Booties, bounties, business models: a map to the next red oceans

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Abstract: This quest is for pirate maps to blue oceans. The key problem involved is that blue oceans turn red whenever these maps make their way from pirates to mainstream entrepreneurs. Pirates therefore have an essential need for maps to the *next* blue oceans. In drawing on form theory, this article develops a map sheet, on which it appears that, throughout history, pirates navigated social borders. An analysis of the gaps in past and present maps of social differentiation then allows for the discovery of a largely uncharted quadrant of the blue ocean for entrepreneurship and entrepreneuring.

Keywords: piracy; piratology; entrepreneurship; entrepreneuring; social differentiation; functional differentiation; mapping; next society; blue ocean strategy.

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1 Borderliners: pirates and society

Throughout the centuries, piracy challenged *and* established orders. Barbarian plundering defined the political limits to Ancient civilisations (Garlan, 1978). European renegades on Moorish vessels incarnated and bridged the clash of oriental and occidental cultures (Wilson, 2003; Jowitt, 2010). Early modern piracy mirrored the emerging colonial powers' cruising range (Thomson, 1996), and by the time when these new blue oceans turned red, pirates turned privateers (Burns, 1980) whose private businesses were investments as well as both tools and indicators for the wealth of their nations. Product piracy then relocated from frigates to factories, where it soon redefined the business models of entire national economies. Internet piracy has eventually virtualised and

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multiplied the early modern prospects and debates on copyright and copytheft (Yar, 2007), and puts constitutional democracies to test, while at the margins of the late-modern empires we still observe plundering barbarians (Silverstein, 2005) who use rather classical methods to demarcate the limits to growth of the Western civilisation.

During all that time, piracy referred to a phenomenon that occurred in spaces that had to be crossed and later have been crossed out of the maps of the known world. We therefore find that one of the big secrets of piracy must be in the possession of maps of otherwise uncharted spaces and assume that entrepreneurs might be interested in getting hold of these. The problem involved in this constellation, however, is that blue oceans (Kim and Mauborgne, 2005) turn red whenever such maps make their way from pirates to mainstream entrepreneurs. The present article therefore must not present master copies of pirate maps. Rather, we address the need pirates have for maps to the *next* blue oceans. In drawing on form theory, we develop a map sheet, on the background of which we can observe which social borders have been navigated by pirates so far. An analysis of systematic gaps in past and present maps of social differentiation will then allow for the discovery of a largely uncharted quadrant of the blue ocean for piracy.

2 A blank sheet of paper: toward a comprehensive pirate map

In the introduction to *Theseus*, Plutarch (2009, p.3) compares himself to geographers who "crowd on to the outer edges of their maps the parts of the earth which elude their knowledge, with explanatory notes that 'What lies beyond is sandy desert without water and full of wild beasts, or blind marsh, or Scythian cold, or frozen sea". Just as geographers travel in space, he continues, historians travel in time until they reach the point where they say "What lies beyond is full of marvels and unreality, a land of poets and fabulists, of doubt and obscurity", and then go further.

Plutarch's analogy is witness to both his exploratory spirit and to the fact that "mapping precedes the map, to the degree that it cannot properly anticipate its final form" [Corner, (1999), p.229]. Our quest for pirate maps therefore does not start from established definitions of piracy. Rather we look for a blank sheet of paper that could make a good map sheet. We soon find that the idea of an unmarked space (Spencer Brown, 1979; Luhmann, 1993, 1995a) is close to the ideal of a blank sheet of paper on which the distinctions we draw appear as differences that make a difference (Bateson, 1972). Like a sheet of paper becomes a map (and not a theory statement) only after the first lines have been drawn, it is the distinctions drawn that make the map in which they exist. The form of this map is consequently defined by both its marked and its unmarked corners as well as by the dividing lines drawn between them.

