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Fictitious Commodities: A Theory of Intellectual Property Inspired by Karl Polanyi's "Great Transformation"

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Cover Page Footnote

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Fictitious Commodities: A Theory of Intellectual Property Inspired by Karl Polanyi's "Great Transformation"

Alexander Peukert*

The puzzle this Article addresses is this: how can it be explained that intellectual property (IP) laws and IP rights (IPRs) have continuously grown in number and expanded in scope, territorial reach, and duration, while at the same time have been contested, much more so than other branches of property law? This Article offers an explanation for this peculiar dynamic by applying insights and concepts of Karl Polanyi's book "The Great Transformation" to IP. It reconstructs and then applies core Polanyian concepts of commodification (infra, II), fictitious commodities (infra, III), and countermovements (infra, IV) to the three main areas of IP, namely copyrights, patents, and trademarks, as they have evolved and are currently regulated in international and selected national laws. The analysis reveals that the history of IP can be told in terms of Polanyi's famous "double movement": efforts to commodify virtually every reproducible input/output face equally persistent opposition, which points out the disruption that IPRs inflict upon communication and competition. Whereas IPRs dis-embed informational artefacts from the uninterrupted flow of societal exchange and subject them to prior authorization requirements, IP countermovements call for their re-embedding, i.e. their usability irrespective of authorization. From a normative perspective, a Polanyian perspective on IP suggests that IP law and policy should ensure that market-based transactions coexist with non-market modes of accessing and sharing information so that authors, inventors, and other entrepreneurs have as many options as possible

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at hand, and all members of society possess adequate possibilities to acquire knowledge.

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INTRODUCTION

The puzzle this Article addresses is this: how is it that intellectual property (IP) laws and IP rights (IPRs) have continuously grown in number and expanded in scope, territorial reach, and duration, while at the same time have been contested, much more so than other branches of property law? Examples of this cleavage between exclusivity and access interests are manifold. Reference can be made to 18th century battles between metropolitan and provincial publishers over copyright,¹ to the 19th century free trade critique of patents,² to 20th century debates about the adequacy of IP protection in developing countries,³ and to 21st century discussions about the relationship between IP and public health⁴ or between copyright and access in the digital age.⁵ During all these

¹ BRAD SHERMAN & LIONEL BENTLY, *THE MAKING OF MODERN INTELLECTUAL PROPERTY LAW* 9 (1999); RONAN DEAZLEY, *ON THE ORIGIN OF THE RIGHT TO COPY* 221 (2004). *Louis d'Héricourt's memorandum (1725–1726)*, PRIMARY SOURCES ON COPYRIGHT, http://www.copyrighthistory.org/cam/tools/request/showRecord?id=record_f_1725b [<https://perma.cc/6LJD-GVAU>] (U.K.) (last visited Oct. 30, 2018). *See generally* LUDWIG GIESEKE, *VOM PRIVILEG ZUM URHEBERRECHT* (1995).

² CHRISTINE MACLEOD, *INVENTING THE INDUSTRIAL REVOLUTION* 68, 203 (1988) (U.K.); GABRIEL GALVEZ-BEHAR, *LA RÉPUBLIQUE DES INVENTEURS* 29 (2008) (Fr.). *See generally* ERICH SCHIFF, *INDUSTRIALIZATION WITHOUT NATIONAL PATENTS* (1971) (Switz. & Neth.); MARGRIT SECKELMANN, *INDUSTRIALISIERUNG, INTERNATIONALISIERUNG UND PATENTRECHT IM DEUTSCHEN REICH 1871–1914*, at 81–82 (2006).

³ *See* Alexander Peukert, *Intellectual Property and Development—Narratives and their Empirical Validity*, 20 *WORLD INTELL. PROP. J.* 2 (2017). *Cf.* Marianne Levin, *The Pendulum Keeps Swinging – Present Discussions on and Around the TRIPS Agreement*, *INTELL. PROP. RIGHTS IN A FAIR WORLD TRADE SYS.* 3, 5 (Annette Kur & Marianne Levin eds., 2011) (discussing the continuing debates of IP protection in developing countries).

⁴ *Cf.* William W. Fisher III & Cyril P. Rigamonti, *The South Africa AIDS Controversy – A Case Study in Patent Law and Policy*, *HARV. L. SCH.* (Feb. 10, 2005), <https://cyber.harvard.edu/people/ffisher/South%20Africa.pdf> [<https://perma.cc/AB2W-VR7H>]; World Trade Organization, Ministerial Declaration of 14 November 2001, *WTO Doc. WT/MIN(01)/DEC/2* (2002); Marrakesh Agreement Establishing the World Trade Organization (with final act, annexes and protocol), concluded at Marrakesh on 15 April 1994, Annex 1C, 1869 U.N.T.S. 299, 33 *I.L.M.* 1197 (1994), establishing an Agreement on Trade-Related Aspects of Intellectual Property Rights [hereinafter *TRIPS Agreement*], art. 31bis; Panel Report, *Australia – Certain Trademark Concerning Trademarks, Geographical Indications and other Plain Packaging Requirements Applicable to Tobacco Products and Packaging*, *WT/DS435/R*, *WT/DS441/R*, *WT/DS 458/R*, *WT/DS467/R* (Jun. 28, 2018), https://www.wto.org/english/tratop_e/dispu_e/435_441_458_467r_e.pdf [<https://perma.cc/93Q4-J7ME>].

⁵ JESSICA LITMAN, *DIGITAL COPYRIGHT* 128 (2001). *See generally* LAWRENCE LESSIG, *FREE CULTURE* (2004); SARA BANNERMAN, *INTERNATIONAL COPYRIGHT AND ACCESS TO*

times, the justification of IPRs was called into question. Still, and irrespective of rigorous and serious critiques, the political and legal dynamic often resulted in a confirmation of the status quo of IP protection, if not its further expansion.⁶

This Article offers an explanation for this peculiar dynamic by applying insights and concepts of Karl Polanyi’s book “The Great Transformation” to IP.⁷ According to the subtitle of this classical study of economic history, published in 1944, Polanyi’s aim was to understand the “political and economic origins of our time,” i.e. a time when WWII was still raging. In a nutshell, he claimed that the catastrophes of the 20th century can be explained by the rise and fall of the market economy in the 19th century. To substantiate this claim, he provides a detailed economic history of how the core production factors of the industrial age—labor, land, and money—were transformed into tradeable commodities in the United Kingdom, and which self-protective measures British society seized in order to re-embed the “satanic mill” of the autonomous laissez-

KNOWLEDGE (2016); SEBASTIAN HAUNSS, *Conflicts in the Knowledge Society* (2013); EDWARD LEE, *THE FIGHT FOR THE FUTURE: HOW PEOPLE DEFEATED HOLLYWOOD AND SAVED THE INTERNET — FOR NOW* (2013); *COPYRIGHT LAW IN AN AGE OF LIMITATIONS AND EXCEPTIONS* (Ruth L. Okediji ed., 2017).

⁶ For example, the Association of German Jurists rejected a proposal made by Professor *Ohly* to repeal the related rights in simple, non-original photographs (§ 72 German Copyright Act), and in press publications (§§ 87(f)–(h) German Copyright Act). See *Deutscher Juristentag – Beschlüsse 26*, DEUTSCHER JURISTENTAG E.V., (2016) https://www.djt.de/fileadmin/downloads/70/djt_70_Beschluesse_141202.pdf [https://perma.cc/LNL2-DST3] (last visited Oct. 30, 2018). The EU legislature likewise rejected a proposal by the European Commission to reduce the scope of trademark law and overrule the CJEU to the effect that regarding cases of double identity and well-known marks only the traditional origin function of trademarks and trademark law ought to be relevant. Cf. *Proposal for a Directive of the European Parliament and of the Council to Approximate the Laws of the Member States Relating to Trade Marks (Recast)*, COM (2013) 162 final (Mar. 2, 2013), with Directive 2015/2436, of the European Parliament and of the Council to Approximate the Laws of the Member States Relating to Trade Marks, recital 16, 2015 O.J. (L 336) 1, 3 [hereinafter EUTMDir 2015/2436].

⁷ See KARL POLANYI, *THE GREAT TRANSFORMATION: THE POLITICAL AND ECONOMIC ORIGINS OF OUR TIME* (2d ed. 2001). For a general introduction to Polanyi’s writings and life see, e.g., GARETH DALE, *KARL POLANYI – A LIFE ON THE LEFT* (2016); GARETH DALE, *RECONSTRUCTING KARL POLANYI* (2016).

faire market into a society in which humans, nature, and economic exchange can sustainably flourish.⁸

Irrespective of the validity of Polanyi's concrete historical argument, the terminology and concepts employed in the "Great Transformation" proved to be very fruitful and influential. Among economic sociologists, for example, "few would disagree with the statement 'We are all Polanyians now.'"⁹ Countless publications in various fields of the humanities rely on Polanyi's theories of commodification, of diametrical countermovements, and of an economy that is more or less embedded in society at large, and apply these concepts to all sorts of countries, economies, commodities, and points in time, in particular to processes of globalization and the most recent financial crisis.¹⁰

Surprisingly, however, IP does not feature prominently among Polanyians. Polanyi himself did not address the issue, which is understandable in light of the accessory role that copyrights, patents, and trademarks played in the analogue, industrial economy in the middle of the 20th century.¹¹ In a post-industrial economy 4.0, however, where computerization, digital networks, 3D printing, robotics, and biotechnology herald a (near)-zero-marginal-cost society of abundant goods and services, information/knowledge advances to become the single most important production factor.¹²

⁸ See 3 RICHARD THURNWALD, *DIE MENSCHLICHE GESELLSCHAFT IN IHREN ETHNO-SOZIOLOGISCHEN GRUNDLAGEN* 44–45 (1932) (explaining embeddedness of economic spheres in a given society).

⁹ Jens Beckert, *The Great Transformation of Embeddedness: Karl Polanyi and the New Economic Sociology*, in *MARKET AND SOCIETY: THE GREAT TRANSFORMATION TODAY* 38, 40 (Chris Hann & Keith Hart eds., 2009).

¹⁰ See, e.g., FRED BLOCK, *THEORY AND SOCIETY* 1 (2003); *MARKET AND SOCIETY: THE GREAT TRANSFORMATION TODAY* (Chris Hann & Keith Hart eds., 2009); GARETH DALE, *KARL POLANYI: THE LIMITS OF THE MARKET* (2010); Sabine Frerichs, *Polanyi in an Hourglass: The Two Lives of a Sociological Classic*, in *FROM ECONOMY TO SOCIETY? PERSPECTIVES ON TRANSNATIONAL RISK REGULATION* 25 (Bettina Lange et al. eds., 2013); see also information and references available at *KARL POLANYI INSTITUTE OF POLITICAL ECONOMY*, <http://www.concordia.ca/research/polanyi.html> [<https://perma.cc/3A5N-UDHV>] (last visited Oct. 30, 2018).

¹¹ ALFRED D. CHANDLER, JR., *SCALE AND SCOPE: THE DYNAMICS OF INDUSTRIAL CAPITALISM* 14 (1990).

¹² For an early account, see PETER DRUCKER, *POST-CAPITALIST SOCIETY* 5 (1993); see also JENS BECKERT, *GRENZEN DES MARKTES* 78 (1997); and lately JEREMY RIFKIN, *THE ZERO MARGINAL COST SOCIETY: THE INTERNET OF THINGS, THE COLLABORATIVE*

And, with the significance of information grows the importance of IPRs. For only if the implementation of ubiquitous copying machines requires prior authorization and a corresponding payment of royalties will providers of goods and services be able to charge a price above marginal costs, which will otherwise approach zero. Whereas commentators differ in their normative assessment of this scenario, all agree that the future of market capitalism in the digital age hinges to a large extent on the question of whether IPRs will be effectively enforced, further strengthened, or, alternatively, scaled back or perhaps even abolished.¹³

In spite of this growing importance of IPRs for current capitalism, to my knowledge, no comprehensive application of Polanyian concepts to IP has been undertaken yet. Social scientists generally do not complement their economic, social, and historical studies with detailed considerations of the law, although Polanyi stresses and shows in detail that the market economy in the UK was established through legal measures.¹⁴ The contribution most closely on point is Bob Jessop's article, "Knowledge as a fictitious commodity," in which Jessop refines Polanyi's core concept—the notion of the fictitious commodity—with respect to IP but fails to

COMMONS, AND THE ECLIPSE OF CAPITALISM 4 (2015); PAUL MASON, *POSTCAPITALISM: A GUIDE TO OUR FUTURE* 117 (2015); Mark A. Lemley, *IP in a World Without Scarcity*, 90 N.Y.U. L. REV. 460 (2015).

¹³ Accordingly, outlooks vary. Some believe more commodification and "global network capitalism" will follow. See MATTHEW DAVID & DEBORA HALBERT, *OWNING THE WORLD OF IDEAS* 94 (2015); Primavera De Filippi & Miguel Said Viera, *The Commodification of Information Commons: The Case of Cloud Computing*, 16 COLUM. SCI. & TECH. L. REV. 102 (2014); David Lametti, *The Cloud: Boundless Digital Potential or Enclosure 3.0?*, 17 VA. J. L. & TECH. 190 (2012). Some anticipate IPRs will become "useless" or so reduced in scope and number that the capitalist market will shrink to the edges of the economy. See RIFKIN, *supra* note 12, at 6, 218; Lemley, *supra* note 12, at 460. Others forecast IPRs will be abolished so that a communist society can be established. See MASON, *supra* note 12, at 279–80.

¹⁴ See POLANYI, *supra* note 7, at 91; Amanda Perry-Kessaris, *Reading the Story of Law and Embeddedness Through a Community Lens: A Polanyi-Meets-Cotterrell Economic Sociology of Law*, 62 N. IR. LEGAL Q. 401 (2011). See also KARL POLANYI, *GLOBALISATION AND THE POTENTIAL OF LAW IN TRANSNATIONAL MARKETS* (Christian Joerges & Josef Falke eds., 2011) and the contributions to *Special Issue: Towards an Economic Sociology of Law*, 40 J.L. & SOC'Y (2013).

complement this claim with a legal analysis.¹⁵ Legal academics, in turn, talk a lot about commodification and second and third “enclosure movements” with regard to IP but fail to integrate these allusions into the much richer theoretical framework that the “Great Transformation” offers.¹⁶ In a recent article on “Property and the Construction of the Information Economy,” Julie Cohen takes up this task, but she does not focus on the dynamic evolution of IP as it stands today. Instead, she tells a more forward-looking story about the propertization of intangible resources, the dematerialization of the basic factors of industrial production, and the embedding of patterns of barter and exchange within information platforms, all of which contribute to the emergence of what she calls “informational capitalism.”¹⁷

Compared to this agenda, this Article pursues a more modest and also conventional aim. It reconstructs and then applies core Polanyian concepts of commodification in Part I, fictitious commodities in Part II, and countermovements in Part III to the three main areas of IP, namely copyrights, patents, and trademarks, as they have evolved and are currently regulated in international, EU,

¹⁵ See Bob Jessop, *Knowledge as a Fictitious Commodity: Insights and Limits of Polanyian Analysis*, in READING KARL POLANYI FOR THE 21ST CENTURY: MARKET ECONOMY AS A POLITICAL PROJECT 115, <http://gerusija.com/downloads/Karl%20Polanyi%20for%20the%2021Century%20Market%20Economy%20as%20a%20Political%20Project.pdf> [https://perma.cc/4QD4-FJV5] (Ayşe Buğra & Kaan Ağartan eds., 2007). Jessop’s concepts have been applied by ELISABETH ABERGEL & CLAIRE LAGIER, *THE GREAT TRANSFORMATION OF THE GMO LABELING DEBATE IN THE ERA OF NEW PLANT BREEDING TECHNIQUES* (2017).

