

The power to mediate: rethinking the Internet's political economy in the war against terror

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Abstract

During most of the past decade the Internet was approached as democracy's strongest ally particularly in the US and the EU; as it enters its second decade of commercial existence and in the aftermath of the burst of the dot.com bubble, political economy criticism has overshadowed such enthusiasm. The poor state of access to the Internet means that it cannot automatically restore communications power deficits globally or locally. The term digital divide was cynically coined by regulators in the US to pave the way to a more inclusive digital future.

Politics in the North America and W.Europe have however changed since these gloomy warnings were first voiced. The war against terror has been launched, anti-terrorist legislation and regulation has been past globally and locally. Before the war on terror, communications regulators and critics alike were concerned with the regulation of the infotelecommunications infrastructure and with the security of this infrastructure. As a result, regulatory approaches entirely disinterested in content have consolidated. This is particularly noteworthy in the case of the EU and the infamous "information society" since historically many member states promoted very content sensitive regulation. Most state actors slowly withdrew the stakes in the production of content or at least moved away from rigid regulations or anything that could be called "state censorship". It seems that for a while nobody seemed to care as to what is "carried over" the information superhighway, or how one defines the term "information". Policy was content blind reflecting a belief that markets are content blind. As long as content was copyrightable, nobody cared about its substance.

Because of 9/11 content has once again assumed a central position in communication policy debates. Instead of only debating access to some digital highway, suddenly content matters. Audiences interested content supporting terrorist activities also matter. The search keyword "terrorism" matters. What is carried through the Internet pipelines suddenly matters. This is a pivotal shift. Information is no longer an object with a price tag. It got its flesh back. Such shift begs the question: does content matter in the same way? Or has it been reconceptualised? This new interest in content provides with an opportunity to rethink and redefine the very perplex relationship between Internet content and infrastructure and between power to access and power to mediate, between state censorship and market censorship. How far should technology influence these relationships? Is a distinction for between infrastructure and content political desirable? Does "mediation" really wither away if one collapses this distinction? Should state actors resume some role in mediating instead of only reducing their stakes to facilitating access? This paper contributes to a redefinition of the relationship between content and infrastructure by negotiating with an unorthodox question: how does the Internet's political economy influence access to free and balanced content about terrorism. The paper seeks to problematise the term access to the Internet. To this end it presents and analyses the Internet's complex taxonomy of access (using terrorism as an example of desired content) and points to the layers of mediation that exist between a user (in the EU area) and on-line content. These include DNS, search engines, software, portal sites and any

navigational device a user relies on to retrieve content. It is through this taxonomy that Internet content and infrastructure intertwine to form a complex picture. This taxonomy can be used in unintended ways. All of the above are discussed within a very specific thematic perspective: the theme of terrorism. The paper will present some findings of content analysis research on the search word terrorism.

The dis-intermediation narrative

Back in the late nineties those arguing against the further re-regulation of the info-telecommunication sector could not have foreseen how important public information and social meaning would become. A crisis, such as the war in Iraq and the events of 9/11 in the US and later on in Spain, was not the reason for which critical scholars crusaded against the withdrawal of autonomous public service media and regulatory bodies from the sphere of communications. The proposed regulatory regime just appeared conceptually poor as it showed no affection to impartiality, accountability, pluralism, and ultimately freedom of expression. Regulation was founded upon the false juxtaposition of two equally bankrupt images: the populist image of commercial consolidated global media and paternalist image of nanny state public media. The first could produce fragmentation and the second a disconcerting social cohesion and censorship. Today this illusive choice appears really uncomfortable, as does the regulatory reality worldwide, which now builds on the former image. Once you pass regulation aiming to dis-intermediate you cannot instantly re-mediate to cater for the new needs.

The current illusive commercial dis-intermediation is not functional. One wonders whether one actually needs scholarly research to prove this simple position. To give some simple evidence: the domain name terrorism.gr could be mine if I just bought it from an official registrar, and I am not really sure what that would mean, and if it would really depend on the server that would host my site, or the content posted on it. The FBI recently managed to temporarily disrupt the function of key indymedia web sites around the world. The perplex relationship between routers, connectivity providers, hosting, domain naming, and site editors remains a regulatory mess, as some of these entities are treated as content providers and others as mere facilitators of on-line communications. Freedom of speech is not considered generically relevant to their operation although to a large extent they do actually facilitate speech, the idea that their operation have anything to do with content is at large refused by company profiles and regulators alike. And of course queasy liberalized markets, such as the Internet, do regulate content, only to a different end; the result is that once the regulation of content is outsourced to the market, chaos will replace pluralism, market censorship will replace regulation.