If we are now interested in drawing a pirate map, then we need to ask which distinctions make a pirate map a pirate map. The problem with piracy, however, is that the pirate is not a self-designation (Medosch, 2003). Thus, the pirate does not autonomously emerge from the blank sheet of paper, which is why it is not by accident that the terms pirate has been observed to refer to the most different groups of persons or behaviours (Larkin, 2007). The similarities of the ancient seagoing warlords, the early modern appropriators of intellectual property (Cisler, 2006), or the hackers of the computer age are therefore not *in* the respective pirates. Rather, the only thing all forms

of piracy have in common is that they are observed as antitheses to whatever is considered *the* society in the respective eras.

"Cicero, for example, invoked the pirate as his ur-criminal – he who declined even the honor that supposedly obtained among thieves. The thing about pirates, for Cicero, was that they lay beyond all society. They had no set place (...). Their existence required that society distinguish itself and its conduct from all that they did." [Johns, (2010), p.35f]

In reading this, we consider piracy a telling case of the 'Making and unmaking of strangers' (Bauman, 1995); and, as much as friends and enemies, strangers are made by societies. We consequently need social coordinates to map piracy.

3 Social differentiation: old familiar blue oceans of piracy

As a foreign appellation for the behaviour of those who are *beyond all society* (Roth, 2014a), piracy inevitable refers to the distinctions drawn by societies to define and distinguish themselves. Explorations in piracy are therefore explorations in social differentiation.

Talking of social differentiation, the first distinction we need to draw is the distinction of similar and dissimilar social systems. In a second step, we add the distinction of equal and unequal systems. Even without reference to a more elaborate definition of social systems than as position markers of social realities [Luhmann, (1995b), p.12], the cross-tabling² of these two distinctions already allows for a direct link to the core concepts of fundamental works on social differentiation (Durkheim, 1933; Marx, 1867; Spencer, 1895; Tönnies, 1887). In fact, all trend statements on mechanic versus organic solidarity, association versus organisation, homogeneity versus heterogeneity, natural state versus alienation, or community versus society, follow and cross lines of arguments drawn by the distinction of dissimilarity and similarity. In doing so, they all agree that identity followed similarity in archaic societies. Dissent, however, occurs if it comes to the second distinction [Giddens, (1973), p.230; Cattacin, (2001), p.7; 14]: On the one hand, the Durkheimian tradition of sociology considers inequalities avoidable side effects of social evolution, the latter of which is deemed a basically positive process of increasing specialisation. On the other hand, the Marxist tradition takes inequality for the inevitable outcome of specialisation and calls for a fundamental reengineering of an essentially misrouted development of human history.

In following Luhmann (1977), we can combine both lines of arguments and, accordingly, the respective distinctions. As such, a cross-table of the two distinctions dis-/similar and in-/equal already allows for one of the briefest possible mappings of historical and present forms of society (cf. Table 1):

Similar and equal *segments* such as families, clans, or tribes were the fundamental units of archaic societies. In the course of the Neolithic revolution, however, some units started to have larger influence on the surrounding units than others. Although *centralisation* is not necessarily an advantage for the centre, in many cases centrality has been the basis for the stratification of societies. *Stratification* is characterised by the differentiation of a society in neither similar nor equal subsystems like castes, estates, or classes.

 Table 1
 Social differentiation

		Equal	
		+	-
Similar	+	Segmentation (families, tribes, states, etc.)	Centralisation (civilisations, empires, etc.)
	-	Functional differentiation (economy, science, art, etc.)	Stratification (castes, estates, classes, etc.)

The above shifts from one form of differentiation to the other, however, do not imply that the latter form eliminates the first. Rather, it is assumed that the newer form interferes the older: In segmental societies, e.g., the elder members might punish the younger. This rule might still apply to stratified societies, however, now only within the margins of the new rules imposed by stratification: It has become unthinkable that an elder farmer punishes a younger nobleman.³ In a similar way, we find that in modern societies it is considered inappropriate to consider a noble illiterate a better scientist as compared to a scholar of humble beginnings. In spite of the still strong presence of hierarchies, *functional differentiation* — which refers to the distinction of eigen-logic function systems such as the political system, the economy, science, or art — is therefore said to be the current primary form of differentiation.