¹⁶ See James Boyle, *The Second Enclosure Movement and the Construction of the Public Domain*, 66 L. & CONTEMP. PROBS. 33, 34 (2003); Lametti, *supra* note 13, at 190; THE COMMODIFICATION OF INFORMATION (Niva Elkin-Koren & Neil Weinstock Netanel eds., 2002); Rosemary J. Coombe, *Commodity Culture, Private Censorship, Branded Environments, and Global Trade Politics: Intellectual Property as a Topic of Law and Society Research*, in THE BLACKWELL COMPANION TO L. AND SOC. RES. 369 (Austin Sarat ed., 2004); Rochelle Dreyfuss & Susy Frankel, *From Incentive to Commodity to Asset: How International Law is Reconceptualizing Intellectual Property*, 36 MICH. J. INT’L L. 557, 560 (2015).

¹⁷ Julie E. Cohen, *Property and the Construction of the Information Economy: A Neo-Polanyian Ontology*, in HANDBOOK OF DIGITAL MEDIA AND COMM. (Leah Lievrouw & Brian Loader eds.), <https://www.ssrn.com/abstract=2991271> [https://perma.cc/N9JQ-UFLT] (posted Jun. 26, 2017).

and selected national laws.¹⁸ The overall purpose of this necessarily abstract effort is first and foremost a descriptive one, namely to better understand the exceptional dynamic that characterizes IP law in comparison to real property law. In the conclusion, I will also articulate some normative implications. These prescriptive conclusions will, however, not only be relatively thin, but moreover—in contrast to Karl Polanyi and most if not all of his followers—not motivated by a particularly “critical” attitude towards markets or capitalism in general. To the contrary, I believe that competitive markets dispose of greater input and output legitimacy than any other economic system that has been tried in the past, including crypto-socialist “third ways” and extremist countermovements.¹⁹ This preoccupation with the market does not, however, in any way diminish the conceptual richness of Karl Polanyi’s “Great Transformation,” which provides many important insights into the functioning of the market, its role in modern society, and the resistance it constantly faces.

I. COMMODIFICATION

The first element of Polanyi’s theory that merits attention is his powerful explanation of seemingly natural processes in which practically every resource and human capacity is turned into a tradeable commodity.

¹⁸ See generally Alexander Peukert, *Die Expansion des Urheberrechts – eine polanyische Perspektive*, in *VOM MAGNETTONBAND ZU SOCIAL MEDIA – FESTSCHRIFT 50 JAHRE URHEBERRECHTSGESETZ (URHG)* 305 (Thomas Dreier & Reto Hilty eds., 2015) (regarding the expansion of German copyright law); see also Alexander Peukert, *Vom Warenzeichen zum Markeneigentum. Ein polanyischer Erklärungsversuch*, in *MARKTKOMMUNIKATION ZWISCHEN GEISTIGEM EIGENTUM UND VERBRAUCHERSCHUTZ – FESTSCHRIFT FÜR KARL-HEINZ FEZER ZUM 70. GEBURTSTAG* 405 (Wolfgang Büscher et al. eds., 2016) (regarding the evolution of German and EU trademark law).

¹⁹ See FRIEDRICH A. HAYEK, *THE CONSTITUTION OF LIBERTY* (1960), <https://iea.org.uk/sites/default/files/publications/files/Hayek's%20Constitution%20of%20Liberty.pdf> [<https://perma.cc/RMU6-7H5M>] (last visited Jan. 30, 2019); Franz Böhm, *Privatrechtsgesellschaft und Marktwirtschaft*, 17 *JAHRBUCH FÜR DIE ORDNUNG VON WIRTSCHAFT UND GESELLSCHAFT [ORDO]* 75 (1966); SUZANNE SCOTCHMER, *INNOVATION AND INCENTIVES* 97 (2004); Richard A. Epstein, *The Disintegration of Intellectual Property? A Classical Liberal Response to a Premature Obituary*, 62 *STAN. L. REV.* 455, 520 (2010); ROBERT P. MERGES, *JUSTIFYING INTELLECTUAL PROPERTY* 5 (2011).

A. *Polanyi on Machines and the Formation of the Market Economy*

Polanyi attributes the initial impulse towards this process to the invention and implementation of new technologies enabling large-scale industrial production. He does not assert that technological progress constitutes the sole cause of the Great Transformation but still observes “that[,] once elaborate machines and plant were used for production in a commercial society, the idea of a self-regulating market was bound to take shape.”²⁰ The reason for the crucial role of the move from craftsmen’s tools to machines like the steam engine is this:

Since elaborate machines are expensive, they do not pay unless large amounts of goods are produced. They can be worked without a loss only if the vent of the goods is reasonably assured and if production need not be interrupted for want of the primary goods necessary to feed the machines. For the merchant this means that *all factors involved must be on sale*, that is, they must be available in the needed quantities to anybody who is prepared to pay for them. Unless this condition is fulfilled, production with the help of specialized machines is too risky to be undertaken both from the point of view of the merchant who stakes his money and of the community as a whole which comes to depend upon continuous production for incomes, employment, and provisions.²¹

As a consequence,

All transactions are turned into money transactions, and these in turn require that a medium of exchange be introduced into every articulation of industrial life. *All incomes must derive from the sale of something or other*, and whatever the actual source

²⁰ See POLANYI, *supra* note 7, at 25.

²¹ *Id.* at 24 (emphasis added).

of a person's income, it must be regarded as resulting from sale.²²

In such a self-regulating market system,

there are markets for all elements of industry, not only for goods (always including services) but also for labor, land, and money, their prices being called respectively commodity prices, wages, rent, and interest. The very terms indicate that prices form incomes: interest is the price for the use of money and forms the income of those who are in the position to provide it; rent is the price for the use of land and forms the income of those who supply it; wages are the price for the use of labor power, and form the income of those who sell it; commodity prices, finally, contribute to the incomes of those who sell their entrepreneurial services, the income called profit being actually the difference between two sets of prices, the price of the goods produced and their costs, *i.e.*, the price of the goods necessary to produce them. If these conditions are fulfilled, all incomes will derive from sales on the market, and incomes will be just sufficient to buy all the goods produced.²³

This, according to Polanyi, is the essence of what we call the "market system" and, at the same time the seemingly natural "satanic mill" of commodification of each and every production factor.²⁴ It implies "a change in the motive of action on the part of the members of society: for the motive of subsistence that of gain must be substituted."²⁵ In a pure market economy, there is no alternative to the profit motive if you want to survive.²⁶

This observation seems to imply that commodification and marketization are quasi-natural phenomena. Social institutions, including the dominant mode of economic exchange, are, however,

²² *Id.* at 24 (emphasis added).

²³ *Id.* at 39–40.

²⁴ *See id.* at 19.

²⁵ *See id.* at 22.

²⁶ *See id.* at 24.

always contingent creations of collective human intentionality.²⁷ Polanyi thus rightly stresses that

[t]here was nothing natural about *laissez-faire*; free markets could never have come into being merely by allowing things to take their course. Just as cotton manufactures – the leading free trade industry – were created by the help of protective tariffs, export bounties, and indirect wage subsidies, *laissez-faire* itself was enforced by the state.²⁸

The measures that put the Great Transformation into effect were legal measures. Polanyi shows in quite some detail the means through which changes in the law, labor, land, and money as the major production factors of the industrial age became tradeable commodities in early 19th century Britain.²⁹ In particular, the British legislature abolished privileges and laws that prevented the free sale of labor and land.³⁰ At the core of these legal developments lies the property issue, which, in Polanyi's words, "is the legal aspect only of capitalism":³¹ "[w]hile the actual content of property rights might undergo redefinition at the hands of legislation, assurance of formal continuity is essential to the functioning of the market system."³²

B. New Technologies and Intellectual Property

To support my assertion that Polanyi's theory of commodification is informative for IP, it will be necessary to show that certain complex machines triggered a demand for property rights in inventions, works, and other subject matter of today's IP system. On a general level, it is indeed widely acknowledged that IP law can be conceived of as a reaction to technological change or,

²⁷ See PETER L. BERGER & THOMAS LUCKMANN, *THE SOCIAL CONSTRUCTION OF REALITY: A TREATISE IN THE SOCIOLOGY OF KNOWLEDGE* (1966); JOHN R. SEARLE, *THE CONSTRUCTION OF SOCIAL REALITY* 114 (1995); RAIMO TUOMELA, *THE PHILOSOPHY OF SOCIALITY: THE SHARED POINT OF VIEW* (2007).

²⁸ POLANYI, *supra* note 7, at 80.

²⁹ See DALE, *supra* note 10, at 208.

³⁰ See POLANYI, *supra* note 7, at 79.

³¹ See *id.* at 99.

³² See *id.* at 134.

more precisely, the development of reproduction technologies.³³ To further disentangle the complex relationship between technology, the market, and IP law, it is useful to distinguish the initial propertization of information by the first modern IP laws in history (1) from later expansions of this body of law (2).³⁴

1. Printing and Other New Technologies in Early Modern Times

The “elaborate” and expensive machines that triggered the move towards property rights in abstract IP objects were wind mills, drainage systems for mining, and, last but not least, the printing press.³⁵ The former technologies were key for the reclamation of land, agricultural production, and the exploitation of silver and other valuable metal at a scale never achieved before in Europe.³⁶ The latter technology of mass communication eventually transformed stratified feudal/absolutist script societies into functionally differentiated modern societies.³⁷ Since the invention, improvement, and employment of all those machines required significant investments, Polanyi’s theory suggests that the respective providers, at one point in time, demanded exclusive property rights in order to be able to generate income based on sales.

At first sight, history seems to cast doubt on this hypothesis. Both the invention and proliferation of the mentioned technologies

³³ See Martin Kretschmer, *Copyright and its Discontents*, in OXFORD HANDBOOK OF THE CREATIVE AND CULTURAL INDUSTRIES 456 (Candace Jones et al. eds., 2015) (“a purely technological reflex appeared to drive the evolution of copyright law”); COPYRIGHT AND THE CHALLENGE OF THE NEW (Brad Sherman & Leanne Wiseman eds., 2012); HERBERT ZECH, INFORMATION ALS SCHUTZGEGENSTAND 167 (2012).

³⁴ Cf. Katarzyna Gracz, *Opposing the Expansion of Copyright Law: Social Norms in the Quest against ACTA and the “Commodification of Knowledge and Culture Project,”* in EXPANDING INTELLECTUAL PROPERTY: COPYRIGHTS AND PATENTS IN THE 20TH CENTURY EUROPE AND BEYOND 267 (Hannes Siegrist & Augusta Dimou eds., 2017).

³⁵ See ALEXANDER PEUKERT, KRITIK DER ONTOLOGIE DES IMMATERIALGÜTERRECHTS 74 (2018).

³⁶ RIFKIN, *supra* note 12, at 39; Christopher May, *The Venetian Moment: New Technologies, Legal Innovation and the Institutional Origins of Intellectual Property*, 20 PROMETHEUS 159 (2002).

³⁷ See ELIZABETH L. EISENSTEIN, THE PRINTING REVOLUTION IN EARLY MODERN EUROPE (2012); WALTER J. ONG, ORALITY AND LITERACY 129 (2012) (“Typography had made the word into a commodity.”); MARSHALL McLuhan, GUTENBERG GALAXY: THE MAKING OF THE TYPOGRAPHIC MAN 142 (1962).

as well as the earliest laws concerning the use of new machines (Venice 1477, England 1624) and the printing of books (UK 1710) predate the formation of the market economy, which Polanyi dates to the first half of the 19th century, by decades, even centuries.³⁸ It thus appears that the relationship between technological progress and propertization is much less straightforward than Polanyi presumed, if it exists at all.

Polanyi is, however, clear about the fact that the Great Transformation was the result of a very long line of events predating the paradigm shift of the 19th century. He notes, for example, that the “[c]ottage industry was spreading by the second half of the fifteenth century” and that, “[f]rom the sixteenth century onwards[,] markets were both numerous and important. Under the mercantile system they became, in effect, a main concern of government. . . .”³⁹

Nevertheless, during all those centuries, “there was still no sign of the coming control of markets over human society. On the contrary. Regulation and regimentation were stricter than ever; the very idea of a self-regulating market was absent.”⁴⁰ This observation also proves true for the area of interest here. Wind mills, mining technologies, and the printing press were not immediately regulated by freely transferable property rights but for a long time by privileges. The privilege was the regulatory instrument that allowed absolutist rulers to incentivize and protect private initiative and investment but at the same time retain control over the use of new, powerful technologies. Privileges were granted on a case-by-case basis to loyal subjects or immigrants and employed as a tool of mercantilist control and censorship. Through the privilege, the printing press and other elaborate machines were integrated into a strictly controlled economy, which in turn was embedded in a stratified feudal society.

The 1477 statute of Venice, the 1624 Statute of Monopolies, and the 1710 Statute of Anne are doubtlessly important steps in the movement from privilege to property and thus from an embedded mercantilist economy to a self-regulating capitalist market. Legal

³⁸ See POLANYI, *supra* note 7, at 19.

³⁹ See *id.* at 19, 32.

⁴⁰ *Id.* at 58; DALE, *supra* note 10, at 80.

historians point out, however, that these statutes were still firmly grounded in the early modern privilege system, most notably because they do not grant property rights in abstract, intangible “inventions” or “works.” Instead, they regulate who is entitled to make “new manufacture” or “print books.”⁴¹

The transformation of these activities and artefacts into commodified abstract works, inventions, and other IP only occurred in the late 18th and early 19th century. Before this point of time, the notion of abstract IP objects—“the” work, “the” invention, etc.—was either “unthinkable”⁴² or considered a “wild” proposition.⁴³ The political, economic, and conceptual difficulties of the move from privileges to act in a stratified society to individual intellectual property rights exchangeable on an anonymous market can be observed, for example, in the long and fiercely fought battles of the booksellers in 18th century Britain, France, and Germany.⁴⁴ The more efficient printing and re-printing technologies became and the more market transactions replaced feudal systems of patronage and privilege, the more it became evident that publishers, authors, and inventors require some kind of property right that enables them to recoup their sunk investments in the first prototype, e.g. a manuscript of a book. Using the example of the German printing industry, this shift can even be pinpointed to a particular year and event, namely to 1764, when the then leading Leipzig publishers switched from a barter trade in books to the sale of their production. As a consequence of this business decision, the complete German book sector had to be restructured to the effect that all exchanges

⁴¹ Regarding patent law, see MACLEOD, *supra* note 2, at 80, 203; Oren Bracha, *Owning Ideas: A History of Anglo-American Intell. Prop.*, UNIVERSITY OF TEXAS AT AUSTIN SCHOOL OF LAW 530 (June 2005), <https://law.utexas.edu/faculty/obracha/dissertation/> [<https://perma.cc/96K8-4VR6>]. Regarding copyright law, see SHERMAN & BENTLY, *supra* note 1, at 17; Friedemann Kawohl & Martin Kretschmer, *Abstraction and Registration: Conceptual Innovations and Supply Effects in Prussian and British Copyright (1820–50)*, 2 *INTELL. PROP. QUARTERLY* 209, 212 (2003) (“Eighteenth century copyright was practised as the sale of a manuscript from author to publisher against a one-off fee, and litigation between competing publishers.”); DEAZLEY, *supra* note 1, at 221; Anne Barron, *Copyright Law’s Musical Work*, 15 *SOC. & LEGAL STUD.* 101, 106 (2006).

