WORDS

Globalization ■ new media ■ India ■ networks ■ Google ■ sovereignty

While prophecies about the demise of the nation state in a globalizing world frequently recur in theories of globalization, details of the mechanism through which the classical form of sovereignty is ceding ground to the new continues to require elaboration. Conceived at the Treaty of Westphalia (1648) and having mutated significantly over centuries, the world order of nation states and the form of sovereignty it represents is undergoing significant alteration, ushered in by a globalizing age (Appadurai, 1996; Sassen, 1999, 2007; Held, 2004; Rosenau, 1999; Hardt and Negri, 2000). Given that this change is an ongoing process of negotiation that is contingent on the specific actors

involved in the process, it can be better understood through a close analysis of moments of contact between the nation state and the forms of power that are challenging it. These moments open up sites of contestation that allow us to complicate our understanding of the morphing nature of power, and thus enable theories of the eroding nation state to move from the conjectural to the concrete.

This article analyzes one such moment, when a new media entity, Google, irked nation states through its website Google Earth, a mapping software allowing users to zoom in on locations around the world. The website drew global attention as nations perceived a threat to their territorial integrity due to the programme's presentation of a normative version of international boundaries and because it allowed users to access close up images of sites that could be potential targets of attack. Relentless complaints from governments and dithering by Google to accede to their demands evolved into a tug-of-war between an older and a newer form of sovereignty. This conflict was particularly pronounced in the case of Google and the Indian government, which continued for over a year and a half. I focus on this case, situating it in the context of other confrontations, to understand the nature of the face-off between newly emerging forms of power and older ones.

Through this article I validate arguments for a special status for new media institutions among emerging non-state actors. By showing how Google ignored repeated requests from governments, and highlighting their lack of legal, technical or diplomatic means to influence Google, my study provides a concrete example of the challenge that new media pose. As they effortlessly transgress boundaries and bypass traditional controls on information flow, digital media institutions such as Google constrain the nation state in unprecedented ways (Vick, 2000; Waisbord and Morris, 2001). They leverage what scholars have called network power, an amorphous web of treaties, organizations and institutions, which functions by presenting its private interest as a global one (Hardt and Negri, 2000; Waisbord and Morris, 2001). In the controversies I explore, Google repeatedly touted the liberal credo that the global free flow of information could only be a beneficial prospect for everyone, thus betraying a conflation of its own interest with the global good.

The protracted case also shows that the challenge from new media is not posed equally for all nations. Despite their perceived immateriality, technological differences between countries as well as the physical location of these digital media, ensure that they are more subservient to the domain of certain regimes than others (Boyd-Barrett, 2006). These differences arise from the degree that countries can leverage existing

political, economic and cultural power to coerce digital media entities. This difference in the respective ability of nations to respond to challenges in the online realm further complicates our understanding of network power and the differential ways in which it constrains sovereignty. An awareness of these differences will make theories about eroding sovereignty more nuanced.

### **Globalization and the nation-state**

The rapid intertwining of the world heralded by the recent phase of globalization has ensured that while the nation state continues to enjoy unfettered power in many areas, including that in the exercise of violence (Sparks, 2007), it also finds itself increasingly constrained and challenged by transnational forces. Nation states must contend with, and, at times, be subservient to international covenants and treaties, global alliances, multinational corporations and media institutions. This transformation encumbers its historical role in protecting communities from the global sway of capital (Rosenau, 1999) that, many believe, would get unrestricted access to resources and markets around the world, if unchecked. Global treaties advocated by bodies such as the IMF and multinational corporations often make much-needed aid and foreign investment contingent upon access to national markets and resources, reducing the ability of nations (particularly smaller ones) to protect their resources. On the other hand, this protective barrier could just as well be an inherently oppressive and coercive structure of power, as is the case with totalitarian regimes. In these instances, the only recourse to justice that citizens have are those very international treaties that enjoin states to ensure citizens' rights and freedoms. In these cases, the fact that a state's power has to be legitimized in 'moral and legal terms, with the maintenance of human rights values and democratic standards' (Held, 2004: 137) could be seen as a welcome sign of the global assurance of human rights and freedoms. Here, the inhibition to adopt international treaties by certain nations becomes an impediment in guaranteeing those rights. An evaluation of the consequences of the withering nation-state system must therefore take account of the specificities of the particular case.

Differences in the role of the nation state notwithstanding, a general agreement seems to emerge about the nature of the post-national global order gradually making inroads into the terrain of the nation state system. The question is: what would sovereignty in this new global dispensation look like? Existing associations and alliances that transcend

geography and territory by forming loose, horizontal pan-global networks give us an inkling of that future global dispensation. These networks challenge the nation-state both from above and below, forming sub- and supra-national hierarchies (Sassen, 2007). Treaties such as the Kyoto Protocol, world trade negotiations, as well as international bodies such as the United Nations, are instances of the supra-national hierarchies existing above the nation state, while a global network of cities, as well as of non-state entities such as non-governmental organizations (NGOs), would be examples of sub-national hierarchies existing below the purview of states.