According to the orthodox narrative, did I own terrorism.gr this would bare no significance within the larger context of terrorist related hypertexts available - somewhat 9 million such texts with some reference to the term 'terrorism'. This because according to the orthodox narrative the Internet offers dis-intermediation, the means for direct communication; it renders mediation and representation obsolete and thus extends individual sovereignty (Patelis 2001, Elmer 2001, Matterlart 2003). The conceptual backbone of the narrative defines the Internet's most commercial application, the web¹, as a transparent interphase, an

¹ The term 'web' is almost impossible to define. The web is a communications media used by less the 6% of the world population, this means it is not global in any all inclusive way. At the same time it is international and therefore it is somewhat impossible to talk about it within geographical boundaries. The research and arguments presented here are historically and geographical specific as well as sensitive to the medium political economy. By the term 'web' this paper refers to mostly English web. For the research presented in this paper the web was accessed from Athens - Greece, using the non-high speed connection available to the minority of the population with access to the web (29%). The perspective such access provided is substantially different from say the one presented in papers written in countries on the other side of the divide.

ideological void; a virtual space bare of representation or mass fabricated social meaning. The web potentially abolishes mediation and intermediaries, those broking or structuring content and therefore offers a technologically enabled, transparent, global, interactive space for the free and equal exchange of ideas between autonomous parties. Whether Greek, Chinese, American, or Cypriot, whether we want to sell, read, surf, watch, whether representative or constituent, producer or consumer, parent or child, we can all relatively unconstrained roam this neutral, virtual space. Even though the Internet is not yet there, the key assertion is that it potentially resembles the free market place of ideas, it could, if left un-tempered, develop into the embodiment of friction free capitalism, and become the foundational grid of the information society². This assertion is constantly strengthened through the construction of the Internet and the free-market as naturally similar entities. Frequent references to the market and the Internet as similar are neatly carved in the dis-intermediation narrative (Patelis 1999)³.

The dis-intermediation narrative developed throughout the first decade of the Internet's development: it was enthusiastically cheer led during the nineties through the dot.com bubble years and paved the way to the re-regulation of info-telecommunications industries worldwide. By the late nineties with less than 4% of the world's population on-line, just about everybody accepted that existing barriers to entry to the Internet market threatened the web's equilibrium, jeopardizing the medium's potential⁴. The Achilles heal of the dis-intermediation narrative was identified by policy makers worldwide: exclusion. Exclusion was carefully absorbed into the narrative; the term digital divide, coined by American policy makers, was incorporated in debate to address the issue and ensure that balance in the Web market will be eventually be restored. The digital divide quickly became an incremental part of the dominant policy approach allegedly countering political economy skepticism. Like sustainable development, interest in the environment, world peace and many other cliché policy goals, the digital divide has now become a world problem; it is being addressed on an UN level and receives attention on a national level as well as supra national funding. Exclusion is therefore enshrined in the dis-intermediation narrative, establishing, that universal access to the Internet is the cure for the ills besetting the Internet's development, an imperative policy goal: imperative to the information society, imperative to the future, imperative for the automatic workings of digital media. The underlying assertion is that once the digital gap narrows, the Internet market will actually work perfectly.⁵ The idea is that despite concerns with equality, the Internet is essentially a democratic chaotic library under construction, a paradise of knowledge were every body can encounter anything once the gates are wide open to all of us; the technological grid which will grow through our contribution and participation. The narrative only allows for disagreement with regard to how this grid will expand, not on whether the end alleged end ideal - the digital free market of ideas - is actually desirable or plausible. Policy makers might disagree on how exactly the Internet might reach the point were it embodies the market, were the information society will be realized, but most agree that this is the teleology. The idea is that if we could actually make it work, the Internet, will provide us with the technological solution to social issues. This in turn verifies the

² The term information society is not an easily defined term, it is broadly used to refer society based on the exchange and production of information. The term is approached critically throughout this article, as the approach and arguments presented by Webster, Webster and Robins, Matterlart are adopting. There is no clear theory as to what exactly the term refers to, nor is there some understanding of how information has to actually be exchanged in order for a society to become an information society. (Webster 1995, 2002, Robins and Webster 2001, Matterlart 2003).

³ It is also strengthened vis a vis the confusion of anarchy with pluralism.

⁴ The way in which access to the Internet is actually measured is problematic as is the notion of an Internet user. Variables and definitions vary. This article discusses the ways in which Internet use has actually been measured, in the paragraphs discussing the term access. The figure quoted here is that one appearing at the NUA website at NUA.com back in 1999 under the category demographics.

⁵ The term digital divide was coined by the US Department of Commerce in the late nineties and appeared in the title of reports measuring the penetration of Internet use in the U.S. such as for example the one issue in 1998 titled Falling through the Net: new data on the Digital Divide (US 1998).

underlying policy assertion that one needn't take a look at on-line communications per se to actually understand the Internet. The conceptual leap required to subscribe to this line of argument is the conflation of anarchy with pluralism, the idea that since the Web appears to be vast and its content randomly distributed, there is no point in taking a further look at it.

The dis-intermediation narrative has been widely criticised over and over again; in the mid-nineties by authors adopting a radical political economy perspective (Mc Chesney 1996, 1999, Elmer 2000, Rogers 2000, Patelis 2000, Schiller 1996, Schiller and McChesney 2001, Schiller 1999), later on by the various critical media scholars. In fact, one could tribute the incorporation of the issue of inclusion in the narrative to political economy criticism.

The plethora and heterogeneity of criticisms voiced formed the counter approach to new media, an approach which argues that new media do in fact do mediate communications – hence the term new media (Buttler 1999, Manovitch 2001). These critical approaches set out to examine the specific ways in which each medium does actually refashion communications, how hybrid forms the communication flows are being constituted, how narrative structures are being produced. The re-mediation approach forms the basis of the majority of research in media studies. This paper is situated within this effort to approach new media critically.

