6-2015

The Undue Reliance on Physical Objects in the Regulation of Information Products

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THE UNDUE RELIANCE ON PHYSICAL OBJECTS IN THE REGULATION OF INFORMATION PRODUCTS

Pascale Chapdelaine*

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* Associate Professor, Faculty of Law, University of Windsor. This Article builds on the ideas developed in various chapters of my doctoral thesis in law (Osgoode Hall Law School, 2013) and I thank Giuseppina D’Agostino, David Vaver, Geraint Howells, and David Lametti for their comments inspiring the ideas further developed in this Article. I thank the participants of a seminar organized by the Faculty of law, University of Tasmania in July 2014, and the participants of the Windsor Faculty of law seminar held in December 2014, for their comments on earlier versions of this Article. I also thank the editors of the Journal of Technology Law and Policy, University of Florida for their editing work.
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I. INTRODUCTION

The co-existence of tangible and intangible property is central to the regulation of information products. The commercialization of musical recordings, books, films, video games, computer software involves a duality between intangible and tangible property. The copyright holder owns the intellectual property rights to the literary, dramatic, musical or artistic work (intangible property), while the recipient of the information product would usually own (but not always) the copy to the information product (tangible property). At a broader level, information products embed an artistic, literary, functional, intangible component that prevails over their concrete, physical, and tangible embodiment.

Increasingly, recipients have access to information products online, without a physical object embodiment (such as a paperback, a CD, DVD, video, disc). One could easily predict that information products with no supporting physical object will soon outnumber (if they have not already) the ones that are embedded in a physical supporting medium. The online distribution of information products brings a different dimension to the traditional tangible and intangible property divide: the products that are offered with a physical supporting medium (associated to something tangible) are in several instances regulated differently from the ones that are not (i.e., of an immaterial character).

Recipients have much to gain from the disembodiment of the information products that they enjoy at the tip of their fingers: freed physical space, flexibility with respect to how and when they access the information product, on which devices, with no physical degradation of their copy. At the same time, the disembodiment of information products breaks traditional boundaries and blurs the lines between suppliers and recipients. Do the recipients own the copies that they access online or


2. See Aaron Perzanowski & Jason Schultz, Reconciling Intellectual & Personal Property, 90 NOTRE DAME L. REV. 1211, 1238–45 (2015) (showing the transformation or “erosion” of copies of copyright works and the impact it has on copyright law).
rather, are they licensees of the copies? Do recipients benefit from a service or access a combination of goods and services? Are recipients’ access to information products restricted by suppliers’ digital locks or other technological protection measures? Do recipients benefit from implied conditions and warranties to the same way that they do when their information products are embedded in a physical object? These shifting lines of demarcation between suppliers and recipients beg the question: to what extent are recipients’ gains of convenience offset by changing rules of engagement? Are recipients gaining, or progressively losing power?

The purpose of this Article is to critically analyze the root causes and justifications supporting the different treatment of information products that are embodied in a physical object from the ones that are not. The divide in the treatment of different forms of property is to a large extent arbitrary and we need to take a closer look at the profound effects that it may have on the regulation of information products, and the balance of powers between suppliers and recipients. Part II considers the effects of the overemphasis on a physical object in defining goods and services and the consequent rippling effects it has on enforcing sales and licenses. The Article will then delve into further illustrations of the emphasis on a physical object on the application of the first sale or exhaustion doctrine and on what exclusive copyright acts are involved in the commercialization of information products. Part III explains the root causes of the current overemphasis on the presence of a physical object through misconceptions of property and through the active role that suppliers play in shaping the nature of information products. I observe how the over emphasis on a physical object progressively decreases recipients’ ownership powers and privileges to information products, thereby creating double standards that may lead to a legal and normative degradation. Part IV proposes to redefine personal tangible property by looking at what its essential attributes should be. In particular, the concept of ownership “as an organizing idea,”\(^3\) should help discern when personal property rights of recipients of information products should be recognized and enforced in conjunction with the need to constrain the effects that supplier contracts have on the personal property rights of recipients of information products.