This picture of multi-scalar hierarchies (Sassen, 2007) decenters sovereignty and makes it an amorphous absent presence (Hardt and Negri, 2000). Power in this instance is local and ubiquitous, and far more effective in creating and regulating subjects. This modality of networked power functions by masking the economic and ideological goals of the institutions it represents and presents its designs, '*not as a function of its own national motives but in the name of global right*'. (Hardt and Negri, 2000: 180, italics in original). Military interventions conducted around the world in the name of universal values of 'democracy' and 'freedom' are instances of this conflation of particular interests with global ones.

Networks could also empower. By linking together those similarly oppressed and resisting, global networks of humans could channel human agency from the bottom up. That channeling represents 'interlinked diasporas of people and images that mark the here and now' (Appadurai, 1996: 19). These empowering associations equally subvert the nation state by becoming an alternative repository of identity, affect and culture. They allow alternative avenues of ascription to citizens marginalized from the dominant constructions of a homogenous national identity. The strategic use of media by those resisting state power, as evidenced by recent social upheavals from Ukraine to Iran and from Myanmar to Nepal, is evidence of how global support can be garnered for causes that in a pre-globalized age would have largely remained local events. These instances support the contention that 'the consumption of the mass media throughout the world often provokes resistance, irony, selectivity, and, in general *agency*' (Appadurai, 1996: 7). So, while the new form of power is decentralized and transnational, it could function both to regulate human subjects and to empower them.

The internet, architecturally designed as a 'distributed network' in order to survive a nuclear attack (Deibert, 2002b), epitomizes those aspects of network power that, as discussed above, are increasingly militating against classical forms of sovereignty. The manner in which

this particular form of network power engages with the nation state and subverts it has direct relevance for my case study.

### **The nation state engages with new media**

Arguably, new media pose a special kind of challenge to the nation state. This subversion is enabled by their perceived immateriality, because even though new media technologies clearly have a material aspect (e.g. servers, fiber cable networks, routers), they are also the culmination of a process whereby information has been gradually disembodied from its material medium. Over the years media technologies have gradually hastened this process of disembodiment, and the invention of the telegraph in the mid-19th century was a crucial milestone in this progressive delinking (Carey, 1992). The internet makes this disconnect even more pronounced, since – within its optic fiber cables – text, sound, and image travel as electric signals that are only separable on the media interface they are accessed through (Kittler, 1999). The convergence of media that earlier could only be carried separately ‘de-differentiates’ them, making them ever more slippery. This convergence has enabled the rise of the ‘network society’ (Castells, 2000; van Dijk, 2006), which scholars claim to be ‘at least as major an historical event as was the eighteenth-century industrial revolution, inducing a pattern of discontinuity in the material basis of economy, society, and culture’ (Castells, 2000: 29).

To understand the nature of confrontation between Google Earth and national governments is to appreciate specifically what this networked convergence means from the perspective of nation states. To be sure, states have always been troubled by foreign media content, and have sought to regulate it. Waisbord and Morris (2001) trace the rise of this attempt to regulate media to the demand for a New World Information and Communication Order (NWICO) in the 1970s, and claim that the rise of the digital media is only ‘the latest assault on state sovereignty’ (p. 8). This challenge has led to a rethinking of the ‘metaphors of containment’ (Deibert, 2002a) in the global order. While national borders have always been porous, new media challenge the very concept of defined international boundaries due to their ‘borderless’ architecture. This compromises a state’s ability to implement laws within its defined geography, since ‘it is impossible to talk about traditional conceptions of sovereignty without reference to physical territories bounded by defined borders’ (Vick, 2000). An instance of this inability is the protection of internet content originating in the US by the First

Amendment, which ensures an export of US norms of free speech around the world, thus placing restraints on other nations' ability to implement their own version of free speech laws within their territories (Vick, 2000).

The vulnerability of states in the online realm has also ensured that the internet has become the site of global tussles and is increasingly the terrain of nationalism, security and warfare.<sup>1</sup> Crucially, the coming together of the internet with satellite technology (represented by websites such as Google Earth), has introduced an entirely new dimension to global espionage. The availability online of satellite images makes the global gaze omnipresent, turning every computer into a veritable keyhole through which the classified secrets of a nation can be accessed. While satellite images have been available for a price for commercial use by non-state agencies (such as news organizations and NGOs) since the end of the Cold War, the accessibility of those images by anyone who can get online makes them a significant security threat. Scholars claim that the availability online of satellite images makes surveillance commonplace, thus turning websites where these images are available into the proverbial Foucauldian panopticons (Litfin, 2002). Today, states must internalize the disciplinary gaze and presume the widespread availability of these images online as a given, when strategizing their security.