⁴² Oren Bracha, *The Commodification of Patents 1600–1836: How Patents Became Rights and why we Should Care*, 38 *LOY. L.A. L. REV.* 177, 219 (2004).

⁴³ *Millar v. Taylor*, [1769] 4 *Burrow* 2303, 2357 (Yates, J.).

⁴⁴ See PEUKERT, *supra* note 35.

became money exchanges, including the contract between the author and the publisher regarding a particular “work” that was then produced and distributed in a certain number of “copies.”⁴⁵

The French revolutionary patent and copyright acts of 1791/1793 present the first full legal implementation of the new paradigm and at the same time the conceptual point of no return.⁴⁶ From here, the idea that authors and inventors own intangible/intellectual goods and sell them on the market spread around the globe.⁴⁷ During the course of their still solidifying commodification, the evaluation of works and inventions became more and more detached from arguments of traditional aesthetics and public benefits. In the end, the only relevant value remaining was the market-conception of value: every use value, however motivated or characterized, has to translate into an exchange value. Thus, what is worth copying is worth protecting by tradeable property rights.⁴⁸

2. Later Technological Development

Once the market is established as the dominant mode of economic exchange, it tends to absorb every new technology. All input into a new technology—in particular the sunk costs into research and development—and all of its output have to be up for sale because there is, in general, no other way to recoup investments and generate income.⁴⁹

⁴⁵ HELMUTH KIESEL & PAUL MÜNCH, *GESELLSCHAFT UND LITERATUR IM 18. JAHRHUNDERT* 124 (1977).

⁴⁶ HEINRICH BOSSE, *AUTORSCHAFT IST WERKHERRSCHAFT* 100, 107 (2014) [1981].

⁴⁷ Alexander Peukert, *Intellectual Property: The Global Spread of Legal Concept* 1, *KRITIKA: ESSAYS ON INTELL. PROP.* 114 (Peter Drahos et al. eds., 2015).

⁴⁸ Regarding inventions see *Lowell v. Lewis*, 15 F. Cas. 1018 (C.C.D. Mass. 1817); Bracha, *supra* note 42, at 233. Regarding works of art, see *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 252 (1903) (“Yet if they command the interest of any public, they have a commercial value—it would be bold to say that they have not an aesthetic and educational value—and the taste of any public is not to be treated with contempt.”); Barton Beebe, *Bleistein, the Problem of Aesthetic Progress, and the Making of American Copyright Law*, 117 *COLUM. L. REV.* 319 (2017). Regarding trademarks, see Rochelle C. Dreyfuss, *Expressive Genericity: Trademarks as Language in Pepsi Generation*, 65 *NOTRE DAME L. REV.* 397, 400–12 (1990). Critique: ALEXANDER PEUKERT, *GÜTERZUORDNUNG ALS RECHTSPRINZIP* 733–90 (2008).

⁴⁹ See DAN SCHILLER, *HOW TO THINK ABOUT INFORMATION* 21 (2010).

The history of IP from the 19th to the 21st century is replete with examples of this Polanyian logic of commodification: musical compositions attained the status of objects of property only after the mass production of sheet music created the impression that music is more akin to written texts than to ephemeral performances on stage.⁵⁰ The thingification of paintings, sculptures, and other works of fine art took even longer. It was not until industrial remakes of three- and two-dimensional products flooded the market in the late 19th century that these artefacts were also idealized as abstract industrial designs or works of (applied) art and allocated to their first producers.⁵¹ In Germany, this was also the time when large research laboratories, for example, in the chemical industry, were established, giving rise to claims for efficient patent protection for the inventions ensuing from these organizations.⁵² Technologies of fixing and reproducing sounds and (moving) images triggered several 20th century copyrights and related rights in audio performances, phonograms, photographs, films, and broadcasting signals, all of which cost money to produce but are easily reproduced without payment.⁵³ Computerization and digitization generalized and amplified this phenomenon, leading to extended exclusive rights in all existing copyright subject matter and to new subject matter such as computer programs, databases, and press publications.⁵⁴ New IP rights in layout designs (topographies) of integrated circuits and the application of patent law to computer-

⁵⁰ See *Bach v. Longman (1777)*, in PRIMARY SOURCES ON COPYRIGHT, http://www.copyrighthistory.org/cam/pdf/uk_1777_1.pdf [<https://perma.cc/7ATU-QK82>] (last visited Oct. 30, 2018); Friedemann Kawohl & Martin Kretschmer, *Abstraction & Registration: Conceptual Innovations and Supply Effects in Prussian and British Copyright (1820–50)*, 2 INTELL. PROP. Q. 209, 214 (2003) <https://core.ac.uk/download/pdf/76740.pdf> [<https://perma.cc/2FLN-5GFG>]; Anne Barron, *Copyright Law's Musical Work*, 15 SOCIAL & LEGAL STUDIES 101, 119 (2006).

⁵¹ See STINA TEILMANN-LOCK, *THE OBJECT OF COPYRIGHT* 120–21 (2017).

⁵² See SECKELMANN, *supra* note 2, at 405.

⁵³ See PEUKERT, *supra* note 35; Sherman & Wiseman, *supra* note 33; JONATHAN STERNE, *THE AUDIBLE PAST* 23 (2003); BERNARD EDELMAN, *OWNERSHIP OF THE IMAGE* (1979); Anne Barron, *The Legal Properties of Film*, 67 MOD. L. REV. 177, 181 (2004); William Cornish, *Conserving Culture and Copyright: A Partial History*, 13 EDINBURGH L. REV. 8 (2009).

⁵⁴ See TRIPS Agreement, *supra* note 4, art. 10; GESETZ ÜBER URHEBERRECHT UND VERWANDTE SCHUTZRECHTE [URHG] [GERMAN COPYRIGHT ACT], Sept. 9, 1965, BGBl I at 1273, last amended by Gesetz [G], Sept. 1, 2017, BGBl. I at 3346, art. 1, §§ 87f-h.

implemented and biotechnological inventions can also be explained as measures to integrate these technologies into the capitalist market economy.⁵⁵

In contrast to patents, copyrights, and other IP rights in innovations, trademarks do not attach to and thus commodify new technologies. Instead, trademark law grants exclusive rights in the use of distinctive signs in the course of trade, irrespective of whether that trade concerns new or traditional types of goods and services.⁵⁶ The history of trademark law is nonetheless also closely tied to technological progress and innovative marketing practices resulting therefrom. Before industrialization, goods and services were primarily distinguished and identified by their characteristics and/or their place of production.⁵⁷ If fanciful signs were attached to products, their use was strictly regulated by guilds and other organizations embedded in a stratified society.⁵⁸ With the emergence of the competitive market, this economic order lost its significance. Early industrialists employed new signs indicating their name or their location (e.g. Worcester Sauce). Though dis-embedded from medieval practices, these signs retained an accessory role. Their purpose was to support the sale of a product that constituted the primary commodity. They had not yet acquired the status of a separate commodity.⁵⁹

⁵⁵ See generally WIPO, Treaty on Intell. Property in Respect of Integrated Circuits, I.L.M. 1477 (1989); Nari Lee, *Patent Eligible of Business Subject Matter Reconfiguration and the Emergence of Proprietarian Norms – The Patent Eligibility of Business Methods*, 45 IDEA 321, 321 (2005); Jessica C. Lai, *A Tale of Two Histories: The ‘Invention’ and Its Incentive Theory*, in INTELL.PROP.AND ACCESS TO IMMATERIAL GOODS 94, 119 (Jessica C. Lai & Antoinette Maget Dominicé eds., 2016); Mario Biagioli, *Between Knowledge And Technology: Patenting Methods, Rethinking Materiality*, 22 ANTHROPOLOGICAL F. 285, 289–90 (2012).

⁵⁶ See Cohen, *supra* note 17, at 5–6.

⁵⁷ See Gary Richardson, *Brand Names before the Industrial Revolution* (Nat’l Bureau of Econ. Research, Working Paper No. 1390, 2008), <http://www.nber.org/papers/w13930.pdf> [<https://perma.cc/5MGF-UXND>].

⁵⁸ KARL-HEINZ FEZER, *MARKENRECHT, Einleitung in das deutsche, europäische und internationale Marken- und Kennzeichenrecht*, para. 17 (4th ed. 2009).

⁵⁹ See Paul Duguid, *Early Marks: American Trademarks Before US Trademark Law*, <https://doi.org/10.1080/00076791.2016.1246541> [<https://perma.cc/5JFT-3FAC>] (2016) (last visited Oct. 30, 2018).

This abstraction only occurred in reaction to further changes in production and marketing, both again related to technological development. In the late 19th century, consumer goods started to be produced at massive industrial scales. They were shipped to institutional dealers and sold to consumers at places far away from the production site. In order to allow consumers to distinguish and remember goods under conditions of such anonymous production and consumption, entrepreneurs like Karl August Lingner from Dresden invented fanciful brand names (“Warenzeichen”) such as “Odol,” which identified the product, not a particular producer or place of production.⁶⁰ Already in the early 20th century, the creation of such a brand image was considered a costly input into capitalist production that merited protection against free-riders, even absent a risk of confusion on the part of the consumer.⁶¹ But only after further technological advancements had allowed capitalist societies to proceed to an affluent society where “wants are increasingly created by the process by which they are satisfied”⁶² did trademarks become valuable commodities in and of themselves. Under these conditions, both producers and consumers require trademarks in order to create and satisfy demand for conspicuous consumption and reputational distinction.⁶³ The input into the creation of these abstract signifiers,

⁶⁰ See Lionel A. F. Bently, *From Communication to Thing: Historical Aspects of the Conceptualization of Trademarks as Property*, 1 *TRADEMARK AND UNFAIR COMPETITION* L. 118, 149 (2014) (U.K.); Kai-Uwe Hellmann, *Soziologie der Marke* 46 (2003); Ross D. Petty, *The Codevelopment of Trademark Law and the Concept of Brand Marketing in the United States Before 1946*, 31 *J. MACROMARKETING* 85 (2011).

⁶¹ Landgericht Elberfeld [LG] [regional court] Sept. 11, 1924, 1924 *GEWERBLICHER RECHTSSCHUTZ UND URHEBERRECHT [GRUR]* 204 (204–205); Hermann Isay, *Die Selbstständigkeit des Rechts der Marke*, 1929 *GRUR* 23, 25; Frank I. Schechter, *The Rational Basis of Trademark Protection*, 40 *HARV. L. REV.* 813, 813 (1927); Barton Beebe, *The Suppressed Misappropriation Origins of Trademark Antidilution Law: The Landgericht Elberfeld’s Odol Opinion and Frank Schechter’s The Rational Basis of Trademark Protection*, in *INTELL. PROP. AT THE EDGE: THE CONTESTED CONTOURS OF IP* (Rochelle Cooper Dreyfuss & Jane C. Ginsburg eds., 2013).

⁶² See John Kenneth Galbraith, *The Affluent Society* 131–37 (1958).

⁶³ See Thorstein Veblen, *The Theory of the Leisure Class* 84 (1994) [1899] (“The basis on which good repute in any highly organized industrial community ultimately rests is pecuniary strength; and the means of showing pecuniary strength, and so of gaining or retaining a good name, are leisure and a conspicuous consumption of goods.”); Peter Corrigan, *The Sociology of Consumption* 179 (1997) (“Instead of consuming the goods themselves, we consume the meanings of goods as constructed through advertising and display . . .”).

in particular for luxury brands, is commodified through contemporary trademark law, for example, via the functionality doctrine of the CJEU and the doctrine of post-sale confusion.⁶⁴

Hardly ever has this continuous commodification and expansion of IP law been straightforwardly justified by the need to subject each and every factor of supply and demand in a market economy to the laws of the market, i.e. to tradeable property rights. The systemic role of IPRs is touched upon, however, in the CJEU's definition of the "specific subject-matter" of IPRs, which justifies a restriction of fundamental freedoms in the Internal Market. According to this definition, IPRs are "intended in particular to ensure for the right holders concerned protection of the right *to exploit* commercially the marketing or the making available of *the protected subject-matter*, by the grant of licenses *in return for payment of remuneration*."⁶⁵

With this complicated definition, the CJEU indeed gets to the essence of IP, the purpose of which is to establish an authorization requirement that the right holder can exchange for money. In a market economy, every input for which there is a demand – even if it is a signifier devoid of meaning – ought to be on sale. And the purpose of IPRs is just this: propertization for the sake of marketization.

The systemic role of IPRs in a market economy with ubiquitous reproduction technologies is also brought to light in IP laws that leave their scope of application effectively open. Under EU and German law, this is the case for the notion of a copyrightable work and the scope of exclusive exploitation rights in these works, the

⁶⁴ See AIPPI, Q68, Economic significance, functions and purpose of the trademark, Yearbook 1979/I, 463–465; ECJ Case C-487/07, L'Oréal v. Bellure, 2009 E.C.R. I-5185, paras. 49, 58; Dev Saif Gangjee, *Property in Brands*, in PROP. CONCEPTS IN INTELL. PROP. L. (Helena R. Howe & Jonathan Griffiths eds., 2013), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2249765 [<https://perma.cc/VR3Q-R65M>].

⁶⁵ See CJEU Joined Cases C-403/08 & C-429/08, Football Ass'n Premier League Ltd. and Others v. QC Leisure and Others, Karen Murphy v. Media Protection Services Ltd., 2011 E.C.R. I-09083 para. 107 (emphasis added). See also Panel Report, *United States – Section 110(5) of the US Copyright Act*, 44–50, WT/DS/160/R (June 15, 2000) [hereinafter Section 110(5) Panel Report]. ("These exclusive rights are the legal means by which exploitation of the work, i.e., the commercial activity for extracting economic value from the rights to the work, can be carried out.")

fields of technology covered by patent law, and the type of signs of which a trademark may consist.⁶⁶ The comprehensive and flexible scope of IP laws and rights makes sure that new technological possibilities to invent, create, and commercialize artefacts will automatically be subject to the central legal feature of the market: exclusive property rights.