**II. The Dividing Line Created by the Presence of a Physical Object**

Courts and legislatures have been grappling for some time with the

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3. I refer to the theory of ownership developed by James W. Harris, Property and Justice (1996).
application of traditional legal doctrines to the immaterial world. The law of theft and the tort of conversion are examples that come to mind. In the case of information products, the presence of a physical object has an impact on the qualification of information products as goods, with rippling effects on the enforcement of sales and licenses, on the application of the first sale or exhaustion doctrine, and on what exclusive copyright acts are involved in the commercialization of information products.

A. Definition of Goods and Services

Commercial copies of information products that are sold through the hand-to-hand supply of a physical medium (such as music CDs or film DVDs) are generally characterized as goods under sale of goods law. In doing so, courts have at times applied a reasoning by analogy and assimilation. Familiar objects such as discs and tapes, which have long been recognized as goods, justify that the predominant feature of the product—the musical recording, the film, or computer software—is also considered to be a good.

By contrast, the applicability of sale of goods—and consumer—law-implied obligations to digital content supplied online is still an unsettled area of the law. In sale of goods and consumer law, “goods” generally refer to (tangible) “chattels personal,” “personal property,” or, in civil law

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5. Id.


jurisdictions, “movable property,” and often exclude “things in action.” As a result, the qualification of information products as goods still largely depends on the definition of tangible property and “chooses in action” or intangible property.

If copies of information products distributed online with no supporting physical media are not goods under the relevant statutory provisions of sale of goods and consumer laws, they cannot benefit from the protection mechanisms offered through implied sale of goods and consumer obligations. This limits the protection to any remaining

8. Quebec Consumer Protection Act, R.S.Q., c. P.40.1, art. 1(d) (Can.) [hereinafter QCPA] defines goods as “any movable property,” which is defined in Civil Code of Quebec, CQLR, c. C-1991, art. 905 (Can.) [hereinafter CCQ], as “[t]hings which can be moved either by themselves or by an extrinsic force.” Art. 907 CCQ states that all other property, if not qualified by law is movable. Thus the definition of goods is broad and would include incorporeal property (art. 899 CCQ). In France, Code de la Consommation, art. L211 provides that the provisions dealing with warranties of conformity apply to movable, corporeal property. Other articles of the Code de la Consommation, for instance, the ones dealing with information disclosure requirements (L111) and the ones dealing with unfair commercial practices (L120) refer to “property” which is not defined, and would thus include movable and immovable property.


10. I.e., the application of statutory implied obligations of quality and of fitness for purpose, of correspondence with description, of title, quiet possession and freedom from encumbrances. This requirement originates from the strong underpinnings of sale of good laws for these particular consumer protection obligations (i.e., consumer-protection-law-implied obligations typically expressly build upon or refer to sale of goods law in the field of consumer implied obligations). E.g., OCPA, supra note 9, §§ 9(2), 9(3). Section 9(3) refers to the existing implied obligations of the OSGA, and adds additional protection for consumer agreements: “Any term or acknowledgement, whether part of the consumer agreement or not, that purports to negate or vary any implied condition or warranty under the Sale of Goods Act or any deemed condition
common law implied obligations, the breach of which may be more difficult to establish than under their statutory counterparts. Implied obligations, applied within the framework of consumer protection law, can be invoked more easily, give rise to a broad range of remedies, and are often mandatory. In some cases, copies made accessible online may benefit from the protection of implied obligations as they apply to services.

Is the requirement of a physical object to qualify information products or warranty under this Act void.” In the United Kingdom, the UKSGA provides implied obligations for sale of “goods.” UKSGA, supra note 9, §§ 2, 12–14 and Services Act 1982, 1982, c. 29, §§ 1(1) & (2) (U.K.) [hereinafter UKSGSA] (providing implied obligations in “contracts for the transfer of goods” such as the supply of labor and materials and hire contracts). Id. §§ 2(1) & (2), 6(1)–(3), 11N(2)(b)). The Directive 1999/44/EC, applies to “goods.” Directive 1999/44/EC, supra note 9, art. 1(2)(b), 2 (1)). The U.S. UCC, sections 2-312, 2-314, and 2-315 also apply to transactions in “goods.” U.S. UCC, supra note 9, §§ 2-312, 2-314, 2-315.


