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International Intellectual Property Scholars Series: A Fundamental Critique of the Law-and-Economics Analysis of Intellectual Property Rights

Andreas Rahmatian

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INTERNATIONAL INTELLECTUAL PROPERTY SCHOLARS SERIES*

A FUNDAMENTAL CRITIQUE OF THE LAW-AND-ECONOMICS ANALYSIS OF INTELLECTUAL PROPERTY RIGHTS

DR. ANDREAS RAHMATIAN**

| I. INTRODUCTION: SOME MAJOR PROBLEMS WITH AN ECONOMIC | |
|---|-----|
| ANALYSIS OF INTELLECTUAL PROPERTY LAW | 192 |
| II. THE ECONOMIC THEORY OF INTELLECTUAL PROPERTY RIGHTS | |
| PROVIDED BY LAW-AND-ECONOMICS | 198 |
| III. TRADE MARKS | 202 |
| IV. PATENTS | 207 |
| V. COPYRIGHT | 211 |
| VI. THE RELEVANCE OR IRRELEVANCE OF A LAW-AND-ECONOMICS | |
| ANALYSIS OF LEGAL INSTITUTIONS TO INTELLECTUAL PROPERTY | |
| LAW AND MORAL CONSEQUENCES | 216 |
| VII. CONCLUSION | 225 |

^{*} The Marquette Intellectual Property Law Review International Intellectual Property Scholars Series features the works of leading national and international scholars whose areas of research include the study of important topics in international intellectual property law and policy. The 2012-2013 Editors of the Marquette Intellectual Property Law Review would like to thank Dr. Andreas Rahmatian for accepting the invitation to publish in this series.

^{**} Mag. iur. et phil., Dr. iur. (Vienna), LL.M. (London), Solicitor (England & Wales). Senior Lecturer in Commercial Law, School of Law, University of Glasgow, Scotland, U.K.

"Die Schriftstellerei wird erst durch den Erfolg als freier Beruf möglich; der Erfolg sagt jedoch nichts über den Wert einer Schriftstellerei aus, er deutet allein darauf hin, dass der Schriftsteller eine Ware herstellt, die sich verkaufen lässt: Dass dieser Umstand nicht befriedigt, sei zugegeben."

(Writing becomes only possible as an independent profession because of the success; but the success reveals nothing about the value of the writing, it only indicates that the writer produces a commodity which can be sold: that this fact is not satisfactory must be conceded.)

Friedrich Dürrenmatt (1921–1990), Swiss writer and playwright

I. INTRODUCTION: SOME MAJOR PROBLEMS WITH AN ECONOMIC ANALYSIS OF INTELLECTUAL PROPERTY LAW

The economic analysis of law and legal institutions, or the law-andeconomics movement, originally a distinct North American phenomenon that emerged in the 1960s.² has become a widespread tool for a certain conceptualisation and understanding of legal problems. Prominent representatives of the law-and-economics approach especially regard intellectual property as a "natural field for economic analysis of law." Since its inception, this form of analysis has been met with suspicion, as it was felt that law-and-economics tried to take over other social sciences and establish a kind of "economics imperialism." This criticism has to be taken seriously because the law-and-economics analysis does not only reconceptualise otherwise dissimilar fields of knowledge in a rather unrecognisable way to the "home-grown" researchers of the other fields, it also alters, deforms, or even destroys the object of research because it has a strong normative element, even where it presents itself as purely descriptive⁵ or (which amounts to the same) "positive." This is particularly true of intellectual property law as the

^{1.} FRIEDRICH DÜRRENMATT, DENKANSTÖSSE 125 (1989) (author's translation from German).

^{2.} CENTO G. VELJANOVSKI, THE NEW LAW-AND-ECONOMICS: A RESEARCH REVIEW 5 (1982).

^{3.} William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. LEG. STUD, 325, 325 (1989).

^{4.} Discussion by Kenneth E. Boulding, *Economics as a Moral Science*, 59 AM. ECON. REV. 1, 8 (1969) who also uses this term.

^{5.} See, e.g., William M. Landes & Richard A. Posner, *Trademark Law: An Economic Perspective*, 30 J.L. & ECON. 265 (1987). On the descriptive, as opposed to the normative, law and economics analysis, see VELJANOVSKI, supra note 2, at 24–26.

^{6.} On the concept of "positive economics," see Milton Friedman, The Methodology of Positive Economics, in The METHODOLOGY OF POSITIVE ECONOMICS: REFLECTIONS ON THE

research object of an economic analysis because all areas of law have developed their long-standing and highly elaborate methodology and do not need a new one, developed for an entirely different discipline, to describe their objects of research. The purpose of an economic analysis can only be a change of current legal institutions and decisions according to perceived superior economic considerations, so every law-and-economics analysis is ultimately normative. Otherwise, it would be superfluous for economists because they take legal institutions (e.g., the legal institutions of contract and property, or regulatory rules) for granted when they seek to explore market phenomena and economic behaviour, and it would be superfluous for lawyers because they have their own conceptual and scholarly frameworks of legal institutions and decisions.

The law-and-economics approach, seeking to belong to economics as well as to law but arguably belonging to neither, engrafts economic research methods on law; it wants to provide a scientific theory to predict the effect of legal sanctions on behaviour, whereby these sanctions are conceptually simplified as prices because people are supposed to respond to sanctions in the same way as to prices. Economics then claims to have mathematically precise theories (e.g., price theory, game theory) and empirical methods for the analysis of the effects of prices on behaviour. The ways of modelling, also mathematical modelling, are controversial within economics itself, but the complexities of human economic behaviour and of the causes and effects of human endeavours require a simplification through modelling which enables scientific findings. In economics, that can often lead to the

MILTON FRIEDMAN LEGACY 7 (Uskali Mäki ed., 2009).

- 7. On the more suitable humanist disciplines for the understanding of law and legal culture, see Bruce A. Ackerman, Law, Economics, and the Problem of Legal Culture, 6 DUKE L.J. 929, 942–44 (1986). See also Anne Barron, Copyright infringement, "free riding" and the lifeworld, in COPYRIGHT AND PIRACY: AN INTERDISCIPLINARY CRITIQUE 93, 125–27 (Lionel Bently, Jennifer Davis & Jane Ginsburg eds., 2010), suggesting Habermas as a better starting point for a social theory than law-and-economics. On the logical and rhetorical aspects of legal reasoning, see Peter Goodrich, Rhetoric as Jurisprudence: An Introduction to the Politics of Legal Language, 4 OXF. J. LEG. STUD. 88, 117–120 (1984).
- 8. $\it Cf.$ ROBERT COOTER & THOMAS ULEN, LAW AND ECONOMICS 2–3, 7 (1997) (2d ed.) who say effectively that.
 - 9. See id. at 2.
- 10. See David F. Hendry, *Preductive Failure and Econometric Modelling in Macroeconomics: The Transactions Demand for Money*, in ECONOMIC MODELLING. CURRENT ISSUES AND PROBLEMS IN MACROECONOMIC MODELLING IN THE UK AND IN THE US 217–222 (Paul Ormerod ed., 1979), for a discussion on the need to monitor, revise, and reconstruct economic models to avoid or collect model mis-specification in relation to demand for money functions. See Erich W. Streissler, "i.i.d." or: On So-called Precise Statements in Economics, in HOW TO FORECAST ECONOMIC DEVELOPMENTS DURING AND AFTER CRISES 75–90 (E. Streissler & G. Tichy, eds., 2012), for a criticism of the shortcomings of economic models.

development of a mathematical equation whereby the economist has to admit that he will never be able to determine the numerical values of the parameters in such a formula.11 Reductionist models are necessary to manage the complexities of reality and to gain a better understanding, but if the model simplifies so extremely such that the connection with reality can hardly be made out, 12 the scientific exercise is worthless for the purpose of legal policy.¹³ Unlike "pure" economists, adherents of the law-and-economics approach appear to be far more insouciant in this regard. Furthermore, an economic analysis of the law influences the object of the examination, the law itself, or at least the perception of the law. One can illustrate the problem of some approaches of the law and economics analysis with a slightly exaggerated example: A researcher wants to study the social behaviour of rats interacting with each other, but, to simplify the complexities of that behaviour for a greater chance of making scientifically verifiable empirical observations. he takes one single rat, kills it according to the devised scientific model for simplification purposes, and then describes the rat's behaviour with earnest scientific accuracy as motionless, perhaps assisted by the empirical methods of statistics and econometrics. The economic analysis of intellectual property law often provides good examples for such a "dead rat" approach.

The following discussion is a fundamental critique of the application of the law-and-economics analysis to intellectual property law from a lawyer's viewpoint. Economists have also raised concerns, ¹⁴ most notably Coase:

Since the people who operate in the economic system are the same people who are found in the legal or political system, it is to be expected that their behaviour will be, in a broad sense, similar. But it

^{11.} Friedrich A. Hayek, *The Theory of Complex Phenomena*, *in* READINGS ON THE PHILOSOPHY OF SOCIAL SCIENCE 61–63 (Michael Martin and Lee C. McIntyre eds., 1964).

^{12.} Cf. Balkin's criticism of the extreme law-and-economics reductionism (here in the context of tort law). See J. M. Balkin, Book Review Essay: Too Good to be True: The positive economic theory of law, 87 COLUM. L. REV. 1447, 1471 (1987):

Different visions of human nature and different moral concerns that give rise to a multiplicity of doctrines all must be shoehorned into the model and reexplained as facets of a unitary principle. Thus, the reductionist strategy views conflict and diversity as mere appearance when in fact they may be fundamental features of legal thought.

^{13.} If one follows Friedman's method of Positive Economics, then the model assumptions are supposed to be unimportant, only the methodological correctness of the conclusions is relevant: if the conclusions lead to an acceptable economic prognosis that is not falsified, then it is irrelevant whether the assumptions have been realistic. *See* Friedman, *supra* note 6, at 14–15, 30–34, 41–42. For any meaningful guidance in legal policy this approach is unsuitable.

^{14.} On the criticism by economists of the extension of economics to "non-market" economics, that is (in the present context) law, see Richard A. Posner, *The Law and Economics Movement*, 77 AM. ECON. REV. 1, 1 (1987), trying to refute their arguments.

by no means follows that an approach developed to explain behaviour in the economic system will be equally successful in the other social sciences. In these different fields, the purposes which men seek to achieve will not be the same, the degree of consistency in behaviour need not be the same and, in particular, the institutional framework within which the choices are made are quite different. It seems to me probable that an ability to discern and understand these purposes and the character of the institutional framework (how, for example, the political and legal systems actually operate) will require specialized knowledge not likely to be acquired by those who work in some other discipline. Furthermore, a theory appropriate for the analysis of these other social systems will presumably need to embody features which deal with the important specific interrelationships of that system. ¹⁵

Coase's view is important here since he became the originator of the prevailing law-and-economics theory of property. The following is not a rejection of an economic method for the analysis of economic phenomena which presuppose, or have been created by, the law, such as supply and demand on the market, which requires at least contract and property rights (or intellectual property rights) for its functioning. But it is a rejection *tout court* of the remodelling of legal institutions and decisions in accordance with certain scientific methods and paradigms developed in (and for) economics, and of the claim that a corresponding analysis could yield any epistemic value for the *law* and a normative standard of efficiency for future legal policy. The critique also disagrees with the idea that we are supposed to have an "economic theory" of property rights, of crime and punishment, of privacy, and so on. 18

Law-and-economics seems to take the worst of both worlds. Economics tends to be descriptive and seeks to ascertain rules of patterns of economic behaviour, which, usually after modelling and a partial analysis, ¹⁹ may be expressed in mathematical equations. A necessary consequence of this

^{15.} Ronald H. Coase, *Economics and Contiguous Disciplines*, 7 J. LEG. STUD. 201, 208 (1978).

Ronald H. Coase, The Problem of Social Cost, 3 J. L. & ECON. 1, 1 (1960).