If we now recall that the term piracy appears in the observation of events that are located at or beyond the margins of societies, then we find it easy to imagine that archaic piracy was observed to originate from the unmarked spaces of the environments of the first communities. Early observers of piracy indeed stress that "a pirate is not counted as an enemy proper, but is the common foe of all" [Cicero in Johns (2010, p.36)], with *all* referring to all communities of old familiar friends and enemies that appeared on the maps of the segmented societies. *The first blue ocean of piracy was hence the no man's land between the emerging islands of civilisation.*

The more advanced the process of civilisation, however, the smaller the unmarked spaces of, or 'between', the civilizations, which is why it seems as if the pirates had moved to the peripheries of the emerging centres now. In this sense, piracy is relocated from the no man's lands to the farthest corners of the empires. The pirate strongholds on the North African Barbary Coast make popular cases for the observation of this form of piracy (Wilson, 2003) if we mind that the Barbary Coast was not barbarian territory. Rather it consisted of remote provinces or dependencies of the Ottoman Empire, which were furthermore located on the outer borders of the Occident. In the context of societies which define themselves as centres, piracy refers to things that happen in those parts of the own periphery that also belong to the periphery of another centre. The second blue ocean of piracy is therefore at the Lagrangian points, where the gravitational forces of the civilised centres are weak enough to overlap, thus stabilising heterotopian orbits for piracy. In this sense, we also find that the Golden Age of Piracy dawned when overlapping sovereignty claims turned the distant Caribbean Sea into a space where these Lagrangian points could be detected, occupied, and exploited. In the same vein, we may wonder as to whether the thawing Artic Sea will turn into a similar melting pot of claims.

If we observe piracy through the lens of stratification, then we find that piracy changes its face again: It is now the strength of the high society rather than the weakness of the centres that seems to motivate piracy. Piracy is no longer uncivilised behaviour occurring at the margins of civilisations. Rather, it is observed whenever civilised

behaviour is displayed without permission. Now the term pirate applies to those who act as if they were entitled to do so: captains who capture ships without Letters of Marque; publishers who print without copy rights, or businesses who copy business models without paying royalties (sic!). In fact, all these sightings of piracy only make sense against the background of societies in which the behavioural margins of the members depend on their rank. In these stratified societies, it is prohibitive for members of one rank to display the behaviour of the members of another, in general, and for members of the lower classes to copy the behaviour of the upper, in particular. Pirates are therefore criminals not because they display criminal behaviour in the proper meaning of the word, but quite the contrary ironically because they copy the behaviour of the polite society. The second-order deviation of piracy is hence in the act of displaying behaviour of the upper society without being admitted into it. In other words, pirates appear as underdogs (Medosch, 2003) who act like overdogs, thus transcending and challenging the cultures of privileges of stratified orders, which is maybe why modern movie industries romanticise pirates as long as they remain in the movies and do not copy them (Wang, 2003; Pang, 2004; Yar, 2005). Privileges are copy restrictions, which pirates will attack whenever these restrictions are weak enough to be bypassed, and yet strong enough to maintain the dividing line between the privileged and the unprivileged. The third blue ocean of piracy is therefore located at the interfaces of the casts, estates, or classes of stratified societies, and appears whenever privileges or lifestyles of the upper classes are handed down to the lower classes without the upper classes benefiting from this transfer.

In looking at the above three oceans, we realise that they can be considered rather well charted yet. Most of us consciously use and often combine segmentation, centralisation, and stratification to navigate society. At the same time, most of us do not have a precise idea of what is meant by functional differentiation. In the subsequent section, we will therefore have a closer look at the remaining uncharted quadrant.

4 Functional differentiation: on the lookout for an uncharted quadrant

The distinction of function systems such as the political system, the economy, religion, art, or education is considered a key principle of modern societies (Leydesdorff, 2002; Beck et al., 2003; Berger, 2003; Vanderstraeten, 2005; Brier, 2006; Kjaer, 2010; Bergthaller and Schinko, 2011; Jönhill, 2012). Modern man talks business and avoids politics or religion in small talk; considers payments for votes as corruption; and discriminates between show trials and normal cases.