Given the nature of the challenge they pose, some scholars have elevated the status of new media entities such as Google, calling it 'a sovereign entity equivalent to a nation' (Conti, 2009: 4). The capabilities that make Google as powerful as a nation state are, 'its top tier intellectual talent, financial resources in the billions of dollars, and world-class information-processing resources combined with ten years of interaction data' (Conti, 2009: 4). Google's revenue of \$13.4 billion places it in the top 100 countries in terms of GDP. It has 450,000 servers located in about 25 locations, is available in 112 languages and provides 159 country-specific portals, not too far short of 192 nations that are members of the UN. The inclusion of *Google* as a verb in the Oxford English dictionary in 2006 heralded its definitive arrival in the everyday lexicon of the 'network society'. Crucially, its might arises not from military capabilities, such as standing armies or physical power, but intellectual capital – a crucial arbiter of power in the information age. The ability to wield this power explains why countries in the instances below took the challenge from Google seriously.

### **Google Earth's global controversies**

Ever since its launch in June 2005 Google Earth has rankled world governments. Within barely a month of its start complaints from

government officials and security experts poured in from around the world. In most of these complaints sovereign states felt, or were perceived to feel (by experts and journalists), threatened by easy access to high-resolution images of government buildings, residences and military installations. These fears were fuelled by some proven instances of the use of the programme to plot and launch attacks against governments.

Among the first publicly-reported fears about Google Earth was that expressed in Australia, where the Australian Nuclear Science and Technology Organization (ANSTO), which runs the country's only nuclear reactor at Lucas Heights in Sydney, called upon Google to censor images of the nuclear site to prevent their misuse. Reporting on the issue, the Australian Broadcasting Corporation (Barlow, 2005) quoted officials from ANSTO, as well as several security experts, as fearing that the images could be of 'tactical and logistical' interest to groups seeking to do harm. The Australian government, however, downplayed the threat, claiming that it was constantly monitoring the internet for potential threats and that Google Earth did not pose one. When asked about the issue, a spokesperson for Google cited the beneficial aspects of the website and highlighted the availability of the images from other sources, arguments that would be repeated several times in future confrontations.

A week after the Australian concern, two Dutch parliamentarians wrote to their government (on 12 August, 2005) pointing out that terrorists could get help from images available on Google Earth. The Associated Press (AP) reported that the letter by Frans Weekers and Aleid Wolfson was meant to 'enquire' about the impact of Google Earth on national security (Sterling, 2005). The letter asked the government of the Netherlands to find out how other governments, such as the US, were dealing with the problem. Having been caught unawares by this complaint, the Dutch government was still 'crafting' its response when approached by journalists. When contacted, Google once again emphasized the existing availability of satellite images even without their software and underscored the beneficial aspects of the website, which 'far outweigh any negatives'.

The following month the government of South Korea responded to a perceived threat from the website by bypassing Google and discussing the issue with the US government directly. The concern arose from the availability of images of the presidential residence and military bases, especially since the country continued to be technically at war with North Korea (Associated Press, 2005). About a week after South Korea's concerns, similar reservations were expressed in Thailand, where the spokesperson for the armed forces stated that the government intended to address the issue after internal discussions (CIOL, 7 September 2005).

Besides Australia, the Netherlands, South Korea and Thailand, objections to Google Earth continued to spring up from several other countries. The *Irish Independent*, for instance, wrote about the numerous Irish government buildings visible through Google Earth (*Irish Independent*, 2005). Similarly, the *Daily Record* quoted a Russian Lt General Leonid Sazhin, of Russia's Federal Security Service, as saying: 'Terrorists don't need to reconnoiter their target. Now an American company is working for them' (*Daily Record*, 2005). By the end of the year, the global buzz created by these controversies was significant enough to result in lengthy articles on the issue in newspapers such as the *New York Times* (Hafner and Rai, 2005) and London-based *The Independent* (Shreeve, 2005).

The attention Google Earth received from nations in the first year of its launch refused to die down and was particularly fanned by its involvement in conflict zones around the world. The programme gained global attention when raids in the Basra region of Iraq unearthed printouts of Google Earth maps that the British intelligence service claimed were being used to attack UK troops (Harding, 2007). The photographs, when matched with the accuracy of previous attacks in targeting vulnerable spots (e.g. tents), gave credence to their use, claimed the army. Even though Google officially continued to reiterate its earlier stated belief in the overall benefits of its website, claiming it could be used both for 'good and bad', it responded to the British request within a week by blotting out its Iraq bases from the programme. It even went further, removing close-up images of several other security installations within Britain (Harding, 2007).