^{17.} COLIN CROUCH, THE STRANGE NON-DEATH OF NEOLIBERALISM 45 (2011). ALAIN SUPIOT, THE SPIRIT OF PHILADELPHIA 43 (2012). Economists tend to recognise that implicitly only. See, for example, OLIVIER J. BLANCHARD AND STANLEY FISHER, LECTURES ON MACROECONOMICS 465–466 (1992), for an instructive type of discussion on the goods market. The law is incidentally referred to as a factor for the possibility of demand shifts having no effect on prices.

^{18.} See, e.g., Posner, supra note 14, at 1.

^{19.} At least with regard to microeconomic neo-classical models, and these are the starting point for law-and-economics approaches.

scientific approach is a plurality of different models for different aspects of the economy and/or different, also contradicting, models and outcomes in relation to one distinct phenomenon. This unavoidable plurality of models and theorems alongside one another is characteristic of economics but is discarded in the law-and-economics analysis. The reason is sociological. As one of the most important protagonists of the law-and-economics movement candidly stated, a motivation for the emergence of the law-and-economics approach was "that many law professors have lost interest in the traditional undertakings of legal research". ²⁰ But the law-and-economics researchers are for the most part still lawyers. Law, unlike economics, does not entertain a plurality of different scientific approaches and models but provides authoritative answers and decisions, either by a lawgiver in statutes, by judges in judgments, or, in addition, particularly in Civil Law countries, prevalent opinion by eminent legal academics. Law-and-economics renounces the plurality of economics and takes the authoritative singular approach of law and, at the same time, uses the arguably unsuitable scientific methods of economics since they were developed for economic, not legal, problems. While unsuitable and wrong approaches are cut to size within the multitude of equal methods and models in economics, or can be reviewed in appeals in law, the law-and-economics analysis seems to be an authoritative method with no established mechanism of review or criticism. Although it sometimes embraces mathematics and statistics to reinforce its scientific credibility, 21 it rather appears to be a method based more on unchallengeable ideological belief than on falsifiable science.²² However, because of this effectively nonplural approach in law-and-economics, this critique can confine itself to the Chicago School of Law-and-Economics as the principal and most relevant approach and can ignore possible other versions of law-and-economics methods as negligible variants, at least from a "classical" lawyer's perspective.

What I will discuss here first is an outline of the law-and-economics modelling of property rights and intellectual property rights, which law-andeconomics regards as following from traditional property rights (especially

^{20.} Richard A. Posner, *The Costs of Accidents–A Legal and Economic Analysis by Guido Calabresi (Review)*, 37 U. CHI. L. REV. 636, 636 (1970).

^{21.} Morton J. Horwitz, Law and Economics: Science or Politics?, 8 HOFSTRA L. REV. 905, 905–06, 912 (1980).

^{22.} Although appearing scientifically detached law-and-economics is not value free: on the underlying ideology of the Chicago School of Law-and-Economics which is arguably conservative, see Balkin, supra note 12, at 1447; Horwitz, supra note 21, at 911–12; C. Edwin Baker, The Ideology of the Economic Analysis of Law, 5 PHIL. & PUB. AFF. 3, 47–48 (1975).

tangible property).²³ This is correct, though for reasons of law and legal theory, that is, property theory, ²⁴ not as a result of economic theory devised by law-and-economics. Then I discuss the argumentation against a law-andeconomics approach for a conceptualisation of intellectual property. The objections to a law-and-economics analysis of legal institutions and legal relations, and, consequently, to economic propositions with regard to legal reform, are threefold. First, the conditions and assumptions on which the proposed economic models rest are oversimplifying, distorting, incomplete and sometimes blatantly incorrect. Secondly, even if correct conditions and model criteria can be developed, they are still unable to translate legal institutions and legal relations into an economic abstraction as a true mirror image of the law and its actors²⁵ because economic considerations are by definition largely irrelevant to the lawyer for a legal decision. Thirdly, the application of a law-and-economics approach to legal decision-making, either in the context of principally law enforcement (e.g., judicial decisions) or of law making (e.g. legal policy), can have questionable and morally reprehensible effects.²⁶ All three objections are obviously interrelated, but they are discussed separately for more clarity. The first concern, the artificial assumptions for the design of economic models that seek to emulate legal institutions and relations, will also be presented with regard to the specific types of intellectual property rights individually: trademarks, where a lawand-economics method may be most acceptable, though often one may question its relevance; patents, where this method is more problematic; and, finally, copyrights, where the law-and-economics analysis is not just a "dead rat" approach, but rather seems to destroy this legal institution.

^{23.} RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 43 (5th ed. 1998).

^{24.} Andreas Rahmatian, *Intellectual Property and the Concept of Dematerialised Property*, in MODERN STUDIES IN PROPERTY LAW 361, 368–371, 372 (Sue Bright ed., 2011).

^{25.} See SUPIOT, supra note 17, at 42–44, 73–74, against the belief in the purportedly supreme rules of "the market," which supposedly determine every aspect of human behaviour and interaction. On the often bizarre assumptions made about the human behaviour of (economic) actors and the world they act in, see the pointed summary by Mark G. Kelman, Misunderstanding Social Life: A Critique of the Core Premises of "Law and Economics," 33 J. LEG. EDUC. 274, 275 (1983): (a) all human behaviour is utility-maximizing of selfish, privatized individuals, (b) every good thing in life has a resource cost which must be ascertained, (c) for most goods of interest, demand curves are downward sloping, so increase of price reduces demand, (d) legal commands can best be thought of as prices.

^{26.} See also Andreas Rahmatian, Copyright and Creativity: The Making of Property Rights in Creative Works 92, 95, 253 (2011).

II. THE ECONOMIC THEORY OF INTELLECTUAL PROPERTY RIGHTS PROVIDED BY LAW-AND-ECONOMICS

Law-and-economics analysis of property rights presumes that legal protection of property rights creates incentives to exploit resources The efficiency criteria have originally been determined according to the Pareto-optimality: a society has not reached its optimal position if there exists at least one change which would make someone in that society better off and no one in it worse off. Thus an alternative is Paretoefficient if and only if it is not possible to make some individual better-off without making anyone worse-off.²⁸ This concept of efficiency is connected to the model of perfect competition,²⁹ an assumption that individuals maximise utility, that firms maximise profit, that no individual seller or buyer has the ability to influence the commodity price by his or her actions, that products are homogenous, that all resources enjoy free mobility, and that there is complete information about market opportunities.³⁰ The Pareto test seems to presume no transaction costs, or, as others have said, is supposed to apply even with transaction costs.³¹ In any case, it is too rigid because it effectively precludes any policy change as it invariably harms at least one person's interest, and the welfare of one individual cannot be compared to that of another.³² Law-and-economics analysis therefore uses mostly the Kaldor-Hicks efficiency criterion instead.³³ a policy is efficient if those who gain can, in principle, compensate those who lose to their satisfaction and yet remain still better off than before the change.³⁴

What "efficiency" means in a law-and-economics analysis, especially in the context of the efficient exploitation of resources through property rights, is controversial. If viewed according to Pareto-efficiency criteria, the allocation of resources that improve some persons' welfare without any reduction in those resources of others could be said to be efficient³⁵ Or, rephrased by Calabresi and Melamed in the light of the Kaldor-Hicks criteria, "[e]conomic

^{27.} POSNER, supra note 23, at 36.

^{28.} See, e.g., Guido Calabresi, The Pointlessness of Pareto: Carrying Coase Further, 100 YALE L.J. 1211, 1215 (1991); SATISH K. JAIN, LAW AND ECONOMICS 3 (Satish K. Jain ed., 2010).

^{29.} See, e.g., PAUL KRUGMAN, ROBIN WELLS, KATHRYN GRADDY, ECONOMICS (EUROPEAN EDITION) 212 (2008).

^{30.} See, e.g., VELJANOVSKI, supra note 2, at 35.

^{31.} Calabresi, supra note 28, at 1215, referring to Coase.

^{32.} VELJANOVSKI, supra note 2, at 37; Calabresi, supra note 28, at 1216.

^{33.} See J. R. Hicks, The Foundations of Welfare Economics, 49 ECON. J. 696, 700-01 (1939).

^{34.} VELJANOVSKI, *supra* note 2, at 37; Calabresi, *supra* note 28, at 1221; JAIN, *supra* note 28, at 4–5, RICHARD O. ZERBE, ECONOMIC EFFICIENCY IN LAW AND ECONOMICS 4 (2001).

^{35.} JAIN, *supra* note 28, at 5.

efficiency asks that we choose the set of entitlements which would lead to that allocation of resources which could not be improved in the sense that a further change would not so improve the condition of those who gained by it that they could compensate those who lost from it and still be better off than before."³⁶ Another expression of efficiency that has been put forward is wealth maximisation.³⁷ There are variations of this cost-benefit analysis, usually variants and improvements of the Kaldor-Hicks efficiency test, in that the Kaldor-Hicks test is supplemented by further criteria, such as: information, individual psychology of decision making (especially how gains and losses are subjectively perceived), costs of change, values, and so on.³⁸ However, despite such efforts, the efficiency criteria remain arbitrary and flexible.³⁹

Externalities can adversely affect the efficiency of the market in the allocation of resources. There is negative externality if the person who causes harm as a result of his activity does not incur costs because of this activity: the typical example is the pollution of the environment by a factory if that factory is not liable for such an emission. (There is positive externality if someone benefits from an activity without facing a cost, for example the benefit for tourists because of the countryside protection by farmers' activities). Externalities, therefore, create a divergence between private cost and social cost. They are characterised by being incidental to some other market activity and by being unpriced.⁴⁰ Coase suggested a solution to this problem in a seminal article in 1960, which particularly initiated the law-and-economics analysis of property rights.

Coase discusses the divergence between private and social cost in opposition to the traditional treatment of this problem by Pigou. In case of emission of smoke or other nuisance, for example, the question is not how to restrain the person causing the nuisance. Rather, the problem is reciprocal. Which choice is to be made to reach better market efficiency (in line with the Kaldor-Hicks criteria): should A, who is causing the nuisance, be allowed to harm his neighbour B and, therefore, not be stopped, or should B be allowed

^{36.} Guido Calabresi and A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089, 1093–94 (1972).

^{37.} See, e.g., Richard A. Posner, Some Uses and Abuses of Economics in Law, 46 U. CHI. L. REV. 281, 291 (1979). Discussion in VELJANOVSKI, supra note 2, at 38. This term has been proposed by Posner, and, according to his view, is identical with the Kaldor-Hicks test, see ZERBE, supra note 34, at 5.

^{38.} ZERBE, *supra* note 34, at 17–27.

^{39.} VELJANOVSKI, supra note 2, at 39.

^{40.} N. GREGORY MANKIW, PRINCIPLES OF ECONOMICS 204–19 (5th ed. 2009), on patents specifically at 209; JAIN, *supra* note 28, at 7; VELJANOVSKI, *supra* note 2, at 44.

^{41.} Coase, supra note 16, at 1.

to harm A so A has to be stopped?⁴² If there were costless market transactions, the decision of the courts concerning tortious liability would be without effect on the allocation of resources. For example, a factory may be faced with the choice to pay \$1,000 for the pollution the smoke causes, or \$400 to its neighbours for the purchase of a dryer each so they can dry the laundry indoors without it getting dirty, or \$300 for the installation of a smokescreen. The last option would be the most efficient one for the factory. There would be the same outcome if there were no legal prohibition against pollution, so legal provisions would not affect the efficient outcome in a situation of zero transaction costs (this is sometimes called the simple form of the Coase Theorem).⁴³ However, the assumption of zero transaction costs is There are realistically always transaction costs entirely theoretical. (communication, dispute resolution costs, operation of a market, establishment of a government department, etc.), 44 and these are no different from any other costs. 45 Analysis of divergence between private and social cost should examine the effects of a proposed policy change and should attempt to decide whether the new situation would be better or worse than the original one. It may also be possible to modify legal arrangements between, for example, the factory causing the pollution and its neighbours by means of a bargain between the parties. Rights (for example the right to create smoke) can be regarded as factors of production. The right to do something with harmful effect is a cost, a loss which is suffered elsewhere in consequence of the exercise of that right. 46 When transaction costs are sufficiently high to prevent bargaining, the efficient use of resources depends on the way in which property rights are assigned. So, in the case of positive transaction costs, there may not be an efficient outcome under every legal rule. The preferred legal rule is the one that minimises the effects of transaction costs (sometimes referred to as the second part, or corollary, of the Coase Theorem).⁴⁷ A legal rule prohibiting nuisance or pollution should be assessed according to these criteria; the absence of such a rule could be more efficient.

