

New Public Sphere in an Emerging Global Polity: Prospects for the Issue of Climate Change

Mr. Muhammad Zubair Khan¹ and Dr. Allah Nawaz²

¹ Gomal University, Pakistan.

Received: 5 June 2012 Accepted: 1 July 2012 Published: 15 July 2012

Abstract

State has generally been considered, internally and externally as the most powerful independent political authority. However, it has to engage with civil society and public sphere, the two significant components of nation-state polity at home. Globalization has profound impact on this power structure and shifted it to global level. Globalization also brought with it mundane issues like climate change which the state alone is incapable to cope with. Several powerful states and MNCs even become obstacle in fighting it. Civil society organizations (CSOs) with their limited resources are combating this issue that threatens human existence on this planet. However, ICTs enabled new public sphere brings in a ray of hope by opening new prospects for CSOs to deal with this threat. This article is meant to juxtapose the diversity of research-findings into a compact piece of knowledge and show strengths of NPS for civil society in perspective of climate change.

Index terms— Global polity, New Public Sphere, Global civil society, Climate change, information and communication technologies.

1 Introduction

he rise of 'state' in Europe was primarily the need of that period, as it provided the best remedies to then existing problems of security both internally and externally, issues of rising markets, and a dependable system of law and justice ??Beaulac, 2004). Travelling back into the history, the sovereign territorial states seem to have been a contingent product of a particular time and space (Ebo, 2007). The nation-state performed significant functions and provided an alternative "loyalty" to the existing ethnic and religious split in Europe at that time (Mossberger et al., 2007).

However, the state is increasingly enfeebled today (Ferguson, 2006). It finds itself bounded by competitors offering alternative rules and norms for world politics. The monopoly of state in international Arena is over; interstate relations are shifting to transnational realm. These transformations are marked by rising interdependence of the various transnational actors, and globalization reinforces this interdependence (Kapitonenko, 2009).

Many scholars believe that the process of transformation is initiated by economic forces that are seeking higher profits in the global space, and is facilitated by technological developments in the field of communication, transportation, media and production (Wriston, 1992). The essential peculiarity of globalization is that physical distance becomes irrelevant and that territorial boundaries become less significant (Scholte, 2000).

Moreover, a number of contemporary issues are global in their nature and solution. Among these problems, the most prominent is global warming which is characterized by the harm inflicted by unsustainable development (Grundmann, 2001). An in-depth consideration of the complexity of climate issue suggests that the climate issue cannot be addressed effectively without addressing the essentially environmentally hazardous dynamics of capitalism. Capitalist lust for profits transformed even living nature into dead commodities. The same forces facilitated the erosion of state power by freeing market from the state control (Bello, 2010).

3 EMERGENCE OF GLOBAL POLITY

Civil society has reacted more sharply than the state, to the issue of climate change at all the levels. Thousands of ENGOs are striving for environmental favors at local, national, regional and global level (Gemmill & Bamiele-Izu, 2002). These ENGOs take individual initiatives as well as work collectively. For example, climate action network (CAN), a network of around 700 NGOs struggling for environmental causes in over 90 countries around the world.

The advent of the Internet has provided these ENGOs with a variety of new tools and channels to further their cause and motivate public opinion on climate change. The most significant development is the rise of 'global human consciousness' in response to the mundane issue of the contemporary era (Tehrani, 2004). These new issues are providing common reference points around which a new 'publicness' is increasingly getting anchored. Climate change is one of the leading issues that have potential to raise this 'global publicness' (Castells, 2008). Civil society organizations (CSOs) are steering the debate on this issue and civic activities to achieve environmental goals by utilizing ICTs. So the new public sphere (NPS) has a lot of potentials for civil society to deal with this threat.

II.