Comprehensive propertization furthermore conforms to the interests of all market participants who have to be able to exchange every productive input and output for money in order to make a living. The input/output at stake in IP is the always costly production of a first, but easily reproduced, prototype of an invention, of a work, and of a brand image. Only if these reproducible “Master Artefacts” are recognized as tradeable commodities can their producers generate a market-based income.⁶⁷ Accordingly, IP laws allocate IPRs to those who carry the entrepreneurial responsibility for these creative or non-creative products, namely to independent authors, inventors, designers, or their employers, to phonogram and film producers, to broadcasters, to producers of databases, and to the (legal) person who has applied for a trademark registration or who controls the use of a distinctive sign in the course of trade.⁶⁸ Their privileged position vis-à-vis the world is not justified because of a particular personal relationship between them and their work product. Only scant subject matter of today’s IP can legitimately be said to bear the personal stamp of its creator. Instead, IPRs are justified from an individual right-holder’s perspective because it would be unjust to subject all these providers of new reproducible

⁶⁶ See *TRIPS* Agreement, *supra* note 4, art. 27(1) (regarding patent law); *Bilski v. Kappos*, 561 U.S. 593, 641–43 (2010) (regarding the limits under U.S. patent law); EUTMDir 2015/2436, *supra* note 6, art. 3, 2015 O.J. (L 336) 1, 7 (regarding the limits under trademark law); GERMAN COPYRIGHT ACT §§ 2, 15 (regarding the limits under copyright law).

⁶⁷ PETER DRAHOS, *A PHILOSOPHY OF INTELLECTUAL PROPERTY* 21 (1996); Jessop, *supra* note 15, at 121.

⁶⁸ *Cf.* Convention on the Grant of European Patents (European Patent Convention) art. 60, Oct. 5, 1973, 13 I.L.M. 268 [hereinafter EPC]; Berne Convention for the Protection of Literary and Artistic Works art. 2(6), Sept. 9, 1886, 828 U.N.T.S. 221 [hereinafter Berne Convention]; Council Regulation 6/2002 on Community designs, art. 14, 2002 O.J. (L 3) 1, 6 (EU) [hereinafter Community Design Regulation]; Regulation 2017/1001, of the European Parliament and of the Council of 14 June 2017 on the European Union trade mark, art. 3, 2017 O.J. (L 154) 1, 7.

artefacts to the unforgiving laws of the market but at the same time to withhold from them the legal tool they need in order to generate income and profit from their efforts. From John Stuart Mill to Pierre-Joseph Proudhon, market theorists and critics agree that “it would be a gross immorality in the law to set everybody free to use a person’s work without his consent, and without giving him an equivalent.”⁶⁹ Taken to their extremes, the systemic and individualistic arguments for IPRs justify the establishment of IP markets for every tiny fragment of information and for every act of copying.⁷⁰

In an already established market economy, further factors amplify this logic of commodification. If one technology of reproduction replaces an already commodified one, courts justify the expansion of IPRs to the new technology by pointing out that other possibilities for market exchanges and individual incomes might “erode.”⁷¹ On an international scale, knowledge-exporting

⁶⁹ See Borghi, *supra* note 15, at 15–16 for further references. *inter alia* to 5 JOHN STUART MILL, THE PRINCIPLES OF POLITICAL ECONOMY, ch. 10, no. 4 (1848). In this sense on the fundamental right to property, see Bundesverfassungsgericht [BVerfG] [Federal Constitutional Court] July 7, 1971, 31 BVERFGE 229 (240–41) – Kirchen- und Schulgebrauch; see also Reichsgericht [RG] [Federal Court of Justice until 1945] Apr. 7, 1910, 73 RGZ 294 (297) (phonogram producer); Rudolf Callmann, *Sittenwidrige Ausbeutung fremder Arbeit*, 1928 GRUR 251, 254; Bundesgerichtshof [BGH] [Federal Court of Justice] May 31, 1960, 1960 GRUR 619 (624) – Künstlerlizenz (principle of equivalence of work and reward); BGH May 31, 1960, 1960 GRUR 614 (616) – Figaros Hochzeit (it is fair that authors and performers share the income generated from a public communication of a recording because both have contributed to its production); BGH Dec. 10, 1987, 1988 GRUR 308 (310) – Informationsdienst (database producer). See generally RG Nov. 14, 1936, 153 RGZ 1 (22) with further references (with justification for the continued force of this argument during Nazism).

⁷⁰ See BGH Oct. 25, 2012, 115 GRUR 717 para. 26, 41 – Covermount (grant of rights irrespective of the accruing exchange value); regarding sound samples and other digital fragments see *Bridgeport Music, Inc. v. Dimension Films*, 410 F.3d 792, 792. (2005); but see *VMG Salsoul, LLC v. Ciccone*, 824 F.3d 871 (2016). See generally BGH June 1, 2017, 61 ZEITSCHRIFT FÜR URHEBER- UND MEDIENRECHT [ZUM] 760 (762) para. 18 – Metall auf Metall III (even the smallest excerpts are protected); BVerfG May 31, 2016, 69 NEUE JURISTISCHE WOCHENSCHRIFT [NJW] 2247 para. 91. – Metall auf Metall.

⁷¹ See, e.g. RG Jan. 31, 1891, 27 RGZ 60 (66) – Clariophon (clariophones equal sheet music copies); BGH Feb. 27, 1962, 1962 GRUR 470 (473)– AKI (television to be treated like other film exploitation); BGH Nov. 11, 1953, 1954 GRUR 216 (219-20) – Rom-Fassung (public communication of recordings); BGH May 18, 1955, 1955 GRUR 492 (497, 499) – Grundig-Reporter (private copy machines); *Am. Broad. Companies, Inc. v.*

countries have successfully persuaded and pressured other countries into some form of IP protection, inter alia with the argument that it would be unfair to establish a world market for all types of products, but not for IP.⁷² Finally, commodification via IPRs creates new assets that are traded on financial markets that in turn exhibit their own demand for ever more tradeable IP commodities/securities.⁷³

C. *Consequence: IP as an End in Itself*

The pervasive systemic and individualistic plea for property in a market economy creates the impression that commodification is an unavoidable natural process: there is no alternative.⁷⁴ Exclusive exploitation based on IPRs is “normal,” and lawful access without prior authorization the exception.⁷⁵ In the area of IP, this “property logic”⁷⁶ led to a self-referential closure of the IP system, where IPRs are no longer considered a tool to achieve an end, for example, to promote the progress of science and useful arts⁷⁷ or to enable

Aereo, Inc., 134 S. Ct. 2498, 2506 (2014) (cloud video provider similar to cable TV stations); EDELMAN, *supra* note 53, 35 (photographs equal other copying techniques).

⁷² On the spread of IP law among European states and the U.S., see SAM RICKETSON, *THE PARIS CONVENTION FOR THE PROT. OF INDUS. PROP.* § 2.13 (2015); SECKELMANN, *supra* note 2, at 156 (US companies demanding patent protection at world exhibitions in Europe in the 1870’s); Paul Duguid, *French Connections: The International Propagation of Trademarks in the Nineteenth Century*, 10 *ENTERPRISE & SOC’Y* 3 (2009) (France as a first mover and exporter of trademark law). On the globalization of IP via colonialism, see Alexander Peukert, *The Colonial Legacy of the International Copyright System*, in *COPYRIGHT AFRICA. HOW INTELL. PROP., MEDIA AND MARKETS TRANSFORM CULTURAL GOODS* 37 (Ute Röschenhaler & Mamadou Diawara eds., 2015). On the globalization of IP after the fall of the Soviet Union, see SUSAN K. SELL, *PRIVATE POWER, PUBLIC LAW: THE GLOBALIZATION OF INTELL. PROP. RIGHTS* (2003).

⁷³ Rochelle Dreyfuss & Susy Frankel, *From Incentive to Commodity to Asset: How International Law is Reconceptualizing Intellectual Property*, 36 *MICH. J. INT’L L.* 557, 566 (2015).

⁷⁴ See *supra* notes 20–32 and accompanying text.

⁷⁵ See Berne Convention, *supra* note 68, art. 9(2); TRIPS Agreement, *supra* note 4, arts. 13, 17, 26(2), 30; WIPO: Copyright Treaty (WCT) art. 10(1), Dec. 20, 1996, 36 *I.L.M.* 65; WIPO: Performances and Phonograms Treaty (WPPT), art. 16(2), Dec. 20, 1996, 36 *I.L.M.* 76 [hereinafter WPPT]; Beijing Treaty on Audiovisual Performances, art. 13(2), June 24, 2012 [hereinafter BTAP]. See generally Section 110(5) Panel Report, *supra* note 65, at 44–50; Christophe Geiger et al., *The Three-Step-Test Revisited: How to Use the Test’s Flexibility in National Copyright Law*, 29 *AM. U. INT’L* 581 (2014).

⁷⁶ See Thomas Dreier, *Primär- und Folgemärkte*, in *GEISTIGES EIGENTUM IM DIENST DER INNOVATION* 51, 76. (Gerhard Schricker et al. eds., 2001).

⁷⁷ U.S. CONST. art. I, § 8, cl. 8.

economies to benefit from their comparative advantage in producing information.⁷⁸ Instead, they are perceived as principally beneficial ends in themselves.⁷⁹ Thus, the more protection there is, the better.⁸⁰

The results of this ideology can be observed, for example, in EU IP law. Directives proclaim that a “high level of protection” will promote innovation and creativity, improve competitiveness, and develop employment.⁸¹ The CJEU relies on this aim of establishing a high level of protection for an extensive interpretation of the *acquis*.⁸² The court also uses the three-step test to rule out any practice that “reduc[es] the volume of sales or of other lawful transactions” and thus adversely affects “normal exploitation.”⁸³ Since 2009, the EU Charter of Fundamental Rights provides additional support for this logic by apodictically proclaiming that “Intellectual property shall be protected.” Why?: “[b]ecause of its growing importance and Community secondary legislation.”⁸⁴

⁷⁸ See generally Keith E. Maskus, *Incorporating a Globalized Intellectual Property Rights Regime Into an Economic Development Strategy*, in *INTELL. PROP., GROWTH AND TRADE* 497 (Keith E. Maskus ed., 2008).

⁷⁹ See Alexander Peukert, *Intellectual Property as an End in Itself*, 33 *EUR. INTELL. PROP. REV.* 67, 67–71 (2011).

⁸⁰ See Economic Partnership Agreement between the CARIFORUM States, of the one part, and the European Community and its Member States, of the other part art. 131(2), Oct. 30, 2008, 2008 O.J. (L 289) 3 (the CARIFORUM States and the EU “recognise that the protection and enforcement of intellectual property plays a key role in fostering creativity, innovation and competitiveness, and are determined to ensure *increasing* levels of protection appropriate to their levels of development”) (emphasis added).

⁸¹ Parliament and Council Directive 2001/29, recital 4, 2001 O.J. (L 167) 1; Parliament and Council Directive 2004/48, recitals 1, 10, 2004 O.J. (L 157) 45.

⁸² See, e.g., CJEU Case C-610/15, *Stichting Brein v. Ziggo*, ECLI:EU:C:2017:456, para. 22.

⁸³ See CJEU Case C-435/12, *ACI Adam v. Stichting de ThuisKopie*, ECLI:EU:C:2014:254, paras. 38–39.

⁸⁴ See Draft Charter of Fundamental Rights of the European Union, CHARTE 4473/00 CONVENT 49, Note from the Praesidium – Text of the explanations relating to the complete text of the Charter, 19–20, COMMISSION OF THE EUROPEAN COMMUNITIES (Oct. 11, 2000), http://www.europarl.europa.eu/charter/pdf/04473_en.pdf [<https://perma.cc/GGF5-NXDP>]; Christophe Geiger, *Intellectual Property Shall be Protected!? Article 17 (2) of the Charter of Fundamental Rights of the European Union: a Mysterious Provision with an Unclear Scope*, 31 *EUROPEAN INTELL. PROP. REV.* 113 (2009).

II. THE FICTITIOUSNESS OF IP

The IP commodification story has been told many times.⁸⁵ At first sight, equally trivial as this story is the observation that commodification is a contingent process. Things could have evolved differently. But even this obvious truth is, according to Polanyi, overshadowed by an “economistic fallacy” that “equate[s] the human economy with its market form.”⁸⁶ In other words, the market has often been conceived of as the only available form of regulating the relationship between scarce resources and human wants, i.e. the economy. Polanyians stress that this reductionist economic determinism is flawed.⁸⁷

More interesting and productive than the insistence on contingency and thus politics in economic matters is, in my view, another concept contained in the “Great Transformation”: the notion of the “fictitious commodity.” The study of land, labor, and money as “fictitious commodities” constitutes the core of Polanyi’s theory because it links commodification processes (*supra*, II) and countermovements (*infra*, IV) together to form Polanyi’s famous “double movement.” This section addresses the question of whether and in what sense the tradeable good “IP” constitutes a fiction.⁸⁸

A. *Polanyi on Fictitious Commodities*

In contrast to Karl Marx’s critique of commodity fetishism, Polanyi does not consider invariably every tradeable good or service as an obscured power relation.⁸⁹ Instead, he distinguishes “real” commodities from “fictitious” commodities. The first are defined as goods or services that are actively and originally “produced for sale,” whereas a fictitious commodity is exchanged for money but was not actively and purposefully created to this end:

⁸⁵ For a Marxist reading of the IP expansion see EDELMAN, *supra* note 53; Ugo Pagano, *The Crisis of Intellectual Monopoly Capitalism*, 38 *CAMBRIDGE J. ECON.* 1409 (2014); Coombe, *supra* note 16, at 369.

⁸⁶ See KARL POLANYI, *THE LIVELIHOOD OF MAN* 20 (Harry W. Pearson ed., 1977).

⁸⁷ See Claus Thomasberger, *The Belief in Economic Determinism, Neoliberalism, and the Significance of Polanyi’s Contribution in the Twenty-First Century*, 41 *INT’L J. POL. ECON.* 16 (2012).

⁸⁸ For a conceptual analysis, see Jessop, *supra* note 15, at 115.

⁸⁹ On parallels and differences between Marx and Karl Polanyi, see DALE, *supra* note 10, at 241.

The crucial point is this: labor, land, and money are essential elements of industry; they also must be organized in markets; in fact, these markets form an absolutely vital part of the economic system. But labor, land, and money are obviously *not* commodities; the postulate that anything that is bought and sold must have been produced for sale is emphatically untrue in regard to them. In other words, according to the empirical definition of a commodity they are not commodities. Labor is only another name for a human activity which goes with life itself, which in its turn is not produced for sale but for entirely different reasons, nor can that activity be detached from the rest of life, be stored or mobilized; land is only another name for nature, which is not produced by man; actual money, finally, is merely a token of purchasing power which, as a rule, is not produced at all, but comes into being through the mechanism of banking or state finance. None of them is produced for sale. The commodity description of labor, land, and money is entirely fictitious.⁹⁰

In other words, land, labor, and money are treated *as if* they had been produced for sale, although they were either not produced at all (like land) or, if so, were not for sale (like labor).⁹¹ In contrast to traditionally marketed artefacts like food, machines, or books, the natural environment (land) and human capabilities (labor) as such are not created in a profit-oriented production process subject to the competitive pressures of market forces. Instead, they are given or are the result of a personal and societal endeavor. The transformation these resources underwent in 19th century England in order to be exchangeable for money is the “Great

⁹⁰ POLANYI, *supra* note 7, at 71 (emphasis in original).

⁹¹ *See id.* at 10. The fictitiousness of money is of another kind, which will not be further elaborated in this article. It concerns the contradiction between, on the one hand, money as a societal-institutional fact, and its strict representation in gold and other brute facts, on the other. *Cf.* Simon Derpmann, *Geld als Ware*, in *THE PHILOSOPHY OF THE MARKET* 227, 244 (Hans-Christoph Schmidt am Busch ed., 2016).