Despite its predominance in research, the idea that new media and in our case the Internet, re-mediate communications is still largely marginal outside the realm of media studies. Policy and industry are oblivious to any criticism voiced in the Ivory Tower. Policy documents worldwide accept the dis-intermediation narrative uncritically adopting its key assumptions and reproduce them. This in turn reshapes Internet related markets. Indicative of this blindness is the term used to refer to new media policy. In the name of technological convergence nobody refers to 'media policy' anymore; or to 'new media policy' for that matter. The term 'information society policy' is usually used hand in hand with the term 'communications'. As if mass media suddenly got abolished, and our world has already become unmediated. The paragraphs below critically analyse the ways in which mediation has been excluded from the regulatory agenda prior to 9/11 events. Such exclusion is proving to be incredibly problematic in with regard to understanding, controversial issues, such as 'terrorism'.

The information society regulatory paradigm

The dis-intermediation narrative lies at the heart of the current regulatory paradigm for the info-telecommunications sector⁶. The paradigm consolidated in the late nineties after a series heated policy debates particularly in the E.U.⁷, under a substantially different political reality worldwide. In this paper this paradigm is referred to as the information society paradigm, a name policy makers routinely give to it, but is used here without really accepting that there is such a thing as the information society⁸. The majority of info-telecommunication polices worldwide, particularly in the U.S. and in the E.U. are formulated within the information society paradigm⁹, despite anti-terrorist legislation. The declaration of principles in the UN organised world summit on the information society is a typical example, as is the E.U. Regulatory Framework for Communications, or the

⁶ The regulatory documents setting out the key parameters of this paradigm are infotelecommunication specific and don't just include any policy such as the US. Patriot Act. They would include: the Telecommunications Act of 1996, the EU Communications Framework, the Digital Millennium Act, eEurope Action Plan 2002: accessibility of public websites and their content.

⁷ The debate on the future of European union media unfolded between 1996-1999 reaching its peak with the controversy on the green paper for the convergence of telecommunication and media. Opposition to the so called bangeman approach to the information-society and the re-regulation of the media industries was voiced by media theories, policy makers and practioners alike. The viewpoints debate are still archived on the europa server, Notable responses to the green paper are the one by the BECTU. (CEC 1997,).

⁹ The paradigm was defined in the nineties. In the U.S.

Millennium Digital copyright Act (WSIS 2003, E.U. 2002). The paradigm consolidates pivotal shifts in media policy, particularly for Western European media and the legacy of public service media; these are discussed throughout this paper.

The paradigm asserts and builds on a extremely illusive image: the creation of a huge highway, a technologically enabled labyrinth like free market place, a grid that carries just about everything. The information society is a place were individuals are all connected with each other through enabling technologies, they can freely exchange words, photos, images, all these things that are now digitised matter. The network forming the backbone of this information-saturated society is the Internet. The Internet is perceived of as similar to an exchange mechanism and a distribution platform. A huge highway network where goods and services are carried across quickly fairly and easily. What is being carried is irrelevant, what is relevant is how it is being carried. Like real highways it's the highway that matters not what rides it. This image of the great info highway comes to replace the image of saturated commercial broadcasting. Fluidity and randomness come to replace structures and media driven agendas.

With this image as the end goal, broadly speaking within the information society paradigm info-telecommunication markets are being re-engineered vis a vis a set of policies which allegedly "protect" the workings of the free market. Three key type of policies are involved in this re-engineering: firstly, policies aiming at the safeguarding of private (mostly intellectual) property, secondly policies establishing at least some universal access mechanisms for consumers, thirdly policies that dismantle existing content regulation of any type, across media platforms. So the paradigm demands strict regulations on patenting and copyright and relatively inclusive pricing schemes for accessing the info-telecommunication infrastructure, and no regulation when it comes to content. Key issues in media policy are neatly excluded from the regulatory agenda and are substituted by concerns previously voiced with regard to non-media markets. So for example concern with universal access and pricing mechanisms (inclusion) replaces concern with pluralism. The implicit assumption behind this substitution is that the universal access automatically leads to pluralism since giving more people access to the Internet will automatically increase the number of people transmitting their opinions on-line and thus pluralise the Web. Pluralism is therefore defined in quantitative terms, to mean plural. By the same token ownership rules are relaxed¹⁰, and intellectual property regulation replaces previous funding mechanisms offered to new markets entrants as it is assumed that intellectual property provides with the financial incentive for production. Finally concern with state censorship is replaced by privacy concerns.

In short communications on-line are entirely privatised not only in the sense that they are totally private but in the sense that they loose any idea of actually existing or serving any type of collective need. Any regulation that would accept that there is such thing as 'the collective' 'the social' is excluded from the regulatory agenda and is considered paternalism. This is coupled with extremely little reference to content and a focus on infrastructure. The paradigm appears disinterested in content, in the message, as something more than the private exchange between 2 consenting independent parties.

What is content?

Within the information society paradigm there is very little concern with content. In refusing to acknowledge that communications are public, the paradigm holds content to be unimportant. Content becomes the inconsequential inner bit of a well rapped data packet. To go back to the illusive image of the grid; does it make a difference if what is carried through the grid is a banana or a piece of video? Does it change the nature of the grid? Whether a piece or pornographic material, a grocery order or a blog, the framework treats content in a similar way, it treats content as the object of exchange. Content is therefore defined formally within the information society paradigm. It is defined as an object, its exchange value is all that regulation acknowledges. Its sign and use value are

¹⁰ In 2003 for example the FCC recently relaxed ownership rules in the U.S. despite opposition.

irrelevant for society they are only relevant to the parties involved in the specific exchange of this specific content object. Policy abstracts substance from the term content. Policy is primarily interested in the property function of content. The paradigm is content blind, it equates new media with technology refusing to actually acknowledge that what is being regulated is not some pure form of technology. This is achieved in three key ways: first content is not mentioned or defined, secondly infrastructure is placed at the center of policy, and finally the term 'information' replaces the term 'content'.

