NETWORKS, ROGUES AND THIEVERY: THE DISCOURSE OF IMMATERIALITY AND MATERIALITY IN THE STOP ONLINE PIRACY ACT LEGISLATIVE HEARING

by

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This study focuses on the themes of materiality an immateriality in the legislative hearing of the Stop Online Piracy Act ('SOPA'). Driven by the associations between intangible intellectual 'property' and tangible 'property' voiced in the legislative hearing on the 16th of November 2011, this study seeks to explore the representation of materiality and immateriality. The SOPA hearing is used as a framework to help contextualise and 'ground' the different discourses. It is hoped that by identifying latent assumptions and discourses in the hearing, it may help encourage more transparent discussion and reduce the potency of the 'property' rhetoric in IP debates.

Critical discourse analysis was employed to investigate the discursive tensions between materiality and immateriality. This was supported by a conceptual framework bringing together theories and concepts of networked information societies, globalisation, digital objects, the construction of national/digital borders, and the intellectual property rhetoric.

The study finds that the articulations of the networked information society, consumer/producer, and the digital object are markedly different from the theory presented in this study. The networked information society is discursively demarcated into areas of legitimacy and illegitimacy, while drawing out parallels with

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[**] 'It is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail.' - Abraham Maslow

physical networks of lawful behaviour and criminal enterprises. The information society is framed as a 'gateway' for the non-virtual world. Furthermore, the network is not portrayed as a site of user creativity or production, connecting the user to connotations of passivity and illness. Lastly, the digital object adopts qualities of physical goods, enabling the digital object to fit into the paradigm of non-virtual theft.

KEYWORDS
Online Piracy, Materiality, Immateriality, Internet, Stop Online Piracy Act

1. INTRODUCTION

When the second H.R.3261 Stop Online Piracy Act ('SOPA') hearing was video-streamed on 15th of December 2011, over 219,000 visitors had tuned in to watch the hearing (Higginbotham, 2011). Plans for large-scale protests were underway; and over 87,000 calls had been made to Congress protesting SOPA (Digital Digest, 2011). On January 20th 2012, the United States Congress withdrew SOPA due to worldwide public scrutiny.

It all began with the drive to fix the problem of widespread intellectual property ('IP') infringement (Department for Professional Employees, 2010). Prosecuting individual infringers failed to eliminate the issue due to general populace ambivalence, while foreign countries with laxer IP protection became hotspots for purchasing counterfeit goods (Boland, 2006). Congress looked for a different approach and found it in SOPA. SOPA's provisions brought different parties of the Internet ecosystem under the same Bill: payment processers, advertisement networks, user-generated websites, and search engines all had additional obligations under the Bill. Section 102 equipped the Attorney General with new powers requiring US-based search engines, service providers and other websites to remove access to websites with substantial infringing content, preventing 'foreign rogue websites' from reaching the American market.

Analyses on SOPA's controversial provisions and debates were conducted by many parties, including constitutional scholars (Lemley, Levine, & Post, 2011; Tribe & Ammori, 2011) to system administrations (Harvey, 2012), some claiming that SOPA was in a constitutionally precarious position and had a tenuous understanding of the technical implications. On November 16th, SOPA's legislative hearing was similarly criticised for 'techno-ignorance' (Thierer, 2011); Congressman Lofgren admitted 'we have

no technical expertise on this panel today.' (Bachman, 2011) The debate had gone from technical to rhetorical.

It is not the aim for this study to conduct legal analysis on SOPA, but to uncover the underlying discourses surrounding the debate. As the hearing progressed, it became more apparent that this was a norm-instilling exercise (Saunders, 2006, p.176) and drew upon general IP tropes to strengthen its claim. This study therefore *is* about SOPA in that it uses it as a salient, instructive case study - but the issues do not end when SOPA is shelved. The discourses enveloping SOPA's debates are similar to the ones found in other areas of IP regulation, and will appear again (Logie, 2006).

I have chosen to focus on the concept of property and intangibility; materiality and the immateriality within the context of SOPA. Long before SOPA was proposed, scholars already expressed misgivings at the term 'property' in 'intellectual property' (Lessig, 2004; Vaidhyanathan, 2001). The question is not purely about semantics, however, and I believe it extends across a variety of concepts: from the information society to the physical infrastructures storing the data; and the restrictions on physical import of counterfeits versus information's permeability across technological ones. Research on the topic of materiality/immateriality discourse in IP regulation has tended to focus on and isolate specific parts of the debate, e.g. near-exclusive emphasis on the linguistics of piracy (Mirghani, 2011; Loughlan, 2006). Research on the nature and structure of digital objects in the context of immateriality/materiality and IP infringement is also limited (Kallinikos, et al., 2010). This study attempts to bridge that gap because the themes of materiality/immateriality are present at all stages of the information ecology. From users and digital borders to global networks and information, issues of tangibility and tangibility remain salient.

It is hoped that this study will help uncover latent assumptions and discourses, encouraging open and transparent discussion about the future of IP regulation and minimise susceptibility towards rhetoric.

2. THEORETICAL BASIS

This section first seeks to outline the context behind the research question: how has our information-rich and networked society impacted the salience of physical, national borders? This will touch on concepts of the construction of nationalism and sovereignty, which are in constant tension with the abundance of cross-bordering information networks. I will then focus on

the question of immateriality and materiality, paying particular attention to the constitution of digital objects and the way this enables fluid flows of information. This section seeks to highlight the tensions between the unbundled, borderless and editable digital object and the notions of materiality and property found embedded in SOPA hearings and copyright discourses.

2.1 GLOBALISATION AND THE NETWORKED INFORMATION SOCIETY

Answering the research question involves clarification on the context to illuminate the various power struggles within SOPA discourses. As Wang argues, 'an examination of piracy [and] copyright ... would not be complete without situating these issues in larger contexts of power, technology and the networking logic of globalization' (2003, p.25). It is important to emphasise the impact of information ubiquity in a networked society here, particularly because SOPA's discourses are about managing these information flows to alter perceptions on copyright infringement (Barron, 2012, p.2).

I included both globalisation and networked information society in the same header because I argue that one begets the other –it is difficult to refer to them in isolation. Globalisation's concepts of 'interconnectedness' (Scheuerman, 2010) and 'integration' (Quah, 2009, p.19) are some of the main features of the information society (Castells, 2001; Castells, 1996; Freeman & Soete, 1997). The concept of the information society explains how society reacts to globalisation, and also focuses on the production, utilisation and dissemination of data. In turn, this increased informational activity can, too, impact the wider processes of globalisation (Albrow, 1996). They are therefore entwined in various ways; including both in the same section would allow efficient bridging of concepts where needed.

Discourse on globalisation risks being termed 'globaloney' (Scholte, 2002, p.6) because the word has no clear unanimous meaning and is prone to being used for any phenomena loosely related to it (Martens, Dreher, & Gaston, 2010, p.574). The definition seems to vary according to the researcher. For some, it is the greater integration of economic processes across nation-states and the global arena (Quah, 2009), but other definitions include the 'Americanization' of culture (Friedman, 1999; White et al., 2007), a condition of space-time compression (Harvey, 1990) or distanciation (Giddens, 1990), amplified distribution of technology and ideas (Albrow, 1996), the

declining significance of national sovereignty (Beck, 1999; Strange, 1996), a partial deterritorialisation of the global economy (Sassen, 1996), or a new division of labour/power (Mittelman, 2000). Some authors also refer to 'glocalization' to emphasise the interlinking between global processes and local influences, such as the use of the social networking sites to plan local groups, or the adaptation of international products to the local markets (Robertson, 1992).

The issue of these definitions is that there is some conflation between what *is* globalisation and the *effects* of globalisation. For instance, is it that the increased distribution of technology *leads* to a new division of labour and power? Additionally, these definitions are derived from scholars who belong to a number of diverse fields, such as economics, cultural studies, politics, sociology, media, and international relations (Mooney & Evans, 2007). This multidisciplinary nature of globalisation studies is why Mooney and Evans suggest that the meaning of globalisation will always be in dispute because it derives many of its lexicons from different fields (2007, p.ix). While this in itself does not take away value from globalisation studies, it should be noted that the 'answers' derived from the studies are very much shaped by the questions asked.

Some of the definitions of more relevance to this study are Harvey's and Giddens' ideas of space-time distanciation. According to Giddens, time and space are altered so that 'presence' is connected with 'absence' (1990, p.14). This phenomenon enables the local to intersect with the global and presents a stark contrast to 'traditional' societies, which relied more heavily on place and time. Time-space distanciation extracts social relations from local scenarios and the result is phantasmagoria: localities are shaped by distant influences.