The function system science, however, has hardly explored the forms and functions of functional differentiation so far. By browsing existing maps of society, we find indeed that even sociology as *the* science of modernity (Giddens, 1996) is primarily focused on categories associated with pre-modern forms of differentiation such as races, genders, nations, castes, estates, or classes. This claim is true insofar as the cross tabling of segmental and strata variables is already quite good a (self-) description of both sociology's academic caste system (Weeber, 2006) and its theoretically humble empirical ambitions (Denzin, 1997; Mears and Stafford, 2002; Smart, 1990).

This is not to say that modern sociology is completely disinterested in the key categories of modern society. Keith and Ender's (2004) analysis of 16 plus 19 sociological textbooks from 1940 and 1990, respectively, came across six out of – we reckon (Roth, 2014b) – *ten* function systems, namely education, politics, religion, the

economy, health, and science, as core concepts of sociology. A view on the landscape of English-language articles indexed by sociological abstracts between 1970 and 1999 (Moody and Light, 2006) also shows that art, health, science, education, and the legal system play a major role in sociological discourses. Still, the function systems are clearly not as popular as the more classical categories, a statement which is also supported by a JSTOR full-text search of common sociological terms (David, 2005). Most research in modern societies therefore implies rather than applies the concept of functional differentiation.

The real life opportunity for pirates involved in this conceptual gap is that considerable parts of the world population apply a concept which they do not reflect upon. The fourth blue ocean of piracy, which appears whenever we observe opportunities emerging at the interfaces of the function systems of society, is therefore a particularly vast and deep blue sea. One strategic axis for piracy across the dividing lines of functional differentiation obviously is commodification.⁴ If we observe, e.g., property right hacking (Durand and Vergne, 2013) through a functional lens then we find that pirates, who corner of patents for no use other than to claim damages against alleged property right infringers, sail the margins of the legal system and the economy, with the piracy being in the fact that the code of law is used against the code of law in order to make money. Of course property right hacking can also be used to block competitors from development, production or sales, and thus to increase the own market power.⁵

Yet, this reference to power, hence politics, already indicates that commodification is only one of many goals pursued by pirates. For example, there is evidence that a considerable number of pirates focus the interface of the mass media system and sport (Chaboud, 2014). Piracy can also be observed at the interfaces of the mass media system and science, that is whenever ideas, conclusions, or research problems are stolen from manuscripts submitted for peer review (Judson, 1994; Gillespie et al., 1985).

From the above we follow that a systematic exploration of what Luhmann (1995b, p.220) calls 'structural couplings' of the function systems will allow for the discovery of an almost infinite number of existing and yet to be explored niches for activities that can be observed as piracy and later be exploited by mainstream entrepreneurs.

5 Multifunctionality: outlook to next red oceans

If we are interested in past, present and future maps to the blue oceans of piracy, then we must take into account that piracy has taken form and has changed shape throughout the history. As a foreign appellation reserved to those who are located at the margins of society and beyond, the term pirate always refers to the dividing lines used by societies to indicate and distinguish themselves and others. The antique pirates therefore appear as barbarians who make trouble in the no man's land in between the first islands of civilisation. The further we move in the process of civilisation, the more piracy seems to move to the margins of the empires and preferable to places where their spheres of influences overlap. As soon as stratification is observed as dominant form of social differentiation, piracy refers to behaviours that challenge hereditary or meritocratic privileges.

The present article therefore reasoned that the recently observed shift from medieval stratification to modern functional differentiation suggests another turn of our observation of piracy. As functional differentiation is still an under-researched field, we furthermore

reasoned that the first to possess maps of this uncharted quadrant of social differentiation are likely to have considerable first movers' advantages. This circumstance prevented us from rolling out the entire *Map of the Fourth Blue Ocean* in terms of a master copy that can easily be copied by 'lazy stupid careerists' (Jemielniak, 2007). In fact, this map must not fall into the wrong hands too early so that the booties, bounties, and business models of piracy reach the money-grubbing mainstream in due time.