3 Emergence of Global Polity

Merriam Webster defines polity as a "form of politically organized unit". The term 'polity' is interchangeably used for 'state' and 'government'. However, 'polity' in Aristotelian sense refers to a regime or a rule. Regime does not necessarily mean 'state', it refers to norms, principles and procedures (Krasner, 1983c), which shape a socio-political whole, with its various elements, the relationship among these elements and the basic norms governing these relationships. The core concern in this relationship remains the aspect of 'power'. The norms of a polity ensure responsible exercise of power. So 'polity' refers to a social formation, a larger whole in which 'state' is also accompanied by other pillars of power in this formation (Polanyi, 1944). The 'state' denominates a political society/sphere (Gramsci, 1971), distinct from market and family-the realm of private. Between the two lies 'civil society' which has the power to mediate between political sphere/society and the private sphere (Habermas, 1989). Yet another realm, 'public sphere' facilitates civil society to mediate with state and market to attain favors for individual and family, and completes the social whole. Market, though part of the realm of the 'private', have the potential to exploit individual and family, so civil society steers this later part of the 'private' along with its associations to form a 'public sphere' to bring the state and market in touch with needs of the 'individual and family' at large. So three overlapping spheres of power i.e. state, civil society and public sphere constitute the whole and forms what may be termed as nation-state polity. Market serves as a powerful intervening variable in this relationship.

The emergence of 'state' has been attributed with the Westphalia treaty however, the polity of nationstate as we see today developed gradually in the post Westphalian period. The power shifted from Pope and feudal lords to monarchs and bourgeois class and eventually the democratic systems emerged which involved the common citizens through the mechanism of elections to provide legitimacy to emergent polity (Slavin, 1964). State dominated the international arena as the supreme authority for the last two centuries. However, since the process of globalization got pace, the Westphalian structure of polity seems to have been challenged.

Globalization is a set of ongoing processes, without a beginning or an end, motivated by human instinct for improved style and standard of living, forcing connections among all types of institutions and organizations, resulting in destabilization and integration simultaneously and chronically. There is no space to explicate the debates regarding globalization. Globalization, we suppose is not entirely a new phenomenon. However, the contemporary technology led globalization is something unmatched and unprecedented in history. Technology led globalization has a profound impact on the nation-state polity. Globalization due to its macro and micro processes is acting as a catalyst for a societal change. No section of society, economy and politics is saved from the transformatory impacts of globalization (Manivannan, 2008).

ICTs are the creator and facilitator of contemporary globalization which is the process that shapes a social system with the capability to work as a unit on earthly scale in real or chosen time (Castells, 1996). Capacity here refers to technological, institutional, and organizational capacity (Held et al., 1999). These processes have shifted the debate from the national to the global realm, and prompted the rise of a global civil society (GCS) and of informal structures of global governance. Consequently, the public sphere as an arena of debate on public issues has also moved from the national to the global level. The rising inability of nation-states to face and control the processes of globalization of the issues that are the purpose of their governance leads to ad hoc shapes of global governance and, eventually, to a new form of state. However nation states, despite their multidimensional crisis, do not vanish, instead they transform themselves to adjust to the new context. Their transformation is what really transforms the current character of politics and policy making (Castells, 2008).

The nation-state based polity is drastically influenced by the ICTs led globalization amounting to a transformation. This transformation on the one hand has relocated the centers of power from national to global level, and on the other, has been compelling to redefine the conditions of interplay among the constituent elements of the new polity. The argument refers to the fact that 'state' capacity to deal with the contemporary issues has decreased and that the new actors have come forth to fill the gap (Kobrin, 2001). Civil society and

public sphere, comparatively weaker elements of nation-state based polity, have now become powerful and have extended beyond the nation-state boundaries (Crack, 2007).

So the emergent political structure at global level reflects three major components. A new public sphere (NPS) which is transnational in nature and is anchored around global communication networks. The second component of this political structure is 'global' civil society which is an organized expression of the norms, values and interests of global society (Keane, 2003). A network state is the third component of the

4 Global Journal of Human Social Science

Volume XII Issue XII Version I(D D D D) b

global polity which is reflected in the emerging global governance structures (Castells, 2008).

5 III.

New Public Sphere "Public sphere" lies between the state and civil society as a network to communicate information and different points of views (Habermas, 1996). The public sphere is an indispensable constituent of sociopolitical organization. It is the arena which provides the people the opportunity to come together as "citizens" and express their independent opinions which can have impact on the political setup of the society (Habermas, 1989). Civil society is the ordered manifestation of these opinions and the association between the state and civil society is the keystone of democracy. The state may drift away from its subjects if there is no civil society capable enough to structure and channelize citizens' discussions over varied topics and conflicting issues (Castells, 2008).