Importantly, some corporations have sought to reduce dependency on time and space by retaining more control over the production process across geographical areas (e.g. a film studio collaborates with or takes over a foreign film distribution company). This helps stimulate a different structure of operations: businesses are no longer clustered amongst a particular locale, but are 'horizontal' (Castells, 1996, p.166), 'unbundled' (both geographically and functionally) and connected by various communication networks (Kallinikos, et al., 2010). For instance, the Kindle's functions are unbundled because many different publishing companies around the world, outside of Amazon, help create content for the Kindle (e-books, software).

The manufacturing process occurs in China, Taiwan and South Korea. Denning comments that 'Amazon's Kindle 2 couldn't be made in the U.S., even if Amazon wanted to.' (2011)

The increasing presence of digital technology allows these disparate and unbundled bodies to cooperate together across multiple time-zones, jurisdictions and localities (White, et al., 2007, p.196). Harvey's (1990) research predicted a similar outcome of time and space barriers becoming less obstructive due to improved efficiency of communication technologies and transportation. Harvey further underlines the 'de-materialisation' (White, et al., 2007, p.233) of objects such as money into information enable faster international processing, particularly in wake of growing importance of instantaneity. Castells (2004), however, warns that information exchange has always been important for every society. The difference is that, in these current times, information generation, distribution and processing become the actual product and the source of productivity (Castells, 1996; Mansell, 2003, p.3). Freeman and Soete concur, arguing that the 'ICT paradigm' of production and distribution of knowledge across different networks is a key factor of the information society (1997, p.3).

The definition of the information society, however, is also unsurprisingly subject to some uncertainty. The very general idea appears to encompass the overall increase in economic activities and technical interaction related to knowledge as a commodity (Lyotard, 1984; Drucker, 1969), leading to a 'qualitatively new sort of social system' (Webster, 2006, p.9; Mansell, 2003). Webster points out five ways that the 'information society' can be defined by: technological, economic, occupation, spatial and cultural (2006, p.8). Briefly put, the technological perspective argues that technology has reorganised the social experiences and life – the instantaneity of exchanges is a facet of the information society (Connors, 1993). The economics perspective, on the other hand, maps the progress of the information society by the amount of informational activities corresponding to a quantitative gain or loss (e.g. GDP). The occupational perspective argues that an information society has been reached when most of the work undertaken is information-based (Bell, 1980), while the spatial perspective echoes Giddens' thoughts on the re-arrangement of time-space (1990). Lastly, Webster claims that the cultural perspective is about the phenomenological experience of experiencing an information-saturated life (2006, p.19). All of these explanations are problematic in some way: the occupational and technological per-

spectives risk being vague (i.e. Webster (2006, p.11) asks 'how much ICT is required in order to identify an information society?') while the economic and cultural perspectives encounter issues of measurability (Monk, 1989).

One of the few unifying threads between the five perspectives is the notion of the *immateriality* of knowledge goods that now permeate society, which Castells claims signals a major restructuring of capitalism (1996, p.18). Scholars refer to this economic shift as 'weightless' (Quah, 2005) or 'digital' (Margherio, 1998). As Stehr posits, a knowledge society is when there is an 'extensive penetration of all its spheres of life and institutions by scientific and technological knowledge' (2002, p.18). Readers of these descriptions may expect that the immaterial has now totally eclipsed the material. In some ways, knowledge and data have begun to permeate jobs, activities and economies (Kallinikos & Mariátegui, 2011), but there are other factors at play: there are a plethora of cultural and legal aspects that are impacted and impact this phenomenon (Castells, 2000). For example, as copyright infringement grows more extensive, the US has become more ardent on stopping piracy at national borders (Smith, 2011). All knowledge and data are, in some way, anchored to the physical – for example, data are stored in a physical server – and therefore are often subject to restrictions applied to physical property (e.g. national law). The many economic, cultural and social issues surrounding the difficult dichotomy of 'free' knowledge and 'restricted' physical objects cannot be understated (Denegri-Knott, 2004).

In light of this, the concept of the 'network society' was used to emphasise economic, cultural and social aspects of the information society (Castells, 2004): how has the way people interact and connect changed as a result of the knowledge society? According to Castells, the network society is about how 'key social structures and activities are organized around electronically processed information networks' (Anon., 2001). This may help explain how the thriving Internet commons came to be: the Internet facilitates communication but the large-scale the exchange of ideas and knowledge across global networks (while at the same time resisting market pricing or corporate hierarchies) resonates with this idea of the network society (Benkler & Nissenbaum, 2006). In a similar vein, van Dijk argues that this new social structure helps connect previously unconnected spheres, such as the individual to the group and the individual to the societal (1999); it is the flow of information, knowledge and culture filling a decentralised and ever-present

network. Accordingly, he defines the network society as a 'social formation with an infrastructure of social and media networks enabling its prime mode of organisation at all levels.' (2006, p.20)

The networked information society brings forward new conditions of possibility that enable corporations to dismantle the model of concentrated capital in geographical localities. These actors are able to work with others across borders and contort the conditions of space and time. However, it should not be forgotten that there are ongoing tensions between free-flowing information networks and the physical infrastructures that produce and enable these networks. Sassen's ground-breaking work on economic globalisation argues that there are economic and political processes (e.g. occurring through international law firms interacting with different cross-bordered parties) that create complex global networks, highlighting challenges of reconciling different legal jurisdictions (Sassen, 1996, p.10). Despite this, it would be unrealistic to claim that national and territorial borders have little pertinence even under the presence of multiple processes and international treaties (Jayasuriya, 1999, p.432). For example, it is the national legislation and government initiatives that often fund and govern the Internet infrastructure. Describing the significance of the State as simply either declining or expanding ignores the fact that even international information networks and cross-bordering corporations are anchored, sometimes quite firmly, to national grounds and material infrastructures (Sassen, 1996, p.16).

2.2 THE MANY FACES OF BORDERS

In order to examine the processes behind the vast cross-border networks of information, the exploration of the concept of borders is beneficial. Originally derived from *bordure*, it referred to the edge of a shield, and later in the 1530s adopted the geopolitical definition as a boundary separating geographical and physical areas (Harper, 2001). The territorial definition is derived from Descartes' view of space as objectively viewable, measurable, external and material (Slowik, 2009). Aristotle and Kant, on the other hand, perceived the border as constructed cognitively and therefore subjectively perceived (Cooper & Rumford, 2011, p.267); this constructivist perspective has remained salient (Boer, 2006).

Since the growth of the information age and the compression of time and space, the concept of the border solely as a separator of nations has become strained (Cammaerts & Van Audenhove, 2005, p.185). Looking beyond

methodological nationalism – the assumption that the nation/state is the quintessential, 'natural' form of society (Beck, 2011) – unveils a large body of research driven by the multiplicity of borders and bordering processes now occurring in the modern society (Balibar, 2004; Hedetoft, 2003; Turner, 2007). As Cooper and Rumford argue: 'we must dispense with the idea that borders always correspond to the edges of the nation-state ... borders can now be diffused throughout society.' (2011, p.263)

Arenas of bordering now include places such as travel agencies or online flight booking services, where travel documents are checked against a database and can be rejected or approved. In following this trend, Hedetoft (2003) emphasises that borders are developing finer-grained selections and are able to filter according to the minute details. This depicts borders not as strictly lined separators but *processes* and *commands* reacting and sorting through the entrance and exit of goods, data and people. In other words, borders 'manage mobilities both within and outside of state territory.' (Cooper & Rumford, 2011, p.267)

Since these borders are processes, they are also constantly changing and dependent on 'the activity of ordinary people' - people who resist, construct or dismantle certain borders (Cooper & Rumford, 2011, p.264; Rumford, 2008). While border-construction is not a new phenomenon and has existed since the ages of smugglers and tourists (Cooper & Rumford, 2011, p.264), borders more ubiquitous because they are unconfined to national boundaries: Beck explains that 'it is neither possible to distinguish clearly between the national and international' (2003, p.458) because borders are now closer to embodying networks. For instance, borders in modern society do not simply restrict, and networks are not only free-for-all access points (Axford, 2006, p.6): their functions have become intertwined and more mobile in nature. Aas questions (2007, p.179): 'How does one grapple, empirically, with the concept of a border ... when a border is no longer a 'wall' around a ... territory, but rather a distributed network of a myriad of checkpoint, technologies and actors?' (my emphasis)

The articulation of the 'border' grows problematic as the definition expands to encompass developments of the information networked society. The conceptualization of the border no longer neatly divides the inside from the outside, or from place to place (Cooper & Rumford, 2011, p.266). However, these bordering processes are still dependent on being legitimised or enacted by the State 'in a top-down fashion' (p.269). The next section will

look at the characteristics of digital objects which permeate across these borders, because it is perhaps not only the borders that have become more porous and networked – the transferred objects also embody qualities that also stimulate global flows of information.