Transformation” that Polanyi studies and pejoratively labels “fictitious.”⁹²

B. IP: A Fiction in What Sense?

It is not uncommon among legal theorists and historians to claim that IP is a “fiction.”⁹³ Such observations are relevant for our purposes because they do not relate to IP *rights* or *laws*—with property in the legal sense⁹⁴—but to the subject matter of exclusive rights, e.g. “the” work, “the” invention, design, sign, etc. (i.e. with property in the sense of a good or resource that is owned by someone). What Polanyi and the referenced IP theorists thus share is an interest in the *ontological* status of certain resources in a market economy. It is, however, not clear whether Polanyi and contemporary IP theorists also apply the same definition of fictitiousness. As explained, fictitiousness in Polanyian terms means that an element of the market economy is not produced for sale but, due to a great, “fictitious” transformation, is nevertheless up for sale. If one applies this distinction to the subject matter of IP laws and IPRs, three transformations (“fictions”) come to the fore.

1. Information Not Produced for Sale

The first transformation concerns IP subject matter that was originally not produced for sale but created for other purposes.

This classical Polanyian category must not be confused with the always “fictitious” commodification of intellectual or entrepreneurial *labor* sold on labor markets and remunerated by wages. For, in general, the individual labor or “knowledge”

⁹² See Jessop, *supra* note 15, at 119.

⁹³ See MICHEL FOUCAULT, *THE ESSENTIAL FOUCAULT* 377, 382 (Paul Rabinow & Nikolas Rose eds., 2003) (“fiction of the work”); JAMES E. PENNER, *IDEA OF PROPERTY* 118 (1992) (“idiotic fiction that intellectual property constitutes property in ideas (patents) or expressions”; “in general it does no harm to speak of rights in ideas, or in manuscripts, or in marks, any more than it does to refer to one’s rights in one’s labour.”); DRAHOS, *supra* note 67, at 67, 151–56, 211; Hugh Breakey, *Properties of Copyright*, in *CONCEPTS OF PROPERTY* 137, 152 (Helena R. Howe & Jonathan Griffiths eds., 2013); Robert H. Rotstein, *Beyond Metaphor: Copyright Infringement and the Fiction of the Work*, 68 *CHI.-KENT L. REV.* 725 (1993); SHERMAN & BENTLY, *supra* note 1, at 28; ALAIN POTTAGE & BRAD SHERMAN, *FIGURES OF INVENTION* 4, 7 (2010) (“Intangibility is a figment.”).

⁹⁴ See EDELMAN, *supra* note 53, at 40 (“juridical fiction”).

necessary to create the first prototype of a copyrightable work, a patentable invention, or a distinctive sign capable of use as a trademark is not what IPRs protect.⁹⁵ Instead, IPRs attach to the objective result of an antecedent labor, irrespective of the efforts and difficulties that work entailed. It is true that this focus on the result conceives of and thus transforms public and personal knowledge and intellectual labor into some kind of raw material that is available in the public domain and/or on labor markets.⁹⁶ But this transformation occurs with regard to every work and work product that is up for sale. It is not a specific feature of IPRs.⁹⁷ What is more, IPRs do not apply retroactively to information that was produced or published before the respective IP law came into effect. They thus do not change the status of already existing information from being owned by no one or belonging to the commons in a private domain.⁹⁸ In addition, basic building blocks of human knowledge systems like laws of nature, factual information, abstract concepts, scientific theories, and mathematical concepts always remain beyond the reach of IPRs.⁹⁹

There are, however, constellations in which IPRs indeed apply to works, inventions, signs etc. that were brought about in non-market contexts and without the perspective of commercialization. Grace periods in patent law are precisely meant to allow for such a transformation. According to U.S. patent law, a disclosure made by the inventor or joint inventor one year or less before the effective filing date of a claimed invention, for example, during an academic congress, is not prior art to the claimed invention and thus does not

⁹⁵ The only exception is the EU right for database producers, which is rightly called a “sui generis” right because, in contrast to all other IPRs, it does not attach to a marketable artefact/product, but to the substantial *investments* into a non-original database. Cf. Council Directive 96/9, art. 7-11, 1996 O.J. (L 77) 20.

⁹⁶ See JESSOP, *supra* note 15, at 117.

⁹⁷ *But see id.* at 120 (“knowledge is codified, detached from manual labour, and disentangled from material products to acquire independent form in expert systems, intelligent machines, or immaterial products and services.”).

⁹⁸ See MONIKA KÜPPERS, CHALLENGING THE PUBLIC DOMAIN – PROTECTION OF TRADITIONAL CULTURAL EXPRESSION IN THE LIGHT OF RETROACTIVE COPYRIGHT PROTECTION 60 (2017), Goethe University Frankfurt am Main Dissertation 2018.

⁹⁹ Alexander Peukert, *A Doctrine of the Public Domain, in* THE INNOVATION AND INTELLECTUAL PROPERTY (Josef Drexl ed., forthcoming), <https://ssrn.com/abstract=2713757> [<https://perma.cc/7QVN-B437>].

bar later propertization.¹⁰⁰ Copyright comes into existence automatically and therefore covers each and every artifact displaying a modicum of creativity, including countless works created for pleasure in completely private settings. If these works retain their non-commercial social status, their copyright protection does not attain relevance. Thanks to the Internet, however, works created in private nowadays often see the light of day and sometimes even spark great commercial success. Such a move from fan fiction to best seller in itself reorganizes the communicative context from non-commercial to commercial.¹⁰¹ More visible and contested transformations concern academia and the artistic field. These spheres operate separately from the market on the basis of autonomous logics of truth and aesthetics and respective allocations of reputational gains and losses among academics and artists.¹⁰² If genuine academic writings and artworks originally created for their own sake (“l’art pour l’art”) are later marketed as products up for sale, their perception and evaluation change fundamentally. They are not valued anymore according to their truth, depth of thought, or aesthetic originality but rather according to their market success. Depending upon its frequency, such commodification can exhibit systemic effects that tend to supplant an open and reciprocal “republic of science” and an equally autonomous artistic field with profit-oriented transactions.¹⁰³ In the area of trademark law, finally, ex-post-commodification of non-commercial signs concerns artworks in the public domain and cultural icons that are later used

¹⁰⁰ Compare 35 U.S.C. § 102(b)(1) (2018), with EPC, *supra* note 68, art. 55(b) (noting six months grace period for displays of the invention at an international exhibition).

¹⁰¹ Except perhaps in the view of literary critics. See Liz Bury, *Fifty Shades of Pay: Erotica Yarn Sends EL James to Top Spot in Earnings List*, THE GUARDIAN (Aug. 14, 2013), <https://www.theguardian.com/books/2013/aug/14/el-james-highest-earning-author> [https://perma.cc/5C5V-KZNX].

¹⁰² For information on Academia, see Michael Polanyi, *The Republic of Science: Its Political and Economic Theory*, 38 MINERVA 1 (2000); Alexander Peukert, *Das Verhältnis zwischen Urheberrecht und Wissenschaft: Auf die Perspektive kommt es an!*, 4 J. INTELL. PROP. INFO. TECH. ELEC. COMM. 142 para. 1 (2013); ACADEMIC CAPITALISM IN THE AGE OF GLOBALIZATION (Brendan Cantwell & Ilkka Kauppinen eds., 2014). For information on Art, see PIERRE BOURDIEU, *RULES OF ART: GENESIS AND STRUCTURE OF THE LITERARY FIELD* (Susan Emanuel trans., 1996); Martin Senftleben, *Copyright, Creators and Society’s Need for Autonomous Art – the Blessing and Curse of Monetary Incentives*, in WHAT IF WE COULD REIMAGINE COPYRIGHT? (Rebecca Giblin & Kimberlee Weatherall eds., 2017).

¹⁰³ See sources cited *supra* note 102.

as signs indicating the origin of a good or service.¹⁰⁴ The European Free Trade Association (EFTA) Court recently confirmed that, in general, trademark protection is available and legitimate in such cases, unless there is a genuine and sufficiently serious threat of “misappropriation or desecration” of the respective work, in which case a trademark registration may be refused on the basis of the public policy/morality exception.¹⁰⁵

2. Commodifying Communication

In quantitative terms, these instances of ex-post-commodification do not, however, justify labeling IP as “fictitious” across the board. Much, if not most, IP subject matter is originally produced for sale under conditions of the market and thus presents a real capitalist commodity in Polanyian terms.¹⁰⁶ Suffice it to mention patented medicines and other technologies invented within private companies for commercial gain, proprietary software, entertainment products, phonograms, broadcasting signals, databases and other products protected by rights related to copyright, industrial designs, and signs created for use as trade marks. Industrial property law is even confined to the commercial context. Private uses of patented inventions, protected designs, trademarks, etc. are beyond the scope of these IPRs.¹⁰⁷ Copyright does extend to the private sphere but often in the weaker form of a right to remuneration (liability rule).¹⁰⁸ Thus, many, if not most, IPRs institutionalize markets for original commodities.

This statement is, however, premature because it fails to recognize the peculiar communicative character of all inventions, works, and signs, irrespective of whether they have been created for non-commercial or commercial purposes. Communication is

¹⁰⁴ See Katya Assaf, *The Dilution of Culture and the Law of Trademarks*, 49 IDEA 1 (2008); Martin Senftleben, *Free Signs and Free Use*, in RESEARCH HANDBOOK ON HUMAN RIGHTS AND INTELL. PROP. 354, 357 (Christophe Geiger ed., 2015).

¹⁰⁵ See EFTA Court Case E-5/16, Municipality of Oslo, para. 102. For U.S. law, see 15 U.S.C. § 1052(a) (2016). See generally *Matal v. Tam*, 137 S.Ct. 1744 (2017).

¹⁰⁶ See Jessop, *supra* note 15, at 118–19.

¹⁰⁷ Cf. PATENTGESETZ [PATG] [GERMAN PATENT ACT], art. 31 § 11(1), Dec. 16, 1980, BGBl I at 1; Community Design Regulation, 6/2002, 2002 O.J. (L 3) 1, 6 (EU).

¹⁰⁸ Cf. Parliament and Council Directive 2001/29, art. 5(2)(b), 2001 O.J. (L 167) 1.

generally defined as a process in which one person imparts something that she knows to another:

[E]very act of communication requires a sender, a message, a medium or channel for its transmission, and a recipient who can decipher or decode it. The code in which it can be expressed depends on the type of decoder the recipient uses to receive, comprehend and assimilate it. Homo sapiens is . . . a recipient with a wide variety of decoders.¹⁰⁹

The creation and further use of inventions, works, and trademarks always involves such acts of communication. To bring about a new technical solution, a creative expression, or a distinctive sign, firstly requires an immense amount of personal knowledge on the part of a novice innovator that has to be acquired by learning about existing technologies, works, brands, etc.¹¹⁰ Secondly, and more importantly, the result of this preparatory act of communication is itself an artefact that communicates something. Most notably, texts, but all other categories of copyrightable works too, express information, be it a scientific theory, a story, or another visually or aurally perceivable “idea.”¹¹¹ Immanuel Kant therefore characterized printed matter as a dynamic speech of the author (opera) and not as an objective thing (opus).¹¹² The German Federal Constitutional Court also finds that:

once a work is published[,] it is no longer at its owner’s sole disposal, but enters the social sphere, just as it was intended to do, and can thereby become an independent factor that helps define the cultural

¹⁰⁹ See ECJ Case C-273/00, *Sieckmann v. Deutsches Patent- und Markenamt*, Opinion of Advocate General Colomer, 2002 E.C.R. I-11737, paras. 19–20.

¹¹⁰ See *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 427 (2007) (“advances, once part of our shared knowledge, define a new threshold from which innovation starts once more”); see also *Laboratory Corp. v. Metabolite*, 548 U.S. 124, 125 (2006) (Breyer, J., Stevens, J., & Souter, J., dissenting).

¹¹¹ See TRIPS Agreement, *supra* note 4, art. 9(2).

¹¹² See IMMANUEL KANT, *On the Unlawfulness of Reprinting* (1785), reprinted in PRIMARY SOURCES ON COPYRIGHT (1450–1900), http://www.copyrighthistory.org/cam/tools/request/showRecord.php?id=record_d_1785 [<https://perma.cc/982X-SJVR>]; ABRAHAM DRASSINOWER, WHAT’S WRONG WITH COPYING? 8, 16, 113 (2015).

and intellectual scene of its era. As over time, the work is no longer only subject to disposal under private law and becomes common intellectual and cultural property, the author must accept that it will increasingly serve as *a link to an artistic dialogue*.¹¹³

The same can be said of patentable inventions. For inventions are neither to be equated with a machine or other “dead” artefacts nor with a “relation between a person and an object.”¹¹⁴ Instead, inventions teach a person having ordinary skill in the art (PHOSITA) how to solve a particular problem by making use of natural resources and the laws of nature.¹¹⁵ In other words, an invention communicates technical information (the message) from a sender (the inventor) to a recipient (the PHOSITA). Trademarks, finally, also “convey a message.”¹¹⁶ It is their very function to inform the public about the origin of a product and to create an attractive image.¹¹⁷

Thus, works, inventions, and trademarks are not static commodities produced for consumption but elements of dynamic communicative processes. They are derived from the state of the art and further conveyed to the public, whose members in turn rely on them as the basis for further innovation, creative expression, and competition. To treat IP as if it is a marketable good is fictitious because such commoditization ignores IP’s embeddedness in communication. What is more, the communicative significance of a given work, invention, or trademark for the public—and thus its use and, eventually, its exchange value—is not produced by the IPR holder. All that an author, inventor, or trademark owner can do is to

¹¹³ BVerfG, May 31, 2016, NJW 2016, 2247 para. 87 – Metall auf Metall (English version: http://www.bverfg.de/e/rs20160531_1bvr158513en.html [<https://perma.cc/ZR9X-9KRA>] (emphasis added).

¹¹⁴ *Contra* DRASSINOWER, *supra* note 112, at 64–65.

¹¹⁵ See BGH Mar. 03, 1969, GRUR 1969, 672 (673) – Rote Taube; BGH Jun. 30, 2015, GRUR 2015, 983 para. 27 - Flugzeugzustand (Erfindung als “Lehre zum planmäßigen Handeln unter Einsatz beherrschbarer Naturkräfte zur Erreichung eines kausal übersehbaren Erfolgs”); BGH Sep. 27, 2016, GRUR 2017, 261, para. 21 – Rezeptortyrosinkinase II (“Lehre zum technischen Handeln”).

¹¹⁶ See *Matal v. Tam*, 137 S. Ct. 1744, 1752 (2017) (“trademarks often consist[ed] of catchy phrases that convey a message”).

¹¹⁷ See Cohen, *supra* note 17, at 5–6.

impart her artistic, technical, or marketing message to the public and hope that some recipients will receive, understand, and find interest in it. Only in this case is the communication complete and a use value created. A book unread, a technical teaching ignored, or a trademark not perceived is worth just the paper on which it is printed. IP only enters the picture if there is an active recipient. The moment when an IP communication is successfully completed is, however, not only the moment when exchange value is created but also the moment in which a work or other IP subject matter becomes “common intellectual and cultural property.”¹¹⁸ This common property and sometimes even the meaning of a work or trademark is created by members of the public.¹¹⁹ It thus cannot be attributed to the author, inventor, or other IPR holder alone. The contrary rule of IPR ownership is thus based on a fiction.