Before the next blue oceans turn red again, those who soon will be labelled pirates are well advised to build and equip vessels to explore, map, and shape them. Ships are machines, and the vessels of the computer are likely to be decision machines (Nassehi, 2005), which we need to navigate the modern sea of alternatives; and we need multifunctional decision machines (Roth, 2012) if we effectively want to sail trends in functional differentiation (Roth, 2014b) and further to the shores of next societies. The maps needed to arrive will appear to those who are happy to circumvent technological and behavioural copy restrictions; to those who changed Archimedes' points for those of Lagrange; to those who learnt their *Distinctions* (Bourdieu, 1984) and yet moved further. We look forward to compelling works or e-mails from these next pirates. For the rest, they can still join the navy.

References

- Bateson, G. (1972) Steps to An Ecology of Mind: Collected Essays in Anthropology, Psychiatry, Evolution, and Epistemology, University of Chicago Press, Chicago.
- Bauman, Z. (1995) 'Making and unmaking of strangers', Thesis Eleven, Vol. 43, No. 1, pp.1-16.
- Beck, U., Bonss, W. and Lau, C. (2003) 'The theory of reflexive modernization', *Theory, Culture & Society*, Vol. 20, No. 2, pp.1–33, 10.1177/0263276403020002001.
- Berger, J. (2003) 'Neuerliche Anfragen an die Theorie der funktionalen Differenzierung', in Giegel, H-J. and Schimank, U. (Eds.): *Beobachter der Moderne. Beiträge zu Luhmanns 'Die Gesellschaft der Gesellschaft'*, pp.207–230, Suhrkamp, Frankfurt am Main.
- Bergthaller, H. and Schinko, C. (2011) 'Introduction: from national cultures to the semantics of modern society', in Bergthaller, H. and Schinko, C. (Eds.): *Addressing Modernity. Social Systems Theory and U.S. Cultures*, pp.5–34, Edition Rodopi, Amsterdam and New York.
- Bourdieu, P. (1984) Distinction: a Social Critique of the Judgment of Taste, Havard University Press, Cambridge.
- Brier, S. (2006) 'Construction of knowledge in the mass media. Systemic problems in the post-modern power-struggle between the symbolic generalized media in the Agora: the Lomborg case of environmental science and politics', *Systems Research and Behavioral Science*, Vol. 23, No. 5, pp.667–684.
- Burns, R.I. (1980) 'Piracy as an Islamic-Christian interface in the thirteenth century', *Viator*, Vol. 11, No. 1, pp.165–178.
- Cattacin, S. (2001) 'Réciprocité et échange', Revue internationale de l'économie sociale, Vol. 80, No. 279, pp.71–82.
- Chaboud, M-C. (2014) 'Pirates never sail alone: exploring the mechanics of social entrepreneurship involved in software piracy', *International Journal of Entrepreneurship and Small Business* (in the present issue).
- Cisler, S. (2006) 'Pirates of the Pacific rim', Leonardo, Vol. 39, No. 4, pp.377–380.
- Corner, J. (1999) 'The agency of mapping: speculation, critique and invention', in Cosgrove, D. (Ed.): *Mappings*, pp.213–252, Reaktion Books, London.
- David, S. (2005) 'Looking for the core in the wrong place: comment on Keith and Ender, TS, 2004', *Teaching Sociology*, Vol. 33, No. 1, pp.81–89.