2.3 THE IMMATERIAL DIGITAL OBJECT

At the core of network society theory is the question of the immaterial digital object. What are the specific characteristics of the digital object that enable dissemination across millions of different networks in seconds? This is the crux of this study's research question: this study seeks to highlight specific features that immaterial and material objects embody, and how are these represented in SOPA's hearings. Pertinent to the issue of mass-dissemination and immateriality of digital objects (including copyrighted material) is their nature and structure.

Discussions on the theories of immateriality/materiality are fraught with semantic difficulties – Miller therefore warns that concepts may be based on 'common sense' rather than academic examination (Miller, 2005, p.7). At first, it may seem that immateriality/materiality is a relatively straightforward concept, as several authors have written (largely) congruent definitions of materiality. Hill suggests that 'intangibles' are objects that have 'no physical dimensions or spatial co-ordinates of their own and have to be stored ... on physical media' (1999, p.427). Hawk and Rieder describe immaterial objects as those which are 'weightless ... not bound by conventional rules of physical law ... This virtual reproducibility creates the potential for infinite material relations and actions.' (2008, p.xiii) Rifkin adds that 'the tallest buildings, the largest ships, and the heaviest, most physically powerful machinery are no longer the centerpieces of American economic value and profit.' (2000, p.30) All of them stress the impact of the immaterial on the material, but it is not very clear *how* they interact with one another. Even if the 'most physically powerful machinery' has indeed lost some prominence in the market, the efficiency of information flows may nevertheless be dependent on the workability of these infrastructures. For example, interacting with immaterial data on computers may be the main reason for its utilisation, but the existence of the data is both dependent on and gains importance through the computer's physical characteristics. Various authors such as Massumi (2002), Lévy (1998) and Hayles (2002) similarly argue that the idea of immateriality/materiality should be reconceptualised to emphas-

ise the symbiotic relationship of the weightless digital object and the physical object. These perspectives therefore lend themselves better to contextualised, case-study analysis, as it is only when magnified and specific that it reveals this complimentary relationship. However, the question remains on whether - and, if so, how - such a relationship is explored in SOPA hearings.

On the whole, the networked, digital economy has decreased the prominence of corporate hierarchies and concentrated capital structures (Benkler, 2003). Non-market organisations such as charities or libraries are able to take advantage of the features of the digital object to expand their roles and provide new services (2003, p.1254). Faulkner and Runde attribute this to the expansibility and non-scarce nature of a digital object, whereby the amount of people who can access this object can be expanded very quickly and almost without cost (2011, p.9). Benkler (2003, p.1252) calls this characteristic 'non-rival' because the use of the object by one user does not prevent usage by another – in some cases, popular use in software may actually create additional value. Scarcity, a quality attributed to physical objects and can change its economic value, is much less of a consideration in digital goods due to their non-rival nature. With the cost of distribution and reproduction approaching zero, and greater movement of information in the form of both people and data across global arenas (Davis, 2001, p.473), scarcity is a concept that is not easily applied to intangible goods. Resonating with concepts of globalisation, Quah also comments that 'dematerialised commodities show no respect for space and geography' (1996). However, the digital object is not inherently and independently expansible; it is dependent on the commands that are executed on it and its various interactions with the user and associated devices (Faulkner & Runde, 2011, p.9).

If the digital object is not independently expansible, what is its 'natural' form? Kallinikos argues that all digital objects are simply bundles of 'numerically controlled operations' (2011, p.281) which are temporarily stabilised according to the context (Ekbia, 2009). In other words, an e-book on a Kindle is temporarily stabilised as a readable digital object only once the specific commands are executed. Its functionality is dependent on the software used by the Kindle, the screen resolution, the battery life, and so on. After the Kindle is turned off, it 'decomposes' and becomes a complex of operations. This is congruent with Lévy's argument that virtual digital objects are about potential possibilities. 'If big physical things have already met their potential, materialized as they are in reality,' Hawk and Rieder

(2008, p.xii) write, 'virtual things are potential realities.' This conceptualisation presents some implications: digital objects are reusable because they are simply composed and decomposed during operation, fundamentally editable, unbundled both functionally and geographically (Kallinikos & Mariátegui, 2011, p.281), accessible and editable from third-party programs (p.283), and distributed (i.e. digital objects are often spread across various institutions, devices, groups and infrastructures; Haider & Sundin, 2010). Hawk and Rieder also suggest that digital objects have 'infinite expansibility', emphasising the characteristic of weightless flexibility (2008, p.xiii).

The features of editability and re-usability are derived from the digital object's ability to decompose into generic basic units (Kallinikos, et al., 2010). Like Lego pieces, they can be dismantled and put back together, joined with other digital objects or isolated from them with ease. In other words, these digital objects can potentially form distributed, loose networks of particular functionalities. This distributed quality enables them to be *borderless*, particularly in comparison to physical objects that have clear outlines signalling the object's entity. For example, a hyperlink on one website can open navigation paths for several other websites, and these websites are also prone to changes by the website creator and the server the website is hosted on. The 'borders' of some digital objects are therefore ephemeral and numerous; Kallinkos (2010; see also Haider & Sundin, 2010) suggests that this produces an 'ecology' of fluid digital connections and disconnections. A nexus like Google's search engine is subject to daily influence by multiple parties: the search engine algorithm, the users who raise the search rankings of each entry, website creators who create keywords for the website, and so on. If the website changes, the search result page also changes in turn. In this way, it can defy simple categorisation: the search results page is dependent on the user's search query, but these pages are also in constant flux. This page becomes the intermediary between the physical users and the cultural records stored and distributed across the Internet (Kallinikos, 2010).

Looking at this from a less magnified perspective, users have become consumers, influencers, and producers of new content without the need for concentrated capital structures. Users are now much closer to the economic core of information creation and production. This does not mean that physical markets are completely displaced – rather, these digital markets exist

alongside and 'interact' with the physical (Benkler, 2003, p.1246; Landow, 2006, p.98).

In a brief aside, digital objects such as information also represent 'a particular form of 'experience good'' (Davis, 2001, p.473), whereby the digital good's value is tied to the consumer experiencing it. For instance, the value of a new film is unknown until it has been viewed. The user is deeply involved in the appreciation and the value of the digital object. Other examples of information goods include (but are not limited to) computer software, or even the provision of useful information, such as a website recommending discounted hotel rooms at your favourite area – here, the product morphs according to user preferences.

As seen with the recent net neutrality debates and its possible impact on the quality of video streaming services, the experienced good's value is also reliant on the way it is transferred or accessed (Selyukh, 2014). A low-quality streaming video can lessen the experienced value in comparison to a high-quality service. The value of an information object is influenced by several factors the focus is very much on intangible goods as *services* (Castells, 1996; Mansell, 2003, p.3). For example, comparison shopping between different providers of home-streaming entertainment now takes into account not just the array of customer choices (e.g. the number of movies or televisions available to watch) but also the service quality. The implication is that when referring to the value of intangible digital goods, they are often treated as services; the customer now makes decisions on both the value of the digital good and the service provided. Correspondingly, the producer is now more closely involved with the service quality, which may include more efficient servers, faster connections, or better web presence – in other words, a mixture of both physical infrastructures and digital services interacting with one another.

The digital object's fluid value as an experienced good and adherence to alternative economic principles raises questions on the divergences between material and immaterial goods. Additionally, the role of the user's influence on these digital objects is now becoming central to both the production and experience due to less concentrated capital structures. The tension between the physical and immaterial is a key theme of this study: how do stakeholders understand the digital object and the implications of it? How are notions of materiality and immateriality represented in SOPA's discourse? This

study hopes to illuminate some of these processes within the Congress hearings.

2.4 INTELLECTUAL 'PROPERTY'

This review has outlined the wider contexts and more specific theories relevant to the research question. The purpose of including this section is to explain how intellectual property relates to the overall concepts of globalisation, networked information societies and immaterialism/materialism.

To briefly describe the basics of IP, it is a term used to describe intangible intellectual products such as ideas, inventions, signs, information and expressions (Yar, 2005, p.679). Intellectual property rights (IPR) are government-mandated, exclusive rights given to creators over their works for a specified period of time. These rights may include, amongst others, the right to distribute their product and bring action against unlawful copying. IP is protected under trademark, copyright and patent law, usually justified under notions of economics and morality (Radin, 1993; Waldron, 1988; Damstedt, 2003). Copyright law – one of the main aspects of SOPA (Smith, 2011) – seeks to protect original expressions of artistic, industrial, literary, technical, and musical works (WIPO, 2001, p.40). Counterfeiting, which falls underneath the umbrella term of copyright, also involves copyright infringement (i.e. unauthorised copying, importing, displaying, selling, transmitting, or creation of derivative works - see Yu, 2007) but may also replicate the copied, original object in terms of tangible packaging, graphics and design to mimic authenticity (Kounoupias, 2003).