Having taken Coase's economic analysis of nuisance rights as a basis, Demsetz proposed an economic theory of property rights in general.⁴⁸ He

^{42.} *Id*. at 2.

^{43.} *Id.* at 10; A. MITCHELL POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 13–14 (3d ed. 2003).

^{44.} Coase, *supra* note 16, at 44. For a detailed discussion of transaction costs, see COOTER & ULEN, *supra* note 8, at 84.

^{45.} Coase, *supra* note 16, at 15; Calabresi, *supra* note 28, at 1218.

^{46.} Coase, *supra* note 16, at 9, 43–44.

^{47.} COOTER & ULEN, supra note 8, at 82; POLINSKY, supra note 43, at 15.

^{48.} Harold Demsetz, Toward a Theory of Property Rights, 57 AM. ECON. REV. 347 (1967).

developed a theory of efficient use of resources through appropriate assignment of property rights. According to Demsetz, property rights constitute incentives to achieve a greater internalisation of externalities. Every cost and benefit associated with social interdependencies is a potential externality. A harmful or beneficial effect turns into an externality if the cost of bringing the effect to bear on the decisions of one or more of the interacting persons is too high to make it worthwhile. A process, in this context usually a change in property rights, that enables these effects to bear on all interacting parties is referred to as "internalization" of such effects. 49 Thus, the main allocative function of property rights is the internalisation of externalities (beneficial and harmful effects with too high of a cost to make the decisions worthwhile); "property rights develop to internalize externalities when the gains of internalization become larger than the cost of internalization." This economic model of property rights presupposes that (a) harmful and beneficial effects of alternative uses of property rights will be brought to bear on their owners, (b) the property owners are utility maximisers and will use property rights efficiently, and (c) the mix of output that is produced will generally be independent of the distribution of property rights among persons.⁵¹

Demsetz assumes that private property rights and private ownership of land internalizes many of the external costs that would be associated with communal ownership. For example, an owner A of a communal right starts constructing a dam on adjacent land which another communal owner B would like to have stopped. In case of communal ownership, A may agree not to continue constructing the dam but cannot guarantee that a third communal owner will not start building a dam because A has no exclusive rights which entitle him to stop. If there is private ownership, he could, and the negotiation cost for B would be greatly reduced because he would not have to negotiate with a number of communal owners and would avoid an increase in the cost of internalizing.⁵² Demsetz tentatively suggests the application of the same principles to patents and copyright: if a new idea is freely appropriable to all, there would be no incentives for developing such ideas, but the incentive would be increased if the originators of these ideas obtained private property rights.⁵³

The Chicago School has applied this cost-benefit analysis for private

^{49.} *Id.* at 348.

^{50.} *Id.* at 350.

^{51.} Harold Demsetz, *Some Aspects of Property Rights*, 9 J. L. & ECON. 61, 62 (1966). The last criterion in particular echoes the Coase Theorem.

^{52.} Demsetz, supra note 48, at 357.

^{53.} Id. at 359.

property rights to develop an economic theory of intellectual property rights. However, the theoretical conditions discussed here have not always been followed closely. One often finds general statements, such as "the social benefits of property rights must be balanced against the costs," applied (with qualifications) to intellectual property.⁵⁴ The rather loose and impressionistic use of efficiency criteria, which are then applied to concrete issues, such as term of protection, search and transaction costs, or fair use,⁵⁵ is characteristic of the law-and-economics theory of intellectual property. This can be observed when one studies the individual economic cost-benefit analyses of the separate intellectual property rights.

III. TRADE MARKS

Presumably the least problematic intellectual property right for a law-andeconomics analysis is the trademark right. It appears that the discussion has only the registered trademark in mind, and it would indeed be more difficult to squeeze the unregistered, passing-off protected, trademark into an economic model. Landes and Posner present perhaps the best-known comprehensive law-and-economics interpretation of trademarks. According to these authors, the economic benefit of trademarks consists in the reduction of consumer search costs. This presupposes that the producer of trademarked goods maintains a consistent quality over time and across customers. So the consumer can economise on real cost, and because he spends less time searching to get the quality he wants.⁵⁶ The authors also provide a formal mathematical model for consumer search costs: firms with strong trademarks will charge higher prices for their brands, not as a result of any market power, but because the search costs associated with their trademark will be lower. This model presumes that all firms produce products or brands of identical quality.⁵⁷ Another benefit of trademarks within the "market in languages" is that trademark protection creates an incentive to invest in the invention of new words. This is connected with the requirement of distinctiveness of trademarks; particularly, once a trademark becomes generic, it loses distinctiveness and is no longer protected.⁵⁸ One test for whether a trademark

^{54.} Richard A. Posner, *The law and economics of intellectual property*, 131 DAEDALUS 5, 6–7 (2002).

^{55.} See, e.g., Richard A. Posner, Intellectual Property: The Law and Economics Approach, 19 J. ECON. PERSP. 57, 57 (2005); Edmund W. Kitch, Property Rights in Inventions, Writings, and Marks, 13 HARV. J.L. & PUB. POL'Y 119, 119–21 (1990); Stanley M. Besen & Leo J. Raskind, An Introduction to the Law and Economics of Intellectual Property, 5 J. ECON. PERSP. 3, 5 (1991).

^{56.} Landes & Posner, *supra* note 5, at 269, 275.

^{57.} *Id.* at 277, 279–80.

^{58.} For the EU: see First Council Directive 89/104/EEC, art. 3(1)(b) and (d), art. 12(2)(a)

has become generic is whether the word constituting the trademark appears in a dictionary. ⁵⁹

Other commentators have added that the economic function of trademarks also consists in facilitating competition and being a structuring device in the organisation of the production and distribution. Thus, the trademarks do not only reduce search costs, but also increase "dynamic efficiency" (efficiency understood according to the Kaldor-Hicks criteria) because producers will seek to develop an improved version of the product that the consumers, being mindful of the trademark, will then purchase because they cannot distinguish the new version from the older, inferior one (but they may otherwise be risk-averse in relation to hidden product changes⁶¹); trademarks therefore encourage innovation. However, as part of a social cost analysis, the use of a trademark should be considered in relation to the costs that third parties would incur through being unable to make use of trademarks as a tool of communication. This consideration should be part of the assessment of likelihood of confusion and trademark dilution when the economic efficiency of trademarks is evaluated.⁶³

There is the possibility that trademarks facilitate competition and reduce consumer search costs, but that does not apply generally. Here, one can only touch upon the notorious problem of how the term "competition" is to be interpreted. What is meant in the present context is probably not the equilibrium of perfect competition in neo-classical economics, but rather what Adam Smith understood as competition: an economic evolution that assumes increasing returns. These, in turn, prompt merchants and manufacturers to develop and exploit opportunities provided by the economics of scale and by specialisation or division of labour. Competition is an activity rather than a (static) structure. 64

The assumption of the reduction of consumer search costs through trademarks presupposes a rationality of the consumer, which is often artificial in a trademark context.⁶⁵ This starts with a too narrow interpretation of the

¹⁹⁸⁹ O.J. (L040) 1 to approximate the laws of the Member States relating to trade marks.

^{59.} Landes & Posner, supra note 5, at 296.

^{60.} Andrew Griffiths, *A Law-and-Economics perspective on trade marks*, in TRADE MARKS AND BRANDS: AN INTERDISCIPLINARY CRITIQUE 243 (Lionel Bently, Jennifer Davis, & Jane C. Ginsburg eds., 2008).

^{61.} On risk aversion in general, see Cooter and Ulen, *supra* note 8, at 45.

^{62.} Griffiths, *supra* note 60, at 244 n.14, 247 (discussing allocative efficiency: Pareto efficiency and Kaldor-Hicks efficiency).

^{63.} Griffiths, *supra* note 60, at 256–64, with examples from case law of the ECJ/CJEU.

^{64.} George B. Richardson, *Adam Smith on Competition and Increasing Returns, in ESSAYS ON ADAM SMITH 354, 359 (Andrew S. Skinner & Thomas Wilson eds., 1975).*

^{65.} The idea of rational behaviour is generally a contested assumption in economics. See,

function of trademarks as indicators of origin and quality. In fact, trademarks rather have a communication, advertising and differentiation function, 66 whereby the origin or quality of the trademarked goods or services is in the background or irrelevant altogether. A law-and-economics analysis that stresses that trademarks are also a structuring device in the organisation of the production and distribution acknowledges to some extent the reduced importance of the origin function;⁶⁷ one only has to think of the many differently trademarked types of toothpaste which are all produced by the same cosmetics corporate group. A trademark may also indicate quality, but not necessarily a good quality; "quality" as such is a neutral term. 68 Furthermore, the quality aspect may often rather be irrelevant to the consumer, especially where the reputation of the trademark is built on a psychological appeal, which may defy economic rationality. Here, the consumer may also rely (unknowingly) on health and safety and consumer protection laws, which operate independently from trademark law and secure a minimum health and safety standard. A typical example is perfume if one looks at the production costs and, in comparison, the retail prices which consumers are willing to pay. The issue of search costs reduction according to the law-and-economics model does not apply in these—practically very common—cases. Either, the customer looks out for a familiar perfume, for example, in which case there may be a reduction in search cost because it is easier to find the product again, but this contributes hardly to an economically efficient behaviour overall; one is willing to pay for a product which is overpriced (in relation to the cost of production, etc.) because of its trademark. Or, equally often, the trademark informs the consumer of the existence of the product that the consumer did not know of, in which case search costs would not have arisen in the first place. It is not surprising that in those branches of commerce where the differentiation and communication function usually eclipses the origin and quality function of the trademark, in the perfume, cosmetic and fashion industries and the spirits industry, branding and trademarks are most aggressively asserted and defended because

e.g., Daniel Kahneman, A Psychological Perspective on Economics, 93(2) THE AMERICAN ECONOMIC REVIEW 163 (2003). See also Lionel Robbins, The Nature of Economic Generalisations, in PHILOSOPHY AND ECONOMIC THEORY 39–40 (F. Hahn & Martin Hallis eds., 1979).

^{66.} WILLIAM CORNISH, INTELLECTUAL PROPERTY: OMNIPRESENT, DISTRACTING, IRRELEVANT? 89–90 (2004). Instructive on the function of trademarks from the perspective of an economist is Jonathan Aldred, *The economic rationale of trade marks: and economist's critique, in* TRADE MARKS AND BRANDS. AN INTERDISCIPLINARY CRITIQUE 268–73 (Lionel Bently, Jennifer Davis & Jane C. Ginsburg eds., 2008).

^{67.} Griffiths, supra note 60, at 243.

^{68.} Andreas Rahmatian, *Trade Mark Infringement as a Criminal Offence*, 67(4) MODERN LAW REVIEW 680 (2004).

ultimately it is the trademark and the goodwill, not the nature and quality, of the product that constitutes the value. It becomes apparent that the theory of a reduction of search costs, where applicable at all, is too one-dimensional and should be reconceptualised.

In this light, the assertion that firms with strong trademarks will charge higher prices for their brands because the search costs associated with their trademark will be lower⁶⁹ becomes doubtful. As has been said, search costs may not necessarily arise, and the willingness to pay a disproportionately high price may be the result of the strong trademark and the non-rational, mental associations of the consumers, rather than a reduction of the search costs the trademark is supposed to have lowered. One can, of course, redefine "rational economic behaviour" and "efficiency" and so cater for trademarks whose power lies mostly in their psychological appeal, but that would turn the terms "rationality" and "efficiency" into malleable and ultimately meaningless concepts. Furthermore, the law-and-economics proponents do not provide a specific argument against the rather obvious contention that (strong) trademarks may not promote, but stifle, competition because they create monopolies and so cause deadweight costs and monopoly rents based on a spurious notion of product quality. 70 With regard to well-known trademarks, there can also be the effect that the communication function of the mark leads to an avoidance of the corresponding products: the consumer decides not to buy products with the trademark in question because of different personal preferences.⁷¹ So the strong trademark may even increase search costs because they become avoidance costs.