Information society documents are also almost exclusively concerned with the so called infrastructure¹¹. In fact infrastructure and access to infrastructure services is their primer focus to such an extent that content is often not mentioned. Policies focus on cables, telecommunications, networks. This goes hand in hand with constant references to e-commerce and security. The problem identified most often is whether the network is accessible and secure. By security however is once again defined in terms of infrastructure and not content.

On the most basic quantitative level there is very little reference to the term 'content' in information society policy documents worldwide. The term content is also never defined. What do we mean by on-line content? What is it? Does its substance matter? What about the content produced to be broadcast off-line? Should we use a different word for it? To take an example: is a press release reproduced in plain text on a web page content? Is software content? Are the pages displaying results for the word 'terrorism' on Goggle content? Are menus content? Are the categories use to list news content? Are the graphic interphases enabling all types of interactions on-line content? And if yes, who is the author of this content? In not defining content the paradigm fails to make regulatory and conceptual distinctions between the different types of content and as well as their functions. Such distinctions could actually be extremely useful in understanding on-line communication. Even the most obvious distinctions don't exist: for example isn;t e-commerce content different from e-communications content like in the off-line world? Should they co-exist? Always? This key argument is better understood through an analogy. The off-line equivalent of the perverse extension of advertorials on the web (actually buying a product whilst reading an advertorial – a key feature in numerous sites) would be the opportunity to buy a product during newcasts; or to buy a book on a telemarketing channel and at the same time contribute to a political campaign (this was actually possible on amazon. com during the U.S. primaries 2004) or of being in a library reading about a type of sailing boat and be informed you can actually buy it on the spot. Shouldn't all these different types of content and service be distinct? Why are they distinct in the offline world? Replacing the example of the boat with the example of any weapon places the problem in perspective for those that would treat political economy anxiety with scepticism.

That references to the term 'content' are sporadic is also due to the fact that the term 'content' is often substituted with the term 'information'. One has to question this substitution? Why substitute the term content with the term information? Does this help us? How does the term 'information' differ from the 'content'? There is an underlying assertion that 'content' refers to something subjective whereas 'information' refers to something objective, some tangible thing exchanged through enabling technologies, in short an object,

¹¹ To use the European Union as an indicative example; The new framework s for regulating communications which consolidates the policy principles set out by the so called Bangeman approach to the Information society is composed of 6 directives: The Framework Directive, The Access and Interconnection Directive, The Authorisation Directive, The Universal service Directive, The Data protection Directive The Consolidated Directive on Competition in the market for communications services. Content not mentioned in the titles neither is it specifically mentioned inside the documents. It is consider the peripheral thing that rides the network.

unmediated and pure. The visual metaphor with which the windows operating system operates strengthens this assertion. Information is more real, its more usable, its less constructed. So this distinction is useful to regulation in that it attempts to naturalise the idea the content is an object.

The conceptual problem

The above described shifts are conceptually based on the idea of dis-intermediation. They fundamentally rely on the assumption that the Internet is not a media but a technology, that is does not re-mediate social meaning it dis-intermediates meaning all together. The Internet is defined as technology that allows for direct access and fair exchange of pure meaning- of information, an exchange mechanism for independent signs, and a distribution platform of signs with no fixed signification. These pivotal policy shifts have re-regulated the info-telecommunications sector in radical ways. What has essentially been undermined is the idea that the message of communication matters to regulators and by extension to our society. What the paradigm essentially does is assert that communication is a private individual right, as opposed to a public good. This conceptual shift is phenomenal. The paradigm essentially deprives of content of its flesh it refuses to even acknowledge that content is not like any other product, it should not and cannot be regulated as if it is an object. In doing so it completely it builds on the idea that there is in fact some new media void out there, a neat place were commercial global media have no power. This information society essentially gets rid of all issues with regard to the power to mediate; any idea of an agenda setting affect threatening pluralism becomes irrelevant. It essentially presents us an image of a loosely fragmented network of individuals that just exchange objects amongst each other. Once this is done any regulation occurs with regard to one specific exchange. Communication is therefore defined in negative terms: communications freedom from external restrictions, not freedom to communicate.

Because of 9/11 events, suddenly regulation has assumed its interest in one type of content. This despite the fact there is no regulatory paradigm that would make it feasible to recognise the difference between different types of content, let alone regulate them. Suddenly all of this illusion of freedom has to be contained within anti-terrorist legislative framework, and thus exclude certain exchanges between sovereign parties, exclude that is so called 'terrorist' related content and services.