Finally, the programme's involvement in the most intractable dispute of our times, the Israeli–Palestinian conflict, highlighted how the very nature of the programme (which seeks to present one global version of international boundaries) set it up for accusations of bias. Israeli commentators alleged that the programme was favouring the Palestinian side in the conflict by presenting a 'received version' of history that was against Israel (Shamah, *Jerusalem Post*, 9 October 2007). Shamah contended that Google Earth's depiction of boundaries in the region favoured anti-Israeli views. The Israeli town of Kiryat Yam supported this contention by registering a complaint of slander against Google with the Israeli police (Associated Press, 2008). The complaint alleged that maps on Google Earth showed the town to be built on the ruins of an Arab village, and that this was not true.

The global consternation aroused by a non-state institution such as Google due to its perceived security threat, its ability to challenge official national positions on boundaries and make visible classified sites, is a

testament to the novelty of network power. The complaints against it show that even within the broad category of networked non-state actors, new media entities represent a unique kind that is largely untameable. The dilemmas that nation states face in engaging with such an entity are better understood by closely analyzing one such protracted episode – the face-off between Google Earth and the Indian state.

### **Google Earth's showdown with India**

The confrontation between Google Earth and India was prolonged for over a year and a half, during which back and forth negotiations involved threats, publicly expressed frustration, and finally a concession on Google's part in the midst of its vice president's visit to India. The issue was first raised through a media report when *The Times of India* (henceforth *TOI*), on 27 September 2005, reported the availability online of high-resolution images of Indian security installations. The story named the so-called 'sensitive sites' as the President's residence, the parliament house, the Prime Minister's residence, the Palam air-force base in Delhi and the Yelahanka air force base in Bangalore, respectively (Assisi, 2005).

Only a few days after the first news report, on 15 October, the then President of India, Abdul Kalam, expressed concern over the issue, even adding a conspiratorial angle to it by claiming that such high-resolution images were available only for security installations within a few developing countries (Farooq, 2005). Kalam's statement on the issue received global attention and many subsequent stories in the international press cited the Indian president's concern to signal the importance of the issue (DPA, 2005). After the president's comments, the Ministry of Science and Technology in India 'started taking steps' to address the issue (Mahapatra, 2005a).

Within days of the Indian president's lament, Google's spokeswoman Debbie Frost responded to the brewing controversy by stating that, 'Google takes governmental concerns about Google Earth and Google Maps very seriously. Google welcomes dialogue with governments, and we will be happy to talk to Indian authorities about any concern they may have' (19 October 2005, *TOI*). Frost repeated Google's position about the availability of the information on the website from other sources, as well as reiterating its beneficial aspects, from 'fighting forest fires to emergency response, rescue, and relief in natural disasters, such as tsunamis and hurricanes' (Indo-Asian News Service, 2005).

The Indian government was suspicious of Google's offer of dialogue, stating that, 'the job entrusted to us is to evaluate in coordination with

others the damage potential of these high-resolution pictures. We are not concerned with Google's reaction'. Articulating the government's position, the secretary of Science and Technology V.S. Ramamurthy explained that, 'the challenge posed by these images is without precedent and it would take some time for the government agencies to evaluate and devise strategy, if at all required' (*TOI*, 2005). The equivocation by the Indian state about the future course of action signaled its confusion about the appropriate response. Given that the government had no mechanism in place for such a contingency in the online realm, the ambivalence betrayed an attempt to buy time even as it sought to make sense of the phenomenon.

Meanwhile, the press reports continued to stoke paranoia. Besides the issue of close-up images of security locations, the media also highlighted the 'wrong' depiction of India's international boundaries. Indian law prohibits the sale, within India, of maps that depict Indian borders differently from the official version. Not surprisingly, Google Earth's version of India's map differed from the official version in crucial areas such as the disputed north Indian state of Kashmir (Chakrawarti, 2005). Given the many boundary disputes that the Indian state faces with neighboring countries (e.g. China and Pakistan), the depiction of national boundaries in a manner different from the official version was shown by media reports to be just as problematic as security threats.

In light of these continuing stories, the Indian government finally protested to Google Earth through a letter sent to its CEO pointing out the 'wrong' depiction of India's boundaries. The deputy Indian minister of external affairs also noted that the Indian embassy in the US had been 'instructed to take up the matter with Google Inc' (30 November 2005, *TOI*). The use of diplomatic channels such as a state embassy to engage with a non-state actor such as Google was a tacit admission of the difficulty in classifying Google within the available categories of global politics. After all, what remained crucially unsaid in the Indian minister's statement was how little legal leverage the Indian embassy in Washington had in negotiating with Google, and in pressurizing it to accede to India's demands.