An unexpressed term can be implied if and only if the court finds that the parties must have intended that term to form part of their contract; it is not enough for the court to find that such a term would have been adopted by the parties as reasonable men if it had been suggested to them; it must have been a term that went without saying, a term which, though tacit, formed part of the contract which the parties made for themselves.

Sir Iain Glidewell then concluded on that basis that “In the absence of any express term as to quality or fitness for purpose, or of any term to the contrary, such a contract is subject to an implied term that the program will be reasonably fit for, i.e. reasonably capable of achieving the intended purpose.” The court applied this passage of Sir Iain Glidewell’s obiter in Horace Holman Group, Ltd. v. Sherwood Int’l Group, Ltd., 2000 WL 491372 (TCC).

12. For example in Canada, see OCPA, supra note 9, § 9(3); see also QCPA, supra note 8, §§ 261, 262; Saskatchewan Consumer Protection and Business Practices Act, c. C-30.2 of the Statutes of Saskatchewan, 2013, 5.15(1) [hereinafter SCPBA]; NBCPWLA, supra note 9, § 24. However in limited circumstances, it can be limited by contract, unless “it would not be fair or reasonable to allow reliance on such agreement.” Id. § 25. BCSGA, supra note 9, §§ 18, 20; Nova Scotia Consumer Protection Act, RSNS 1989, c. 92, 26 (3) (d) & (f) [hereinafter NSCPA]; MCPA, supra note 9, § 58(1). ROBERT BRADGATE, CONSUMER RIGHTS IN DIGITAL PRODUCTS 20 (2010) (referring to three main characteristics of implied obligations under §§ 12 to 15 of UKSGA: “(a) they are easy to prove; (b) their breach allows the consumer buyer to seek to bring into play a range of powerful remedies; and (c) neither they nor liability for their breach can be excluded where the buyer ‘deals as consumer.’”). See also id. at 26, 49.

13. This would then give rise to different regimes of protection. In the case of services, for example under the OCPA, supra note 9, § 9(1) the implied warranty applicable to services is that the services are of a “reasonably acceptable quality.” See also MCPA, supra note 9, § 58(6) (providing a non-mandatory implied warranty, “that the services sold shall be provided in a satisfactory manner”); UKSGSA, supra note 10, § 14(2) (providing that “there is an implied term that the goods supplied under the contract are of satisfactory quality.”). See also BRADGATE, supra note 12, at 28–29.
as goods falling under the protection of statutory sale of goods and consumer laws a relevant criterion and if so, under what rationale? The requirement that an information product must have a physical embodiment or aspect to be considered a good was stated in the English Court of Appeal judgment St. Albans City & District Council v. International Computers, Ltd. 14 Sir Iain Glidewell, in a frequently cited obiter dictum, stated that the presence or not of a physical medium to supply the copy of the computer software would be the decisive factor to determine whether a computer program qualified as a good or not. 15 Canadian and American courts have also been more readily inclined to find that copies of information products are goods in presence of the supply of a hand-to-hand physical object. 16 Sir Iain Glidewell made the distinction between the transfer of a computer disc for money, which would trigger the application of warranties under the applicable sale of goods law as the allegedly defective instructions (e.g., the code in the computer program) were part of the disc, and would have made the disc (i.e., a good) defective. 17 However, in this case, the mere provision of a computer program would not, even though a disc was involved in the arrangement, have triggered the application of sale of goods warranties because the installer had transferred the program himself onto the computer but had retained the disc:


15. Id. In that case, it was held that the defendant was under an express contractual obligation to provide the plaintiffs with software that would allow them to accomplish certain functions. Id. It was therefore not necessary to consider the legal ground (e.g., statutory or common law) under which implied obligations would apply. Lord Justice Nourse indicated concurrence with the obiter dictum. Id. This obiter dictum was cited in subsequent judgments: 1996 SLT 604 (Outer House) [Beta Computers].