Furthermore, the consumer may differentiate products due to personal preferences, which may be prompted by the trademark itself but are otherwise unrelated to the quality or general properties of the trademarked products. This can be the case with so-called Veblen goods, which are bought for boasting and status although they are more expensive, and, as an anomaly in microeconomics, their demand tends to rise with a price increase.⁷²

^{69.} Landes & Posner, supra note 5, at 277, 279.

^{70.} *Id.* at 275. Landes & Posner just reply to this argument: "A longer answer, which we shall merely sketch, is that the hostile view of brand advertising has been largely and we think correctly rejected by economists." *Id.*

^{71.} This has to be distinguished from George Akerlof's argument that trademarks are a counteracting institution against the effects of quality uncertainty because the consumer will refuse to buy the trademarked product in the future if it has not met the customer's quality expectations. *See* George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84(3) THE QUARTERLY JOURNAL OF ECONOMICS 500 (1970). However, in the present example the customer does not buy the trademarked product in the first place.

^{72.} See, e.g., Aron O'Cass & Hmily McEwen, Exploring consumer status and conspicuous consumption, 4(1) JOURNAL OF CONSUMER BEHAVIOUR 27, 29 (2004); THORSTEIN VEBLEN, THE

Trademarks are particularly relevant in this context because goods are often turned into Veblen goods through their prestigious trademark. For example, two T-shirts may have been manufactured in the same East-Asian "sweatshop" and are of the same quality, but one bears a well-known and high-status trademark and is sold (successfully) for a ten-times higher price. Here, the trademark may have reduced search costs (depending on the individual situation) but has overall triggered a consumer behaviour at odds with rational economic efficiency. One of the most curious irrational phenomena is that consumers are willing to pay a significantly increased price for a garment with its prominently affixed trademark, but they do not seem to consider charging the trademark-owning company for the advertising as living billboards.⁷³ Again, the economic model of the trademark as reducing consumer search costs based on a premise of consumer rationality is too simplistic.

The concept of "dynamic efficiency" is also problematic. It conflicts with the presumption that consumers are rational actors of the market with complete information. In this scenario the trademark misleads consumers: they buy the product because they may think that the product is of the same quality, given that it bears the same trademark. Perhaps the product has really been improved, but in any case it has changed while the trademark pretends it has not. Or, consumers expect an improvement, which they associate with the goodwill of the trademark, but in fact the product has not changed.⁷⁵ In which way should such an arrangement promote innovation? It is also difficult to see how this idea can be reconciled with the supposedly fundamental concept of an economic analysis of property rights: the concept of the internalisation of externalities, that is, social costs, for the purpose of greater efficiency, which is supposed to be achieved by property rights, ⁷⁶ here trade mark rights.

Where the model of economic analysis of trademark rights detaches itself completely from reality is when it starts developing concepts of "markets in

THEORY OF THE LEISURE CLASS: AN ECONOMIC STUDY OF INSTITUTIONS 75, 87, 96, 99 et passim (1957).

Andreas Rahmatian, Psychological Aspects of Property and Ownership, 29(3) LIVERPOOL LAW REVIEW 296 (2008).

^{74.} Griffiths, *supra* note 60, at 244, 247.

Such a scenario of information asymmetry can lead to market failure according to the theory Akerlof developed in relation to the second-hand car market, see Akerlof, supra note 71, at 488. But Akerlof sees trademarks as a counteracting measure against the effects of quality uncertainty because the trademark gives the consumer a means of retaliation. If the quality does not meet expectations, the consumer will refuse to buy the trademarked product in the future. Id. at 499– 500.

^{76.} Demsetz, *supra* note 48, at 348, 350.

language" and "efficient market rules." One may note, here, that the "dictionary test" for whether a trademark has become generic is in striking contrast to the mathematical precision with which the authors try to prove the search cost reduction effect of trademarks. Dictionaries often list words that are considered to be (still) valid trademarks with an ® to avoid possible litigation, but they may also make incorrect assumptions either way.

Despite all these concerns in the area of trademark law, a law-and-economics analysis *can* reflect legal and economic realities. Whether it increases our knowledge significantly is debatable. Arguably, a lawyer and policy maker does not need a complex, mathematically enhanced, economic model to arrive at the rather general conclusion that trademarks *may be able to* reduce consumer search costs and facilitate competition under certain circumstances.

IV. PATENTS

The picture changes when one looks at patents. Here, an economic analysis can become positively harmful to the institution of patent law and its legal objectives. The main reason may be that patents, unlike trademarks, 80 have the essential, but unpredictable, element of human inventiveness and creativity at their core, and that cannot be evaluated in economic models, probably not even with complicated risk assessment theorems.

Patents are usually regarded as the prime example of a monopoly right. The classical liberal approach has been suspicious of the monopolising effect of the patent.⁸¹ Adam Smith accepted it as the lesser evil because the patent

- 77. Landes & Posner, *supra* note 5, at 271–72.
- 78. *Cf.* Landes & Posner, *supra* note 5, at 275–80.
- 79. Under § 16 of the German Trade Marks Act 1994, the trademark owner can compel the publisher of a dictionary to indicate that the word in question is a registered trademark.
- 80. Trademarks are arguably the most commercial/business-oriented and least inventive among the intellectual property rights. The only inventive or creative element—the design of the trademark—characteristically obtains protection by copyright (as an artistic work), and that different protection right becomes eclipsed by the trademark protection proper. The problem of potential overlap is, however, relevant in infringement actions because of trademark parody. In that situation, the permitted acts (parody, criticism, and review, etc.) under the copyright laws would theoretically apply, and they are more generous than defences under trademark law. However, the French courts, for example, keep the intellectual property rights separate and do not allow copyright-based defences in trademark infringement claims, see Christophe Geiger, Trade Marks and Freedom of Expression The Proportionality of Criticism, 38 INTERNATIONAL REVIEW OF INTELLECTUAL PROPERTY AND COMPETITION LAW 317, 325 n.36 (2007).
- 81. Roger E. Meiners & Robert J. Staaf, *Patents, Copyrights, and Trademarks: Property or Monopoly?* 13 HARVARD JOURNAL OF LAW AND PUBLIC POLICY 911–15 (1990); Kitch, *supra* note 55, at 122–23.

protects and promotes innovation. 82 From a modern economist's point of view (and that is most relevant in the present context), patents are not *per se* monopolies in an economic sense, 83 although they may be used to establish economic monopolies. 84 The exclusive right that the proprietary nature of the patent right confers cannot be equated with a monopoly as an economist understands it:85 therefore, the expressions "monopoly right" or "legal monopoly right" as different terms for "property right" should not be used to avoid confusion. 86

Law-and-economics analysis regards patent law as preventing "others from reaping where they have not sown." It promotes R&D investment because it confers an exclusive (property) right to the investors that enables them to recover the costs of invention. If a firm were unable to recover the costs of the invention because the information relevant to the invention were open to all, the level of innovation would be lowered to a suboptimal level.⁸⁷ According to Kitch, the patent system offers a particular opportunity to develop a known technological possibility; it is a "prospect" with associated probabilities of costs and returns. Such "a patent 'prospect' increases the efficiency with which investment in innovation can be managed." In this way, the patent owner has an incentive to make investments to maximise the value of the patent without the danger of appropriation of the corresponding information by competitors. A patent system also reduces the cost for the owner of technological information as a result of contracting with other firms that possess complementary information and resources (for example, funding for innovation investments). Furthermore, patents have an information function so that the risk of duplication of investments in the same type of innovation is being reduced. Finally, patents reduce the cost of maintaining control over technology and improve the structure of the returns to innovation

^{82.} ADAM SMITH, AN ENQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS, Book V, ch. 1, pt. 3, at 754 (Roy H. Campbell & Andrew S. Skinner eds., 1976) (The Glasgow Edition of the Works and Correspondence of Adam Smith, vol. 2) (1st ed. 1776).

^{83.} Frank H. Easterbrook, *Intellectual Property Is Still Property*, 13 HARVARD JOURNAL OF LAW AND PUBLIC POLICY 109 (1990); Kenneth W. Dam, *The Economic Underpinnings of Patent Law*, 23(1) THE JOURNAL OF LEGAL STUDIES 249–50 (1994).

^{84.} Hence, for example, the antitrust legislation of the EU in relation to the abuse of a dominant position of a patent holder. *See* Art. 102 in connection with Arts. 34 and 36 of the TFEU. In the U.S., *see* Sherman Antitrust Act, 15 U.S.C. § 2 (2006); *see also* MARIATERESA MAGGIOLINO, INTELLECTUAL PROPERTY AND ANTITRUST. A COMPARATIVE ECONOMIC ANALYSIS OF US AND EU LAW 54–84, 92 (2011).

^{85.} See American Hoist & Derrick Co. v. Sowa & Sons, 725 F.2d 1350, 1367 (Fed. Cir. 1984). For a discussion of the relevant cases, see Dam, supra note 83, at 269–270.

^{86.} This is particularly true of copyright, but the same consideration applies to patents. RAHMATIAN, *supra* note 26, at 34–35.

^{87.} Dam, *supra* note 83, at 247.

by providing a uniform structure of incentives.⁸⁸

While the advantages of the patent system Kitch sets out are in some respects not particularly controversial, they are not (and arguably cannot be) sufficiently concrete to give guidance in cases of conflict that lawyers and courts face. Furthermore, some criteria do not seem to be specifically "economic" ("information function," which is as much a sociological and psychological criterion as it is an economic one) and appear, rather, as embellished renderings of the *status quo* for the purpose of its justification. It is notoriously difficult to provide indubitable empirical evidence to confirm the assertions that the patent system increases investment efficiency and, therefore, the incentive to invest, or that it reduces contracting costs with firms possessing complementary information or resources (a variant of the idea of internalisation of externalities through contracts). 89

When these general statements have to be translated into practical examples, one does not quite know whether one needs these broad principles at all, or even whether one wants to use them as a yardstick. If they are applied in an examination of the validity of an existing patent, then one becomes uncomfortable if the decision is supposed to be determined by the question whether the patent is commercially successful. This may be an economically relevant criterion but should not be a legally relevant one. Doe also arrives at peculiar and unsatisfactory results if the relevant criterion for ascertaining novelty of an invention is the "prospect" that a patent (if granted) would confer, the opportunity to develop technological possibilities, with associated probabilities of costs and returns. Accordingly, the relevant test is not supposed to be whether the invention is worth a monopoly (the

^{88.} Edmund W. Kitch, The Nature and Function of the Patent System, 20 J.L. & ECON. 265, 266, 276–79 (1977).

^{89.} See, e.g., Tom G. Palmer, Intellectual Property: A Non-Posnerian Law and Economics Approach, 12 HAMLINE LAW REVIEW 291, 301 (1988–89), Maggiolino, supra note 84, at 16–21. Copyright does not fare better with regard to copyright in musical works. "The emergence of formal copyright law was undoubtedly important for composers as well as for their publishers. But it remains unclear whether changes in copyright law elicited systematic changes in the choice of composing as a vocation." Frederic M. Scherer, Quarter Notes and Bank Notes. The Economics of Music Composition in the Eighteenth and Nineteenth Centuries 196 (2004).

^{90.} See Kitch, supra note 88, at 283 (qualifying some of the court decisions in the U.S. in this regard).

^{91.} It is not in the U.K. with regard to inventive step. The challenge of validity (lack of novelty, inventive step) of the patent typically happens in infringement actions. Whether an invention is obvious does not depend on whether it has had (immediate) commercial success. *See* Mills & Rockley (Electronics) v. Technograph Printed Circuits [1969] FSR 239, at 250. The House of Lords decision, [1971] FSR 188, affirming the Court of Appeal, does not discuss this point specifically.

classical patent "reward" idea), but whether the invention is information whose significance should be further investigated. Only in this way would the examination of substantial novelty be an economically rational test of patentability. Such an interpretation amounts to a significant distortion of patent law as lawyers have traditionally understood it.