3. Commodifying Artefacts and Actions of Non-owners

One could still try to defend IP as a “real” commodity in Polanyian terms by pointing to IP subject matter that does not communicate anything. For example, the rights “related” to the copyright of a phonogram of film producers and of broadcasters do not attach to a message that a sender imparts to a recipient but to the medium or channel employed for the transmission of a piece of information, namely to fixations of sounds and moving images, and to broadcasting signals.¹²⁰ If a phonogram, a film carrier, or a

¹¹⁸ See BVerfG, May 31, 2016, NJW 2016, 2247 para. 87 – Metall auf Metall (English version: http://www.bverfg.de/e/rs20160531_1bvr158513en.html [<https://perma.cc/ZR9X-9KRA>]).

¹¹⁹ See Dev S. Gangjee, *Property in Brands*, LSE LAW, SOC’Y AND ECON. WORKING PAPERS at 1, 19 (Jun. 13, 2013), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2249765 [<https://perma.cc/D9F2-NE8E>] (regarding the consumer understanding of a trademark, and unpaid labor of consumers).

¹²⁰ See TRIPS Agreement, *supra* note 4, art. 14. Another example of this materialist approach concerns plant variety rights that attach to a “plant grouping within a single botanical taxon of the lowest known rank, which grouping, irrespective of whether the conditions for the grant of a breeder’s right are fully met, can be defined by the expression of the characteristics resulting from a given genotype or combination of genotypes, distinguished from any other plant grouping by the expression of at least one of the said characteristics and considered as a unit with regard to its suitability for being propagated unchanged.” See International Convention for the Protection of New Varieties of Plants (UPOV), art. 1(vi), Mar. 19, 1991, 815 U.N.T.S. 89

broadcasting signal produced for the entertainment market is not a “real” commodity, what else will qualify for this category? In addition, both this and other IP subject matter, including works, inventions, and trademarks, have for a long time been signified and regulated as “goods” that can be owned and traded on markets.¹²¹ Is this absolutely dominant practice not proof enough of the ontological adequacy of IP commodification?¹²²

Well, not if one takes into account that mainstream IP theory itself characterizes IPRs as legal institutions creating “artificial scarcity” of otherwise “public goods.”¹²³ For to treat public goods as if they were private commodities and to execute this transformation by legal means is exactly the kind of fictitiousness Polanyi had in mind.¹²⁴

Yet even this observation does not exhaust the problem. The continued talk about “public” goods that, through a legal measure, turn into “private” goods neglects and obscures a transformation at a deeper level, namely the level of how we collectively conceive of reality and regulate human interaction accordingly. The worldview I allude to here is the view that IP “goods,” like works, inventions,

<https://www.upov.int/upovlex/en/conventions/1991/act1991.html>

[<https://perma.cc/B86R-6V2Z>]; PEUKERT, *supra* note 35, at 68.

¹²¹ This is true even for critical observers. *See, e.g.*, DRAHOS, *supra* note 67, at 156, 212; Jessop, *supra* note 15, at 120 (“non-rival good”). *But see* Pagano, *supra* note 85, at 1413 (“Knowledge is not an object defined in a limited physical space. The same item of knowledge can be encoded in multiple languages, using many different objects existing in a potentially infinite number of places. For this reason, the full-blown private ownership of knowledge means a global monopoly that limits the liberty of many individuals in multiple locations.”).

¹²² *See* Maria E. Reicher, *Wie aus Gedanken Dinge werden. Eine Philosophie der Artefakte*, 61 DEUTSCHE ZEITSCHRIFT FÜR PHILOSOPHIE 219, 227 (2013); Andrew Chin, *The Ontological Function of the Patent Document*, 74 U. PITT. L. REV. 263 (2012).

¹²³ *See* Lemley, *supra* note 12, at 460 (“In effect, the point of IP laws is to take a public good that is naturally nonrivalrous and make it artificially scarce, allowing the owner to control how many copies of the good can be made and at what price.”).

¹²⁴ *See* Borghi, *supra* note 15, at 3–4 (“No law of the market can convert an idea, or a poem, or a creation, into a scarce item . . . ideas . . . are not naturally commodities, but they are nonetheless treated as if they were commodities . . . No natural law of the market (no ‘invisible hand’) is capable of producing this fiction by itself. The fiction must be established as such.”); Jessop, *supra* note 15, at 120 (“knowledge is collectively produced and is not inherently scarce . . . it is made artificially scarce and access thereto depends on payment of rent”); Pagano, *supra* note 85, at 1414 (“commons were turned into exclusive private property”).

brands. etc., exist as distinct objects and that these “goods” can be allocated to certain owners in exclusion of all others. The respective ontology assumes that IP objects exist as abstract objects (types) independently from their instantiations (tokens) in books, products, digital files, and other physical or mental manifestations.¹²⁵

I have shown elsewhere in detail¹²⁶ that this ontology is implausible because the existence of allegedly abstract IP is always dependent upon the existence of at least one physical or mental “embodiment.” The dominant paradigm is also untenable from a legal perspective because law can legitimately only regulate behavior that relates to brute facts that humans are able to control. Abstract types exactly defy such control. I also show that the idea of the abstract IP object was the result of a quite recent historical process, in which signifiers like “the” book, work, or invention changed their meaning. Instead of referencing many distinct but sufficiently similar artefacts and actions, they henceforth signified abstract IP objects. Whereas early modern privileges and still the first British patent and copyright statutes regulated exclusive rights to print a book or work a machine, today’s paradigm was only implemented in full by the French Revolutionary Acts of 1791 and 1793, which granted exclusive property rights in “ouvrages,” “idée nouvelle,” and “découvertes industrielle.” Since then, we have treated books, machines, other items with physical existence, and public performances as secondary “embodiments” of a primary, abstract “intellectual property.”

The transformation at stake here concerns the dominant perception of the world. An idealized world of abstract objects superseded a realistic focus on artefacts and actions having brute, measurable existence. This fundamental shift occurred solely in our language and thinking. The brute facts of artefacts and actions

¹²⁵ See Berne Convention, *supra* note 68, art. 2(1); 17 U.S.C. § 101 (1976) (“embodied”); CODE DE LA PROPRIÉTÉ INTELLECTUELLE art. L111-3 (Fr.) (“La propriété incorporelle définie par l’article L. 111-1 est indépendante de la propriété de l’objet matériel.”); Michael J. Madison, *The End of the Work As We Know It*, 19 U. GEORG. L. J. INTELL. PROP. L. 325, 333 (2012) (“The work subject to copyright is solely and purely an intangible thing.”); TRIPS Agreement, *supra* note 4, art. 15–16, 26(1).

¹²⁶ See PEUKERT, *supra* note 35; Paul Duguid, *The Aging of Information: From Particulate to Particulate*, 76 UC BERKELEY J. HIST. IDEAS 347 (2015) (regarding information as an object).

(books, machines, performances) retained their physical existence. But they were signified and conceived of differently: not as artefacts and actions whose use or occurrence was regulated, but as exemplars of an IP object that belonged to someone else. This bizarre abstraction is fictitious in the sense that we speak of works, inventions, and other IP objects as of tangible commodities, where in fact IP objects only exist insofar and because we speak and regulate *as if* they exist as abstract “things” of value. In other words, IP objects only exist in our linguistic practice and collective imagination.¹²⁷ From a legal realist perspective, IPRs are exclusive rights to prevent or authorize the reproduction and further use of certain Master Artefacts.¹²⁸ And the only reason for the “wild”¹²⁹ conceptual move from privileges to act to modern IPRs in abstract objects was the commodity function of IP. The emerging market for books and other innovative yet easily reproducible products required property rights in distinct abstract objects that represented the input of authors and inventors.¹³⁰

C. Consequences: Dis-embedding Effects of IP

The market demand for commodification of each and every element of production was also the driver for the fictitious commodification of labor, land, and money, the commodities studied by Polanyi. In his opinion, their transformation into commodities produced devastating effects:

To allow the market mechanism to be sole director of the fate of human beings and their natural environment, indeed, even of the amount and use of purchasing power, would result in the demolition of society. For the alleged commodity ‘labor power’ cannot be shoved about, used indiscriminately, or

¹²⁷ Richard Rudner, *The Ontological Status of the Esthetic Object*, 10 PHIL. AND PHENOMENOLOGICAL RES. 380 (1950).

¹²⁸ TRIPS Agreement, *supra* note 4, art. 11, 16, 26, 28 (Members shall provide right holders with exclusive rights to “prevent,” “prohibit” or “authorize” certain conduct); Michele Boldrin & David K. Levine, *Intellectual Property and the Efficient Allocation of Social Surplus from Creation*, 2 REV. OF ECON. RES. ON COPYRIGHT ISSUES 45 (2005).

¹²⁹ See *Millar v. Taylor*, (1769) 4 Burr. 2303, 2357 (Yates, J., dissenting); see also *SHERMAN & BENTLY*, *supra* note 1, at 19.

¹³⁰ See *Millar v. Taylor*, (1769) 4 Burr. 2303, 2357 (Yates, J., dissenting).

even left unused, without affecting also the human individual who happens to be the bearer of this peculiar commodity. In disposing of a man's labor power the system would, incidentally, dispose of the physical, psychological, and moral entity 'man' attached to that tag. Robbed of the protective covering of cultural institutions, human beings would perish from the effects of social exposure; they would die as the victims of acute social dislocation through vice, perversion, crime, and starvation. Nature would be reduced to its elements, neighborhoods and landscapes defiled, rivers polluted, military safety jeopardized, the power to produce food and raw materials destroyed. Finally, the market administration of purchasing power would periodically liquidate business enterprise, for shortages and surfeits of money would prove as disastrous to business as floods and droughts in primitive society. Undoubtedly, labor, land, and money markets are essential to a market economy. But no society could stand the effects of such a system of crude fictions even for the shortest stretch of time unless its human and natural substance as well as its business organization was protected against the ravages of this satanic mill.¹³¹

At first sight, the transformation of reproducible artefacts and their communicative use to abstract IP objects give less cause for such dramatic warnings. In and of itself, the formation and expansion of the IP system can hardly be blamed for consequences of the magnitude Polanyi describes.¹³² His analysis is nevertheless informative for our purposes because IP exhibits the same dis-

¹³¹ See POLANYI, *supra* note 7, at 76–77.

¹³² James Boyle, *A Politics of Intellectual Property: Environmentalism for the Net?*, 47 *DUKE L.J.* 87, 115 (1997) (“After all, environmental problems could actually destroy the biosphere and this is just, well, intellectual property.”). *But see* LAWRENCE LESSIG, *CODE: VERSION 2.0*, at xv (2d ed. 2006); JOHN NAUGHTON, *FROM GUTENBERG TO ZUCKERBERG* 291 (2012); EVGENY MOROZOV, *THE NET DELUSION* (2011) (Orwell-Huxley scenario where global IP champions form a powerful alliance with state actors).

embedding ramifications that characterize other fictitious commodities.¹³³ What they effectuate is that, “[i]nstead of economy being embedded in social relations, social relations are embedded in the economic system.”¹³⁴

The dis-embedding impact of IP can be explicated with reference to the three features of its fictitiousness introduced above, namely its application to information that was not produced for sale, the commodification of communicative practices, and, more generally, the fictitious treatment of the use of artefacts by non-owners “remote from the persons or tangibles of the party having the right”¹³⁵ as infringements of a property right in an abstract IP object.

Ex post commodification of artefacts originally created in non-commercial contexts, such as religion or academia, transplants the works or signs into a market setting. Thereby, the respective artefacts are dis-embedded from their social roots and integrated into an economic order governed by a logic of profitable/non-profitable. With every expansion of the market, the fields where non-market logics of true/false (academia), sacred/profane (religion), aesthetic/non-aesthetic (arts), or winning/losing (sports) dominate will shrink, and this will attenuate the norms that stabilize these fields.¹³⁶ Whereas some commentators praise this type of commodification as the creation of secondary economic meaning, others conceive of it as a corruptive force that supplants traditional lifeworlds.¹³⁷

¹³³ See Boyle, *supra* note 132, at 115.

¹³⁴ See POLANYI, *supra* note 7, at 60.

¹³⁵ *White-Smith Music Pub. Co. v. Apollo Co.*, 209 U.S. 1, 19 (1908) (Holmes, J., concurring); Pagano, *supra* note 85, at 1414 (2014) (“the holders of property rights on knowledge . . . can decide whether a certain production process can be undertaken in a particular country”).

¹³⁶ See Jessop, *supra* note 15, at 120.

¹³⁷ Compare Megan Richardson, *Trade Marks and Language*, 26 SYDNEY L. REV. 193, 213 (2004), with MADHAVI SUNDER, FROM GOODS TO A GOOD LIFE. INTELL. PROP. AND GLOBAL JUSTICE 2, 5 (2012) (IP “bears fundamentally on the basic activities that make for a full and joyful life” in a culture that is not understood as an accumulation of goods but as a “process of creative and social interaction”). On the transformation of football clubs from sports associations to entertainment companies and the role of trademark law in this transformation, see ECJ Case C-206/01, *Arsenal Football Club v. Matthew Reed*, Opinion of Advocate General Colomer, 2002 E.C.R. I-10273, para 79.

The more general insight that patents, copyrights, and trademarks split up dynamic, interconnected processes of communication into separate pieces of information that may be imparted, received, and further used only upon prior authorization by the right holder points to a generally disruptive potential of IPRs for society at large. Communication, as defined above, is doubtlessly a central, if not *the* specific, feature of human societies.¹³⁸ The more information that is covered by IPRs, the less communication of technical teachings, expressions of various sorts, and brand images can occur spontaneously and without regard to exclusive rights of others. Taken to the extreme, the interruptions caused by IPRs would bring communication and, thus, societal exchange effectively to a halt or reconfigure today's society to a nightmarish system where only those are allowed to speak and act are those who can afford it.¹³⁹ Unfortunately, one can observe instances where this risk flashes up. Patent and other IPR thickets stifle economic competition (which is part of, and embedded in, society);¹⁴⁰ digital copyright law remodels heterarchical networks where everyone can speak publicly (e.g. user-generated content platforms) into closed, hierarchically structured, and fully licensed services;¹⁴¹ and contemporary trademark law reinforces consumption as the primary meaning of life.¹⁴²

The third and final aspect of the fictitiousness of IP, namely the fiction of the abstract IP object, ignores the innovative/entrepreneurial process leading to IP as well as imitative/repetitive activity and follow-on innovation, which IP law

¹³⁸ See LUHMANN, *supra* note 37, at 80.

¹³⁹ See SUNDER, *supra* note 137, at 5 (regarding the continuity of societal and cultural exchange as an end in itself).

¹⁴⁰ See MICHAEL HELLER, *THE GRIDLOCK ECONOMY: HOW TOO MUCH OWNERSHIP WRECKS MARKETS, STOPS INNOVATION, AND COSTS LIVES* (2010); Barton Beebe & Jeanne C. Fromer, *Are We Running out of Trademarks? An Empirical Study of Trademark Depletion and Congestion*, 131 HARV. L. REV. 945 (2018). Regarding the financial system, cf. Wolfgang Streeck, *How Will Capitalism End?*, 87 NEW LEFT REV. 35, 51 (2014) (“excessive commodification of money. . . brought down the global economy in 2008”).