16. Courts tend to approach contracts for the supply of computer hardware and computer software as a whole as sale of goods. See BARRY B. SOOKMAN, COMPUTER, INTERNET, AND ELECTRONIC COMMERCE LAW, loose-leaf ¶ 2.17 (b) (1988). In Arbor Search Services, Inc. v. Foam Shop, Ltd., 2008 ABPC 256, the court, in obiter dictum, stated that softwares did not constitute goods. In that case, the issue of the application of implied obligations under the Alberta Sale of Goods Act, did not need to be addressed as the issue to be tried revolved around the consequences of non-performance of the contract by both parties. Id. In the United States, courts have been willing to consider software alone as involving a transaction in goods. See, e.g., Schroeders v. Hogan, 137 Misc. 2d 738, 742 (N.Y. Cty. Sup. Ct. 1987) ¶ 3 (holding that the U.S. UCC, as adopted in the State of New York, applied to software licenses even if no hardware was being transferred); see also Shema Kolaini-Hear Our Voices v. Providersoft, 2010 WL 2075921 (E.D.N.Y. May 21, 2010) (referring to case law supporting treatment of software license as a good under the U.S. UCC and noting uncertainty in the area). In that case, the parties had agreed to treat the software license agreement as “goods.” Id. at 199; see also Gross v. Symantec Corp., No. 1200154 (N.D. Cal. Jan. 10, 2012), at 9 (holding that a software delivered online with no physical supporting medium qualified as goods under the California UCC).

As I have already said, the program itself is not “goods” within the statutory definition. Thus a transfer of the program in the way I have described does not, in my view, constitute a transfer of goods. It follows that in such circumstances there is no statutory implication of terms as to quality or fitness for purpose.  

The lower Court in that case had stated, also in obiter dictum, that software were probably goods. The characterization that computer software without a physical supporting medium are not goods, as per the obiter by Sir Iain Glidewell, was applied or accepted in subsequent judgments.

The determinacy of a physical object to qualify software as a good is at first blush somewhat surprising. For software and other information products, the physical medium (i.e., the disc, DVD, book cover and paper) in which they are embedded has never been a defining component. It is the literary, functional, and artistic quality that they contain that distinguishes them from other products. In a judgment preceding St Albans, Beta Computers (Europe), Ltd v. Adobe Systems (Europe), Ltd, Lord Penrose acknowledged the arbitrariness of giving prevalence to the supporting medium as the determining factor to qualify the object of the transaction as goods:

It appears to emphasize the role of the physical medium, and to relate the transaction in the medium to sale or hire of goods. It would have the somewhat odd result that the dominant characteristic of the complex product, in terms of value or of the significant interests of parties, would be subordinated to the medium by which it was transmitted to the user in analyzing the


I am of the view that software probably is goods within the Act. Programs are, as has been pointed out, of necessity contained in some physical medium, otherwise they are useless. As Mr Mawrey put it, it is just as much a supply of goods as if paint were applied to a wall or printing ink to a blank page. It is not simply abstract information like information passed by word of mouth. Entering software alters the contents of the hardware.


true nature and effect of the contract. If one obtained computer programs by telephone, they might be introduced into one’s own hardware and used as effectively as if the medium were a disk or CD or magnetic tape.22

Commentators also note the oddity of the requirement that software be embedded in a physical object to qualify them as goods.23 Yet, the Court in Beta Computers refused to treat the supply of computer software as the sale of goods.24 In a recent judgment by the Court of Appeal of England and Wales, the lack of physical embodiment was a determinant factor to qualify a database as intangible property and in holding that it could not be subject to a common law possessory lien.25

Directive 2011/83/EU places a similar emphasis to that of Sir Iain Glidewell in St. Albans on the presence of a supporting physical medium exchanged from hand-to-hand, to determine whether copies of information products (“digital content”) qualify as a good or not.26 Directive 2011/83/EU harmonizes the laws of Member States with respect to traders’ information disclosure requirements in consumer contracts, including distance or off-premises contracts, as well as with respect to formal requirements for these specific types of contracts.27 On the one hand, copies of information products that are supported by a physical medium exchanged from hand-to-hand are “goods.”28 On the other hand, copies distributed online with no physical supporting media exchanged from hand-to-hand are neither goods nor services, but of a sui