The contemporary information society and knowledge industries are characterized with the removal of all the temporal and spatial challenges to distanced communication with the help of ICTs. The peculiarity of the technologies of the network society is that they do not just extend conventional communication media, rather these are entirely different in terms of their structure, speed, and scope (Crack, 2007). The NPS is rising out of the information technologies initiating from a 'computer' then linking them into 'Network', which initiated within a building, then extended to cities, states and eventually 'global-networks' emerged with the gadget of 'Internet', a global platform that provide opportunity to every citizen to become a 'global-citizen' (Chan & Lee, 2007).

The public sphere that was once, woven around the national institutions of territorially bounded societies has moved to a public sphere anchored around the modern media system (Volkmer, 1999). This modern media system is based on networks of communication that enable many-to-many two-way exchange of messages in a multimodal shape of communication that can even bypass mass media and avoid state control as well (Crack, 2007). These ICTs have enhanced dialogic prospects between geographically scattered and distinct actors, thus have provided the opportunities to extend public spheres beyond the realm of nation-state (Castells, 2008).

The NPS supplies new opportunities for stimulating an active and attentive 'public' (Oblak, 2002). These information civilization innovations are shaping a new global consciousness, founded on growing "awareness of the world's ecological and economic interdependence, cultural clashes and the need for dialogue and democracy" (Tehrani, 2004). This consciousness provides the basis for the rise of global 'public' joined together as a virtual body by a sense of global affinity which springs out in response to mundane issues of the twenty first century. This 'affinity' substitutes the 'common' interests which were defined in the nation-state context in Habermas theory that brought private citizens together to form a public body. As the mundane issues today are global in nature, therefore the emergent 'affinity' is equally global. However this affinity would be effective when there would be more and more terms of references (Crack, 2007).

The issue of climate change provides one of such reference points that have the potential to bring the citizens from around the globe together as a single public. The technologies that enabled NPS provide unlimited opportunities to citizens and civil society, striving to deal with this issue.

In perspective of climate change, one can observe the components of transformed polity. NPS on the issue of climate change exists in the shape of blogs, facebook pages, bulletin boards, and unlimited websites that provide the basic information on the subject and stimulate debates. One can also observe a vibrant global civil society striving to combat the rising temperature of the planet Earth. Among such organizations, prominent are the Climate Action Networks (CANs), World Wild Life Fund, Friends of Earth International and Greenpeace. Similarly, there are a huge number of environmental laws, and regimes along with global governance structures like UN International Panel on Climate Change (IPCC). So the three structures of nation-state based polity can be observed on this particular issue on global level.

6 IV.

7 Prospects for Climate Change

Climate change is a variation in the statistical properties of the environmental system when measured over long periods of time, regardless of cause (IPCC glossary). However, the term is particularly used to point to human induced climate change, contrary to natural changes in the Earth's environmental system (UN Framework Convention on Climate Change, 1994). This term has become identical with anthropogenic global warming

in perspective of sociopolitical environmental debates. Global warming is described as increase in Earth's surface temperature. Climate change encompasses global warming and everything else that gets affected by the greenhouse gases (NASA, 2011).

The enormous consumption of fossil fuels that release huge amounts of greenhouse gases cause global warming. There is a scientific consensus that this would change climatic patterns both for humanity and other living beings on the Earth (Oosthoek & Gills, 2005).

Climate change is one of such issues that can motivate 'public' consciousness on planetary scale (Tehrani, 2004;Crack, 2007). This global consciousness is increasingly enhanced by the facilities provided by information and communication technologies. The availability of information on issues relating to climate change added by the raised capacities of civil society to steer debate, and stimulate public actions to influence public policies is helping the cause of environmentalists (Castells, 2008).

8 a) Motivating Global Opinion

The popularity of ICTs in human activity requires that the notion and reality of the current popularity of social media be considered in the climate change crisis (Kazlauskas & Hasan, 2009). ICTs facilities like the Internet, cell phones, community and interactive radio that are easily available across the world, offer extraordinary opportunities to improve the generation, management and sharing of information about climate change (Ospina & Heeks, 2011).

CSOs are increasingly using ICTs to disseminate information about climate change and motivate public opinion. Various successful ecampaigns actually provide the evidence for motivated citizenry across the globe. Several examples from the activities of ENGOs are worth consideration in this perspective. Greenpeace holds the world record for maximum comments on a Facebook page in a single day as its page Unfriendly Coal attracted record 80,000 comments in on ??pril 14, 2011 ??Greenpeace, 2011). This was part of the 'unfriendly coal' campaign to compel 'facebook' to turn to renewable energy. After campaigning for 20 months to green Facebook, the website finally agreed to run on clean, renewable energy.