¹⁴¹ See Alexander Peukert, *Copyright and the Two Cultures of Online Comm.*, in INTELL. PROP. L. AND HUMAN RIGHTS 367 (Paul L.C. Torremans ed., 3rd ed. 2015); Parliament and Council Directive 2019/790, art. 17, 2019 O.J. (L 130) 92.

¹⁴² See POLANYI, *supra* note 7, at 157 (“cultural void”); RICHARDSON, *supra* note 137, at 215–16. See generally ZYGMUNT BAUMAN, *CONSUMING LIFE* (2007).

treats as either illegal or exceptionally lawful for reasons that again lie beyond IP law, e.g. the freedom of information and competition. This willful disregard of the reality that IPRs regulate (i.e. the production, reproduction, and further use of artefacts remote from the right holder) fosters abstract talk about fictitious objects and problems, e.g. a systematic lack of incentive to innovate or invest in ever larger segments of the market economy. At the same time, the dominant paradigm obscures the aforementioned disruptive potential of IPRs within and beyond the economy. It falsely suggests that IPRs allocate objects just like other exclusive property rights, whereas, in fact, IPRs are exclusive privileges to act in certain ways with regard to certain artefacts.¹⁴³

III. COUNTERMOVEMENTS: FROM OBJECTS TO ARTEFACTS AND ACTIONS

The fiction that IPRs apply to objects that are ready for commodification, like land and other tangibles, furthermore obfuscates the fact that IPRs not only form the basis of “free” markets but also possess a strong protectionist element in that they allow IPR holders and their respective home countries to leverage market power. This feature explains why the acceptance and expansion of IPRs gained momentum at the very moment the free trade era, which had brought about the fictitious commodification of labor, land, and money, came to an end in the 1870s.¹⁴⁴ Historically and functionally, IPRs are thus located at the transition from early 19th century commodification and laissez-faire capitalism to late 19th century countermovements.

It would, however, be a mistake to qualify IPRs as a countermovement measure in Polanyian terms. The countermovements Polanyi studies are self-protective measures of society at large against the destructive effects of the fictitious commodification of labor and land. Their purpose is to re-embed

¹⁴³ See PEUKERT, *supra* note 35.

¹⁴⁴ Compare POLANYI, *supra* note 7, at 19 (“by the end of the seventies the free trade episode (1846–79) was at an end”) and DALE, *supra* note 10, at 86 (discussing German tariff politics in the 1870s), with SECKELMANN, *supra* note 2, at 155, 169–170, 415 (discussing the formation of international patent law in the 1870s and 1880s).

these commodities and the respective markets into society and the environment, with the ultimate aim to guarantee the continued existence of man and nature. These policies were implemented by labor, social security, and early environmental protection laws.¹⁴⁵ IP laws differ from these regulations both teleologically and structurally. Their primary aim is not to control market forces but to integrate innovative and entrepreneurial activity into the market system. To this end, they grant individual owners private rights in fictitious goods.¹⁴⁶ The effect of this measure is exactly the opposite of Polanyi's countermovements, namely the separation of ever larger segments of technical, artistic, and other communication from the rest of society.

Accordingly, analogies to Polanyi's countermovements in the area of IP are to be found beyond IPRs. Respective norms are characterized by the purpose of re-embedding IP subject matter into commercial and non-commercial societal exchange that occurs spontaneously and irrespective of prior authorization requirements.¹⁴⁷ Rules with this aim are scattered across various legal fields, ranging from contract and competition law to fundamental rights. In contrast to social security/labor and environmental protection laws, they still lack a coherent legal and theoretical basis. The most aspirational proposal along these lines, and, unsurprisingly also the one most closely tied to Polanyi's theory, is James Boyle's call for a "cultural environmentalism."¹⁴⁸

A. The Contested Boundaries of IPRs

Commodification and countermovements clash at the boundaries of IPRs. The limits of exclusivity demarcate the realm of IP markets on the one hand and the realm of spontaneous societal communication and exchange based on everyone's equal negative liberty to copy and otherwise use reproducible artefacts on the other.

¹⁴⁵ See POLANYI, *supra* note 7, at 171.

¹⁴⁶ See TRIPS Agreement, *supra* note 4, at preamble.

¹⁴⁷ On the integration of the TRIPS Agreement into general international law, see HENNING GROSSE RUSE-KHAN, *THE PROTECTION OF INTELL. PROP. IN INT'L L.* ch. 12–13 (2016).

¹⁴⁸ See Boyle, *supra* note 132; Boyle, *supra* note 16, at 53, 69; ROBERT CUNNINGHAM, *INFORMATION ENVIRONMENTALISM* (2014).

The expansion of one system necessarily reduces the scope of the other. Thus, advances to push the boundaries in any direction are always fights over all or nothing. Since IPRs are “creatures of statute,”¹⁴⁹ respective debates primarily take place in the political and legislative sphere.¹⁵⁰ The conflict between the forces of commodification and opposing movements resurfaces when the boundaries of IP laws and rights are contested before courts and other tribunals. On both the macro and the micro level, continuous efforts are undertaken to sustain unauthorized communication and competition or even to re-embed commodified information into spontaneous societal exchange. These countermovements can again be classified according to the three aspects of the fictitiousness of IP.¹⁵¹

The resistance against the commodification of reproducible artefacts that are not primarily produced for sale but first and foremost for other purposes (IP fiction No. 1) is mostly brought up as an issue of public interest, policy, or morality. In this regard, international and EU IP law grant nation states a wide range of discretion so as to enable them to integrate the global innovation and brand markets into a local society that avoids serious prejudice to the environment and provides protection for all life forms and public health.¹⁵² As a consequence, inventions remain unpatentable in the EU that require the prior destruction of human embryos or their use as base material.¹⁵³ Trademark registrations can be denied on the ground that a sign is contrary to public policy or accepted principles

¹⁴⁹ See *Théberge v. Galerie d’Art du Petit Champlain Inc.*, [2002] 2 S.C.R. 336, para. 25 (Can.); *Wheaton v. Peters*, 33 U.S. 591, 662–63 (1834) (“This right . . . does not exist at common law—it originated, if at all, under the acts of congress.”); BVerfG Jul. 15, 1981, 58 BVerfGE 300 (330) - Naßauskiesung (“The legislature creates on the level of objective laws those provisions which establish the legal position of the owner”).

¹⁵⁰ See *supra* notes 1–5 and accompanying text.

¹⁵¹ *Supra* Section II.B.

¹⁵² See TRIPS Agreement, *supra* note 4, art. 8(1), 27(2); World Trade Organization, Ministerial Declaration of 14 November 2001, WTO Doc. WT/MIN(01)/DEC/2, 41 I.L.M. 755 (2002) (“We agree that the TRIPS Agreement does not and should not prevent members from taking measures to protect public health.”); CJEU Case C-34/10, *Brüstle v. Greenpeace*, 2011 E.C.R. I-9821, para. 29.

¹⁵³ See CJEU Case C-34/10, *Brüstle v. Greenpeace*, 2011 E.C.R. I-9821, para. 49.

of morality,¹⁵⁴ and the international copyright system does not in any way affect a government's right to censor copyright-protected speech for reasons of the local public order.¹⁵⁵ Numerous copyright statutes and doctrines serve to protect academia and the artistic field from being completely transformed into segments of the market where the ability to participate in academic or artistic exchange would depend solely on one's ability to buy and sell. In this regard, reference can be made to the universal public domain status of factual information, scientific theories, mathematical concepts, and artistic styles¹⁵⁶; further limitations and exceptions for purposes of research and education;¹⁵⁷ and the case law of the German Federal Constitutional Court calling for an "art-specific" interpretation of copyright that would allow for "an artistic dialogue with existing works, without being subject to financial risks or restrictions in terms of content."¹⁵⁸

Numerous further limitations and exceptions aim at cabining IP fiction No. 2, namely the splitting up of technical, artistic, academic, and commercial communication into single commodified objects. To avoid the permanent disruption and potential breakdown of communication and competition because of IP-related authorization requirements, the law exempts acts done privately and for non-commercial purposes from the scope of IPRs either completely or

¹⁵⁴ See Parliament and Council Regulation 2017/1001, art. 7(1)(f), 2017 O.J. (L 154) 1, [hereinafter EUTMReg 2017/1001]; EUTMDir 2015/2436, *supra* note 6, art. 4(1)(f), 2015 O.J. (L 336) 1, 7; EFTA Court Case E-5/16, Municipality of Oslo; 15 U.S.C. § 1052(a); Paris Convention for the Protection of Industrial Property art. 6, March 20, 1883, 25 Stat. 1372; TRIPS Agreement, *supra* note 4, art. 15(2); *Matal v. Tam*, 137 S.Ct. 1744 (2017).

¹⁵⁵ See Berne Convention, *supra* note 68, art. 17; Panel Report, *China – Measures Affecting the Protection and Enforcement of Intell. Prop. Rights*, WT/DS362/R (Jan. 26, 2009), paras. 7.120-7.139.

¹⁵⁶ See TRIPS Agreement, *supra* note 4, art. 9(2).

¹⁵⁷ See also WIPO, *Limitations and Exceptions*, <http://www.wipo.int/copyright/en/limitations> [<https://perma.cc/9CFX-4EEY>] (regarding copyright limitations and exceptions amongst various countries); cf. Kenneth D. Crews, *Study on Copyright Limitations and Exceptions for Libraries and Archives*, WIPO (Nov. 2, 2017), http://www.wipo.int/edocs/mdocs/copyright/en/sccr_35/sccr_35_6.pdf [<https://perma.cc/3KA4-D52B>].

¹⁵⁸ Cf. BVerfG May 31, 2016, 142 BVerfGE 74, paras. 86–87 – Sampling (English version available at: http://www.bverfg.de/e/rs20160531_1bvr158513en.html [<https://perma.cc/4TRV-S42A>]). For a similar result based on a general de minimis limitation of copyright, see *VMG Salsoul, LLC v. Ciccone*, 824 F.3d 871 (9th Cir. 2016).

subjects them only to a levy.¹⁵⁹ IP laws furthermore declare admissible acts done for experimental purposes,¹⁶⁰ quotations,¹⁶¹ hyperlinks to works freely available on another website,¹⁶² and comparative advertising and other referential uses of protected trademarks, if such commercial communication is otherwise in accordance with honest practices in industrial or commercial matters.¹⁶³

Fiction No. 3, the abstract IP object, is the most fundamental one. It treats certain activities, namely the employment of third parties' own reproduction technologies (think of your computer) and their cognitive capacities, as if these activities, which occur remotely from the IPR holder, constitute trespass upon a private property owned by that person. Countermovements taking aim at this basic fiction defend the general freedom to copy/imitate and to use/perform copies/imitations, even if highly innovative technologies, creative expression, and distinctive trademarks are concerned.¹⁶⁴ Legal measures to this end are less thematically focused than rules that protect information from ex post commodification and instruments preventing or softening

¹⁵⁹ Cf. Community Design Regulation 6/2002, art. 20(1)(a), 2002 O.J. (L 3) 2, 7 (EU); GERMAN PATENT ACT § 11 No. 1; Parliament and Council Directive 2001/29, art. 5(2)(b), 2001 O.J. (L 167) 1. *But see*, as a counter-move of the forces of commodification, Parliament and Council Directive 2001/29, art. 6(4), 2001 O.J. (L 167) 1 (stating DRM systems trump digital private copy exemption).

¹⁶⁰ *Whittemore v. Cutter*, 29 F. Cas. 1120, 1121 (C.C.D. Mass. 1813) (Story, J.: "it could never have been the intention of the legislature to punish a man, who constructed such a machine merely for philosophical experiments, or for the purpose of ascertaining the sufficiency of the machine to produce its described effects."); *Madey v. Duke Univ.*, 307 F.3d 1351, 1361 (Fed. Cir. 2002); GERMAN PATENT ACT § 11 No. 2, 2a, 2b; Community Design Regulation 6/2002, art. 20(1)(b), 2002 O.J. (L 3) 2, 7 (EU).

¹⁶¹ See Berne Convention, *supra* note 68, art. 10(1).

¹⁶² See *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1176 (9th Cir. 2007); CJEU Case C-160/15, *GS Media v. Sanoma*, ECLI:EU:C:2016:644, paras. 40–41.

¹⁶³ J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 23:11 (5th ed. 2017); Parliament and Council Directive 2006/114, art. 4, O.J. (L 376) 21, 23; EUTMDir 2015/2436, *supra* note 6, art. 14; EUTMReg 2017/1001, *supra* note 154, art. 12. Regarding the limits of these countermovements, see ECJ Case C-206/01, *Arsenal Football Club v. Matthew Reed*, 2002 E.C.R. I-10273, para. 51; ECJ Case C-487/07 *L'Oréal v. Bellure*, 2009 E.C.R. I-5185.

¹⁶⁴ EFTA Court Case E-5/16, *Municipality of Oslo*, para. 65 ("The considerations relating to the public domain also serve, to some extent, the general interest in protecting creations of the mind from commercial greed . . . and in ensuring the freedom of the arts.").

disruptions of communication caused by IPRs. Opposition against IP fiction No. 3 is also of a more radical kind because it questions the very object status of IP and stresses the liberty-inhibiting effects of IPRs. Boundaries of IPRs that reflect these kind of countermovements include:

- the territoriality principle, which secures that States can adjust the level of IP protection to their local socio-economic conditions¹⁶⁵;
- the first-sale doctrine/exhaustion principle, which allows for the free circulation of tangible exemplars that were put on the market with the consent of the IPR holder¹⁶⁶;
- the freedom of transit of goods and, more generally, the principle of free trade in goods and services under WTO law¹⁶⁷;
- the time limitation of all IPRs in innovation¹⁶⁸;
- and the requirement of continuous genuine use of a trademark, which confirms the embeddedness of this particular right “in the system of undistorted competition.”¹⁶⁹

Last but not least, countermovements against IP fiction No. 3 are also voiced in the *Grundnorm* of the IP system, which is not ownership as in real property but non-ownership. As long as and insofar as there are no applicable IPRs in the books, equal negative

¹⁶⁵ See Alexander Peukert, *Territoriality and Extraterritoriality in Intellectual Property Law*, in *BEYOND TERRITORIALITY: TRANSNAT'L LEGAL AUTHORITY IN AN AGE OF GLOBALIZATION* 189–228 (Günther Handl et al. eds., Queen Mary Studies in Int'l L. No. 11, 2012).

¹⁶⁶ See TRIPS Agreement, *supra* note 4, art. 6; *Impression Prod., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523 (2017); *Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S. 519 (2013).

¹⁶⁷ See *GROSSE RUSE-KHAN*, *supra* note 147, ch. 10; *but see* EUTMDir 2015/2436, *supra* note 6, art. 10(4); EUTMReg 2017/1001, *supra* note 154, art. 9(4) (transit as trademark infringement).

¹⁶⁸ See PEUKERT, *supra* note 35.