While IPRs seek to protect intellectual creations of intangible nature such as trademarks and trade secrets, the use of 'property' in 'intellectual property' dates back as far as the 18th century. Although Cornish claims that it was the World Intellectual Property Organisation that brought the term 'property' into popular vocabulary, the term 'literary and artistic property' was used to describe literary and artistic works in the Berne Convention for the Protection of Literary and Artistic works in 1886. 'Industrial property', too, was also used to describe industrial creations in the Paris Convention for the Protection of Industrial Property (Yu P. K., 2005, p.3; Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886; Paris Convention for the Protction of Industrial Property, Mar. 20, 1883). Yu and Mossoff posit that one of the earliest references to property was from a 1783 Massachusetts legislation where 'there being no property more peculiarly a

man's own than that which is produced by the labour of his mind' (Bently & Kretschmer; Mossoff, 2010; Yu P. K., 2005, p.3). Further analogies to the quality of property have been applied to these such labours of the mind in a 1845 case Davoll v. Brown, likening them to 'as much as the fruit of his honest industry, as the wheat he cultivates, or the flock he rears' (*Davoll v. Brown*, 7 F. Cas. 197, 199 (C.C.D. Mass. 1845) (No. 3,662)).

These beginnings of the intellectual 'property' narrative echo the early philosophical discussions first used to justify IPRs. For instance, Locke's theories remain widely debated in this area of law and are often cited in discussions about justifications for IPR. Locke's labour theory can be surmised as the moral right to 'reap what you sow' (Dibble, 1994), describing the moral right to benefit from your body's labour when the labourer takes from the unowned commons, makes it their exclusive property, and creates value through their labour (Gosseries, Marciano, & Strowel, 2008, p.31). The original property is therefore distinguished and changed through labour; the labourer then has a moral right to appropriate it. Taking this reasoning to IPR, it follows that if an entrepreneur creates an innovative, novel invention, they have a moral right to own and reap benefits from it.

Of course, there is little opposition against the protection of rewards justly earned. However, the like-for-like comparison between intangible intellectual creations and physical creations is problematic when Locke's labour theory is closely examined. The idea that the labourer should take from unowned commons and then distinguish it through labour is difficult to compare to intellectual creations. It requires that these intellectual creations came from unique, previously unowned foundational knowledge (Gosseries, Marciano, & Strowel, 2008, p.41). Few intellectual creations spring from unchartered knowledge; much research is evolutionary, building on pre-existing research, and this learning from the work before it: 'designs for new products invariably incorporate elements taken from existing products ... [reuse is] a prerequisite for the evolutionary nature of technological change' (Arthur, 2009; Faulkner & Runde, 2011, p.11). Moreover, it is questionable to what extent intellectual creations could be attributed to the producer's environment and culture. Pinpointing origination and labour is difficult, as it requires a direct 'one-to-one' relationship between the producer and the product (Gosseries, Marciano, & Strowel, 2008, p.41). Locke's perspectives on the moral right to benefit from labour are clear, yet the comparison between physical creations and intellectual creations is not. Given

that some of the justifications of IPR are based on the nature of tangible property, it is unsurprising that growth and development of IP legislation was often considered through these lens.

Recent developments have indeed shown that IP is progressively treated more and more as property: the duration of initial rights has since increased (Carrier, 2004, p.15), 'American courts, periodicals, and public rhetoric seem to have engaged almost exclusively in 'property talk' when discussing copyright' (Vaidhyanathan, 2001, p.12), and property has been framed as being 'anything of value' (Litman, 1999, p.1726). Comparisons and analogies to physical property in IP debates are typical 'showstoppers of persuasion', which is further encouraged in light of the growing economic significance of IP in developed markets (Radin M. J., 2004, p.400). Lessig commented that the general IP protection discourse 'has been framed as a battle about the rule of law and respect for property.' (Lessig, 2004, p.10) This framing effectively makes it difficult to question issues of authorship, originality, duration, access and use copyright because the 'discussion ends' (Vaidhyanathan, 2001, p.12) once property rights are brought into play. This is because property rights are seen as fundamental and 'cannot' be in dispute (Patry, 2009, p.78).

The aim of this research is not to examine the technical or legal aspects of copyright. Instead, it seeks to frame the question of how discourses regarding SOPA's hearings reconcile the virtual, weightless flows of digital objects with the material. Equating immaterial objects with material objects attempts to eliminate the many differences between the two, such as features of non-rivalry, third-party editability, and reusability. This may cut short most discussion on whether immaterial objects should be treated differently even if they conform to alternative economic principles (Quah, 2005). Frames often conceal embedded assumptions and remove avenues for critical questioning, cementing them into cultural frames to become 'common sense' (Chudžíková, 2011, p.116; see also Wodak, 2006).

Other tensions also crop up within the debate of intellectual property and immateriality/materiality. The concept of IP often defies clear categorisation; IPR are sometimes haphazardly debated to the various axes of property/intangible goods, natural/artificial right, sovereignty/globalisation, and regulation/laissez-faire (Boyle, 1997, p.180). IPR strives to strike a balance between those scales, although the result may involve the constant re-shuffling of IPR. For example, when information assets cross borders, national le-

gislation purporting to manage these data flows will need to assert its influence over national grounds to control something that has been described as largely 'deterritorialised' and 'disembodied' (Levina & Kien, 2010, p.82). New methods will need to be developed, such as exerting control over large intermediaries to prohibit access to 'national' markets (e.g. SOPA, Title I, §102), discouragement by harsh criminalisation of the infringing citizen (Wessels, 2010), embedding powerful frames into the discourse of copyright, and so on.

These lines of discussion resonate with discourse studies, and research shows that linguistic tools such as metaphors (Patry, 2009, p.49), labelling (Monica, 2001), repetition (Patry, 2009, p.38), omission of key details (Bettig, 1992, p.150), and appeals to tradition or 'authority' (Rojo & van Dijk, 1997) are often wielded to help distinguish between morality/immorality, legality/illegality, 'pirate'/consumer, and material/immaterial. Further analysis on metaphors and other linguistic tools will be explained in the findings section.

2.5 THEORETICAL BASIS: AN OVERVIEW

In the review, I first contextualised the research question by discussing the different interpretations of globalisation and the information society, as well as questions of national limitations and border-constructions. More specifically, I also explored the networked nature of borders as a result of globalisation and growing salience of information. However, I attempted to root the discussion into a more holistic framework by referring to Castells' and van Dijk's conceptions of the networked society. Information is not static, but interacts with different spheres of society on cultural and social levels.

I argued that the ubiquity of networked information flows can also be attributed to the mobile objects themselves. I therefore looked at different views on the characteristics of immaterial objects; the relationship between the immaterial with the material; and impact of immateriality on various actors. The discussion underlined the various tensions and dependencies between the material and immaterial. These tensions are contextual but ever-present within the smallest levels of bit strings in pocket calculators to networked, national infrastructures. The user is also impacted and is now closer than before to the economic core of production, consumption and dissemination. Through the malleability of digital objects, we are able to influence and re-negotiate the networked borders and digital intermediaries.

In other words, this literature review attempted to portray a cross-section of the many interlinking relationships involved in the tensions between the material/immaterial (note: each node, as shown in the diagram below, harbours its own set of tensions e.g. physical borders versus networked borders):

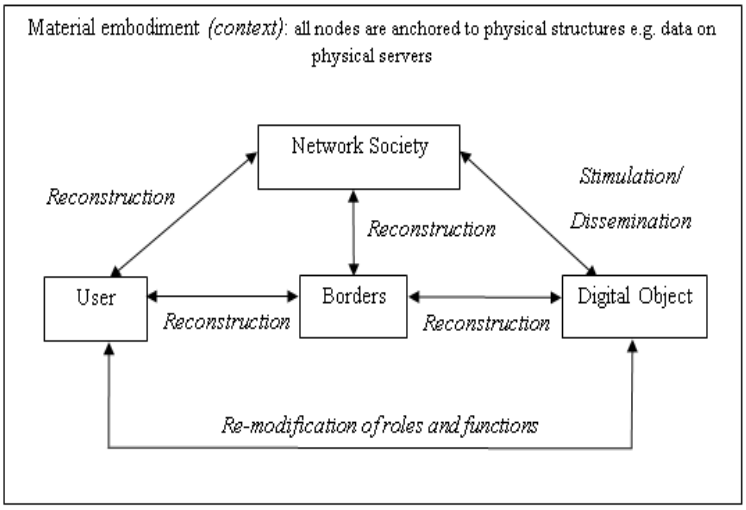

Figure 1: Brief outline of literature review

3. CONCEPTUAL FRAMEWORK

At this point, it is important to weave together the different concepts considered above into a workable framework. I first present the outer frame, which is comprised of van Dijk's (1999) conception of the networked information society and Giddens' (1990) condition of time-space distanciation, highlighting how these networks join previously unconnected, cross-bordered arenas. This frame is tempered by Sassen's (1996) work on the intricate symbiotic relationship of immaterial to the material (i.e. the essential anchoring of 'intangible' networks to physical infrastructures), stressing the constant tensions at play.