Similarly, Kit Kat campaign was another social media facilitated campaign that persuaded Nestle to agree to removing products that resulted in the destruction of rainforest in Indonesia. The campaign used a 'video' to motivate public to boycott Kit Kat Chocolate as its production negatively affected certain Indonesian forests, thus initiated a vibrant debate on social media. Various CSOs negotiated with the Nestle, and eventually Nestle agreed to stop such production that was harmful for rainforests (Petersson, 2010).

Equally powerful tools are interactive radio and community radio. ENGOs are utilizing both of these facilities for environmental purposes (Kalas & Finlay, 2009). World Association of Community Radio Broadcasters (AMARC) initiated various environmental projects in different countries. Community radios in Madagascar, Peru, Uruguay and Argentina are some of their successful projects (AMARC website). Interactive radios are rapidly becoming popular. Public interact with the broadcasters via cell phone, SMS, email, Social Networking Sites. Furthermore, many ENGOs have established their interactive radio stations (Kalas & Finlay, 2009). to be a universal consensus among the citizens living in different parts of the planet earth that climate change is a serious threat that needs to be addressed immediately. The polls show that people are even willing to deal with this issue at the cost of their budgets. Of course exceptions do exist, just as exceptions exist in any territorial society. However in general, one can see the rise of global consciousness on the issue of climate change (World Bank, 2009). It is not argued that public opinion about climate change is solely determined by the ICTs, however, the potential significance of ICTs in this process can not be underestimated.

9 b) Engaging citizens

ICTs have immense potential to enable civil society to get citizens engaged in the struggle to combat this issue. This engagement can be in the shape of individual or collective green actions. ICTs particularly cell phone has made it easy and swift to communicate to citizens and motivate them for any action. The Billion Acts of Green (BAG) campaign is a good example of how ICTs can raise civic engagement for the environmental cause. The BAG campaign is a transnational effort meant to encourage simple actions on behalf of the planet in the shape of commitments from individuals and organizations to exhibit the collective power of service to the planet. The campaign was launched by the Earth Day Network on the eve of 2010's Earth Day, the BAG utilized social media that facilitated enhanced public participation in this global effort. Facebook and twitter apps encouraged users to promise at least one "act of green" and share it with members of their social network. The BAG campaign was extremely successful, and succeeded in registering over 5 million pledges (website of the campaign). BAG is still functional on facebook and is discovering innovative ways to help this cause from the global public.

Greenpeace campaign to protect Argentina forest is another good example in this perspective. Greenpeace observed that 300,000 hectares of area is deforested in Argentina each year. To address this issue, Greenpeace Argentina used social media and conventional media to gather 1.5 million signatures for a petition to support La Ley de Bosques, or the Forest Law (Kinkade & Verclas, 2008).

Through a form on the Greenpeace website, individuals were required to submit both email ID and cell phone number, and sign a petition that supported the Forest Law. Greenpeace succeeded in collecting around 300,000 phone numbers, moreover 50,000 other numbers were collected through other means. Greenpeace remained

successful in collecting over 1.5 million people that signed the petition supporting the Forest Law (Kinkade & Verclas, 2008)

10 c) Enhancing CSOs capabilities

CSOs have been the most active defenders of the planet earth. Though 'states' have more resources than these organizations however these have the 'will', 'expertise', 'reach' and 'networks' required to further this cause (Gemmill & Bamiele-Izu, 2002). Though, civil society's participation in global environmental governance has improved the process and brought positive results in a variety of ways, however, keeping in view the fact that ENGOS have to struggle against states and MNCs, the world largest polluters, the resources available to these CSOs are extremely limited . Furthermore the existing socioeconomic differences between ENGOS of North and South pose challenges to any efforts for combating the causes of climate change (Petersson, 2010). The advent of ICTs facilitated the enhancement of the capabilities of CSOs. Generally speaking, social media have become a coordinating tool for political movements across the world (Shirky, 2011).

ICTs have strengthened CSOs to perform several significant functions regarding climate change; providing expert advice and analysis, intellectual struggle against state, mobilizing public opinion, representation of the citizens, monitoring, assessing and legitimizing global-scale decision making processes (Gemmill & Bamiele-Izu, 2002).