22. Id. at 608–09.
23. On the triviality of the physical medium in comparison to the computer programming, see also Bonna Lynn Horovitz, Computer Software as a Good Under the Uniform Commercial Code: Taking a Byte out of the Intangibility Myth, 65 B.U. L. REV. 129, 131–33 (1985). The confusion that arises from the presence of intellectual property rights and other intangibles and the physical medium supporting it was noted by Andrew Rodau, Computer Software: Does Article 2 of the Uniform Commercial Code Apply?, 35 EMORY L.J. 853, 861–62 (1986). The artificiality of this distinction in an increasing world of online distribution of copyright works (and generally information products) is also discussed by P.S. Atiyah & John N. Adams, The Sale of Goods 68–71 (10th ed. 2001). The authors come to this conclusion by a consequential argument, as to whether liability for a defective software should be different based on how the software is delivered (i.e., a disc or online (answering this question in the negative)).
28. Id. pmbl., Recital 19.
generis nature. The Green Paper on the Consumer Acquis invited Member States to consider the expansion of the European Union regime of consumer sale of goods to the supply of digital content. This proposal met fierce resistance, with the result that the proposal for reform did not expand the application of the European consumer sales legal framework to the supply online of digital content. The foundations and rationale behind the insistence on the presence of a physical supporting medium exchanged from hand-to-hand for information products to qualify as “goods” in E.U. regulation are not entirely clear and merit further investigation.

It is somewhat surprising that the presence of a physical tangible product would be a defining attribute of information products, as the physical embodiment is the ancillary part of the product (such as the CD of a musical recording or the DVD of a film). As acknowledged by Lord Penrose in *Beta Computers*, the presence or not of a hand-to-hand physical supporting medium (e.g., a disc) with the copy of an information product (e.g., a software) as a determinant factor of its nature as good is somewhat artificial.

The peculiarity of the requirement of a physical object for information products to qualify as goods is even more apparent when contrasted to how other areas of law deal with the immateriality of copies of information products. For instance, international classifications (e.g., in the area of trademarks), classify software as goods regardless of the presence of a supporting tangible medium. In the United States, the

29. Id.
31. Id.
32. See Peter Rott, Download of Copyright-Protected Internet Content and the Role of (Consumer) Contract Law, 31 J. CONSUM. POL’Y 441, 452 (2008) (explaining the resistance especially with respect to the distribution of online software).
34. See discussion infra Parts III & IV.
35. See BRADGATE, supra note 12, at 40–41 (analogizing such reasoning to placing more emphasis on the packaging than the substance of the product as the test of its qualification, such as focusing on the bottle of whiskey to determine the nature of whiskey.).
37. Id.
38. NICE AGREEMENT CONCERNING THE INTERNATIONAL CLASSIFICATION OF GOODS AND SERVICES FOR THE PURPOSES OF THE REGISTRATION OF MARKS, June 15, 1957, as amended, online, available at http://www.wipo.int/treaties/en/classification/nice/trd/docs_w019.html. There are 45 registration classes, 34 for goods and 11 for services. Class nine (goods) would cover software. The explanatory notes to Class nine states that this class includes: “all computer programs and software regardless of recording media or means of dissemination, that is, software recorded on magnetic media or downloaded from a remote computer network.” See also INTERNATIONAL
Copyright Act defines “copy” as: “material objects . . . from which the work can be perceived . . . either directly or with the aid of a machine . . . .” If “copy” was defined narrowly (i.e., as requiring the form of a material object (book, CD, DVD)), innumerable unauthorized copies would not be deemed to infringe copyright. Pointing to the U.S. Copyright Act definition of “copy” as including “immaterial” machine-readable copies, Jean Braucher notes the incongruity that results from not also treating copies of software as goods under sale of goods law: “There is no good reason not to extend this version of tangibility, assuming tangibility is necessary, to the realm of Article 2.” “Software copies are perceivable by a machine and in that sense tangible, making them easily ‘things,’ which may not require tangibility.”

Other features of copies of information products may be more relevant to determine whether they are goods under relevant laws than the presence of a physical object.

The tangible versus intangible property distinction is also relevant to distinguish goods from services, through the ordinary meaning of the two terms. In contrast with “goods,” “services” are rarely defined and when they are, not in a manner that elucidates their nature and scope.