I would like to suggest that this interest is actually contained within the information society paradigm. It merely cements the pivotal shift that has occurred, It is a different type of interest in content. It is an interest in a specific content object. This because it merely restricts what can be exchanged, it remains indifferent to the public need for independently produced, non-commercial content on terrorism. The anti-terrorist legislation passed in the U.S. as well as the one in the E.U. does not change the substance of the monumental conceptual shift in the regulation of communications. It does not suddenly assert that there is a need for a public sphere to discuss terrorism, accepting that hey were where wrong maybe we did need some public service funded media for the web. On the contrary legislation targets terrorist criminals but still remains unwilling to actually take a look at the function on-line communication has for society. So criminal content is considered to be the equivalent to exchanging an object that should not be exchanged like drugs, like the real bomb. Legislators want to regulate communications as private not as public. This is why it is so hard to actually produce arguments against this censorship. Once you accept that freedom of speech is a negative right, the freedom from as opposed to freedom to, than speech loose its public ness. The result is a commercially saturated mess¹²: no official sources to find out more about terrorism, plenty of unofficial ones, commercially sponsored sites, and just a general randomness. An illusive dis-intermediated space were

¹² A search on any popular search engine would provide access website the first 100 of which are not any way independent sites casting independent content. A notable example would be the terror portal or even terrorism.com which is a sponsored site.

terrorist content is produced by official sources, so called terrorist sources and commercial companies. Is that the end goal?

Most importantly, I would like to suggest that on the web companies have control over what content is actually accessible. In other words to this image of dis-intermediation this paper juxtaposes a different one. One that builds on the idea that the Web re-mediate communications. One that would potentially provide content its flesh back and allow regulators to actually develop the Internet from chaos to pluralism. This framework is based on the idea that there is a taxonomy operating on the web, a taxonomy that distributes content and by doing so allows for the regulation of it. This framework is produced through a critique of the information society paradigm.

The shortcomings of the paradigm and the world on terror

The information society policy paradigm essentially extends some assumptions embedded in the regulation of U.S. communications and establishes an association between the free market communications regulation and new media.¹³ A number quasi-neoliberal assumptions lie at the heart of the paradigm. These have been criticised over and over from political economists way before the Internet became commercialised, and after its commercialisation. To mention some: Marxism offers a critique of the idea that individuals are in fact sovereign, that individual freedom is a plausible goal (Ramsey 1987). In philosophy of language there is intense debate on whether in fact language and thus perception is socially determined. In radical political economy of the mass media authors have repeatedly argued that Internet communications are not formulated in the some virtual democratic realm but reflect existing socio economic inequalities across the globe, like a mirror of inequality. Finally some argue that electronic commerce and electronic communication should not co-exist because they serve different needs for our societies, and therefore should be regulated by different frameworks as they are with other media. Furthermore the paradigm ignores existing offline communication power and structures¹⁴. There is growing concern that the Internet will magnify existing communications inequalities instead of the opposite. The framework also pays no attention to the fact that most content is actually produced by a few companies around the world, that there is media concentration affecting the content available on –line. In doing so of course it is unable to explain why specific websites are more popular than others. It also ignores that fact that most content produced in the world is actually copyrighted and already owned by media conglomerates. Offline communications power and structures are neatly excluded from the debate in this way. The power to capture audiences or to source becomes completely irrelevant. In defining content in a formal way the paradigm also fails to really distinguish between the different types of services and content properties on-line and their function for individuals and society alike. This is extremely important. The paradigm completely ignores the difference in the type of content and the difference between e-content, and e-commerce. To give an example: an e-learning seminar on how to make bombs is qualitatively different from a website stating the opinions of a group, or a portal for terrorism. It is different type of content. It is a different information packet exchanged.

In this paper I would like to critically focus a key assumption that has received less attention. The assumption that content and carriage can be distinguished from one another. That the network carrying the data does not in any way reflect the actual data. That content actually can be packaged in some neat way and carried through cables. That it is produced to be platform independent. That the communication occurring between parties on-line essentially starts once they have logged on and access a web page. That content analysis on the web means nothing but downloading a web site and analysis what one see on screen.

¹³ The regulation of communication in the U.S. does not reflect one monolith tradition and it would be unfair to only pay tribute to its pro-deregulatory.

¹⁴ This was a key argument voiced by the civil society declaration on the WSIS.

The regulatory obsession with access and the digital divide resides on this assumption. Regulators are primarily interested (if at all) in making sure that every single one of us around the globe has equal access this experience exactly because they hold content to be totally irrelevant to such access. It is exactly in this argument that exclusion becomes part of the dominant narrative. The idea is that exactly because one is excluded only from the carrier, this does not effect the content. Once you are online you will just post it. Once you get the access you will get to produce your content. This argument also works in reverse, exactly because content is independent from carriage all you need do in order to get rid of content you might not want is go after the people that actually created the website.

Access, infrastructure and the dis-intermediation narrative

The neat distinction between infrastructure and content defines the way in which access is perceived of with the information society paradigm. Access is defined in very narrow terms within the dis-intermediation narrative; by access to the Internet the narrative literally refers to material, to electricity, cables and PC. Access basically is synonymous to access to the Internet infrastructure. So a so called terrorist has access to the Internet if he/she can formally access the network. Similarly we have access to a terrorist web site if this is actually posted on-line irrespective on whether it actually visible through navigational tools.

This formal definition does not allow for a distinction between access to post information and access to receive information. This is reflected in the way access is actually measured. Predictably enough the global reports inquiring upon the term access almost never ask users whether this access actually includes the web's most celebrated features interactivity producing and posting content. In fact of the major surveys published by eu. and us. official source none includes information with regard to what type of content people do actually contribute to the web but only includes information on what they consume. The opposite is actually true of survey on business use. In fact we know very little about the people that do produce content. Those reports that do measure how much people contribute content have found that the portion of Internet users contributing content are a small minority of those using the web¹⁵.