These days nearly all NGOs utilize the Internet for internal communication; for shaping public opinion through their websites; for improving member services by supplying them a greater amount of information; for communicating swiftly at lower cost; for recruiting new members and for soliciting financial support; for disseminating informational resources to governments and the public; for raising public awareness and for mobilizing citizens to become politically involved; and for realizing innovative ideas (Petersson, 2010).

11 d) Monitoring Carbon emission and formulating adaptation plans

Despite enhanced role of CSOs in combating climate change, it has been the states that mostly monitored the carbon emission and formulated adaptation plans due to its monopoly over technologies, resources and political authority. However, with the advancement in technologies and transformation in the power structures, CSOs are increasingly acquiring capabilities to monitor the carbon emission and shape effective adaptation plans.

MobGAS, a mobile application can be utilized for tracking individual emissions of greenhouse gases. This application was designed by scientists at the European Commission's Joint Research Centre. It can track the emissions of gases like carbon dioxide, nitrous compare their emissions with national and international averages (Kinkade & Verclas, 2008). Citizens can know about the emissions caused by watching television, driving, or cooking at any time. By creating a link between their users' daily activities and greenhouse gas emissions, mobGAS can encourage individuals to change their lifestyle. The application also provides tips on how to adjust activities to reduce emissions. MobGAS was downloaded over 3,000 times between December 2007 and February 2008. MobGAS due to its potential to raise individuals' awareness of emission can facilitate higher-level change (Kinkade & Verclas, 2008). A variety of such devices are facilitating CSOs in pursuit of their goals.

Adaptation plans to combat environmental issues demands a partnership between public, private and civil sectors. ICTs enable multiple actors to get involved in the design of adaptation strategies at all levels, from simple broadcast and opinion shaping on various issues to be decided ? to enhanced engagement by means of social media and online polling of those who are expected to be affected ? to the use of group decision support systems to model and analyze various scenarios, and facilitate decision making (Ospina & Heeks, 2011).

12 e) Pressurizing State and MNCs

ENGOS network inform and persuade individuals and government by generating and disseminating relevant information. These pressurize governments to make certain changes by either holding them answerable for existing laws, or shaming their particular behaviors with ethical demands for social justice (Custard, 2008). ENGOS can be referred to as "watchdogs for the global commons". These strive to make both state and businesses accountable. These have become now stakeholder with the 'state' in environmental governance and have been very actively participating in environmental legislative forums (Petersson, 2010). ICTs are facilitating ENGOS in performing this function.

Usage of social media to pressurize state, and particularly to rally support on the eve of major economic and political forums have become quite common (Castells, 2008; ??rack, 2008). Businesses are also coming stress from the innovative use of social media by ENGOS. Cell phone based one of such initiative is the Climate Counts USA, which facilitates citizens to check companies' environmental sustainability ratings, and then compare them with their competitors. This information is sent back to a consumer in the shape of a scorecard via text message, which shows the self-reported efforts of businesses to address environmental issues. Climate Counts has produced an index based on whether these companies V.

13 Discussion

It would be oversimplification to consider climate change as just an environmental issue because it is the consequence of modern economic systems, and our contemporary living style. The politics of climate change is marked by scientific uncertainties, north-south divide, different approaches of coastal and mainland states, role of TNCs and certain social issues as well. Furthermore, it is a matter of resources, expertise and access to centers of power for ENGOs which highlights the fact that ENGOs struggle for environmental goals itself is marked by differences. These offline differences also influence NPS and as a result, its efforts to win favors from national and global political authorities.

However, it is important to note that the politics of climate change is cosmopolitics and any genuine effort to bring this issue to its logical conclusion requires a post nation-state approach (Gills, 2008). It also ushers in an opportunity to prove the existence of a single human race on planet earth, striving to safeguard its motherhood. However, the existing socio-economic differences between north and south publics, and their civil society actors results in fragmentation in public sphere. As a result multiple public spheres emerge on the subject, with different aims and approaches to deal with this issue.

These challenges have multiple effects on NPS on climate change. The north-south divide at the very global level can create fragmentation in the public sphere. The existing socio-economic differences within a state can further create groups with different approaches on this issue. Moreover the works of skeptic scientists can also misguide the public and produce false public opinion. As a result of these challenges, the fragmented public sphere on climate change becomes weak in pressurizing political authorities at national and transnational levels to act decisively on the drastic threat to the planet earth.