- Denzin, N.K. (1997) 'Whose sociology is it? Comment on Huber', *American Journal of Sociology*, Vol. 102, No. 5, pp.1416–1423, 10.1086/231088.
- Durand, R. and Vergne, J-P. (2013) The Pirate Organization: Lessons from the Fringes of Capitalism, Harvard Business Press, Boston.
- Durkheim, E. (1933) The Division of Labor, Simpson, G (Trans.), Macmillan, New York.
- Garlan, Y. (1978) 'Signification historique de la piraterie grecque', *Dialogues d'histoire ancienne*, Vol. 4, No. 1, pp.1–16.
- Giddens, A. (1973) Capitalism and Modern Social Theory: An Analysis of the Writings of Marx, Durkheim and Max Weber, Cambridge University Press, Cambridge, MA.
- Giddens, A. (1996) 'In defense of sociology', Essays, Interpretations and Rejoinders, Cambridge University Press, Cambridge.
- Gillespie, G.W., Chubin, D.E. and Kurzon, G.M. (1985) 'Experience with NIH peer review: researchers' cynicism and desire for change', *Science, Technology, and Human Values*, Vol. 10, No. 3, pp.44–54.
- Jemielniak, D. (2007) 'Managers as lazy, stupid careerists?: Contestation and stereotypes among software engineers', *Journal of Organizational Change Management*, Vol. 20, No. 4, pp.491–508.
- Johns, A. (2010) Piracy: The Intellectual Property Wars from Gutenberg to Gates, University of Chicago Press, Chicago.
- Jönhill, J.I. (2012) 'Inclusion and exclusion a guiding distinction to the understanding of issues of cultural background', *Systems Research and Behavioral Science*, Vol. 29, No. 4, pp.387–401.
- Jowitt, C. (2010) The Culture of Piracy, 1580-1630, Ashgate, Burlington.
- Judson, H.F. (1994) 'Structural transformations of the sciences and the end of peer review', JAMA, Vol. 272, No. 2, pp.92–94.
- Kauffman, L.H. (1987) 'Imaginary values in mathematical logic', Proceedings of the Seventeenth International Conference on Multiple Valued Logic, 26–28 May, IEEE Computer Society Press, pp.282–289.
- Keith, B. and Ender, M.G. (2004) 'The sociological core: conceptual patterns and idiosyncrasies in the structure and content of introductory sociology textbooks, 1940–2000', *Teaching Sociology*, Vol. 32, No. 1, pp.19–36.
- Kim, W.C. and Mauborgne, R. (2005) Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant, Harvard Business Press, Boston.
- Kjaer, P.F. (2010) 'The metamorphosis of the functional synthesis: a continental European perspective on governance, law, and the political in the transnational space', *Wisconsin Law Review*, No. 2, pp.489–533.
- Larkin, B. (2007) 'Pirate infrastructures', in Karaganis, J. (Ed.): Structures of Participation in Digital Culture, pp.74–87, SSRC, New York.
- Leydesdorff, L. (2002) 'The communication turn in the theory of social systems', Systems Research and Behavioral Science, Vol. 19, No. 2, pp.129–136.
- Luhmann, N. (1977) 'Differentiation of society', *The Canadian Journal of Sociology/Cahiers canadiens de sociologie*, Vol. 2, No. 1, pp.29–53, 10.2307/3340510.
- Luhmann, N. (1993) 'Deconstruction as second-order observing', New Literary History, Vol. 24, No. 4, pp.763–782.
- Luhmann, N. (1995a) 'The paradoxy of observing systems', Cultural Critique, Fall, Vol. 31, pp.37–55.
- Luhmann, N. (1995b) Social Systems, Standford University Press, Stanford.
- Marx, K. (1867) Capital, Critique of Political Economy, Vol. 1, Penguin, Harmondsworth.
- McKie, L. and Callan, S. (2011) 'Families: the basic unit of societies' in Craft-Rosenberg, M. and Pehler, S-R. (Eds.): *Encyclopedia of Family Health*, Sage, Thousand Oaks.