But the most fundamental deformation of the legal institution of patents by a law-and-economics reconceptualization is the elimination of the person of the inventor in all these models. Here, a complete "defamiliarisation" of reality takes place to arrive at a workable model. But then claims about phenomena in reality nevertheless are made on the basis of findings that result from entirely artificial model assumptions. Law-and-economics analysis seems to take, as the starting point, the patent owner as the rational actor on the market. 93 But in order to create the product in question, the patentable invention, one needs an inventor. The inventor is always and necessarily a human being.⁹⁴ The patent owner may not be, and normally will not be, a human being; it is typically a company. The inventor is either an employeeinventor, so patent ownership vests directly with the company as the patentee, 95 or the patent owner is assignee of the inventor as the original patentee. A legal entity cannot invent on its own; it needs the inventor. However, all law-and-economics model elements of economic rationality, such as the incentive to invest efficiently and to maximise the value of the patent or to have a reduction of costs for maintaining control over technology, really have corporate enterprises in mind, and the analytical assumptions may be important to them only. But inventors who are individual human beings would consider these criteria as hardly relevant. If it were otherwise, then this would indicate a somewhat sociopathic personality, given that efficiencymaximising criteria are rather one-dimensional. For an inventor, the incentive to invent is usually completely different and is based on

^{92.} See Kitch, supra note 88, at 284.

^{93.} See Kitch, supra note 88, at 266, 276; see also Dam, supra note 83, at 247.

^{94.} This is different from the trademark: the goodwill that the trademark denotes can be created by the endeavour of a corporation. The input by an individual human being is confined to the design of the trademark itself, but in trademark law this is not the relevant subject of protection.

^{95.} In the U.K. under the Patents Act 1977, s. 39 (1).

^{96.} It cannot be discussed here whether only a company and legal person can fulfill the rational criteria of economic efficiency in this context, because a physical human being would have to have, or would benefit greatly from, a sociopathic personality to be able to conform. *See generally* Gregory A. Daneke, *Regulation and the Sociopathic Firm*, 10(1) THE ACADEMY OF MANAGEMENT REVIEW 16–17 (1985) on the "sociopathic firm." On the "corporate psychopath" (manager), see Clive Boddy, *The impact of corporate psychopaths on corporate reputation and marketing*, 12(1) THE MARKETING REVIEW 80 (2012). On the related question of corporate social responsibility as a means to obtain a reputation for good behaviour (relevant is the reputation), see Crouch, *supra* note 17, at 142.

unpredictable creativity and other sociological and psychological motives, which an economic model cannot emulate. 97 Scientific interest and curiosity, advance of scholarship and knowledge, general philanthropic desire to improve the human condition, personal fame, and, perhaps, promotion in the company hierarchy are far more likely to be motivating factors for inventing. Sometimes, an invention is unintended and the outcome of sheer luck.⁹⁸ It is difficult to see the relevance of a law-and-economics analysis of patent law if the inventor, the essential originator of the very subject-matter of the analysis, the patentable invention, is disregarded completely. Here, we have already a case of a 'dead rat' approach; that is, scientific analysis is attempted on the basis of a simplifying model that disproportionally distorts reality. If implemented, it may influence the law disadvantageously, since law is a normative, and not a positive/objective, science (unlike Newtonian physics).⁹⁹ So, the explanatory value of the findings on the basis of such a model is very limited. Their practical relevance for policy decisions de lege ferenda is highly doubtful, and their implementation is undesirable because they rest on incorrect premises.

V. COPYRIGHT

The "dead rat" approach seems to characterise most of the law-and-economics analysis of copyright. But, strangely, or perhaps because of that, law-and-economics representatives show a particular interest in copyright. Here again, Landes and Posner are the principal authors who attempted a reconceptualisation of copyright for their analysis. It is difficult to provide a short account of their analysis without being accused of making distorting omissions. This is a particular concern here because the law-and-economics approach transforms the institution of copyright beyond recognition from a lawyer's perspective (probably to be able to deal with the particular complexities that characterise copyright). How is one supposed to understand a statement such as "[t]he more that the cost of expression rises as z^{101}

^{97.} See Boulding, supra note 4, at 4 (economics as such does not contribute much to the formal study of human learning), see also Kahnemann, supra note 65, at 166.

^{98.} For assessing whether there is inventive step, it is irrelevant whether the inventor thought he had made an invention. For the U.K., see British United Shoe Manufacturers v. Fussell [1908] 25 RPC 631, at 652.

^{99.} For a brief instructive discussion of the difference between economics and the disciplines of history, sociology, and the natural sciences, *see*, *e.g.*, Streissler, *supra* note 10, at 75–76.

^{100.} Posner, *supra* note 55, at 57: "The emphasis is on copyright law, which, perhaps because of its complex legal structure and the relative neglect by economists of the arts and entertainment, has tended to be slighted in the conventional economic analysis of intellectual property." *Id. See also* Landes & Posner, *supra* note 3, at 325.

^{101.} In the formal model, Landes & Posner provide for copyright, z, is the level of copyright

increases (that is, the greater is E_z^{102}), the lower will be the optimal degree of copyright protection." No lawyer thinks like that, but that is exactly the decisive point: copyright needs law and lawyers for its existence and application, not economists. Here, one has a good example of what Coase cautioned against: "It by no means follows that an approach developed to explain behaviour in the economic system will be equally successful in the other social sciences," and "[u]tility theory seems more likely to handicap than to aid economists in their work in contiguous disciplines."

For Landes and Posner, the factors that determine the number of copyright-protected works created are the costs of producing the work. These costs have two components: the first is the "cost of expression" (cost of creating the work: the author's time and effort plus the cost of the publisher for editing, typesetting), and the second is the "cost of printing and distributing individual copies." The second component rises with the number of copies, while the cost of expression is unaffected by these and is a fixed cost. In their model, Landes and Posner remove the distinction between author and publisher and treat them both as the same for cost calculation purposes. They then discuss the possible relevance to their model of the facts that, among other things, (a) copies may be of inferior quality and not a perfect substitute for the original, (b) copying takes time, so there will be an interval during which the original publisher will not face competition, (c) there are contractual alternatives to copyright protection for limiting copying, and (d) authors derive substantial benefits from publication that are beyond any royalties (self-advertising, prestige, e.g. in case of academics). 105

These assumptions have several fundamental flaws: authors and publishers are radically different actors, both in the conception of copyright law and as economic actors on the market. It is difficult to see how an analysis, which disregards this aspect, can arrive at satisfactory results.

The next problem is the practical assessment of the cost of expression and cost of production. This is particularly true of the cost of expression: what is

protection, whereby $z \ge 0$, z = 0 denotes no copyright protection. Landes & Posner, *supra* note 3, at 333

^{102.} E_z seems to denote the aggregate of the author's costs (or total cost) of expression e_z , but I cannot guarantee this. See Landes & Posner, supra note 3, at 334, 341, which may enlighten or confuse the reader further in this regard.

^{103.} Landes & Posner, supra note 3, at 344.

^{104.} Coase, supra note 15, at 208.

^{105.} Landes & Posner, *supra* note 3, at 326–327, 329–331.

^{106.} Otherwise there would be no point in distinguishing between authorship and ownership in copyright law and in having rules on license or assignment of copyright which presuppose author and publisher at the opposite sides of the bargain. See CDPA 1988, ss. 9, 11, 90 (U.K.). See 17 U.S.C. §§ 201(a) & (d).

the author's time and effort? The two hours for writing a poem, or the skill acquired for writing poetry over a period of twenty years that enables the poet to write a poem in just two hours?¹⁰⁷ This approach is essentially shaped according to neo-classical microeconomic partial analysis, and, therefore, suffers from the time-disregarding extreme reduction of possible factors that may be acceptable for 'conventional' economic problems but not for a description of legal institutions. Some adaptation to the model will also have to be made in view of the development of digital technology in the area of reproduction and publication. In particular, digital copies are a perfect substitute for the original today.

The postulated second cost component, the cost of printing and distribution (together with the concerns about the quality of copies, etc.), is also startling. One cannot help thinking that this is rather an issue of personal (moveable) property law regarding the object and not regarding the copyright it embodies; it concerns the physical copy of the book, not the copyright of the literary work. Leaving aside the question of a too narrow focus on books as almost the only type of copyright-protected works discussed, the cost involved in the production of the physical thing really relates to the physical thing 108 and is presumably irrelevant to the reconceptualisation of the legal institution of copyright with methods deriving from economics. assumptions, for example, that authors derive substantial benefits beyond royalties from publication (positive externalities perhaps) are highly conjectural and also problematic. The example given, the benefits of an academic because of his/her publications as self-advertisement, is not a convincing one, because self-advertisement really happens through talks at conferences and various administrative duties that confer a profile outside the academic's department or university. 109

The law-and-economics model also posits that if the cost of expression becomes too high, it becomes counterproductive to produce copyright-protected works. The less extensive copyright protection is, the lower are the costs of creating a new work because the author can draw more freely from previous works. This leads to the concept of the idea/expression

^{107.} For further potentially relevant points for this calculation, see RAHMATIAN, *supra* note 26, at 93.

^{108.} From a property theorist's and copyright lawyer's perspective, the physical copy represents, but does not constitute, the copyright in question. For further discussion, see Rahmatian, *supra* note 26, at 15–19.

^{109.} On the identities of the "manager-academic," see ROSEMARY DEEM ET AL., KNOWLEDGE, HIGHER EDUCATION, AND THE NEW MANAGERIALISM: THE CHANGING MANAGEMENT OF UK UNIVERSITIES 102–25 (2007).

dichotomy¹¹⁰: granting the author copyright protection in ideas would increase the cost of expression of later authors without generating offsetting benefits.¹¹¹ That may appear plausible, but only if one disregards the problematic nature of "cost of expression". Further questionable statements follow; ideas are apparently acquired by the author "at zero cost." Landes and Posner also think that most works of fiction anyone would want to copy are intended for a mass audience and therefore have to operate with stock characters and situations (that is, ideas in the sense of copyright law) in order to be understood. 112 But in fact, ideas are rarely acquired at zero cost; one only has to think about the research cost of a historic novel or of a non-fiction book—both of which attract copyright as literary works. Furthermore, the controversial aesthetic assumption about works of fiction directed at a mass audience is an irrelevant consideration for copyright protection and the operation of the idea/expression dichotomy. But, there is a more fundamental methodological objection, which the discussion of the idea/expression dichotomy highlights. We find, here, an economic explanation of a legal rule that presupposes the legal rule itself for its explanation, so there is a petitio principii; the proposition lies already in the premise. What is an unprotectable idea and what is protectable expression is a normative decision of copyright law (implemented by the courts in each case), not a factual observation. 113 So the law determines the economic parameters that are supposed to model the law according to economic criteria. If economics is supposed to be descriptive, then we also have a logically incorrect conclusion from an "is" (economic modelling) to an "ought" (law), and conversely. 114

The whole law-and-economics analysis is riddled with similar methodological flaws. An example is the discussion of derivative works, also a normative definition of the law, 115 that is presupposed to model an economic assumption but, at the same time, defined by economic methods. The definition offered by Landes and Posner is that "the derivative work is an

^{110.} U.S. Copyright Act of 1976, 17 U.S.C. § 102(b); Agreement on Trade-Related Aspects of Intellectual Property Rights [hereinafter TRIPS Agreement], art. 9(2); Baker v. Selden, 101 U.S. 99 (1879); Donoghue v. Allied Newspapers, Ltd., [1938] 1 Ch. 106, at 110; CJEU in Bezpečnostní softwarová asociace v. Svaz softwarové ochrany v. Ministerstvo kultury [2011] FSR 18 (Case C-393/09), ¶¶ 48–50.

^{111.} Landes & Posner, supra note 3, at 332–33, 349–50.