ICTs potentials get undermined by the existing digital divide which is actually yet another reflection of existing socioeconomic divides (Papacharissi, 2002). However, in this perspective, cell phones offer unique opportunities to ENGOs for staying in touch with their members as well as with the public in general (Bahague, 2008). Around 6 billion cell phones are in use across the world (ITU, 2012). Mobile phone technology is very extensively used by NGOs these days. It enables CSOs to generate awareness, initiating public discourse, collect environmental data and to perform several other functions (Kinkade & Verclas, 2008).

VI.

14 Conclusion

The process of 'polity' formation at transnational level is underway. The elements of the nation-state based polity may find similar matches at global level but based on different footings. One can observe the emergence of transnational public sphere, GCS actors and of course emerging global governance structure woven in a larger framework beyond nation-state. This requires the need for new lenses to see the world as a unit itself, as a grand polity, having three distinct spheres that reinforce each other beyond nation-state and negotiate with each other to cope with various issues faced by the Planet Earth.

The NPS being entirely different from conventional public sphere in its nature, structure, vastness and mechanisms is shaping public opinions in its own way by infusing the feelings of 'global citizenship' in its activists. Global civil society organizations are utilizing this opportunity for public opinion generation on climate change by initially providing the global citizens with the required information and more importantly by involving them in global campaigns with disregard to territory.

ICTs have ushered in a new era of opportunities for global civil society to cope with the issue of climate change. ICTs dire problem-the digital divide is being checked by the ICTs emerging capability of integrating communication technologies. Today, billions of people get access to information and their network via cell phones along with the Internet. Similarly new opportunities like interactive radio & television are opening up new avenues for ENGOs and are proving to be a setback for the proponents of 'digital divide'. The NPS is facilitating global civil society to play effective role in the planetary governance.

However, it should also be emphasized that ICTs alone can not create a vibrant global public sphere on any issue. In order to achieve concrete result on this issue various concerns should be addressed. The existing north-south divide in socio-economic development is one of the major hurdles in achieving such noble ends. The environmental problems related with the modern lifestyle can be addressed through schooling and public sphere discussions leading the way to convince policy makers at the top.

15 Global Journal of Human Social Science

1 2 3 4 5

¹© 2012 Global Journals Inc. (US) Year

²New Public Sphere in an Emerging Global Polity: Prospects for the Issue of Climate Change

³2012© 2012 Global Journals Inc. (US) Year

⁴. Beaulac, Stéphane. (2004). The Westphalian model in defining international law: challenging the myth.

⁵© 2012 Global Journals Inc. (US)



Figure 1:

Collective, India. [Retrieved on March 24, 2012 from [http://mobiles.tacticaltech.org/files/ Mobiles.pdf](http://mobiles.tacticaltech.org/files/Mobiles.pdf)]

[Globalizations] , Globalizations . 4.

[Smith and London] , Nowell Smith , London . Lawrence and Wishart.

[Krasner and Ithaca] , Krasner , Ithaca . NY: Cornell University Press.

[Australasian Journal of Information Systems (2012)] , <http://dl.acs.org.au/index.php/ajis/article/view/587/493> *Australasian Journal of Information Systems* January 08. 2012. 16 (2) . (Retrieved on)

[Bello ()] Walden Bello . *Climate and capitalism in Copenhagen. Globalizations*, 2010. 7.

[Habermas ()] *Between facts and norms: Contributions to a discourse theory of law and democracy*, Jurgen Habermas . 1996.

[Billion Acts of Green webpage (2012)] *Billion Acts of Green webpage*, <http://billionactsofgreen.com/> February 24. 2012.

[Billion Acts of Green, Facebook page accessed on (2012)] *Billion Acts of Green, Facebook page accessed on*, <http://apps.facebook.com/billionactsofgreen> July 2012.

[Tehrani (2004)] *Civilization: A Pathway to Peace? Globalizations*, Majid Tehrani . 2004. September. 1.

[Gills (2008)] *Climate change: A global call to action. Globalizations*, Barry K Gills . <http://mobithinking.com/mobile-marketing-tools/latest-mobile-stats#subscribers> 2008. May 21. 2012. 5. (Report of the International Telecommunication Union. Retrieved on)

[Newell ()] 'Climate for Change? Civil Society and the Politics of Global Warming'. Peter Newell . *Global Civil Society*, Marlies Glasius, Mary Kaldor, Helmut Anheier (ed.) (London) 2005. 2005. Sage.