Predictably, the government's pronouncements went unheeded and the problematic images and boundaries continued to be displayed without any changes in their form or content. Months after this official complaint, commentators lamented (Mahapatra, 2005b) that the government continued to 'grapple with the damage potential, far from finding an antidote'. In refusing to take action on the official complaint, Google again repeated its stated position about the easy availability of

the information from various sources, stating that 'anyone who flies above or drives by the piece of property' could obtain the same information (Press Trust of India, 2006).

Google's refusal to accede to its demands prompted the Indian government to threaten to alter the high-resolution images on its own and replace them with low-resolution ones, another solution that would be difficult to implement. This threat, made by a minister in the Indian parliament on 9 March 2006, was reiterated to the press by India's army chief on 3 April 2006. However, even as the government emphasized its intention to mask images, it betrayed its inability to do so by refusing to detail exactly how it would be done, leading analysts to rightly speculate on the impossibility of masking unless it was done at the source servers by Google itself (Basu, 2006). The emptiness of this threat was underscored by the inability of the government to make those alterations, as the images remained unchanged for an entire year after the threat of masking.

Nothing changed on the issue until early 2007, when the Vice President of Google, Vinton Cerf, visited India. Timed to coincide with his visit, Google finally struck a conciliatory note, saying that it 'saw no hitch in addressing the concerns and issues raised by the Government'. Commenting on the issue, Cerf claimed that removing the images from Google would not necessarily deter those intent on procuring them, since they were available for sale from various agencies (Press Trust of India, 2007). Google also released a statement claiming that the problematic images would be 'blurred or camouflaged or distorted' (Press Trust of India, 2007). The company addressed the issue of competing versions of international boundaries by using different colored lines to mark the variations, and re-naming the two sides of Kashmir, Indian- and Pakistan-controlled Kashmir, respectively.

The change in Google's position would have appeared routine had it not coincided with the visit of its Vice President. The timing showed that the company sought to capitalize on the controversy, and use it to send out a positive message in order to further its commercial interests (which Cerf was there to promote). This voluntary concession on its part was more an attempted gesture of goodwill than acquiescence to pressure from the Indian government. This concession, however, only solved the problem temporarily, as the entire episode returned to public prominence when it was revealed that those involved in the attacks in Mumbai on 26 November 2008 had used Google Earth extensively to survey their targets (19 December 2008, *TOI*). After the attacks, a public interest litigation filed in the Mumbai High Court asked the Indian government to take

measures to prevent the misuse of the software for such attacks in the future (9 December 2008, *NDTV.com*).

### **Contextualizing India's response**

While the response of each government to Google Earth was broadly determined by perceived threats to security and sovereignty, each nation's anxiety must also be understood through historical and political factors unique to it. The response of the Indian government must be contextualized in the backdrop of past fears about the invasion of foreign media entities, its numerous border disputes and its self-perception as a frequent victim of terrorist attacks. Anxieties about foreign media emerge partly from India's experience of colonial rule and the special status acquired by the Indian press due to its crucial role in the struggle against that rule. During the struggle, nationalist newspapers actively countered the establishment ones, thus ensuring that the press remained an active site for political debate (Sonwalkar, 2002). Several leaders who fought for India's independence were journalists, frequently writing for newspapers and making them a crucial conduit through which to propagate their ideas (Parameswaran, 2009). This historical legacy has determined India's position towards the entry of foreign media in the post-colonial period as well. It was concretized into policy when, in 1955 (eight years after India's independence) the Indian cabinet, led by its first Prime Minister Jawaharlal Nehru, disallowed foreign investors from owning newspapers in India (Nayar, 2002). This decision was taken in response to a request by *The New York Times* to start an edition from New Delhi and it prevailed until 2002 when, after much debate, the Indian newspaper sector was finally opened up for foreign investment.

In the years since independence, the special status acquired by the media during the freedom struggle ensured that even while newspapers continued to be free from government control, thus participating in the nation's democratic functioning, television and radio were government-owned and to be used for educational and nation-building purposes. However, as Thussu (1999, 2007) has shown, successive governments undermined these stated goals, reducing television and radio to government mouthpieces. The government's monopoly on electronic media ended in the 1990s with the launch of several private television channels, among them the Rupert Murdoch-owned Star TV. The distinction between news and entertainment continues to be maintained in television, with only partial foreign ownership allowed in television news. Since it deals with facts and contemporary events, news is seen as

the realm where foreign ideological control can be more easily exercised, thus necessitating restrictions. These past anxieties animate the Indian government's anxious response to Google. Google's threat showed that while national laws deterred foreign control in print and electronic media, there were none to regulate threats from digital media institutions easily accessible in India.