- Mears, D.P. and Stafford, M.C. (2002) 'Central analytical issues in the generation of cumulative sociological knowledge', *Sociological Focus*, Vol. 35, No. 1, pp.5–24, 10.2307/20832147.
- Medosch, A. (2003) 'Piratology: the deep seas of open code and free culture', in Medosch, A. (Ed.): Dive. An Introduction into the World of Free Software and Copyleft Culture, Fact, London.
- Moody, J. and Light, R. (2006) 'A view from above: the evolving sociological landscape', *The American Sociologist*, Vol. 37, No. 2, pp.67–86, DOI: 10.1007/s12108-006-1006-8.
- Nassehi, A. (2005) 'Organizations as decision machines: Niklas Luhmann's theory of organized social systems', *The Sociological Review*, Vol. 53, No. 1, pp.178–191.
- Pang, L. (2004) 'Mediating the ethics of technology: Hollywood and movie piracy', *Culture, Theory and Critique*, Vol. 45, No. 1, pp.19–32, 10.1080/14735780410001686423.
- Plutarch (2009) Plutarch's Lives, Vol. 1, The Chesterfield Society, Lansing.
- Roth, S. (2012) 'The multimedia organization', Tamara Journal for Critical Organization Inquiry, Vol. 10, No. 3, pp.5–6.
- Roth, S. (2014a) 'The eye-patch of the beholder: introduction to entrepreneurship and piracy', International Journal of Entrepreneurship and Small Business (in the present issue).
- Roth, S. (2014b) 'Fashionable functions. A Google ngram view of trends in functional differentiation (1800–2000)', *International Journal of Technology and Human Interaction*, Vol. 10, No. 3, pp.88–102.
- Silverstein, P.A. (2005) 'The new barbarians: piracy and terrorism on the North African frontier', *CR: The New Centennial Review*, Vol. 5, No. 1, pp.179–212.
- Smart, B. (1990) 'On the disorder of things: sociology, postmodernity and the 'end of the social'', *Sociology*, Vol. 24, No. 3, pp.397–416, 10.1177/0038038590024003003.
- Spencer Brown, G. (1979) Laws of Form, E.P. Dutton, New York.
- Spencer, H. (1895) The Principles of Sociology, Appleton, Westport.
- Thomson, J.E. (1996) Mercenaries, Pirates, and Sovereigns: State-Building and Extraterritorial Violence in Early Modern Europe, Princeton University Press, Princeton, NJ.
- Tönnies, F. (1887) 'Community and society', *The Urban Sociology Reader*, pp.13–22, Abingdon, Psychology Press.
- Vanderstraeten, R. (2005) 'System and environment: notes on the autopoiesis of modern society', Systems Research and Behavioral Science, Vol. 22, No. 6, pp.471–481, 10.1002/sres.662.
- Wang, S. (2003) 'Recontextualizing copyright: piracy, Hollywood, the state, and globalization', *Cinema Journal*, Vol. 43, No. 1, pp.25–43.
- Weeber, S.C. (2006) 'Elite versus mass sociology: an elaboration on sociology's academic caste system', *The American Sociologist*, Vol. 37, No. 4, pp.50–67, 10.2307/27700480.
- Wilson, P.L. (2003) Pirate Utopias: Moorish Corsairs and European Renegadoes, Autonomedia, New York.
- Yar, M. (2005) 'The global 'epidemic' of movie 'piracy': crime-wave or social construction?', Media, Culture & Society, Vol. 27, No. 5, pp.677–696.
- Yar, M. (2007) 'Teenage kicks or virtual villainy? Internet piracy, moral entrepreneurship, and the social construction of a crime problem', in Jewkes, Y. (Ed.): Crime Online, pp.95–108, Routledge, London.

Notes

- "Legal provisions cannot foresee all the possibilities facilitated by new technologies and creative thinking. In a democracy worth its name, everything that is not strictly permitted is legal, in a totalitarian state everything is illegal that is not strictly allowed" [Medosch, (2003), p.117].
- 2 From a form-theoretical point of view, the fact that these two distinctions are *called* and not *crossed* (Kauffman, 1987; Spencer Brown, 1979) can be criticised because, according to Luhmann (1977, p. 31), we need to "conceive of system differentiation as the reduplication of the difference between system and environment within system". With a particular focus on the deduction of categories of social differentiation, however, Luhmann (1977, p. 33) cross-tables two distinctions himself: system/environment and equality/inequality. This represents a theoretically more elaborate combination of distinctions, which is, however, less connective with the everyday language of sociology. For the sake of readability, this text hence opts for the calling of the two more familiar distinctions.
- 3 In this way, families may still be considered basic units of society (McKie and Callan, 2011), however, no longer the dominant forms of differentiation, today.
- 4 We find, indeed, that functional differentiation is implied rather than applied to piracy insofar as most research implicitly locates piracy at the interfaces of politics, the economy, and the legal system (only). This observational bias limits research, however, also holds plenty of opportunities for piracy.
- 5 In either case, we are likely to non-observe the piracy involved as long as it is larger and established firms that use the respective strategies.