^{112.} Landes & Posner, supra note 3, at 349–50. See also Posner, supra note 55, at 65.

^{113.} See, e.g., Rahmatian, supra note 26, at 125-130, with examples from case law.

^{114.} Sometimes referred to as Hume's law. *See* DAVID HUME, A TREATISE OF HUMAN NATURE 469 (L.A. Selby–Bigge ed., 2d ed. 1960) (1739–40).

^{115. 17} U.S.C. \S 101 "derivative work." In the U.K.: "adaptation." CDPA 1988, \S 21(3) (U.K.).

imperfect substitute,"116 which conflates, from a copyright perspective, the categories of "copy" and "derivative work", the latter being capable of attracting copyright in its own right. Another obvious candidate for a lawand-economics analysis is the "fair use" defence, again a concept that is defined and shaped by the law only, 117 and differently so in different jurisdictions (for example, "fair dealing" in U.K. copyright law is a concept within the permitted acts that is defined differently from US copyright law¹¹⁸). Landes and Posner postulate that fair use reduces transaction costs because there is no need to obtain a license (at a potentially high cost) from the copyright owner. A fair use privilege creates a clear benefit to the user A, but no harm to the copyright holder B. 119 However, if one applies the Coase Theorem, which is supposed to stand at the beginning of all these law-andeconomics considerations of property rights, then it rather appears that B has a cost and suffers harm, and the question is really reciprocal whether A is allowed to harm B, or conversely, so the problem is to avoid the more serious harm. 120 This becomes particularly apparent in the case of parodies, which Landes and Posner do discuss¹²¹ but not against the background of this aspect.

The optional term of copyright protection has been the subject of several law-and-economics examinations. Copyright protection should be limited in time to be efficient. Copyright should also be time-limited to save on tracing costs and transaction costs; too lengthy terms of protection invite rent-seeking. A time-limitation shall augment the public domain because future authors can borrow from these earlier works that are no longer protected. However, there also seem to be economic benefits in long copyright terms. Posner gives the example of the Mickey Mouse, which, if it were in the public domain, would lead to a "surfeit of copies" that "might produce a net reduction in the market value of the character if overexposure induced a degree of boredom or even disgust that caused, via a downward shift in the demand curve, a decline in total utility." It is not convincing that such essentially arbitrary aesthetic value judgments should be allowed to determine

^{116.} Landes & Posner, supra note 3, at 354.

^{117. 17} U.S.C. § 107.

^{118.} For a brief contrasting overview, see J. ADRIAN L. STERLING, WORLD COPYRIGHT LAW 541, 547 (3d ed. 2008).

^{119.} Landes & Posner, *supra* note 3, at 357.

^{120.} Coase, supra note 16, at 2.

^{121.} Landes & Posner, supra note 3, at 359. See also Posner, supra note 55, at 62–64.

^{122.} See, e.g., Landes & Posner, supra note 3, at 361; William M. Landes & Richard A. Posner, Indefinitely Renewable Copyright, 70 U. CHI. L. REV. 471, 471 (2003).

^{123.} Landes & Posner, *supra* note 3, at 362. *See Indefinitely Renewable Copyright*, *supra* note 122, at 477–478, 483, for various qualifying arguments.

^{124.} Posner, supra note 55, at 61.

the level and length of copyright protection. Could one not also feel sated with the Mickey Mouse character because of the type or quality of the art in question or the over-advertising and over-promotion by the copyright holders to increase profits? Does one have enough of Bach or Paul Klee because they are in the public domain?

The law-and-economics modelling of copyright distorts this legal institution exceptionally strongly, so it is really an extreme case of a "dead rat" approach. One also notes, especially with regard to copyright but already also in the case of patents, that the economic conceptualisation of intellectual property rights focuses only on the property and its characteristics, but not on the creator, the author, and the inventor. He or she is merely implicitly regarded as the property maker and then eliminated from further analysis. Important is the product and its economic utility, not how it comes into existence; unlike with tangible goods that must come from somewhere (at least as raw material), intellectual property originates from a mental act. Without its human designer, the object of economic examination does not come into existence in the first place. So the creator and the parameters of the creation are important for any scientific analysis. The law-and-economics approach ushers in a commodification of the human being by equating property maker and property in a reductionist model. In the strong scientific analysis.

VI. THE RELEVANCE OR IRRELEVANCE OF A LAW-AND-ECONOMICS ANALYSIS OF LEGAL INSTITUTIONS TO INTELLECTUAL PROPERTY LAW AND MORAL CONSEQUENCES

Even if all assumptions and conditions in a law-and-economics analysis are corrected and adapted satisfactorily, economic considerations are, by definition, essentially irrelevant for the lawyer. More precisely, when the lawyer takes economic considerations into account, he or she means something else than the economist. The reason is that law and economics have an entirely different institutional framework, methodology, and understanding of human society, so that the criteria for decision-making are necessarily different in nature. This is even so where the results of a legal and an economic exploration may be similar in some cases; the similarity is a phenotypic, not a genotypic, one.

This can be demonstrated already with Coase's seminal article at the

^{125.} As in the Landes & Posner model that ignores the distinction between costs incurred by authors and by publishers for simplification of analysis. *See* Landes & Posner, *supra* note 3, at 327.

^{126.} This is particularly ominous in the case of copyright. See RAHMATIAN, supra note 26, at 231, 253.

beginning of the law-and-economics movement.¹²⁷ Coase's economic analysis of nuisance cases provides a good example of the fundamental and irremediable flaw of a law-and-economics approach to legal institutions and decisions. The problem in situations of nuisance, according to Coase, has traditionally been obscured by the law. When A inflicts harm on B, the question is not how to restrain A, but to regard the problem as a reciprocal one. Were A restrained, he would suffer harm, so one should really ask: is A allowed to harm B, or is B allowed to harm A? The cost of exercising a right is always a loss suffered elsewhere as a consequence of the exercise of that right.¹²⁸

Coase demonstrates this problem with some nuisance law decisions, among them the ruling in the English case of *Sturges v. Bridgman*,¹²⁹ a landmark case in the English law of nuisance.¹³⁰ In this case, a confectioner used two mortars and pestles for breaking up loaf-sugar for the operation of his business, which was in the same position for more than 60 years. A physician moved to the house next door and later erected a consulting room at the end of his garden that shared a wall with the confectioner's kitchen. The noise and vibration of the confectioner's mortars and pestles seriously disturbed the doctor during the consultations of his patients, especially when he wanted to listen to the patients' chest with a stethoscope. The doctor brought an action for nuisance against the confectioner, and won in both instances, because there was an actionable nuisance from the time when the doctor built a consulting room, something he was entitled to do as property owner. The confectioner was ordered by injunction to stop the use of his machinery.¹³¹

Coase criticises that the judges should have taken into account the question whether the continued use of the machine adds more to the confectioner's income than it subtracts from the doctor's. The decision of the court simply presupposed the case in which the costs of carrying out the necessary market transactions exceeded the gain, which might be achieved by any rearrangement of rights. The preservation of the area for residential and professional use is only desirable if the value of the additional residential facilities obtained was greater than the value of the confectioner's products (cakes, etc.) lost. It would have been better to consider the possibility of a bargain; whether the doctor would have been willing to waive his right and

^{127.} Coase, supra note 16, at 1-44.

^{128.} Id. at 2, 44.

^{129.} Sturges v. Bridgman, [1879] L.R. 11 Ch.D. 852 (U.K.).

^{130.} Coase, *supra* note 16, at 8–10.

^{131.} Sturges v. Bridgman, [1879] L.R. 11 Ch.D. at 855, 859, 865-66.

allow the machinery to continue to operate if the confectioner would have paid him a sum of money, which was greater than the loss of income because the doctor would have to reduce his consultations or move to a more expensive or less convenient area. One can test this argument by assuming what would have happened if the confectioner had won. In that case, there would have been the opportunity for a bargain, whereby the doctor would have had to pay the confectioner to stop using his machinery. ¹³²

From a lawyer's and court's perspective, Coase's considerations are mostly beside the point. Many rights in law, including property rights, are absolute and not subject to a bargain of parties, specifically not to an ex post bargain of parties.¹³³ This is particularly true of criminal law and rights arising out of a tort. If a very capable and highly regarded chief executive A of a large company knocks over a two-year old child B with his car and kills it, the law does not evaluate A's liability on whether the cost of having A sent to prison and having him made to pay damages exceeds the cost the death of B entails. This is even so if one considers that A is an influential and very skilled businessman who would be hindered to give his services to his company, the market, and the business community (at least temporarily) and to increase wealth, while B is a small child who does not yet contribute to the production of anything valuable and can be replaced relatively easily and fairly fast by growing a new child for two years (and nine months). An economic bargain-oriented approach would perhaps advocate that A pays the parents of B an amount of money that covers the reinstatement costs for a new child, and in turn A would not have to spend time in prison and pay damages (beyond the cost bargained for) because that would produce negative externalities (cost) that go beyond the loss of the child; the company would be deprived of the expertise of its chief executive (and the chief executive may be financially crippled by a too onerous damages claim). The company, as a result, may suffer losses in business and have to make staff redundant and so The law fortunately decides deliberately against such economic considerations.

The same applies to nuisance cases. In *Sturges v. Bridgman*, the question was not whether the continued use of the machine adds more to the confectioner's income than it subtracts from the doctor's. The question is, for the lawyer, and that is the only relevant question, whether the confectioner's activity amounts to nuisance and whether this activity is tolerable or not from

^{132.} Coase, *supra* note 16, at 9–10.

^{133.} Every contract may prepare a change of rights, also a change of allocation of property rights, but once the contract is concluded, no further "bargain" (from a law-and-economics perspective) is accepted, only if all parties agree to renegotiate *pro futuro*.

a legal, ethical, sociological, and psychological point of view, where economics may come in but most commonly plays a very minor part. Whether there is nuisance has to be considered in the context of its occurrence, especially its geographical context; ¹³⁴ a cost-benefit analysis of the value of the additional residential facilities relative to the value of products as a result of commercial use cannot become a decisive factor. Here, perhaps for the reason of a continued provision of healthcare, the unimpeded existence of a doctor's surgery was considered as more important for the community at issue than the carrying on of certain activities within a confectioner's business. The detriment the community suffers is arguably greater if it is the result of the relocation of a physician (who provides essential services) than of a confectioner (who provides non-essential products that can be transported to different places).

The law obviously recognises, enables, and protects bargains, or contractual arrangements, but, as a look into *Sturges v. Bridgman* shows, the lawyer understands "bargain" differently from the economist. The courts considered the possibility of a bargain between the doctor and the confectioner:

When you find a man doing an act which is a manifest injury to another... and his neighbour allows that to go on for a great number of years, it is not unreasonable to presume that he did it under some right. If he has done it openly and his neighbour does not complain... it is not unreasonable to suppose that they did come to terms at some antecedent period for granting a right. 135

The difference to Coase's bargain is that, here, the possibility of the existence of a *previous* right created by a contract is debated which would then manifest itself by the confectioner's behaviour. But it would have been a *prior* bargain, so the tort (nuisance) would not have arisen because the activity would have been lawful. It is not a Coase-bargain, which is an *ex post* attempt at an economic redress of an extant state of affairs, here *after* the tort of nuisance has already been committed. In law, such *ex post* 'bargains' are not an instance of a negotiable trade-off, but a corruption of the idea of justice. It is characteristic that a great deal of the argumentation in *Sturges v. Bridgman* centres around the question whether the confectioner could claim an easement to justify the use of the machinery. In this way, a restricted *prior* property right (even prior to the doctor's later building of the consulting

^{134.} Sturges v. Bridgman, [1879] L.R. 11 Ch.D. 852 (U.K.) at 865-66.