While in principle we need to be suspicious of any nationalist attempt at policing information, that suspicion must be qualified somewhat in the case of the postcolonial nation state, where anti-colonial struggles used nationalism as a vantage point to oppose foreign rule. Third-world nationalism is the continuation of a struggle resulting from the introduction of the modern nation state in the rest of the world, which subverted existing community affiliations. This imposition produced an irreconcilable struggle between community and capital (Chatterjee, 1993). In postcolonial states anti-Western sentiments, which India's response to Google was a sign of and that often functions to sustain an elite's' power, are a symptom of that very struggle.

In the Indian case, the modern nation-state has given rise to a host of resistances to it that challenge India's self-imagination as a homogenous nation with a defined national boundary. These interruptions come in the form of popular secessionist movements, armed attacks on state institutions, and intractable border disputes with neighboring countries. For instance, a spate of recent attacks has ensured that the specter of violence and the resulting discourse of public security is a recurring feature in political discussions in India.<sup>2</sup> In each of these attacks key government installations have been targeted, and media coverage of the Google Earth controversy predictably referred to these attacks in order to press home the urgency of the issue. Violence is a continuing legacy of India's fractious birth and its partition, which created marginalized communities and minorities who felt excluded from the mainstream. Popular secessionist movements have occurred in the north-eastern states of India as well as in the northern states of Punjab and Kashmir, among other places. While each of these movements has a specific historic genealogy of its own, they arguably result from what Chatterjee (1993) has shown to be the disruptions produced by the modern nation-state within existing community affiliations.

Since a defined boundary is one of the 'first criterion' in the construction of statehood (Vick, 2000), issues of international boundaries become even more sensitive in regions where the formation of nation states was itself embroiled in violence, leading to conflicting claims on

territories. The dispute between India and Pakistan over the Kashmir region, for instance, has led to the two countries naming the same region differently on their official maps. The names Azad Kashmir (Freed Kashmir) and Pakistan Occupied Kashmir (POK) are given by Pakistan and India respectively to the same disputed region in the state of Kashmir, an area the two countries have fought over thrice (in 1947, 1965 and 1971). On the Eastern side, Indian maps show an entire region called Aksai Chin, actually under official Chinese control, to be a part of India. India has also fought a war with China (in 1962), which continues to claim an entire Indian state (Arunachal Pradesh) as its own. These boundary disputes with neighboring countries have led the Indian state to strictly enforce the printing and usage of only official versions of the map within its territory.

Google's depiction of India's boundaries was entangled within these pre-existing historical disputes. By challenging the official version and allowing easy access to a different version within India, Google subverted a crucial aspect of Indian nationhood. Disputes over maps of international boundaries are hardly new, given that every map is a representation that attempts to advance a version of truth and holds an inherent bias (Wood, 1992). In the pre-internet age, however, each nation could at least police the version of maps available within its own boundaries. By showing the inherent bias in the official Indian version of its international boundaries, Google Earth challenged the core of that power. As we seek to understand India's arguably exaggerated response to the exigency of Google Earth, we must juxtapose it with its historical suspicion towards Western media institutions, its self-perception as a frequent victim of terrorist attacks and its sensitivity about the issue of its boundaries.

### **Differential power and the novel challenge of new media**

Challenges posed in the online realm, as in the cases above, have led nation states to gradually evolve mechanisms to deal with threats to their cultural or territorial integrity. Governments have resorted to macro approaches, such as blocking the entirety or parts of objectionable websites at the internet gateway itself, and/or the alternative of micro level approaches, such as prosecuting individual users and cyber cafes where people access those websites. These attempts, however, are far from perfect, and in their imperfection highlight the difficulty of targeted filtering without transgressing on basic human rights of communicating and associating online, and inviting charges of censorship. Moreover, in

an ironic bargain, attempts to develop firewall technologies to filter internet content must rely on the very Western software firms, such as Sun Microsystems and Cisco Systems, involved in the technological innovations that make the internet possible (Deibert, 2002b).

The macro level practice of filtering internet content has been shown to have loopholes, with little success in precise targeting of sub-domains within websites without blocking the entire website. Commercially available software targets key words appearing in website URLs in order to block them, but leaves unsolved the question of whether the entire website is to be banned even if only a sub-site/sub-domain within it is objectionable (Zittrain and Palfrey, 2008a, 2008b). These loopholes highlight what scholars call the difference between 'East coast code' and 'West coast code', whereby legal diktats emerging out of courtrooms and legislatures can only be imperfectly implemented and translated into software code. Among the states that have been most successful in filtering problematic content are Saudi Arabia and China, with the former targeting pornography and the latter political dissent (Zittrain and Palfrey, 2008a, 2008b).