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41. E.g., U.S. UCC, supra note 9 (defining goods as “all things that are movable at the time of identification to a contract for sale,” including “manufactured goods,” but excluding information and “chooses in action.”).
42. Braucher, supra note 40, at 268.
43. See Fiona Smith & Lorna Woods, A Distinction Without a Difference: Exploring the Boundary Between Goods and Services in the World Trade Organization and the European Union, 12 Colum. J. Eur. L. 1, 60 (2005) (discussing by the authors, the distinction between tangible and intangible as dictated in part by the ordinary dictionary meaning attributed to “goods” and “services,” which is the approach chosen by the authors in the context of assessing the meaning of goods and services in an international trade context, e.g., at the World Trade Organization level).
44. See, e.g., In the Business Practices and Consumer Protection Act, SBC, Official Text (2004) available at http://www.bclaws.ca/Recon/document/ID/freeside/04002_00 [hereinafter B.C. Law] (defining services as “services, whether or not the services are together with or separate from goods, and includes a membership in a club or organization.”); see also AFTA, supra note 9, at 10 (defining services as “any service offered or provided primarily for personal, family or household purposes” and includes specific examples.); SCPBPA, supra note 12, § 2(h) defines “services” as “services ordinarily provided for personal, family, or household purposes that have
Generally though, goods are more readily associated with tangibility, and services with intangibility. As services are typically involved in the online delivery of information products, there is a tendency to qualify the transaction as one involving services only, forgetting that the transfer of an information product to the recipient may also be involved.45

Traditionally, the Statute of Frauds’ requiring that certain contracts be in writing to be enforceable, applied only to the sale of goods and not to the provision of services.46 This has, at times, led courts to make artificial distinctions between “goods” and “services.”47 In some cases, uncertainty about the difference between goods and services stems from the confusion about the difference between the labor involved to deliver the commercialized end result and the end result itself.48 Such uncertainty...
also flows from the combination of goods and services in the same transaction, in which case courts tend to apply an essential character of the transaction test or substantiality test to determine, on a case-by-case basis, whether the commercial transaction is one for goods or services.

The distinction between goods and services affects the scope of protection available to purchasers in sale of goods and consumer law, the nature of claims and the applicable regime of liability. While information disclosure obligations and protection against unfair commercial practices typically apply equally to transactions of “goods” and “services,” this is not the case with respect to implied obligations (e.g., of quality, fitness for purpose, correspondence with description, title, and quiet possession). In several jurisdictions, the said implied obligations do not apply to services, leaving any applicable claims and

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51. Id.

52. For instance, if the transaction is characterized as one for services, a successful claim would lie in an actionable tort: for example negligent misrepresentation, or in breach of contract.

53. When such jurisdictions explicitly provide such regimes of protection. For instance, this is the case under the OCPA. OCPA, supra note 9, sched. A; MCPA, supra note 9, § 58(1); AFTA, supra note 9, § 1(1)(e); SCPBPA, supra note 12, §§ 6–9. This is also the case of the European Union. Directive 2011/83/EU, supra note 26; Council Directive 93/13/EEC of 5 April 1993 on Unfair Terms in Consumer Contracts, [1993] O.J. L 95/04 at 29 (seeking to approximate the laws of the European Union Member States with respect to non-negotiated contracts with consumers (art. 1)). This is also the case in France under the Code de la Consommation, and in the United Kingdom pursuant to Consumer Protection (Distance Selling) Regulation 2000—SI 2000/2334 and pursuant to the Unfair Terms in Consumer Contracts Regulations 1999.

54. This is the case under the QCPA, although the statutory warranty of correspondence with the description applies equally to goods and services. QCPA, supra note 8, art. 40. This is also the case under: MCPA, supra note 9, § 58(1); AFTA, supra note 9, § 1(1)(e); BCSGA, supra note 9, § 1(a); SCPBPA, supra note 12, § 44(1) (repealed 2014); NBCPWLA, supra note 9, § 1(1); U.S. UCC, supra note 9 (applying only to goods); Directive 1999/44/EC, supra note 9 (applying only to goods).
remedies against a defective service to the common law.\textsuperscript{55} In others, a different statutory implied obligation applies to services, requiring, for instance, that the services be deemed to be of a “reasonably acceptable quality.”\textsuperscript{56} IMPLIED obligations applicable to goods impose a strict liability regime where consumers need to prove that goods are not meeting certain standards (e.g., of quality or fitness for use), while implied obligations applicable to services apply a fault-based regime where consumers must prove that the supplier was negligent in how the services were provided.\textsuperscript{57} It also affects the nature of remedies available\textsuperscript{58} and involves evidentiary and statute of limitations considerations.\textsuperscript{59} Whether information products qualify as goods or services engender other implications under different legal regimes including tax law and international trade law.\textsuperscript{60}