^{135.} Id. at 859.

room), granted as a result of a prior contract or 'bargain' or by prescription (that is, by operation of law), could have been found that could have made his activity lawful. There was, however, no easement because noise is not capable of being the subject-matter of an easement; the neighbour had no chance to interrupt this activity physically from his own land, which, in turn, would have prevented the easement from arising against him by prescription. He would have had to go onto the neighbour's land to interfere with the neighbour's noisy business, and that would have been trespass. ¹³⁶

Coase does not address the easement aspect at all, although the discussion by Thesinger LJ would have highlighted the difference between legal and economic balancing of reasons very well. If the neighbour cannot prevent the noisy activity without trespassing and cannot bring an action before the noisy activity has started to prevent it from happening, no right to noise and vibration—especially in form of an easement—can arise against the neighbour; it is "in a very high degree unreasonable and undesirable" that there should be a right of action for acts which are not currently happening (so there is as yet no nuisance), and "it is in an equal degree unjust, and from a public point of view, inexpedient that the use and value of the adjoining land should . . . be restricted . . . by reason of the continuance of acts incapable of physical interruption." The negation of this principle would lead to greater individual hardship than the application of this principle. 138 A cost-benefit analysis or a weighing of the cost as a result of the harm to A or to B does not feature at all and would be out of place; the criteria are whether the ruling is "just" and "expedient" from a point of view of public interest, and whether the effects are "reasonable" and "desirable". Anyone who doubts the exactitude of these terms will readily agree that the term "efficiency" in economics is equally opaque.

The concerns raised in the context of the relatively simple tort of nuisance apply, *a fortiori*, to the much more complex intellectual property rights.¹³⁹ The present discussion of copyright law reform in the U.K. after the Hargreaves Review (2011)¹⁴⁰ shows how damaging a law-and-economics analysis of legal principles and values can be. The Hargreaves Review is full of law-and-economics considerations or at least makes extensive use of their

^{136.} Id. at 856, 863, 865.

^{137.} Id. at 865.

^{138.} Id. at 865-866.

^{139.} These are also close to torts because their protection (infringement) is tortuous (trespassory) in nature. For further discussion and references, *see* RAHMATIAN, *supra* note 26, at 23–24.

^{140.} IAN HARGREAVES, DIGITAL OPPORTUNITY: A REVIEW OF INTELLECTUAL PROPERTY AND GROWTH, (May 2011), available at http://www.ipo.gov.uk/ipreview-finalreport.pdf.

jargon. One suggestion of the Hargreaves Review was the introduction of a copyright defence for parody, and the Review noted that "there is an economic link. Video parody is today becoming part and parcel of the interactions of private citizens, often via social networking sites, and encourages literacy in multimedia expression in ways that are increasingly essential to the skills base of the economy. Comedy is big business." Following the Hargreaves Review, the Business, Innovation and Skills Committee of the U.K. Parliament recommended in its Report (2012)¹⁴³ that before such an exception for parody is introduced,

[T]here should be a closer examination of certain economic issues including, possibly: (i) the actual transactional costs involved in negotiating licenses; (ii) the comparison between those costs and the anticipated benefits; (iii) how much creative activity is actually stifled by the current legal situation; and (iv) what proportion of parody cases might lead to an allegation of moral rights infraction, and what the costs of resulting disputes would be. 144

The Committee recommends that "the Government give due weight to economic data on the potential benefits and disadvantages of implementing a parody exception." In fact, only (iii) is of relevance to the lawyer, and (iv) only without the consideration of the costs of resulting disputes, because one cannot abolish or restrict a right (freedom of expression) just with the economic argument that an exercise of this right would cause costs of resulting disputes. However, (i) and (ii) should have a very inferior role in legal policy considerations. The most important concerns, here, would be the rights of freedom of expression, freedom of criticism, freedom from censorship, and freedom of the arts, and these rights may often operate directly and deliberately against economic interests. An economic

^{141.} Andreas Rahmatian, *The Hargreaves Review on copyright licensing and exceptions: a missed moment of opportunity*, 22(8) ENT. L REV., 221–22 (2011), with further references in the Hargreaves Review to illustrate this point, and emphasising and criticizing this approach of the Hargreaves Review.

^{142.} HARGREAVES, supra note 140, at 50.

^{143.} BUSINESS, INNOVATION AND SKILLS COMMITTEE-FIRST REPORT, *The Hargreaves Review of Intellectual Property: Where Next?* (June 21, 2012), *available at* http://www.publications.parliament.uk/pa/cm201213/cmselect/cmbis/367/36702.htm.

^{144.} *Id*. ¶¶ 42.

^{145.} *Id*. ¶¶ 42–43.

^{146.} For a discussion on the relationship between the neo-classicist market paradigm and democracy-enhancing goals in the context of parody and fair use, see Neil Weinstock Netanel, *Copyright and a Democratic Civil Society*, 106 YALE L.J. 283, 324–36 (1996–97).

argument would have a deeply corrupting effect on the law by replacing justice with efficiency. The Committee's insistence on economic data on the potential benefits and disadvantages before a decision in favour or against a parody exception is also likely to delay any reform considerably, and it creates the wrong impression that a defence would allow parodies for the first time in the U.K. (and only if they do not harm unduly the market of right holders), as if parodies were not already lawful in principle today. Parodies have been recognised in case law because a parody does not amount to infringement at all¹⁴⁸ or because it could also be acceptable under the general copyright defence of fair dealing for criticism and review. It rather appears that a new statutory defence specifically for parody would be restricted to economically "efficient" cases, while the current common law defence is free from such considerations.

One can see that the purpose of law differs radically from the purpose of The purpose of commercial law is to provide authoritative solutions for conflicts by determining rights and obligations and allocating them to the parties of the conflict, typically in court, as the nuisance case above has illustrated. There is in law no "market" and no "competition"; these may be phenomena to which the law may refer, especially in rules regulating these (antitrust laws, etc.), and here also not guided by purely economic concerns. But "market" and "competition" are not a constitutive part of the normative framework of the law. When the court in Sturges v. Bridgman stated that, by applying its decision, it allowed individual cases of hardship to avoid individual cases of greater hardship, it acted against any idea in economics of a market and market equilibrium in perfect competition. Different from law, economics can be defined as the science studying the general methods by which men co-operate to meet their material needs, or, more restrictively, the study of allocation of physical resources and the determination of prices in the economy. 150 The direction of economics may

^{147.} ALAIN SUPIOT, HOMO JURIDICUS: ON THE ANTHROPOLOGICAL FUNCTION OF THE LAW 85–86 (Saskia Brown trans., 2007); CROUCH, *supra* note 17, at 63–64.

^{148.} This is because the parody does not amount to a substantial part of the work it satirises. *See* Glyn v. Weston Feature Co., [1915] 1 Ch. 261; Joy Music Ltd. v. Sunday Pictorial Newspaper (1920) Ltd., [1960] 2 EWHC (QB) 60.

^{149.} CDPA 1988, s. 30(1) (U.K.). There is some support for this view in Williamson Music Ltd. & Others v. The Pearson P'ship & Another, [1987] FSR 97, but it is unclear whether parodies would (always) fall under this section. On the problematic basis of § 30(1) for parodies, see Ronan Deazley, Copyright and Parody: Taking Backward the Gowers Review, 73 MOD. L. REV. 785, 789–91 (2010).

^{150.} VELJANOVSKI, *supra* note 2, at 18, with several definitions. A brief generally accepted definition is: "Economics is the study of how society manages its scarce resources." MANKIW, *supra* note 40, at 4.

overlap with that of law in some aspects, e.g. regarding the "allocation of physical resources", but with a different starting point and a completely different scientific interest. Furthermore, it is the law that transforms physical resources into the concept of property and so creates the necessary preconditions for the operation of markets and the economy as a whole. There can be law without economics, but there cannot be economics without law. Economic efficiency, the cornerstone of economic analysis, is essentially irrelevant for lawyers and judges when they have to ascertain the existence or extent of a right. Thus, an economic model is necessarily unable to conceptualise and so emulate the law and the relationship the law creates between people and legal institutions. Economic models may be able to give a limited explanation of markets and changes of markets as a result of legal intervention and regulation, but they cannot explain the nature and effects of legal rules themselves.¹⁵¹

A further point of criticism is the incomplete picture of the human agent in economics that economic theory provides: he is rational, selfish, and his tastes do not change. Modern research in psychology and behavioural economics has qualified this standard assumption considerably. To a limited extent, some of these discoveries start finding their way into economic theories of intellectual property, such as the relevance of the endowment effect to the valuing of intellectual property rights by economically rational actors. The standard property is the standard property rights by economically rational actors.

But even these corrections, commendable as they are, cannot remove the basic conceptual problem. The essence of Coase's analysis of legal conflicts (for example with regard to nuisance) is the opportunity to buy oneself out of legal obligations that have already arisen, sometimes by previous agreement and sometimes by operation of law, and so without the consent or even knowledge of the economic actor(s) concerned. This opportunity is determined by cost-benefit considerations to maximise efficiency. That approach has not surprisingly been characterised as "immoral", not only, as one would expect, because of human rights concerns, but also from a libertarian viewpoint, because such an opportunity to a "bargain" would undermine the very essence of property rights that apply *erga omnes*. If in a "bargain" anyone could buy himself out of an obligation that another's property right imposes on him, then we would not really have a property right

^{151.} RAHMATIAN, supra note 26, at 95.

^{152.} Kahneman, supra note 65, at 162, 165–166.

^{153.} See, e.g., Christopher Buccafusco & Christopher Springman, Valuing Intellectual Property: An Experiment, 96 CORNELL L. REV. 1, 1–45 (2010), based on the research by Daniel Kahneman et al., Experimental Tests of the Endowment Effect and the Coase Theorem, 98 J. POL. ECON. 1325, 1325–48 (1990). See also ZERBE, supra note 34, at 44.

system at all.¹⁵⁴ It has therefore been argued that "we must reject Coase's advice because it is just plain downright *immoral*. It is evil and vicious to violate our most cherished and precious property rights in an ill conceived attempt to maximise the monetary value of production."¹⁵⁵ These are strong words, but one will probably start considering them sympathetically at least when one looks at some of the law-and-economics discussion of clearly illegal bargains, which are, from an economic perspective, apparently entirely rational. Furthermore, law-and-economics protagonists seem to examine these illegal transactions without embarrassment and without even raising the serious fact of illegality and moral reprehensibility if these scientific model assumptions were mirrored in the real world. ¹⁵⁶

For example, Demsetz illustrated the way in which property rights internalise externalities with the case of slavery. If a law establishes the right of a person to his freedom, this also necessitates, according to Demsetz, a payment on the part of a firm or of the taxpayer sufficient to cover the cost of using that person's labour if his services are to be obtained. On the other hand, "a law which gives the firm or the taxpayer clear title to slave labour would necessitate that the slave-owners take into account the sums that slaves are willing to pay for their freedom." 157 What is really the only rational consideration here is that the law needs to intervene remedially in the perversions of economic analysis and prohibit certain types of transactions outright, irrespective of any economic concerns. Critics of the law-andeconomics interpretation of property rights should perhaps be less concerned about the integrity of property, but rather about the integrity of the human being. This is something law-and-economics approaches by virtue of their model assumptions do not regard as relevant, while lawyers arguably see that as the highest purpose of legal rules, at least in a democratic society. 158 The more personal nature of intellectual property rights (particularly of patents and copyright), when compared to tangible commodities, emphasises this idea.

^{154.} Walter Block, Coase and Demsetz on Private Property Rights, 1 J. LIBERTARIAN STUD. 111, 112 (1977).

^{155.} Block, *supra* note 152, at 114–115 (original emphasis).

^{156.} For a discussion on the question of deontological constraints, which would counteract such considerations, see, for example, Larry Alexander, *Deontological Constraints in a Consequentialist World: A Comment on Law*, Economics and Morality, 3 JERUSALEM REV. LEGAL STUD. 75, 75 (2011).

^{157.} Demsetz, supra note 48, at 349.

^{158.} See also Robin Paul Malloy, Is Law and Economics Moral?—Humanistic Economics and a Classical Liberal Critique of Posner's Economic Analysis, in ADAM SMITH AND THE PHILOSOPHY OF LAW AND ECONOMICS 160 (Robin Paul Malloy & Jerry Evensky eds., 1995).