Even in these countries banning entire websites is rare, due to the political fallout and accusations of censorship, as in the case of the Chinese ban on the BBC's website (Deibert, 2002b). Moreover, if proof of the impossibility of filtering online content were needed, it is found in the innumerable ways in which political subversion continues to bypass the 'great firewall' in China (Deibert, 2002b). India too has installed filtering mechanisms at its internet gateways since January 2007, in order to block websites challenging 'national unity and state security' (Deibert and Rohozinski, 2008: 289). However, its attempts to filter content, as in the case of certain religious fundamentalist websites, have 'not entirely been effective' (Deibert and Rohozinski, 2008: 290), because there are ways to circumvent filtering by shifting the content to alternative websites. For successful internet filtering, therefore, even political intent and access to technology are insufficient conditions.

In the case of Google Earth, the only workable solution nations had at their disposal would have been to block off the entire Google Earth domain, a move likely to invite allegations of disproportionate censorship. An assessment of the global controversy by the Open Source Center<sup>3</sup> (2008), a branch of the US government, showed that governments worldwide had tried several strategies in face of the threat from Google Earth, such as (a) conducting negotiations with the company, (b) banning its products, (c) trying to develop a similar product, or (d) taking evasive measures. Their best hope of success, however, remained if Google

addressed the issue at its end on its own servers. In the case of boundary representations, that too was problematic, since any change in international boundaries, while appeasing one nation, would still offend another. Moreover, any list of so-called 'sensitive' buildings and sites that Google could blur would be inadequate since any public place could be a target of such attacks. More importantly, from this study's perspective, Google was not legally bound to accommodate any nations' concerns except that of the US where it is located and whose laws it must abide by. This inability to impose their laws on it through diplomatic or other coercive means led nations to perceive an imbalance in the ability of governments to respond to the challenge.

The inadequacy of diplomacy to address disputes and threats in the digital realm arises because diplomacy presumes a nation-state structure. Within this structure there is a mutual recognition of each other's sovereignty and a principle of non-interference in the internal affairs of another (Vick, 2000). The covenants and laws that dictate the global diplomatic milieu presume a world order sprung from the Treaty of Westphalia (1648), where all problems are inter-state problems and must be negotiated between equal sovereign powers (Rundle and Birdling, 2008). The episode with Google Earth could only be resolved by bypassing the nation-state structure to negotiate directly with a non-state actor, thus symbolizing a reconfiguration of global power. This reconfiguration required a grudging concession on the part of nation states to give a non-state actor an equal seat at the table and hence cede national sovereignty.

Elaborating on this dilemma Ray Williamson, of the George Washington University's Space Policy Institute, when asked by the *Christian Science Monitor* if the US government should advocate other nations' concerns with the company, stated, 'From a legal standpoint, they haven't got a leg to stand on. There's no law on the books about this, so the government is not likely to limit the availability of these images' (Svoboda, 2005). He explained that the United Nations might be a better forum than the US for complaints of this nature. While Williamson's might be the most explicit expression of this sentiment, it recurred in media reports and statements by government officials. During the controversy, an Indian government official had called the challenge posed by the availability of images as 'without precedent'. He elaborated, 'there is very little we can do to a company based overseas and offering its service over the internet' (TOI, 2005) thus emphasizing that the challenge came from the de-territorialized structure of entities such as Google. This network architecture, which allows new media entities to

subvert the dominant national narratives of history, identity, territory, and security, also makes it difficult to hold them accountable, thus rendering any attempt to cordon off aspects of the internet a 'Sisyphean task' (Waisbord and Morris, 2001: viii).

The long and contentious process of threats and evasions continuing for almost two years shows the mechanism of the challenge posed by newly emerging forms of sovereignty. This challenge, however, is not equally encountered by all nations. For instance, the US was involved in a similar incident just a year before the Google Earth controversy. John Pike, the director of *Globalsecurity.org*, was asked to remove certain images from his website by the National Geospatial-Intelligence Agency, an arm of the US Defense Department. The *New York Times* stated that, 'Pike said he had complied, but added that the incident was a classic example of the futility of trying to control information' (Hafner and Rai, 2005). Pike unknowingly echoed Google's position by saying, 'to think that the same information couldn't be found elsewhere was not a very safe assumption'.

Given that his website operated out of US territory, however, Pike had to abide by laws governing the distribution of images considered sensitive by the US government. The same laws regulate Google, and the *New York Times* claimed that images of US government buildings such as the White House and adjacent buildings appeared blurred on Google Earth for a period, because the source of those images was the US Geological Survey. The story elaborates that, 'the government had decided that showing details like rooftop helicopter landing pads was a security risk'. While Pike's situation might have been an isolated one, it illustrates for us the unequal leverages states have in responding to a challenge in the digital realm.