¹⁶⁹ CJEU Case C-689/15, *W.F. Gözze Frottierweberei v. Verein Bremer Baumwollbörse*, ECLI:EU:C:2017:434, para. 37; ECJ Case C-206/01, *Arsenal Football Club v. Matthew Reed*, 2002 E.C.R. I-10273, para. 48; 15 U.S.C. § 1115(b)(2) (2002) (discussing abandonment of mark).

liberty to copy and imitate artefacts reigns.¹⁷⁰ Accordingly, prospective IPR holders face an uphill battle if they want to establish or expand a privileged position vis-à-vis the world. They carry the burden of proof that an IPR is warranted.¹⁷¹

B. Commons Regimes

The fiction of the abstract IP object has become, however, so self-evident and powerful that it has forced all countermovements onto the defensive. Nowadays, it is often the public domain that needs justification in political battles and in court, not its limitation through new or expanded IPRs.¹⁷² Much more often than not have expansionist efforts been successful.¹⁷³

When commodification continued and even accelerated in the digital age, civil society initiatives tried to counter and even reverse this trend. The paradigmatic example in this regard is the Free and Open Source Software (FOSS) movement, which inspired similar initiatives in other creative sectors (Creative Commons) and in academia (Open Access).¹⁷⁴ All of these movements strive to realize the emancipatory potential of the digital, near-zero-marginal-cost

¹⁷⁰ EFTA Court Case E-5/16, Municipality of Oslo, para. 66 (stating that “protection is the exception to the rule that creative content becomes part of the public domain once communicated”).

¹⁷¹ See Peukert, *supra* note 99, at para. 43.

¹⁷² See, e.g., Mireille van Eechoud et al., Statement from EU Academics on Proposed Press Publishers’ Right, INST. FOR INFO. L., UNIVERSITY OF AMSTERDAM (Apr. 24, 2018), <https://www.ivir.nl/academics-against-press-publishers-right/> [<https://perma.cc/67JR-2CLS>]; CJEU Case C-527/15, Stichting Brein v. Wullems, ECLI:EU:C:2017:300, para. 62 with further references (limitations to copyright “must be interpreted strictly”).

¹⁷³ See William Cornish, *The Expansion of Intellectual Property Rights*, in GEISTIGES EIGENTUM IM DIENSTE DER INNOVATION 9 (Gerhard Schricker et al. eds., 2001). For a rare example of a successful countermovement, see LEE, *supra* note 5; Gracz, *supra* note 34, at 267.

¹⁷⁴ See RICHARD M. STALLMAN, *FREE SOFTWARE, FREE SOCIETY* (3d ed. 2015); YOCHIA BENKLER, *THE WEALTH OF NETWORKS* (2006); Yochia Benkler, *Law, Innovation, and Collaboration in Networked Economy and Society*, 13 ANN. REV. L. SOC. SCI. 231 (2017); UNDERSTANDING KNOWLEDGE AS A COMMONS (Charlotte Hess & Elinor Ostrom eds., 2007); Molly Shaffer Van Houweling, *Cultural Environmentalism and Constructed Commons*, 70 L. & CONTEMP. PROBS. 23 (2007); Cohen, *supra* note 17, at 14.; GOVERNING KNOWLEDGE COMMONS 86 (Brett M. Frischmann et al. eds., 2014); ERIC V. HIPPEL, *FREE INNOVATION* (2017). On the significance of commons production in the area of brands and consumption, see Barton Beebe, *Intellectual Property Law and the Sumptuary Code*, 123 HARV. L. REV. 809, 884–88 (2010).

age by establishing networks of commons-based peer production. Production in these networks does not follow the logic of the market, where all input and output is separately exchanged for money. Instead, authors of software, music, and academic writings—the very beneficiaries of IPRs—allow unspecified others to access and use their works. This generosity is sometimes coupled with a requirement of reciprocity, called “copyleft.” According to this rule, she who uses free or open content is obliged to make her additions and modifications available to everyone under the same free/open conditions that she has benefited from. In this case, copyright is not simply waived or granted royalty-free but actively used as a tool to turn exclusivity into inclusivity. Copyleft licenses are meant to expand the realm of non-market communication and innovation and shield the intellectual commons from the infiltration of proprietary content and the market mode of exchange. In support of this alternative mode of communication, the German legislature has exempted open-content licenses from author-protective rules that address market-related risks of exploitation, and it has furthermore preserved the right of publicly funded academic authors to make journal articles available on Open Access repositories, even if they have already granted commercial publishers an exclusive license for the complete copyright term.¹⁷⁵

The quantitative and qualitative significance and sustainability of commons-based production is, however, not beyond doubt.¹⁷⁶ Formal, open-content licenses are rarely enforced in court and involve major, if not insurmountable, legal obstacles, for example, if the license model that governs a massive project like Wikipedia is to be amended or replaced.¹⁷⁷ It thus seems that open-content

¹⁷⁵ Cf. German Copyright Act §§ 31a, 32, 32a, 32c (regarding the grant of an unremunerated non-exclusive exploitation right for every person); German Copyright Act, § 38(4); Dutch Copyright Act, Sept. 23, 1912, Sec. 25fa. See generally Dirk Visser, *The Open Access provision in Dutch Copyright Contract Law*, 6 GRUR INT. 534 (2015).

¹⁷⁶ See Jonathan M. Barnett, *The Illusion of the Commons*, 25 BERKELEY TECH. L.J. 1751, 1814 (2010) (“illusion of the commons”); Primavera De Filippi & Miguel Said Viera, *supra* note 13.

¹⁷⁷ Cf. FREE AND OPEN SOURCE SOFTWARE (FOSS) AND OTHER ALTERNATIVE LICENSE MODELS (Axel Metzger ed., 2016); Dan Wielsch, *Governance of Massive Multiauthor Collaboration - Linux, Wikipedia, and Other Networks: Governed by Bilateral Contracts*,

licenses are primarily of symbolic bearing in that they signal legality in extremely fluid and anonymous communication contexts. Ultimately, a dynamic sharing culture cannot be founded on the basis of the classic, bilateral contract that legalizes market transactions.¹⁷⁸

In addition, there are countless texts, images, films, etc. available on the Internet, the copyright status of which is not clarified or is, at best, signalled with a ©. This content is spontaneously accessed and shared, in particular via hyperlinks, without regard to the authorization requirement that copyright establishes. In order to bring this societal practice in line with digital copyright or, in Polanyian terms, in order to embed copyright into digital society, courts have resorted to the doctrine of implied consent. In light of the “public interest in the well-functioning of the Internet,” the German Federal Court of Justice has held that a right-holder who makes texts or images available on the Internet without access or copy controls implicitly consents to the “normal uses according to the circumstances.” In other words, she who voluntarily participates in an unrestricted mode of communication is thereby subject to the fundamental rules allowing for this non-market mode of exchange to occur.¹⁷⁹ Contrary to predominantly critical comments in the literature, the court deserves due respect for this courageous legal innovation. With the doctrine of implied consent, it legalizes social norms by a legal measure, which is adequately informal, flexible, and globally effective—just like the communication to which it applies.¹⁸⁰

Partnerships, or Something in Between?, 1 J. OF INTELL. PROP., INFO., TECH., & ELECTRONIC COM. L. 96 (2010).

¹⁷⁸ Cf. Severine Dusollier, *Sharing Access to Intellectual Property Through Private Ordering*, 82 CHI.-KENT. L. REV. 1391, 1394 (2007).

¹⁷⁹ See BGH July 17, 2003, GRUR 2003, 958 (961–62) – Paperboy; BGH Apr. 29, 2010, GRUR 2010, 628 paras. 28 – Vorschaubilder I; see also CJEU Case C-466/12, Nils Svensson v. Retriever Sverige, ECLI:EU:C:2014:76.

¹⁸⁰ See generally Alexander Peukert, *Der digitale Urheber*, in Festschrift für Artur-Axel Wandtke zum 70. Geburtstag, 459 (Winfried Bullinger et al. eds., 2013); contra Martin Senftleben, *Internet Search Results – A Permissible Quotation?*, 235 RIDA 2, 59 (2013).

CONCLUSION

This article offers an explanation for the striking dynamic of the IP system, which is at the same time expanding rapidly and severely contested. To this end, it makes use of theoretical concepts Karl Polanyi set out in his ground-breaking study, “The Great Transformation.” As has been elaborated in Parts I-III *supra*, the history of IP can be told in terms of Polanyi’s famous “double movement.” Efforts to commodify virtually every reproducible input/output face equally persistent opposition that points out the disruption IPRs inflict upon communication and competition. Whereas IPRs dis-embed informational artefacts from the uninterrupted flow of societal exchange and subject them to prior authorization requirements, IP countermovements call for their re-embedding, i.e. their usability irrespective of authorization. At the heart of the struggle between market and society lies the ontological question of how to understand the subject matter of IPRs. Proponents of commodification assume that IP presents an object, which in principle lends itself to propertization like land and other goods, whereas their opponents perceive IP as an integral part of communication and thus society. According to the latter view, IP falls into Polanyi’s category of fictitious commodities. I agree with this qualification because IPRs, in part, attach to information that was not produced for sale; they partition communication into commodified pieces, and they are grounded on the obscure fiction of the abstract IP object.¹⁸¹

A Polanyian perspective on IP teaches further lessons. One implication concerns IP theory. Whereas there is considerable theory on IPRs and a well-established layman’s understanding of these rights, countermovements and their traces in the law have long been neglected.¹⁸² No comprehensive branch of law exists comparable to labor or environmental laws that systematically addresses the interests represented by the public domain and by commons regimes. Rules and provisions on point are scattered across IP statutes, competition law, and other laws. There is no

¹⁸¹ See *supra* Sections II.B.1–II.B.3.

¹⁸² See Cohen, *supra* note 17, at 14 (“The relationship between commons and property-based notions of exclusivity is complex and underexplored.”).

generally accepted theory on what characterizes the public domain and the intellectual commons and how the two phenomena relate to each other.¹⁸³ Although this is not the place to enter into this debate, a Polanyian perspective can also inform this theoretical debate. For if IPRs execute the forces of commodification, they cannot at the same time implement the opposite.¹⁸⁴ The notion of “user rights” equally misses the point that private rights legalize and enforce individual, not public, interests.¹⁸⁵ Instead, an adequate legal theory of IP countermovements has to explicate that certain reproducible artefacts belong to everyone (communitarian approach) or that no one can claim ownership (libertarian approach).¹⁸⁶

The last-mentioned alternative finally points to normative implications of a Polanyian theory of IP. In the final section of the “Great Transformation,” Polanyi muses about a complex, industrialized society, in which labor, land, and money are removed from the market and subjected to central planning, but, at the same time, the rights of the individual are strengthened and thus freedom increased. He pins his hopes on a kind of “third way” that avoids the pitfalls of both 19th century liberalism and oppressive fascism/socialism.¹⁸⁷

The repeated failure of socialist regimes in terms of both economic efficiency and individual freedom exposes these hopes, however, as utopian and even dangerous. The society that arguably came closest to Polanyi’s ideal has been the post-WWII Welfare State that adhered to the commodification of labor and land but

¹⁸³ See Pamela Samuelson, *Enriching Discourse on Public Domains*, 55 DUKE L.J. 783, 785 (2006); Séverine Dusollier, *Inclusivity in Intellectual Property*, in INTELL. PROP. & GEN. LEGAL PRINCIPLES: IS IP A LEX SPECIALIS?, 101, 106 (Graeme B. Dinwoodie ed., 2015).

¹⁸⁴ See POLANYI, *supra* note 7; Alexander Peukert, *A Bipolar Copyright System for the Digital Network Environment*, 28 HASTINGS COMM. & ENT. L.J. 1 (2005); Dan Wielsch, *Relationales Urheberrecht: Die vielen Umwelten des Urheberrechts*, 5 INTELL. PROP. J. 274 (2013). *Contra* Senftleben, *supra* note 102 (copyright is a neutral mechanism).

¹⁸⁵ See CHRISTOPH MENKE, KRITIK DER RECHTE 32 (2015). *Contra, e.g.*, Rochelle C. Dreyfuss, *TRIPS-Round II: Should Users Strike Back?*, 71 U. CHI. L. REV. 21, 22–30 (2004).

¹⁸⁶ ALEXANDER PEUKERT, DIE GEMEINFREIHEIT 49–50 (2012).

¹⁸⁷ POLANYI, *supra* note 7, at 147 (“Freedom in a Complex Society”).

greatly intensified distributional interventions in the market by the state.¹⁸⁸

Regarding contemporary IP policy, these normative findings suggest that extreme versions of either commodification or countermovements are to be avoided because over-commodification would disrupt and potentially bring to an end spontaneous communication, competition, and innovation,¹⁸⁹ whereas repealing IPRs altogether would deny personal competence and threaten individual liberty and market-based efficiency.¹⁹⁰ Instead, IP law and policy should ensure that market-based transactions coexist with non-market modes of accessing and sharing information so that authors, inventors, and other entrepreneurs have as many options as possible at hand, and all members of society possess adequate possibilities to acquire knowledge.¹⁹¹ The principle of coexistence of property and non-ownership/commons regimes implies that neither alternative may be allowed to oust the other. By implementing a permanent coexistence of the two, the law would properly reflect upon the peculiar nature of the subject matter of IP, which concerns not distinct property objects but the copying and further use of reproducible artefacts. Whether and to what extent respective exclusive rights to act are warranted will remain a controversial political issue, and rightly so.¹⁹²

¹⁸⁸ See WOLFGANG STREECK, *GEKAUFTE ZEIT: DIE VERTAGTE KRISE DES DEMOKRATISCHEN KAPITALISMUS* 76–87 (2d ed. 2016).

¹⁸⁹ Compare PAUL GOLDSTEIN, *COPYRIGHT'S HIGHWAY: FROM GUTENBERG TO THE CELESTIAL JUKEBOX* 10 (rev. ed. 2003) and Joseph Straus & Nina-Sophie Klunker, *Harmonisierung des internationalen Patentrechts*, 2007 GRUR INT'L 91 (2007) with Neil Weinstock Netanel, *Copyright and a Democratic Civil Society*, 106 YALE L.J. 283, 363–64 (1996); MICHELE BOLDRIN & DAVID K. LEVINE, *AGAINST INTELL. MONOPOLY* (2008); JAMES BESSEN & MICHAEL J. MEURER, *PATENT FAILURE: HOW JUDGES, BUREAUCRATS, AND LAWYERS PUT INNOVATORS AT RISK* (2009); LAWRENCE LESSIG, *REMIX: MAKING ART AND COMMERCE THRIVE IN THE HYBRID ECONOMY* (2008).

¹⁹⁰ Compare MASON, *supra* note 12, at 263 with the sources cited *supra* note 19 and generally JARON LANIER, *YOU ARE NOT A GADGET: A MANIFESTO* (2010).

¹⁹¹ Peukert, *supra* note 141, at para. 43. On the co-existence of capitalism and commons, see PETER BARNES, *CAPITALISM 3.0: A GUIDE TO RECLAIMING THE COMMONS*, at xiv (2006); RIFKIN, *supra* note 12, at 232.

¹⁹² See Alexander Peukert, *The Fundamental Right to (Intellectual) Property and the Discretion of the Legislature*, in *RESEARCH HANDBOOK ON HUMAN RIGHTS AND INTELLECTUAL PROPERTY* (Christophe Geiger ed., 2015).