In an online environment, the absence of the hand-to-hand supply of a physical medium, compounded by the blurry line between “goods” and “services”\textsuperscript{61} are at the heart of the equivocalness that surrounds the


An unexpressed term can be implied if and only if the court finds that the parties must have intended that term to form part of their contract; it is not enough for the court to find that such a term would have been adopted by the parties as reasonable men if it had been suggested to them; it must have been a term that went without saying, a term which, though tacit, formed part of the contract which the parties made for themselves.

\textit{Id.}

\textsuperscript{56}Statutory implied warranties adapted in the case of the provision of services have been introduced in some jurisdictions. For example under the OCPA, the implied warranty applicable to services is that the services are of a “reasonably acceptable quality.” OCPA, supra note 9, § 9(1). See also MCPA, supra note 9, § 58(6) (providing a non-mandatory implied warranty, “that the services sold shall be provided in a satisfactory manner”); UKSGSA, supra note 10, s. 14(2)(d) (providing that “supplier will carry out the service with reasonable care and skill.”).

\textsuperscript{57}See BRADGATE, supra note 12, at 28–29. In the case of services, for example under the OCPA, the implied warranty applicable to services is that the services are of a “reasonably acceptable quality.” OCPA, supra note 9.

\textsuperscript{58}See LOOS ET AL., supra note 7, at 32 (analyzing the laws of 11 countries including the United States, the United Kingdom, France, and other European states).

\textsuperscript{59}Consumer protection laws tend to alleviate evidentiary requirements in favor of consumers. For example, the parole evidence rule often does not apply to consumer contracts. See generally Horovitz, supra note 23, at 140–43 (showing a U.S. context).


\textsuperscript{61}For a review of Canadian case law characterizing contracts as sale of goods or service agreements, or a combination of both (i.e., for “work and material”), see GERALD H.L. FRIDMAN, SALE OF GOODS IN CANADA (5th ed. 2004). See also JACOB S. ZIEGEL & ANTHONY J. DUGGAN, COMMERCIAL AND CONSUMER SALES TRANSACTIONS, CASES, TEXT AND MATERIALS 49–61 (4th
characterization of information products.

B. Rippling Effects on Sales and Licenses

The presence of a physical object influences the qualification of the commercial transaction of information products; specifically, whether a sale or a license took place. The absence of an embedding medium (e.g., a CD or a DVD) facilitates a growing commercial practice under which copyright holders dictate through their contract terms the absence of sale in the copy of the information product, a practice that is far less common in the physical hand-to-hand exchange scenarios of books, music CDs, or film DVDs, which have long been considered as sales of goods. At times, courts confuse the license granted to consumers to the exclusive intangible intellectual property rights of the copyright holder, and the transaction that is taking place with respect to the copy itself. One can surmise that the confusion between the intellectual property rights of the copyright holder and the personal property rights to the copy of the information product will only grow bigger when there is no physical object separating the two.

The struggles examined so far to characterize information products as goods, services, or sui generis extends to the determination of whether the transaction is a sale or a license, leading to inconsistent outcomes.

Permuting a sale by a license of the copy of the information product has important consequences on the rights of recipients of information products. First, the absence of a “sale” will preclude the application of sale of goods and consumer protection law statutes to apply in some

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ed. 2002). For the European Union and World Trade Organization context, see Smith & Woods, supra note 43, at 40ff. In the context of the World Trade Organization, the treatment of digital products distributed online has not been settled and is the object of a work program on electronic commerce. Electronic Commerce, World Trade Organization, http://www.wto.org/english/tratop_e/com_e/com_e.htm. See also Tania Voon, A New Approach to Audiovisual Products in the WTO: Rebalancing Gatt and Gats, 14 UCLA ENT. L. REV. 1, 8–9 (2007). The uncertainty of the proper treatment of these products as goods or services needs to be understood within the economic, political and legal context proper to the World Trade Organization treatment of goods and services. Id.