The imbalance also arises from the fact that, in addition to policing end users like *Globalsecurity.org*, technologically-advanced nations can also control the *source* of these images, as companies selling them must abide by the laws of their host state. Just as the First Amendment insulates US online content that might be deemed to violate other nations' free speech norms, US laws prohibit sensitive images from being posted online, and hence regulates content even before it goes online. For instance, one such law proscribes that, '... images of Israel shot by American-licensed commercial satellites be made available only at a relatively low resolution. Also, the companies' operating licenses allow the United States government to put any area off limits in the interests of national security. A 24-hour delay is mandated for images of especially high resolution' (Hafner and Rai, 2005).

Given that these images are regulated at the source before they even go online, the relative imbalance in the power of the nation states to regulate them is apparent. This difference in power is not new or surprising (Vick, 2000; Waisbord and Morris, 2001) but is accentuated by the network society that the internet heralds. As Boyd-Barrett (2006) has shown, in the age of digitized new media, power continues to accrue to a nation from its physical location and the materiality of the medium.

## Conclusion

This article positions new media entities firmly within the category of emerging non-state actors, while simultaneously underscoring their special status. Their uniqueness comes from an architecture that is designed to be a centerless diffused network, which allows them to present themselves as a web where, in principle, each node has as much control as another. This architecture also entitles them to claim that they represent the global good, as opposed to the parochial interests of a particular location, since all points on the network could equally use it to its advantage. This ability to present the parochial as the universal is the *modus operandi* of the new form of sovereignty worldwide (Hardt and Negri, 2000), and new media institutions are able to deploy it in particularly successful ways. Evidence of this attempt is found in Google's repeated defense of its position during the controversy by citing the overall beneficial aspects of the website. This defense rides on the implicit idea of it having no interests of its own – a claim clearly untrue given Google's global commercial ambitions (Conti, 2009).

While a networked structure facilitates peer-to-peer interaction, unmediated through a center, significant disparities in the information generated in the online realm (also termed the 'global digital divide') constrain that interaction. Organizations such as the World Summit on Information Society (CNN, 2005) have highlighted how practices such as the allocation of domain names only by the US-based firm ICANN, as well as the allocations of names only in English, have prevented the internet from being truly representative of its global users. These disparities belie claims implicit within statements made by Google during the controversy, that more access to its website would be a progressive move for the entire world.

Google's position in fact aligns with that of the developed world during the NWICO debates, who sought the 'free' flow of information, as opposed to the 'free and balanced' flow of information sought by the developing world (MacBride and Roach, 1989). The guise of an 'information society', under which arguments about free access to

information are often made, is also shown to be an expedient alternative to the much-derided discourse of spreading Western modernity – but one with the same hegemonic goal (Bhuiyan, 2008). While the controversy that is the subject of this article did not necessarily play out along the axis of developed versus developing world, since several developed countries also felt threatened by Google, the presence of a global digital divide interrupts claims about the internet being truly representative and egalitarian – the overriding principle behind Google's request to be allowed unfettered presence in countries.

While understanding the nature of network power, this article is also a caution against premature predictions about the imminent demise of the nation state. That Google eventually conceded to India's, and other nations', demands, and that nations have access to filtering technologies allowing them to regulate internet content, shows that they continue to wield power. However, the degree to which they are being constrained by non-state actors, and the inadequacy of existing precedents, laws and categories within global politics for classifying and engaging with this phenomenon, buttresses the idea that the internet heralds a permanent alteration in the nature of global sovereignty. Differences between the ability of nations' to engage with this new form of challenge also ensure that existing inequities in the global order continue to be reproduced in the online realm.

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### **Notes**

- 1 The most famous recent example of cyber warfare is the comprehensive attack in May 2007 on Estonian websites, allegedly by Russia-based hackers. The attacks were widely seen as retribution for Estonia's decision to remove a Soviet-era memorial called the Bronze Soldier from the capital Tallinn. The attacks partly or completely disabled the websites of the Estonian presidency and parliament, almost all of the nation's ministries, political parties, three out of the six biggest news organizations and two of the biggest banks. For more on the incident see <http://www.guardian.co.uk/world/2007/may/17/topstories3.russia>.
- 2 The hijacking of an Indian passenger airplane in December 1999, attacks inside the Indian parliament in December 2001, and the more recent attacks in Mumbai in November 2008 all made global news, but there have also been a string of other attacks. In the case of the Mumbai attacks, investigations revealed the extensive usage of Google Earth for surveillance and reconnaissance while planning the attacks.
- 3 The entire report can be accessed here: <http://www.fas.org/irp/dni/osc/google.pdf>

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