A political economy of the Internet which accepts this narrative would now proceed to give you an account of the who has access to the Internet and who has not what type of access is this access and so on. Indeed, unlike 5-7 year ago there now plenty of studies from official sources providing with data on the ICT penetration and the divide. To an extent these do provide us with an idea of the material boundaries within which on-line communication can occur¹⁶.

In 2002 in the U.S. 53,6%¹⁷ of the population was using the Internet. The EU average was lower with 40.4% of household with Internet penetration.¹⁸

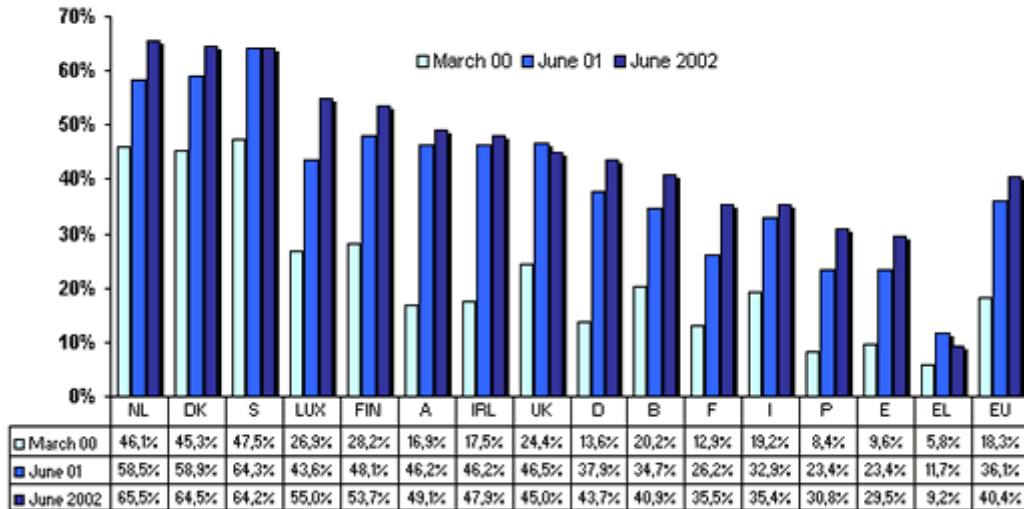
¹⁵ The PEW Center for the Internet and society recently issued a report with such finding according to which only 13% of US Internet users have their own web page and about 17% have posted material on the a web site (

¹⁶ I am adopting Hall;s argument according to which

¹⁷ In order to be have data that is comparable this account use data from 2002 that is the latest compiled data for many digital excluded countries.

¹⁸ Note that households figures do not represent the entire population of a country depending on the homeless rate.

Internet penetration in Households 2000-02



Source: European Commission (Eurobarometer)

Internet penetration rates really vary according to economic development and geopolitical position. We can take the E.U. as an example. The table above shows the percentage of households with Internet access in E.U. (prior to the enlargement). Note that there are countries in which Internet access is actually decreased. Britain and Greece (by 4% and 1% correspondingly). In general there is a **north and south divide** Southern EU countries have poor record of access, 30 for Spain, and Portugal and a really low 9,2 % for Greece. Greece being the most digitally homeless of all E.U. countries.

Info rich and poor are also divided because of income and literacy levels. These are usually related so. So for example access to the Internet in the U.S. depends on income. In 2002 according to the U.S government¹⁹ 75.0 percent of people who live in households where income is less than \$15,000 and 66.6 percent of those in households with incomes between \$15,000 and \$35,000 did not have access to the Internet. **Education** is also a huge issue. In the U.S. for example adults with low levels of overall education—60.2 percent of adults (age 25 +) with only a high school degree and 87.2 percent of adults with less than a high school education. In countries we penetration rates are high **ethnic origin in combination with knowledge of the English language is also a factor. For example** 68.4 percent of all Hispanics and 85.9 percent of Hispanic households where Spanish is the only language spoken in the U.S. do not have access to the Internet.

What type of connection we have to the Internet also makes a difference. In the U.S. 80% of people access the Internet through dial up service but 11% have broadband access. According to one EU 16 percent of standard telephone lines are the access point for 72% of respondents and 16 with ISDN lines. Finally where the Internet is access from is of major importance. To a large extent it influences the use we make as we are contracted to not make certain uses of the network by those providing the access. There is public use, private use and corporate use depending on the access point available. So for example personal use is not permitted in major business around the world. The consumption of pornographic material is prohibited in some access points. In Europe for example 71% of users use the Internet from home, 11% from public access places (and this has decreased in most countries) and 42% from offices. Access to the Internet grows as infrastructure develops through telecommunications investment and also as income level grows. In the late nineties there was evidence that showed that Internet use would grow at an amazing rate. The U.S. provide the best example

¹⁹ A nation on-line - survey

with Internet usage rate growth of 20% annually since 1998 (Nation 2002). Statistics from Europe defy this evidence as Internet penetration is reaching a plateau of growth. Internet penetration rates doubled between 2001 and 2001 from 18% to 36% but grew by a mere 2% in the same year (BARO 2002).