VII. CONCLUSION

The law-and-economics analysis interprets legal rules and institutions with the methodology of economics and so transforms them into unrecognisable artefacts. This is particularly so with regard to intellectual property law: while in the case of trademarks law-and-economics analysis is merely too simplistic and mostly superfluous, in the cases of patents and particularly copyright, it is positively harmful to these legal institutions. Economic methodology has not been developed for the analysis of law, and the purpose of legal methodology is not the scientific exploration of economic efficiency. The "economic" analysis of intellectual property rights can be likened to a "dead rat" approach in a laboratory: entirely artificial model assumptions kill the object of research for simplification purposes and then analyse scientifically the dead object as if it were alive in its natural habitat. Law-and-economics distinguishes itself from economics in that it essentially rejects the pluralism of models, which is characteristic of the discipline of economics. It also sets itself apart from law in that it discards the possibility of legal argument and, if in judicial proceedings, appeal because it presents itself as a kind of natural science discovering immutable natural laws that cannot be, by nature, subject to appeal and redress. So law-and-economics is not a potentially falsifiable scientific theory but a belief system that seeks to remove itself from critical enquiry. The idea of the all-embracing free market with its own consistent laws as the ultimate foundation and limit of the legal universe has religious overtones.

Furthermore, it is hard to understand why law-and-economics builds on the individualistic microeconomic short-time orientation of neo-classical economics (with emphasis on demand) instead of relying on the macroeconomic long-term analysis¹⁵⁹ (with emphasis on supply) to explore principles of political economy, which characterises classical economics, that is, the era of economic thought from Adam Smith to (and arguably

^{159.} On the absence of macroeconomics in law-and-economics analysis, *see* Kelman, *supra* note 25, at 276, 283.

^{160.} An early definition of the purpose of political economy by Sir James Steuart, *Book I: Of Population and Agriculture* (from: AN INQUIRY INTO THE PRINCIPLES OF POLITICAL OECONOMY), in THE SCOTTISH ENLIGHTENMENT. AN ANTHOLOGY 402 (Alexander Broadie ed., 1997) (1st ed. 1767):

The principal object of this science [political economy] is to secure a certain fund of subsistence for all the inhabitants, to obviate every circumstance which may render it precarious; to provide every thing necessary for supplying the wants of the society, and to employ the inhabitants ... in such a manner as naturally to create reciprocal relations and dependencies between them, so as to make their several interests lead them to supply one another with their reciprocal wants.

including) Karl Marx.¹⁶¹ Lawyers are not normally interested in the individual behaviour at individual markets but in the legal framework that can create markets in general, whereby this legal concept must apply to all markets and actors in an equal manner, ultimately as a result of the idea of justice. This subjection of a possible individual rule to the question whether it could be sustained for society in general is rather characteristic of legal thinking;¹⁶² one illustrative historical example is from the Scottish jurist and judge Lord Kames (Henry Home, 1696–1782), at one time the mentor of Adam Smith, about the possibility of the intervention of equity as an individual relief:

However clear a just claim or defence may be, a court of equity ought not to interpose, unless the case can be brought under a general rule. No sort of oppression is more intolerable than what is done under the colour of law; and, for that reason, judges ought to be confined to general rules, the only method invented to prevent legal oppression. 163

Any meaningful analysis based on economic methodology that seeks to implement legal policy (at least ultimately) will probably have to adopt a more macroeconomic, long-term, non-individualistic approach without the principle of diminishing marginal utility and its variants.

The scientific method of law-and-economics is fortified by "mathematical models", which give the appearance of exact truth. But those who apply these mathematical formulae tend to forget that these are as good as the quality of the data input, and there are virtually never measurable data in the context of legal reasoning. This can be demonstrated already with the work that was the starting point for the law-and-economics movement: Coase's discussion of the nuisance cases in his seminal paper on the problem of social cost in 1960. Relevant is not a trade-off, not an *ex post* "bargain", the buying oneself out of existing obligations arising from tort or property in particular, but a decision concerning the allocation and defence of rights based on justice. The law-and-economics analysis seeks to replace justice with efficiency¹⁶⁴ and in this way corrupts the law and the idea of justice. In this context, a rather

^{161.} WILLIAM J. BARBER, A HISTORY OF ECONOMIC THOUGHT 17, 163 (1967).

^{162.} Put broadly, economists seek to deduce rules from individual market behaviour which they believe are applicable generally in all markets, while lawyers decide whether an individual case should prompt them to create a rule; if so, such a rule must be accepted to be applicable generally to society as a whole.

^{163.} LORD KAMES (HENRY HOME), PRINCIPLES OF EQUITY 132 Vol. 2 (Rahmatian ed., Lawbook Exchange 2011) (1778).

^{164.} SUPIOT, *supra* note 147, at 85.

unsophisticated notion of "justice" should suffice; any detailed discussion of the problem of a definition of "justice" and whether the purpose of the law is to realise justice, must be left to specialist works on legal theory, ¹⁶⁵ but provisionally one may rely on clear statements of some legal philosophers. ¹⁶⁶ Law is obviously not tantamount to justice but is a principal means to bring about justice. The currently popular postmodernist approach that questions the ability to pursue truth (and presumably also justice) ¹⁶⁷ is of no assistance. ¹⁶⁸

A legal system, which gives way to the more economically powerful individuals and legal entities and allows them to buy themselves out of legal obligations for the purpose of their own wealth maximisation under the principle of efficiency increase, does not safeguard justice. Justice is not the subject of a commercial bargain. For Adam Smith, the towering figure at

165. On philosophical and legal theories of justice, *see*, *e.g.*, JOHN RAWLS, A THEORY OF JUSTICE 260–63, 265 (rev. ed. 1999); NIGEL E. SIMMONDS, CENTRAL ISSUES IN JURISPRUDENCE 9–15 (3d ed. 2008), followed by part 1 of his book. HERBERT L. A. HART, THE CONCEPT OF LAW 157–67 (2d ed. 1997) (a prominent passage on justice and the law). *See also* NEIL MACCORMICK, INSTITUTIONS OF LAW: AN ESSAY IN LEGAL THEORY 270–74 (2007) on the role of justice and the law. "Law is morally loaded . . . and contains an implicit aspiration to justice." *Id.* at 270. On the generally accepted distinction between *rule of law* and justice, *see*, *e.g.*, Joseph Raz, *The Rule of Law and its Virtue*, *in* THE AUTHORITY OF LAW: ESSAYS ON LAW AND MORALITY 211 (2d ed. 2009) (1979).

166. Particularly, legal philosophers of earlier times were rather undeterred from making bold statements about justice. *See, e.g.*, RUDOLF STAMMLER, THE THEORY OF JUSTICE 24, 26 (Ass'n Am. L. Sch. eds., Isaac Husik trans., 1925):

All positive law is an attempt to be just law. . . . Law as a final end is the greatest injustice. Law is a condition and not a goal; a means, not an ultimate end. Whoever maintains and defends a specific legal rule with definite content as absolute, simply because it is legal, is guilty of an objectively unjust act of will.

Obviously there are a few inaccuracies in these deductions, but this cannot be discussed here. More recently and also very straightforward, Mortimer Sellers, *The Value and Purpose of Law*, 33 U. BALT. L. REV. 150 (2003–04): "Legal systems properly exist for the purpose of giving right answers about justice. . . . Law is a theory of practical justice, and a legal system is a process for discovering and implementing the rules that justice requires."

- 167. See, e.g., MAX TRAVERS, UNDERSTANDING LAW AND SOCIETY 146 (2010).
- 168. It may rather open up the opportunity to intellectual corruption under a scientific guise. This danger is not particular to postmodernism; Stammler's views cited above did not prevent Stammler from joining one of the organisations of the NSDAP several years later. Very instructive is Hannah Arendt's 1964 interview about the intellectuals in 1933 in Germany. See HANNAH ARENDT, THE PORTABLE HANNAH ARENDT 11 (Peter Baehr ed., 2003): "And among intellectuals Gleichschaltung was the rule, so to speak. But not among the others. And I never forgot that. I left Germany dominated by the idea Never again! I shall never again get involved in any kind of intellectual business."
- 169. A commercial bargain can of course be conducted in line with justice. *Compare* ADAM SMITH, THE THEORY OF MORAL SENTIMENTS 86 (D. D. Raphael & A. L. Macfie eds., Clarendon Press 1976) (1759) [hereinafter THE THEORY OF MORAL SENTIMENTS]:

Society may subsist among different men, as among different merchants, form a sense of

the beginning of modern economics, justice, was central to the fabric of society: "Beneficence... is less essential to the existence of society than justice. Society may subsist, though not in the most comfortable state, without beneficence; but the prevalence of injustice must utterly destroy it." 170

When a cultural or aesthetic quality assessment is attempted, a law-and-economics analysis can provide no insight at all. But such considerations are particularly important for intellectual property. As the writer Friedrich Dürrenmatt in the quote at the beginning of this article states, the fact that a writer can produce a commodity that sells says nothing about the quality of the writing.

It is unclear where the law-and-economics belief in the market and in economics as the foundational science for law and possibly all phenomena of society derives from. One root seems to be a kind of inverted Marxism, ¹⁷¹ perhaps a conservative response to it in the prevailing discourse of the 1960s. Law-and-economics shares with Marxism that it also seeks to relate each legal rule back to its economic determinants. ¹⁷² The political history of the twentieth century illustrates graphically what twentieth-century versions of Marxism (or what called itself Marxism) could lead to when all humanist conceptions are ousted in favour of a one-dimensional and arid "economic" world view that has the desire to create a "new man." Friedrich Engels saw this problem coming and felt uneasy about it. He wrote in a letter to Joseph Bloch, (September 21, 1890) in which he explained the meaning of historical materialism:

According to the materialist view of history, the *ultimately* determining element in history is the production and reproduction of actual life. More than that was never maintained either by Marx or myself. Now if somebody distorts this by declaring that the economic element is the *only* determining factor, he transforms that proposition into a meaningless, abstract, absurd piece of jargon. . . . If some younger writers attribute more importance to the economic aspect than

its utility, without any mutual love or affection, and though no man in it should owe any obligation, or be bound in gratitude to any other, it may still be upheld by a mercenary exchange of good offices according to an agreed valuation.

^{170.} THE THEORY OF MORAL SENTIMENTS, *supra* note 169, at 86. On Smith's theory of justice, *see* John W. Cairns, *Adam Smith and the Role of the Courts in Securing Justice and Liberty, in* ADAM SMITH AND THE PHILOSOPHY OF LAW AND ECONOMICS 36 (Robin Paul Malloy & Jerry Evensky eds., 1995).

^{171.} Or a vulgar form of Marxism, with law as a "superstructure" based on economic rationality (although the Marxist economic rationality is a different one). See Horwitz, supra note 21, at 905.

^{172.} SUPIOT, supra note 147, at 85. See also Malloy, supra note 158, at 154.

is its due, Marx and I are to some extent to blame. We had to stress this leading principle in the face of opponents who denied it, and we did not always have the time, space or opportunity to do justice to the other factors that interacted upon each other. But it was a different matter when it came to depicting a section of history, i.e. to applying the theory in practice, and here there was no possibility of error. Unfortunately people all too frequently believe they have mastered a new theory and can do just what they like with it as soon as they have grasped—not always correctly—its main propositions. And I cannot exempt from this reproach many of the more recent "Marxists," and indeed, they have been responsible for some pretty peculiar stuff.¹⁷³

It is too idealistic to think that adherents of the Chicago School of Law-and-Economics will start appreciating Friedrich Engels and will give up on the law-and-economics analysis of intellectual property law and law in general. But if only the fear of being associated with the foremost socialist thinkers made them do so, then, from a consequentialist efficiency perspective, this would nevertheless be an achievement.

^{173.} Friedrich Engels, *Letter by Friedrich Engels to Joseph Bloch, London, 21–22 September 1890, in* KARL MARX, FREDERICK ENGELS, COLLECTED WORKS, Vol. 49 (Engels 1890–92) 34, 36 (2001) (first publication 1895) (with slight alterations of the translation from the German by the author).