[Newell (2005)] *Climate for Change? Civil Society and the Politics of Global Warming, Global Civil Society Year Book*, Peter Newell . 2005. 2005-06.

[Oblak ()] 'Dialogue and Representation: Communication in the Electronic Public sphere'. Tanja Oblak . *The Public* 2002. 9 (2) .

[Khan et al. (2012)] 'From Habermas Model To New Public Sphere: A paradigm shift'. M Khan , Zubair , Dr I S Gilani , Dr , Allah Nawaz . https://global-journals.org/GJHSS_Volume12/6From-Habermas-Model-to-New.pdf *Global Journal of Human Social Science* 2012. August 02. 2012. 12.

[Held et al. ()] *Global Transformation: Politics, Economics and Culture*, David Held , Mcgrew Anthony , David , Goldblatt , Perraton Jonathan . 1999. Stanford: Stanford University Press.

[Manivannan (2008)] 'Globalization of technology -Imagine the possibilities Socioeconomic, political and cultural implications and thought leadership Proceedings of The'. Mani Manivannan . http://www.ijme.us/cd_08/PDF/112%20IT302.pdf *IAJC-IJME International Conference*, 2008. 2008. May 20. 2012. (Paper 112, IT 302. Retrieved on)

[Kapitonenko ()] *Globalization, nationstate, and global security arrangements*, Mykola Kapitonenko . <http://europolis.politicalanalysis.ro/files/issue6/kapitonenko.pdf> 2009. 2009. 2011. (Retrieved on December 23)

[Scholte (2000)] *Globalization: A Critical Introduction*, Scholte . Jan Aart. (2000. Houndmills: MacMillan.

[Oosthoek et al. ()] 'Humanity at the crossroads: The globalization of environmental crisis'. Jan Oosthoek , Gills , K Barry . *Globalizations* 2005. 2 (3) .

[Ospina and Heeks (2011)] *ICTs and climate change adaptation: Enabling innovative strategies. Climate Change, ICTs & Innovation Project*, A V Ospina , Richard Heeks . http://www.niccd.org/ICTs_and_Climate_Change_Adaptation_Strategy_Brief.pdf 2011. July 29. 2012. Center for Development Informatics, University of Manchester (Retrieved on)

[Keane ()] John Keane . *Global Civil Society? UK*, 2003. Cambridge University Press.

[Bahague et al. (2008)] 'Mobiles in-a-box: Using mobile phones for advocacy. Tactical Technology New Public Sphere in an Emerging Global Polity: Prospects for the Issue of'. Rick Bahague , Ken Banks , Trixie Concepcion , Toni Elias , Christiana Iyoha , Geoffrey Muthondu , Kevin Nnadi . <http://www.austlii.edu.au/au/journals/AJLH/2004> *Climate Change Australian Journal of Legal History* 2008. February 02. 2012. 9. (& the Tactical Technology Collective)

[Mossberger et al. ()] Karen Mossberger , Caroline J Tolbert , Ramona S Mcneal . *Digital Citizenship: The Internet society and Participation*, (Massachusetts) 2007. The MIT Press.

[Volkmer ()] *News in the global sphere: A study of CNN and its impact on globalcommunication*, Ingrid Volkmer . 1999. Eastleigh, UK: University of Luton Press.