The Internet without a distinction between infrastructure and content

The distinction of content and carriage is an illusive assumption since it is actually impossible to distinguish between the two. This is mainly because software is both infrastructure and content. And software is what on-line content is made off. Software constructs and distributes content on-line. It infrastructure and content at the same time. Software is part of a wider system of taxonomy that operates on-line. This taxonomy weaves the web's infrastructure tight with its content, to such an extent that it is actually impossible to distinguish between the two, like with other media. In other words the web re-mediate through a complex system of taxonomy. This system of taxonomy has extraordinary mediating power both in quantitative and in qualitative terms. It potentially mediates the navigation of 1 billion users. This taxonomy firstly assigns hierarchy to different content elements secondly defines the boundaries within which navigation must occur. It sets the limits of the narrative, and when the narrative is about terrorism we can understand how important this agenda setting affect actually is. This taxonomy is constituted by the interplay of various entities, what we could call e-mediators. On-line communications is compromised by a complex system of e-mediators. By an "e-mediator" one refers to an entity or process, which mediates the on-line experience imposing any kind of structure; that is a force that intervenes between the user and on-line content. By doing so it compromises the medium's promise of transparency and freedom; it interrupts the potential for direct exchange embedded in on-line communication. E-mediators are also the distributors of the Internet industry.

E-mediators include:

- **Software**
- **navigational tools:** software that allow us to retrieve files over the Internet
- **filtering devices:** software does not allow the retrieval of certain files
- **Internet Service Providers**
- **Information brokers:** companies that provide users with information chunked into smaller segments
- **portal sites:** sites that are gateways to other sites
- **search engines:** robots that crawl web sites
- catalogues and indexes

The Web's taxonomy system assigns hierarchy to the different nodes of information one could encounter on-line and by doing so structures the on-line communication. It provides with the narrative backbone of content. There are two dimensions to e-mediation, firstly there is structuration through the production of intertextuality, secondly there is structuration through classification. So in other words e-mediaries limit the supply of content by firstly adding a structured textual component and by classifying information and adding layers of representation. This means that software and DNS constitute the Web's main navigation interphase. Aside from these there are other e-mediaries which structure our on-line experience. These are mainly information brokers, that is companies that add structure to information by mining, indexing, cataloguing and classifying it; providing information on information is their key business. The workings of all these different type of e-mediaries intertwine and mix, re-mediating the web. The remediation process in which e-mediaries are involved is composed by the workings of each e-mediaries separately but actually constitutes one unified process and thus should be analysed as such. So for example if we were examine how terrorist content is affected by this process we would have to look at the users client software, the software the content is written on, the software (usually a navigation tool)

through which it becomes available and how the term terrorism is distributed through the current domain naming system.

E-mediaries and the world we live in

E-mediaries are companies that developed services and products building on the simple fact that information and content available in a space is not accessible unless it is organised in some way. It is only through such organisational structure that the actual content differs from an amorphous bubble and can thus be of value. This is how a warehouse differs from a library. In a library information is classified, segmented, indexed and archived rationally so that users can find it more easily. Records summing up the content of information objects are produced so that users do not have to read through the entire range of material available to find that which is relevant. Information retrieval existed long before the Web was invented. Practically speaking it is actually impossible to organise material without applying some form of hierarchy, that is without assuming that some information is more important than other. In librarianship hierarchy is provided by well thought out methods that have been applied for decades for example the Dewey Decimal System of Classification. Information retrieval is based on cataloguing and indexing objects. These processes have traditionally been carried out by skilled professionals at a very high cost. Creating one single record for an item in a library or museum for example can cost \$50 (Arms 2001:154). The indexes on the back of a book take up time to produce, for every index we find so useful there has been a librarian that has agonised over producing the index. Non-automated indexing is of better quality than any other: the processing power, sophistication and detail that a human being can use to classify goes well beyond a computers ability to match a word with another. Humans understand meaning not form. Despite this due to the high cost of paying humans to index as well as the increasing quantity of information that needs to be catalogued computers are being increasingly used to automate the indexing and the information retrieval process.

The Web is no exception, the same logic applies to on-line content. Without some form of organisation Internet content would be nothing more than an anarchic maze. We would not have the time to surf all Web pages, we would be lost in an infinite labyrinth. Time limitations add to the need for some structure as we cannot be surfing endlessly. So some entity has to set the boundaries of the user's on-line experience in order for the Internet to be used at all within existing time and other limits. As Fuller mentions: 'Users need the interface to narrow their attention and choices so they can find the information and actions they need at any particular time. Real life is highly moded' (Fuller 1998). So even if it were possible to built software and other e-mediators that were technically transparent, and would thus to allow us to experience an infinite amount of content, this would not be possible because our time is limited, and thus we could not possibly experience an infinite amount of content. So theoretically the need for some organisation of Internet content exists. In cyberspace the need for such organisation has been appropriated by companies brooking information in various ways. Classification as a line of business has proven to be profitable. It is attracting audiences. According to the most recent study by the American Department of Commerce searching for information ranked high in usage patterns: approximately one-third of Americans used the Internet to search for product and service information 36.2 percent, up from 26.1 percent in 2000, US 2002.

Software, DNS and Search Engines

The most basic structure that influences on-line communication by providing the basic text within which we read any computer mediated communication, is the interface. It would be impossible to cover this issue with in the constraints of this paper, though one has to mention that: every time a user logs on-line he has already made certain assumptions about information, how this is stored and manipulated in his/her pc. These assumptions do not often receive attention but nevertheless remain incremental in structuring the on-line experience.

