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Distribution as a Design Principle for Law

Mélanie Dulong de Rosnay

AB   AC

Instead of applying law to peer-to-peer in order to control networks, I propose to apply peer-to-peer to the law to transform it. The western liberal conception of law is based on the legal category of the individual. This legal theoretical conception does not adequately take into account the concept of communities of peers, defined as non-stabilised, evolving, or non formalized groups sharing a common interest or an ad hoc production purpose, from local communities (e.g. those using a commons-based governed fishery) to online communities (e.g. the users of a platform) which do not have a legal statute as an individually identifiable entity.

Legal thinking can be influenced by architecture design principles based on decentralisation. Peer-to-peer architectures, for example distributed storage and wireless mesh network, disrupt the application of positive law and question central legal notions of liability, control, ownership and responsibility. I call for a transformation of legal thinking and logic and a theoretical break from envisioning the individual person as unique point of reference of the regulatory system composed by positive law and policies targeting individuals. Network theorists have already been conceptualising the agency of collectives, and commoners have been developing legal hacks to organise collective property. Beyond an

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The relation between peer-to-peer and the law is often analysed from the angle of file-sharing regulation. Peer-to-peer is seen as a disruptive technology of distribution, requiring the law to adapt itself in order to control a new type of activity. A polarised discourse leads copyright law to be extended to prevent file-sharing from disrupting existing business models based on a strong enforcement of copyright; the alternative policy proposal to adapt

My starting point is that the western conception of law is based on the legal category of the individual to which rights and duties are allocated in balance with others'. The fictional notion of the individual person includes the citizen, the user, matching the notion of a real person, but also all individually identifiable actors which have been allocated a legal status as a single entity: corporations, non-profits, nation states, all kinds of organisations. But this legal theoretical conception does not adequately take into account the concept of communities of peers, defined as non-

in section 3 such attempts of designing collective rights or collective persons beyond both a mere individualised law and Information and Communication Technologies. A peer-to-peer law also relates to political theory questions of plural persons and the agency of collectives. But in order to really challenge liberal legalism design grounded around individualism, I

However, for the sake of theoretical reasoning

peers offering their internal disk for shared storage are online at the moment the user who uploaded the file wants to access it again (in the same way it is necessary to have at least one 'seeder' to download a torrent). Therefore, if no file is stored entirely, it is questionable whether contributory or induced liability would be triggered at all, if a file contains illegal content. Unlike Bittorent, peers do not know what they are hosting as the files, after being fragmented, are encrypted.

Besides, the service can't technically monitor[3] what is being uploaded because of the distribution of the process. External entities (majors, police) can't proceed to the surveillance of the files either. Indeed, at no time are files existing in a reconstituted format, making them readable and perceptible to the senses, outside of the machine of the first peer who uploads it bits by bits and downloads it back fragment by fragment.

Therefore, it is legitimate to question, as Musiani does (2013: 221), whether users could be held liable for helping someone to reproduce and access an infringing file. It seems impossible to assign intention, awareness or even to detect guilt in the mere transient action of hosting fragments, as neither the peers nor the service developers have the technical means to know what they are hosting. Circulating in sealed envelopes fragmented among many ha

commitment to host only lawful content, can be useful to self-regulate and police a service to ensure its sustainability as a commons, based on Ostrom's Institutional Design Principle #4: 'Effective monitoring by monitors who are part of or accountable to the appropriators' and its complement #5: 'A scale of graduated sanctions for resource appropriators who violate community rules' (Ostrom, 1990). But more pragmatically in the case of a distributed service such as Wuala, if no infraction can be detected, it seems very unlikely that such a feeling of community responsibility could be developed.

Similarly, I seriously doubt that liability could be assigned to the service provider (except in the case peer-to-peer technologies would be outlawed altogether with their developers), nor to some individual nodes (legal regulation did not reach that stage of control yet and intermediary law is protecting them). It seems difficult to allocate individual responsibility to individuals who share their computing resources with unknown peers to reproduce and communicate content of unknown nature. Judicial proceedings for negligence to secure one's wireless connection have been implemented both in France with the three strike law[9] and in the US with police raids. However, the identification of the IP address of the device, which is dynamically changing over time and can be changed or spoofed, is not sufficient proof to identify a person.

can be connected to the internet or not, and communication can be organised either around a central server or in a decentralised way, as considered in this paper. One node will only transmit to the next node. In order to avoid secondary liability for actions led by other users of one's internet connection, in the jurisdictions where it exists, it is possible to use a Virtual Private Network (VPN)[11]. There is community governance and self-regulation as many

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Lobbying to prohibit peer-to-peer file sharing or peer-to-

describing property not as an absolute right but as a collection of social relations, rights, duties, obligations and responsibilities[16].

More recently, Italian water distribution has been the theatre of a movement that uses the constitutionalisation of the commons to exclude both privatisation and nationalisation. Stefano Rodotà (2013) is calling for 'a new definition of "citizen"', one that g

), reproduction, derivation, commercial exploitation (or   ) and exclusion (or
            ), the latter being neutralised by the Share Alike or Copyleft clause. Distributed
property, with the legal hack of the copyleft clause, started from the need to maintain

to bird watching or making music. Can the joint provision and usage of distributed storage or connectivity be found under the same banner? According to her, this plural subject can be found when 'One is willing to be the member of a plural subject if one is willing, at least in relation to certain conditions, to put one's own will into a "pool of wills" dedicated, as one, to a single goal (or whatever it is that the pool is dedicated to)' (Gilbert, 1996) and group

When joining a distributed project like Wuala or hosting a Tor node to facilitate anonymous

connect

The basic problem is that the neoliberal political order – and particularly the system of law – favors private property rights and the corporate sector. (...) If you are a municipality and want to sell your water company, you will find it very easy from a legal point of view. But there are no laws in the Italian legal order that shows you how to go the other way around. (Mattei, 2013: 23)

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The western legal system is grounded on the individual (private or public) person, while

occupation of vacant, abandoned spaces rather than through ownership[23] (Finchett-Maddock, 2011).

It is likely that a distributed law based on common ownership (not on collective ownership by a corporation or a cooperative representing a sum of individuals) will be different from self-

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