- [Ebo ()] *Non-State Actors, Peace-Building and Security Governance in West-Africa: Beyond Commercialisation*, Adedeji Ebo . 2007. 3 p. .
- [Kalas and Finlay (2009)] *Planting the Knowledge Seed: Adapting to Climate Change Using ICTS*, Patrick P Kalas , Alan Finlay . http://www.apc.org/es/system/files/BCO_ClimateChange.pdf 2009. February 23. 2012. (Building communication opportunities (BCO) alliance. Retrieved)
- [Public Attitudes towards climate change. Findings from a multi-country poll (2009)] *Public Attitudes towards climate change. Findings from a multi-country poll*, <http://siteresources.worldbank.org/INTWDR2010/Resources/Background-report.pdf> 2009. 2009. March 23. 2012. (World Development Report)
- [Gramsci ()] *Selections from the Prison Notebooks*, Antonio Gramsci . 1971.
- [Krasner ()] 'Structural Causes and Regime Consequences: Regimes as Intervening Variables'. Stephen D Krasner . *International Regimes*, S (ed.) 1983c.
- [Habermas ()] *Structural Transformation of Public Sphere*, Jurgen Habermas . 1989. MIT Press.
- [Ferguson ()] 'The Crisis of the State in a'. Y H Ferguson . *Globalizing World. Globalizations* 2006. 3 (1) .
- [Polanyi ()] *The Great Transformation*, K Polanyi . 2001. Boston: Beacon.
- [Petersson ()] *The Internet and environmental NGOs: Changed conditions for campaigning*, Maret Petersson . 2010. PCM. p. 409.
- [Custard and Ann (2008)] 'The Internet and Global Civil Society: Communication & Representation within Transnational Advocacy Networks'. Holly Custard , Ann . http://globalmedia.emu.edu.tr/images/stories/ALL_ARTICLES/2008/fall2008/issues/Custard_pp_1_11.pdf *GMJ: Mediterranean Edition* 2008. April 29. 2012. 3 (2) .
- [Slavin (ed.) ()] *The New Monarchies and Representative Assemblies: Medieval Constitutionalism or Modern Absolutism?*, Arthur J Slavin . Lexington, MA: D.C. Heath (ed.) 1964.
- [Castells (2008)] 'The new public sphere: Global civil society, communication networks, and global governance'. Manuel Castells . <http://Annenberg.usc.edu/Faculty/Communication%20and%20Journalism/~media/78.ashx> *ANNALS* 2008. June 24. 2012. p. 616. (AAPSS)
- [Shirky (2011)] 'The Political Power of Social Media'. Clay Shirky . *Foreign Affairs* 2011. Jan/Feb. 90 p. 14.
- [Castells ()] *The Rise of the Network Society. The Information Age: Economy, Society and Culture*, M Castells . 1996. Oxford: Blackwell.
- [Gemmill and Bamiele-Izu (2002)] 'The Role of NGOs and Civil Society in Global Environmental Governance'. B Gemmill , A Bamiele-Izu . <http://environment.research.yale.edu/documents/downloads/a-g/gemmill.pdf> *Global Environmental Governance, Options and Opportunities*, D C Esty, M H Ivanova (ed.) (New Haven) 2002. February 09. 2012. Yale Center for Environmental Law and Policy (Retrieved on)
- [Wriston ()] *The twilight of sovereignty: how the information revolution is transforming our world*, Walter B Wriston . 1992. New York: Scribner.
- [Papacharissi ()] 'The virtual sphere: The internet as a public sphere'. Zizi Papacharissi . <http://www.cbll.soton.ac.uk/multimedia/PDFs/The%20virtual%20sphere.pdf> *New media & society*, 2002. 2012. 4. (Retrieved on September 02)
- [Crack ()] *Transcending Borders? Reassessing Public Spheres in a Networked World*, Angela M Crack . 2007.
- [Grundmann ()] *Transnational environmental policy: Reconstructing ozone*, Reiner Grundmann . 2001. London. (Routledge)
- [Water twestival webpage (2010)] <http://www.charitywater.org/twestival/> *Water twestival webpage*, April 23. 2010. June 17. 2012. 6 p. 79. (Retrieved on)
- [Chan et al. ()] *We Want to be Teachers, Not Programmers: In Pursuit of Relevance and Authenticity for Initial Teacher Education Students Studying an Information Technology Subject at an Australian University*, Anthony & Chan , J W Mark , Lee . 2007.
- [Kazlauskas and Hasan ()] *Web 2.0 solutions to wicked climate change problems*, Alanah Kazlauskas , Helen Hasan . 2009.
- [What's in a name? Global warming vs. Climate change. NASA (2011)] *What's in a name? Global warming vs. Climate change. NASA*, http://www.nasa.gov/topics/earth/features/climate_By_any_other_name.html June 15. 2011.
- [Kinkade and Verclas (2008)] *Wireless Technology for Social Change: Trends in Mobile Use by NGOs. UN Foundation-Vodafone Group Foundation Partnership*, Sheila Kinkade , Katrin Verclas . http://mobileactive.org/files/MobilizingSocialChange_full.pdf 2008. February 06. 2012. Washington, DC & Berkshire, UK. (Retrieved on)