Secondly, the sub-frame incorporates the above theories into the debate and also draws from Kallinikos et al.'s theory of digital objects (2010) e.g. the way they form ecologies of fluid digital connections and disconnections. It takes note of the way digital intermediaries between the physical users and the digital records are produced as a result of the decomposability and editability of digital objects. Furthermore, the framework acknowledges

how these features modify the role of the user into a producer of networked borders, supporting Kallinikos' conceptualisations of the ecologies of fluid associations.

The sub-frame additionally includes concepts of border-construction. Firstly, the 'membrane' that demarcates the virtual from the physical infrastructure will be examined through Aas' (2007) and Beck's (2003) perspectives that these borders are not simply static, but actively constructed, dynamic processes which also form global/local networks. It follows that because these borders are influenced by everyday actors, they may also be constructed by discourses of interested parties such as SOPA supporters, government departments and corporations.

Secondly, understandings of the way linguistic tools (e.g. metaphors, similes) drawn from Patry's (2009) seminal work will be incorporated into the study. This framework therefore looks to comb through SOPA's discourses and uncover the embedded assumptions that influence border-construction and, furthermore, expose alternative articulations of the nature of networks and the characteristics of intellectual property and digital objects.

4. RESEARCH QUESTION

This study seeks to critically analyse the SOPA legislative hearing to uncover latent discourses about the way materiality and immateriality in IP regulation are represented in the SOPA debates. In particular, it seeks to expose underlying assumptions on: (a) copyright protection within a networked information society; and (b) the qualitative nature of digital objects and copyrighted goods. These two lines of inquiry will aim to make known the power struggles embedded in the texts, e.g. the re-naming of copyright infringement to 'theft' to emphasise the 'materiality' of digital copyrighted works.

The full research question is as follows:

RQ: How does the Stop Online Piracy Act (SOPA) legislative hearing construct notions of materiality and immateriality?

Sub-RQ1: How does the hearing portray information networked societies?

Sub-RQ2: How does the hearing articulate the qualitative features of digital intellectual property?

This topic was chosen for study because IP regulation is a subject thick with rhetoric and moral panics - and may potentially benefit from some cla-

rification (Logie, 2006). While regulation explicitly purports to control cultural and information flows (Pang, 2006, p.2; Barron, 2012, p.2), regulation, by itself, does not shape perceptions on the way IP rights should be assigned. Instead, it is through the work of selective and persuasive framing that IP regulation gains the momentum to further the agendas of interested parties. Uncovering these discourses is therefore central to encouraging open and transparent discussion about IP regulation. Currently, Lessig (2004, p.10) laments that certain frames prevent burning discussions from reaching the table, resulting in many unanswered questions on the nature of IP protection.

Previous research on IP regulation tend to isolate specific parts of the debate (e.g. near-exclusive emphasis on information societies or the rhetoric of piracy) and few are likely to adopt more holistic approaches (Loughlan, 2006; Philip, 2005; Yung, 2008). Research on the applied nature and structure of digital objects in the context of IP infringement is also limited. This study attempts to bridge that gap by analysing discourses of materiality and immateriality, because issues of materiality are present at all stages of the information ecology, consequently outlining a more integrated approach. This study may highlight alternative ways of understanding materiality/immateriality in IP debates and potentially help encourage constructive debates on IP regulation.

5. RESEARCH DESIGN AND METHODOLOGY

5.1 CHOOSING CRITICAL DISCOURSE ANALYSIS

This study used critical discourse analysis (CDA) to answer the research questions presented above. CDA was by far the most appropriate methodology for the research questions as it is fundamentally rooted in the idea that discourses always contain power struggles; these discourses are situated within the exchange and contestation of power (Locke, 2004, p.25). Specifically, CDA aims to critique postulates and 'common sense' (Brahim, 2011, p.26), which is crucial for uncovering embedded discourses. Similarly, my research topic focuses on latent, institutionalised portrayals about information societies and virtual objects because discussions relating to IP regulation are often thick with assumptions – see Sag, Jacobi, & Sytch, 2009. CDA was a clear choice for this study as it is precisely about exposing these articulations.

Alternative qualitative methods were considered (quantitative methods were deemed inappropriate because they do not efficiently analyse latent power structures), such as discourse analysis and interviews. It was found that these methods could not approach the research question with the same level of effectiveness. Discourse analysis places less emphasis on power structures and the examination of the 'institutional processes' that produced it (Fairclough, 1992, p.16). Interviews were unfeasible because it would have required interviewing the SOPA hearing participants (all of which are high-profile figures). Secondly, interviewers focus most heavily on the interviewee's speech/content, which is not as relevant to the research question of investigating background power structures and assumptions (1995, p.95).

Fairclough's method for CDA was chosen because its approach facilitates the examination of power struggles at three levels: text, discourse practices, and wider social practices (Fairclough, 1995, p.74). I also incorporated elements from van Leeuwen (2005), Halliday (2004), and Wood & Kroger (2000) in the three stages, as they provide helpful signposts on the analysis process (e.g. van Leeuwen's work helped identify different forms of legitimization in the texts). All three levels are important to uncovering underlying assumptions crucial to answering this research question. Other CDA methods, such as from Pecheux et al. and Fowler et al, place less emphasis on identifying power structures in the texts, and consequently are slightly less applicable (Fairclough, 1992, p.29-30).

Some potential limitations to Fairclough's method should be noted: firstly, there is a danger of 'ideational bias' unjustifiably influencing the results (e.g. if I am in favour of a 'regulation-free' Internet, I may be especially critical with pro-copyright discourses); and secondly, there is a question of how generalisable the results are. In response to the former criticism, Saville-Troike (2003) argues that CDA *should* include some '*acknowledged* political, ideological and ethical stance' (my emphasis), as this is what makes it 'critical'. Three procedures, clarified through a pilot study, were used to reduce the possibility of unacknowledged bias as much as possible: concerted researcher reflexivity, use of a more structured methodological framework, and independent peer feedback. However, it is impossible to completely eliminate all possibilities and I encourage interested readers to refer to the appendix for a more comprehensive breakdown of the interpretation stage.

The latter limitation about generalisability relates to the fact that this research question involves analysing a case study of SOPA hearings. The main critique of using case studies is the purported lack of generalisability (Yin, 2003). As I mentioned in the literature review above (page 14), this research question lends itself better to case-study analysis because, when contextualised, it 'retain[s] the holistic and meaningful characteristics of real-life events' (Yin, 2003, p.2). Examining the discursive relationship between the material and immaterial in a networked society is difficult without a concrete case to anchor it because of its vastness and multiplicity: such a position requires some reification through context.

Stake suggests that a case study should be judged on the learning potential rather than simply generalisability (1995). Accordingly, the SOPA hearings were chosen because I view them as significant opportunities to 'learn' about the construction of materiality and immateriality from several different perspectives. Rarely has a contemporary IP bill generated so much discussion from different players in the Internet ecosystem regarding issues of nationalism, jurisdiction and information dissemination. In following Yin's argument that case studies should 'generalize theories (analytical generalization) and not to enumerate frequencies (statistical generalization)' (2003, p.10), I also sought to compare the results with the theoretical body to examine alternative retellings, contradictions and consistencies.

5.2 SAMPLING

The SOPA Congress hearings on the 16th November 2011 were the chosen texts for this research question. The focus on SOPA was justified on the basis that it highlights salient questions relevant to the research question, e.g. the tensions between national boundaries and vast information flows; and representations of immaterial copyrighted works with the material aspects of digital 'theft'.

Secondly, the hearing on the 16th of November was selected because it involved testimonies from different stakeholders of the Internet ecosystem, providing a 'meeting point' for all the disparate issues to surface. This hearing discussed the moral, economic and cultural rationales of the bill, providing insight into the stated goals, embedded assumptions and interests of each party. As conflicting discourses and alternative representations were

articulated, this created rich opportunities to investigate the research question at hand.