Any interface and thus a piece of software is not transparent: it represents information and, in doing so, it essentially constructs information. Software and thus operating systems are culture, they are cultural texts, they mirror a set assumptions about the world. Software is representation. Software constitutes a visual language and this, like any language it is structured. Software provides the cultural environment, the net material constraints and framework within which on-line communication can occur. This is a framework that reflects certain assumptions about users and the nature of information and, by doing so, reproduces such assumptions. For example it might strip an experience down to one or two components, namely the purely textual component of language like chat room software, or the opposite.

Companies offering information retrieval services on the Web cash on the fact that under the current DNS it is difficult to know the exact URL of an on-line resource and thus search engines are literally the only way millions of users world-wide can find what they are after. Increasing reliance on search engines also partly stems from the construction of the Internet as a vast and chaotic landscape which search engines to an extent promise to make more usable. Many sites offering search services have evolved into portals and many portals offer search engines. Search engines have thus become gateways to the on-line world, offering services that go beyond merely indexing web pages. Search engines are more than on-line yellow pages. Attention to available on-line resources is distributed by search engines and consequently search engines are of paramount importance in structuring the on-line experience. Search engines have received little academic attention and their function is often considered to be technical, an operational matter of allocating attention to different Web-sites. Such perception is in striking contradiction to popular wisdom in business circles according to which the exposure and inclusion of a Web site in search engine database is the primary task of on-line promotion and distribution. In fact placing a web site in search engine databases is itself a line of business; part of on-line advertising packages. Consider the following advert, for example: *SalesSecrets.com is in the business of providing the Industry's leading Search Engine Submission services. Our packages are geared towards businesses that are serious about not only putting their sites on Search Engines but also being at the Top of SE rankings, and seeing dramatic increases in Web traffic.* (Sales Secrets. Com).

This line of business is based on knowledge on part of companies that search engines do not distribute all web pages fairly. This because search engines do not index all web pages and furthermore they do not rank results alphabetically or randomly.

Search engines are probably one of the most important piece of software that mediates our web experience. Search engines perform automated searches for the retrieval of particular on-line material; essentially functioning like catalogues of available resources. This can be limited to the material available on a single web site, or millions of web sites around the Web. Take the example of Yahoo that officially claims to be an “aggregator of content”. Yahoo claims that its services are used by something like 219 million unique consumers, with 86 million of these registered 13 languages revenues of 717 million dollars

The problem

Exactly because life is highly mode if not through any other factor definitely by time, information brokers have gained amazing power on the Web. Categories have become ways of classifying content. Categories are to the web what programming is to television. They are the narrative backbone of web communications. This applies both internal with that is a web site and externally. Unfortunately though taxonomy and librarianship were not invented for broadcasting. The relationship between categories of knowledge and search categories is still under explored. The system of taxonomy in other words has been produced in an arbitrary first come first serve basis. It is not really systemic though it is obviously amazingly powerful. It set the agenda for millions of Internet

users. The power to set this agenda is purely dependant on the power to remediate. This power is actually financially defined (one could argue that this is not true of dns as governments have at least some say on how their top country level domains are regulated).

This system of taxonomy becomes extremely important at times of geopolitical crisis. Contemplate, all of the above in relation to term 'terrorism'. The term terrorism compromises two qualities that seem perfect to test the taxonomy system described above: on the one hand there is no consensus in defining it. Like with any concept it is a really vague. On the other it is the most controversial category for searching as it is very closely linked to a type of content that is considered criminal. It provides us with a pure example of the problems of disintermediation: a type of content that is not define but is considered an dangerous object is being randomly distributed through the webs commercial taxonomy.

'Terrorist' content is in fact unlikely to be visible within the Internet's current taxonomy system. When it is visible this is purely accidental. It is usually the automatic translation of off-line power to on-line power. Lets look at some examples: if I were a greek trying to find out more about terrorism, without knowing a specific site that could provide me with terrorist content (whatever that might be), I would be likely to go to search engine and run a search for terrorism. I would also be likely to type in a url that had terrorism in itut of all the search engines available goggle indexes the largest amount of pages, and does not display paid for ranking without warning the user. This is why it was chosen. According to Google there are 8,740,000 websites that include some reference or information or content about terrorism on the web. Out of these the majority 8,270,000 have the word terrorism in their title. Out of these only 3,370 are in Arabic. 43,800 have terrorism in their title in the org domain out of these only 19 are in Arabic. There are 139,000 pages in the .com domain that have the term terrorism in their title. Out of these 138,000 are in English and only 16 are in Arabic. Nobody knows anything about these sites, nobody regulates access to them. Most importantly if I actually wanted some independent infromaiton about what terrorism is I would not know which of these available site shave the best information. To give an other example. There is a trial of so called terrorist going on as we speak in Greece. There is no official information about this trial poste don the web, and the terrorists have no site of their own. Indeed the key property for publishing web content on terrorism has for example not been bought by the Greek government. Terrorism. Gr does belong to anybody.

CONCLUSION

The web is characterized by dis-intermedation. On the contrary there is a system of taxonomy distributing content remediating for users. The current regulatory paradigm is blind ot this process. A s a result despites it interest in content related to 'terrorirsm' it cannot really regulate this. A regulatory regime that would acknowledge the workings of e-medation on-iline and potentially funded independently run autonomous e-mediators is need for the web to exit its current state of commercial randomn distribution.

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