In total, there were seven written testimonials submitted on the 16th of November, including the Chairman's initial statement of support for SOPA. Six of the testimonials were chosen for study, as I wanted to create a diverse corpus involving different stakeholders representing a myriad of issues relating to the research question; overlaps in positions (e.g. more than one testimonial from intermediaries) were carefully excluded from the study. While this may have reduced the findings, the corpus on the whole accounts for a breadth of opinions, positions and interests.

Analysing *all* of the verbal and oral debates related to SOPA would have resulted in over 50,000 words to analyse. Although this would have been the most comprehensive path, time constraints and the chosen methodology would have rendered this unmanageable. Additionally, only the *written* testimonials were examined as these are the most 'complete' form of each party's arguments, and therefore enabled more in-depth CDA.

5.3 PROCEDURE

The process of analysis was threefold: firstly, the testimonials were examined for key themes alongside the conceptual framework (border-construction, immateriality, physicality, information flows, rhetorical devices, etc.) to identify the main contrasts and connections within each text and in comparison with other texts.

The second stage involved finer analyses using Fairclough's three-stage method (2001) and incorporated elements from van Leeuwen (2005), Halliday (2004), and Wood & Kroger (2000) within the model. Reflections from a pilot study also resulted in more sub-elements to each stage that were previously lacking. Textual analysis involved examination of lexicalisation, legitimisation, metaphor, simile, comparison, modality, patterns of cohesion, patterns of transitivity, and textual hybridity. Analysis on discourse practices examined genre, absence/presence of voice, information focus, assumptions, and legitimisation. Examination at the level of social practices involved uncovering constructions of identities and history, reproduction of hegemonic practices, the use of objects/instruments or times/places, and representation of activities. This was done manually and portions were highlighted and annotated according to a colour code (yellow for textual analysis, green for discourse practices, and blue for social practices, al-

though some were highlighted multiple colours due to linkages between the three dimensions). I also received peer feedback on randomly selected excerpts of the findings.

The third stage of analysis involved intertextual analysis by summarising the key points around several nodes of interest: Networked Information Society, Digital Objects & Infringement, Consumer Identity, and Intermediaries. These points were incorporated into a table of comparisons, each divided by the stakeholder and Fairclough's level of analysis. This enabled easier comparison of points across different levels and stakeholders.

6. RESULTS AND INTERPRETATION

Testimonials from Katherine Oyama (Google), John Clark (Pfizer), Paul Almeida (Department of Professional Employees of American Federation of Labor and Congress of Industrial Organizations), Lamar Smith (Committee Chairman of SOPA), Maria Pallante (Register of Copyrights), and Michael O'Leary (Motion Picture Association of America) were analysed. I compared and contrasted the various individual findings to illustrate the dominant and resistant threads of discourse across the key topics.

6.1 THE (UN)NETWORKED SOCIETY

(Note: the texts do not refer directly to the information society and instead use concepts such as the 'Internet' or 'networks' to describe the phenomena of transferring, connecting and disseminating from distant localities. While they are not completely equivalent, they are not mutually exclusive: the Internet plays a crucial role in the progress and growth of the overall networked information society. For purposes of this study, statements on the Internet/networks will be taken to relate to concepts of the information society, although it will be noted that these statements will not relate to the entirety of the information society.)

Discourse on the networked information society across the different testimonials is strikingly Janus-faced. It is largely split into two main branches of discourse – the 'legitimate'/'innovative' sector juxtaposed against the 'illicit' marketplace of unlawfully disseminated copyrighted goods. This is consistently discernable across almost all of the testimonials. On one side, Clark refers to the Internet as a 'threat' and Pallante similarly speaks of the 'dark side of the Internet'; on the other hand, Google describes it as one of the 'few bright lights of our economy'. The binary metaphors of

dark and light suggest a degree of fragmentation over what it means to participate in the information network.

Each branch of discourse harbours its own set of embedded topics: the 'illicit' view of the information network lends itself more to brusquer lexicalisation, such as naming those who engage unlawfully with this 'side' of the Internet as 'thieves' (Almeida, O'Leary, Pallante, Smith), or 'rogues' (Oyama, Pallante, Smith, O'Leary). Delving into etymology and lexicalisation further, the noun 'rogue' is derived from vagrant or vagabond (Harper, 2001), constructing the image of a nation-less, homeless and lawless figure far beyond the reach of any legitimate, law-abiding network. The phrase 'foreign rogue' is repeated a total of eleven times in reference to copyright infringing websites; if connotations of vagrancy was not a sufficient indication of alterity, 'foreign' makes it explicit.

This discursive thread attempts to demarcate between 'areas' of the Internet using sensory adjectives of light/dark and introducing identities of lawless otherness into the discussion. The deliberate parallels between physical geographies and Internet geographies are clear. From this discursive thread, however, two themes emerge: firstly, the numerous associations of IP regulation with war-like terms; and secondly, the purported impact of the virtual society on the 'physical' society.

Readers are immediately aware of the liberal incorporation of words such as 'fight', 'threat' or 'combat' (all testimonials) when referring to the problem of curtailing copyright infringement. The consequences of uncaught copyright infringement are similarly 'destructive' (O'Leary) and 'cause immense damage' (Pallante).These terms underline connotations of a physical, imminent war and this is mirrored across the different texts. For example, Oyama warned Congress that SOPA could potentially cause 'collateral damage' to legitimate businesses, and Pallante referred to the act of severing a foreign rogue website from payment processes as 'starving' them out, reminiscent of war-time tactics. I agree with Mirghani's claim that these acts of 'linguistic aggression' are attempts by interested parties to gain dominance (2011, p.114). Copyright infringement is widespread and largely circumvented by those who do not feel compelled to legitimately obtain copyrighted goods. Framing the discussion in terms of an epidemic (Pfizer) or a war are a few ways to stress the urgency of the issue.

However, efforts to *bridge* the physical to the virtual with palpable descriptions may involve a slightly subtler shift in argument. For instance, the

majority of Clark's testimonial on behalf of Pfizer emphasised his own credibility as an ex-Immigrations and Customs Enforcer (ICE), the 'unsanitary' conditions where counterfeit drugs are produced and the 'toxic ingredients' often found in counterfeit drugs: 'Counterfeit medicines are a *global problem*, one from which no region, country ... is immune.' (Clark, my emphasis) The testimonial is initially at odds with the others, as it starts with a global standpoint and refrains from mentioning topics relating to the economy, commerce and profit. There is no mention of the issue of copyright for several paragraphs, until it mentions 'the major threat to patients in the U.S.': hoodwinked 'patients' going to unauthorised online pharmacies and ordering counterfeit drugs. Given that SOPA is a bill purporting to impede access to the *online* infringer/vendor, the large amount of space taken to underline the seriousness of physical counterfeit drugs appears counterintuitive.

The decreased focus on the online network and increased attention on the manifest harms of counterfeit medicine creates a new line of discourse: no longer are harms derived from copyright infringement only contained to intangible lost profits - they are now connected to sophisticated criminal 'enterprises' (Clark) with potentially grave consequences. His background as an ICE also becomes more evident: this is about physical networks and tangible products. 'Counterfeits taint the original products with their inferior quality. More important, counterfeits kill. When brakes are fake, drivers die.' (Almeida). Framing the discussion in this way makes it difficult to engage in candid and critical debate. As Litman argues, 'if you're dissatisfied with the way the spoils are getting divided, one approach is to change the rhetoric. When you conceptualize the law as a balance between copyright owners and the public, you set up a particular dichotomy ... that constrains the choices you are likely to make.' (2006, p.15) Secondly, it also blurs over the stages where the consumer goes to the website and discerns whether or not to buy these counterfeit products. The voice of the consumer (let alone opportunities for consumer education) is very much silenced; Clark uniformly refers to them as 'easily ... deceived' 'patients'.

The concept of the information society, then, becomes severely minimised through this line of discourse. It becomes a mere gateway to networks situated outside the virtual. 'Misuse' (Smith) of the Internet can lead to stimulation of cross-border criminal networks. Alternatively, legally-sanctioned online distribution platforms can allegedly help benefit networks of

local economies and employment: 'Our industry also includes more than 95,000 small businesses across the country that are involved in the production and distribution of movies and television ... and beyond even these are the hundreds of thousands of other businesses that every year provide services to productions, like the local drycleaner that served the cast and crew on location or the local hardware store that supplied paint and lumber' (O'Leary).

This is what the testimonials refer to as the 'legitimate' side of the Internet. This is where the 'flow of revenue' (Smith) should ideally stream through – where growth is accelerating by 'leaps and bounds' and innovation is 'off the charts' (O'Leary). Importantly, these metaphors of movement and dynamism are anchored to connotations of economic benefit (though it should be noted that economic gain is commonly highlighted in policy debates regardless). While Oyama did briefly mention that the Internet is a 'universe of information', most of the discourse about the Internet and flows of information liken it to a 'digital distribution system' (O'Leary) - in other words, a vehicle for transferring entertainment to consumers. The nature of this relationship appears to be described as a supplier-to-consumer rather than a user-to-user relationship of mutual production and consumption. Within the corpus, the main examples of lawful networks are the advertising networks (Oyama, O'Leary) and authorised video streaming of movies (Pallante, Smith) – both of which involve the user as a paying consumer rather than an active participant: '*Consumers* now have numerous ways to enjoy streamed content legally through legitimate video streaming websites like Hulu or Netflix...' (Pallante, my emphasis)

The separation of the Internet to either illicit or legitimate has created two sets of discourses and 'proximities': a 'dark' side inhabited by lawless 'thieves' engaged in constant 'battles' with the State, both virtual and real; and the Internet as a distribution repository for passive consumption of mainstream entertainment. Looking back at the conceptual framework, this portrayal of the networked information society is very different from van Dijk's conception of the network society, which is characterised by networked activities at all levels of society (individual, societal and organisational). The discourses uncovered here do not highlight any sense of connectivity that is marked at all levels – instead, notions of connectivity are mostly reserved for privileged and paying consumers seeking to passively receive a service (provider to consumer rather than local to global).

Secondly, the ideological connection between certain 'dark' vicinities of the Internet and non-virtual networks such as counterfeit drugs operations does not quite resonate with Aas and Beck's notions of borders as networks. The discourse examined above did not perceive the Internet as a network but a *gateway* for non-virtual networks, because it was taken for granted that unwitting 'patients' who searched for online pharmacies online would most likely end up purchasing counterfeit goods (Clark). The result is a fragmented vision of the Internet as a purely commercial platform for passive consumers on one hand - and lawlessness, vagrancy and illegality overreaching to real-life activities on the other.

6.2 THE NAIVE USER

The discourse relating to the position, function and identity of the user is remarkably consistent across almost all texts, save for Oyama's testimonial. The lexicalisation techniques used to frame the user are penetrative and regular. To mention only a few, Clark unfailingly refers to buyers of medicinal drugs as 'patients' who are easily misled, deceived and 'lured' by the 'professional looking' websites. These patients are under 'threat', 'exposed' to counterfeit medicines, 'deprived' of the active pharmaceutical ingredient, and 'rely' on Pfizer's products – Clark provides long lists of numerous drugs that are counterfeited, citing grave diseases and conditions, including cancer (which was mentioned four times). The position of the patient is underlined further with the use of passive sentences: actions are being thrust upon the patient, who is described as little more than a frail figure with needs. The image of a vulnerable patient is evocative.

On the other hand, O'Leary's testimonial refers to the user as a 'consumer' of 'high-quality' content, albeit not a particularly discerning one. Consumers are also 'exposed' (noting the passive position of the subject) to different a set of problems, this time 'subjected' to 'fraud and deceit... also to identity theft and other harms'. Unlike Clark, O'Leary's text does consider producers and consumers as different: producers are described as legitimate 'hard-working people behind the scenes ... people like Dan Lemieux, a stunt coordinator in Michigan, who depends on the residual payments he earns to help support his wife and three children'. These people do not have a uniform name like 'producers' but are referred to as 'people' with histories and identities, such as 'Budecke's Paints & Decorating of Baltimore, Maryland, a fifth-generation family-owned and-operated retailer'. These are the

people who 'create' a product and are 'exploited' for profits by 'thieves'. The image of a humane, hardworking producer is supported by O'Leary's focus on the phenomenological; the experience of living, contributing and producing on an everyday basis.

In contrast, O'Leary refers to unlawful actors as 'feeding consumer confusion', suggesting infantile images of the consumer. When faced with the claim that consumers will still seek other unlawful offshore free content-providing sites if SOPA is passed, O'Leary simply asserts that 'consumers do not look for rogue sites when they search, they look for content – and [SOPA] will help ensure that the content they find is legitimate.' The simplification of the well-meaning consumer as being herded to 'legitimate' content ignores the multifaceted politics of consumer choice, and the issues of accessing to up-to-date content currently impeding the legal content streaming market. O'Leary's perception of the innocent, receptive consumer is at also odds with MPAA's own history of prosecuting individual 'consumers who steal our product' (Johnson, 2005). Given the controversy and high-profile furore surrounding the bill, it is likely that maintaining good relations with the consumer and appearing sympathetic to the general citizen was a priority of all testifiers. However, through this, the portrayal of the user as 'unwitting' (Pallante) contrasts sharply with the 'empowered' (Pallante) and wronged copyright owner and producer.

Given Google's stance against that version of SOPA, it is unsurprising that Oyama's testimonial paints the user differently from the other findings discussed above. Oyama refers to consumers as 'citizens' and 'users' exploring the 'vibrant platform for democratic ... expression' that is the Internet. The name 'citizen' also finds roots in terms relating to '[engagement] in political *activity*' (my emphasis; see Harper, 2001). Furthermore, the text makes a very different assumption to O'Leary's discourse: users can make a choice to learn and circumvent and subvert technological changes ('... easily circumvented by the user or foreign web site ... SOPA's provisions in this regard are not likely to prevent users from learning how to evade DNS blockades'). It envisions the actions of users to be disparate and, to some extent, beyond the control of the web host: '[it is] a high probability that all social networking and user-generated content sites are used for infringement by some'. The incongruent views of the user as a passive consumer, duped patient, and astute learner are all useful tools to furthering a chosen discourse. The creative, discerning producer/consumer need not be protected

by the State in the same way that a vulnerable 'patient' is. Through cementing user identities as passive and susceptible consumers, this also strengthens the potency of in-group beliefs and the rejection of the 'Other', e.g. unlawful 'rogues' or alternative, unfavourable discourses (see: Ryan & Bogart, 1997).

Comparing these findings to the conceptual framework sparks a number of implications. Firstly, Aas and Beck's theory of the collectively constructed border-network starkly differs from the discourses presented here: the consumer does not construct or substantially contribute, but is instead affected by these pre-constructed networks in the same way water is redirected, without complaint, when the course is altered. By privileging the identities of the producers/workers, the role of the consumer/user is downplayed; the State is justified in changing the status quo because these consumers require active 'protection'.

The question therefore remains: what does this mean with regards to the research question at hand? Despite the body of theory on the generativity and editability of the digital object within networked societies, the culture for altering and tinkering is absent from this discourse. Discussions pertaining to the potential impacts of digital objects are omitted, while the authenticity of corporeal objects (e.g. the legitimacy of fire alarms) are emphasised. The user is seen as a passive receiver of digital and virtual objects, while digital networks are seen as mere paths to the potentially 'harmful' material world that the consumer should be 'steered' away from (Smith).

6.3 STEALING THE DIGITAL OBJECT

At the centre of the debate is the question of how IP infringement should be depicted. One dominant line of discourse in the corpus is the plethora of language emphasising the *materiality* of copyright infringement. Terms such as 'digital theft', 'theft wage', 'stolen works', 'thieves', 'rogues', 'cyberlockers' (O'Leary), and 'pirates' are plentiful; the effects of copyright infringement have also been described as 'corrosive', 'damaging' (Smith) and causing 'devastation' (Pallante). This is purely at the textual level – at levels of discourse and social practice, wider themes emerge. For example, the proliferation of counterfeit medicines caused by unauthentic online pharmacies has been linked to the Hezbollah (Clark), while copyright infringers have also been accused of tax theft, job theft, benefits theft, livelihood theft and even the potential death of others (Almeida). These terms help evoke senti-

ments of nationalism – the American against the terrorist; the thief against the law-abiding citizen – and consequently encourage protection of these trade and cultural borders.

Secondly, the digital creation is placed squarely within the axis of economic potential and commerce; it is product constituted by possibility of creating revenue for a large network of actors ('the producer may commission songwriters, composers, and musicians... for use of [your creation]' - Pallante). The result derived from this discourse is the bewildering portrayals of objects with no clear qualities of their own (e.g. no inherent function, editability, size, flexibility, accessibility) except for an apparent materiality and impact on many sectors of society, including the 'local drycleaner' (O'Leary). Though this, statements such as the '[The] First Amendment does not protect stealing goods off trucks' (used as a reason to strengthen IP protection; Almeida) slip past critical examination because there was no clear framework for how we should regard copyrighted goods. In other words, questions on the difference between material and digital goods and the creation process of digital goods are skirted. Chudžíková (2011, p.474) warns that this type of 'schemata is preserved via their generational transference by national narratives-metaphors, analogies, insinuations ... which implant them deeper in cultural frames and transform them into common sense.'

Drawing from Kallinikos' views on the digital objects, it is argued that there are key differences between the material and immaterial. As mentioned prior, the characteristics of non-rivalry, decomposability and editability mean that digital objects are replicable at almost no cost, constantly edited and dynamic. Furthermore, it defies the normal constraints of space and time (Giddens). On the other hand, the idea of theft usually involves a thief, without consent, appropriating the victim's property and the *deprivation* of that property from the victim (e.g. see Arizona State Legislature, 2012), while there is no such physical deprivation in copyright infringement. Although the definition of theft (and indeed any word) is prone to change, there are implications when connecting the physical appropriation of property with copyright infringement. As Patry (2009, p.78) warns, 'copyright owners have attempted to avoid regulation by describing their right as intellectual property ... outside the need for any empirical social justifications ... it's axiomic and need not be justified.'

For example, O'Leary stated that author has a 'right' to 'reap the rewards of his or her creative work'. This shift away from informed debate into rhetorical/metaphorical arena manages to sidestep difficult questions (e.g. how long the exclusive right should stand) and quietly assumes that the copyright owner did not benefit from any previous works (Loughlan, 2006, p.224). At the core of this agrarian metaphor is the conflation of the physical with the immaterial: a farmer labours the earth for his work and is physically deprived from him by the 'rogue' or 'thief'. This metaphor evokes the idea that the State should step in to protect his labour, without any onus on the creator to reconcile with the pace of information-filled markets or the culture of creation/editing (Lessig, 2008) in networked societies.

The discourse of copyrighted works as tangible contrasts with Kallinikos' view of the digital object and Giddens' concept of space-time distanciation. O'Leary argues that 'major motion pictures ... appear on these rogue sites just days, if not hours, after their theatrical release'; there is some acknowledgement of the portability and decomposability of digital goods, although it is often framed within a commercial context of video streaming to the paying consumer. The discourse surrounding the flexibility of the digital object remains focused on materiality in two ways – firstly, materiality as a quality of the copyrighted work (digital 'theft' and 'property'); and its manifest, substantial impact on the non-virtual networks and economies.

6.4 THE MALLEABLE BORDERS

In SOPA's discourse, there are two types of 'borders' that are discussed: national borders, which outline the geographical arena of a nation-state, and technological borders. Technological borders are search engines acting as the point of contact between the material user and digital objects disseminated around the information network. Following Aas and Beck's definition of a 'border', an intermediary such as a search engine performs the function of an Internet 'border' because it filters, connects and also emulates a distributed network – a results page is constituted by the different search queries and hundreds of different actors.

A prominent theme within the texts is the way these borders are negotiated by the different stakeholders. As mentioned above, SOPA created new obligations for technological borders/search engines to actively monitor their search results for links to infringed content, and sever links to websites hosting infringed material. The intent of this is to 'starve' out websites by

substantially reducing the amount of visitors and therefore advertising revenue, disrupting the Internet ecosystem for copyright infringers. National borders are often used as points of reference and comparison, reinforcing the image of a relatively fixed and impermeable nature of national borders.

There are two main branches of discourse relating to intermediaries. The dominant discourse portrays the border (both technological and national) as state-influenced and mandated, while an alternative argument depicts the border as a site of *technological* negotiation. Testimonials from O'Leary, Pallante, Clark and Smith strongly favour a state-influenced view of the Internet 'border', using terms such as 'ordered' (O'Leary), 'obligation' (Smith) and 'required to comply' (Pallante) when referring to the legislative obligations towards technological borders. Parallels are drawn alongside national borders, where Smith iterates that 'we cannot continue a system that allows criminals to disregard our laws and import counterfeit and pirated goods across our physical borders.' The deliberate inclusion of 'pirated goods' (a term nonexclusively used to refer to digital copyright infringement) in that statement clarifies his position that, regardless if the product is tangible or intangible, it will treated equally with regards to border-crossing and entry into the US market.

Additionally, Pallante argues that 'stopping infringement at the borders is not a new concept of American copyright law', attempting to justify similar legal treatment for both digital copyrighted goods and non-digital goods. Looking back at Harvey's concepts of space-time compression, the urgency to control technological borders becomes more apparent. Internet 'harms' are exacerbated by the contortion of space and time; with the instantaneous delivery of content, Pallante claims that 'quick' and 'effective' blocking would be appropriate. She urges that 'every member of the Internet ecosystem needs to play a role' to curtail copyright infringement, attempting to border off the 'foreign infringing websites' through the cooperation of various US-based networks.

However, this state-driven construction of the technological border is contested by Oyama's testimonial, expressing that maintaining the integrity of search engine results is a 'serious technical undertaking' involving numerous cases of dealing with 'hijack[ed] accounts' which 'evade detection'. The clear physical connotations above attempt to emphasise the technical and already-laborious burden that intermediaries such as Google allegedly tolerate, although this industry-driven position is unsurprising given that

the bill seeks to increase the obligations of search engines. This raises questions on the relationship between the technological border and the national border: how do conflicting discourses regarding the construction of technological borders reconcile? What is the emerging 'image' of the technological border?

Linking these observations with the conceptual framework, the main lines of discourse are congruent with Cooper & Rumford's views that borders are dependent on the State's legitimization. Out of the testimonials represented in Congress that day, Oyama's testimonial was the only text that emphasised discourse on borders as a site for technological negotiation. Therefore, the border as collectively constructed (Cooper & Rumford, 2011), even if factually valid due to the distributed nature of search engines (Kallinikos, Aaltonen, & Marton, 2010), appears to concur less with the themes represented here. Furthermore, Aas' concept of the border as a distributed network is turned on its head: it is *because* intermediaries such as Google are networks that it is required to block others according to State regulation. The equating of the physical border with the technological both in concept and in function helps alter the extent we view these technological borders as editable.

7. CONCLUSION

As seen in the analysis, there are a number of underlying discourses relating to the treatment of materiality and immateriality of intellectual property. There is a clear fragmentation of the Internet into vicinities of legitimacy and illegality. The online legitimate arena is characterised almost solely by commercial growth and profit potential, while the online illicit vicinities are said to 'harbor' more pernicious 'foreign rogues' who commit intellectual property 'theft'. The discourse continues into the non-virtual sphere, where copyright infringement is linked to the illicit networks in the offline world, such as organised crime rings dealing in counterfeit medicines and defective products. On the other hand, the legitimate online sphere is also positively associated with legitimate offline networks, such as burgeoning local businesses and services benefiting from the production of intellectual property. This offline network is again framed through the lenses of economic potential and profit. The information network is not so much a network but a 'gateway' for the non-virtual world.

Discourse on technological networks/borders represents these borders as being State-constructed with obligations to block off Internet vicinities from access; this is 'justified' by comparison to national borders and laws. Furthermore, the information society is not portrayed as a site of user creativity or citizen production – the dominant discourses cloaking the 'user' include connotations of passivity, vulnerability, illness, and gullibility. Users passively consume content supplied by 'workers' and 'professionals', who are conversely described as innovative, hard-working, unjustly treated, and with long-standing histories and sympathetic identities.

The digital object is not viewed as malleable, flexible, decomposable or having characteristics of non-rival goods. Instead, they take on the features material goods, enabling the digital object to fit into the paradigm of non-virtual theft. Consequently, the digital object is defined by materiality and economic potential both in the virtual and offline worlds. Words relating to battles, threats, wars, and destruction are liberally invoked, emphasising materiality. Secondly, heavy use of labelling and metaphors frame the debate in terms of protecting property; this is advantageous for copyright owners and interested parties. The discourses privileging the copyright owner's position contain latent assumptions that remain relatively unquestioned as a result.

7.1 LOOKING BACK, MOVING FORWARD

There are several possible directions for future research – some are derived from the limitations and gaps in this study, and others are related but fresh avenues. Firstly, there were few topics in the analysed texts relating directly to the *entirety* of the networked information society as described in the theoretical review; the themes were on the whole focused on the Internet. This particular project therefore analysed the immateriality/materiality of digital copyrighted material and not (for example) of public works, which have different functions and associations within the networked information society. Furthermore, the networked information society is not related solely to the Internet. There are other forms of media or technology with corresponding tensions between the material and immaterial; looking into these may help expand the scope of the research further and develop a more holistic perspective.

Lastly, while this research topic examined the editability and transferability of digital objects, an explicit focus on the discourse of generativity on

legislation or other platforms relating to user-generated content may illuminate this other side of the coin. Drawing out the underlying assumptions regarding this topic grows more pertinent as viewing home-made videos have become a significant part of mainstream entertainment.

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