62. The transfer of CDs, DVDs, and cassettes are commonly treated as sales of chattels moveables, unless they are provided under a specific rental agreement. By contrast, the software industry has for some time adopted the commercial practice to license (and not sell) copies of software even when they were supplied through the physical transfer of a CD or DVD. Step-Saver Data Sys., Inc. v. Wyse Tech., 939 F.2d 91, 96 n.7 (3d Cir. 1991) (discussing briefly the historical context of software licenses).

63. See discussion infra Part III.A.2.

64. See discussion infra Part III.B.

65. See discussion supra Part II.A. For a review of the case law and how courts tend to be more lenient to enforce license to software copies than copies of other types of copyright works, see Perzanowski & Schultz, supra note 2, at 1235–38.
jurisdictions, leaving any protection to the potential application of other statutes or to the application of similar implied obligations under the common law. Second, licensing copies of information products rather than selling them to recipients enables copyright holders to circumvent the application of exceptions to copyright infringement, the rationale for such licensing practices being well known and documented. Whether an information product is sold or licensed determines recipients’ ability to perform certain acts without the authorization of copyright holders such as: benefiting from the first sale doctrine or the computer programs exemptions. Recipients of information products are authorized to perform those acts without copyright holders’ authorization on copies that they own, not when the copies of information products are licensed.

Courts have taken different approaches to decide whether a sale or a license of the information product took place, in the context of determining whether the recipient of the information product would benefit from the relevant exception to copyright infringement (i.e., those exceptions requiring that a sale or transfer of the copy of the information product take place to apply). The approaches vary between deferring in large part to how copyright holders characterize the transaction (i.e., it is a license because right holder stated it as such in the agreement) to looking at the substance and economic characteristics of the transaction, regardless of how the transaction is designated by the right holder. In the United States, the leading decision is the Ninth Circuit Court of

66. In some jurisdictions, the requirement of the sale of a good is relevant to the application of implied obligations (e.g., quality, fitness for purpose, title and quiet possession). It is generally not relevant for the application of information disclosure requirements and for the application of provisions prohibiting unfair terms. See supra Part II.A. In the United Kingdom, while the implied obligations under the UKSGA (supra note 9) would not apply in the absence of a sale, the implied obligations of the UKSGSA, supra note 10, c. 29 (showing it may apply if the transaction falls within the scope of this Act). See, e.g., SAM Bus. Sys., Ltd. v. Hedley & Co., [2002] EWHC 2733 (TCC) (Eng.); Jonathan Wren & Co., Ltd. v. Microdec PLC, 1999 WL 1953326 (1999) (Eng.) (holding UKSGSA applied to computer systems).

67. The practice is well-recognized and particularly prevailing with respect to copies of computer programs. See Brian W. Carver, Why License Agreements do not Control Copy Ownership: First Sales and Essential Copies, 25 BERKELEY TECH. L.J. 1887 (2010); Perzanowski & Schultz, supra note 2, at 1242–46.

68. See discussion infra Part II.C.


70. See Carver, supra note 67, at 1898–923. On a case law analysis of how courts take different approaches to determine the nature of the legal transaction as sale or license in cases involving software versus other cases, see Perzanowski & Schultz, supra note 2, at 1925-31.
Appeals judgment Vernor v. Autodesk, Inc.,\textsuperscript{71} reflecting the first approach. In that judgment, the court gave more weight to the terms used by software licensor than in previous judgments that focused more on the substance of the transaction.\textsuperscript{72} The court held that the applicable test to determine the nature of the transaction was: “whether the copyright owner specifies that a user is granted a license. Second, we consider whether the copyright owner significantly restricts the user’s ability to transfer the software. Finally, we consider whether the copyright owner imposes notable use restrictions.”\textsuperscript{73} In the European Union, the judgment by the Court of Justice of the European Union, UsedSoft GmbH v. Oracle International Corp,\textsuperscript{74} is illustrative of the second approach, focusing on the substance of the transaction. In that case, the court had to assess whether a sale of the software copies of Oracle International Corp to

\begin{itemize}
  \item \textsuperscript{71} Vernor v. Autodesk, Inc., 621 F.3d 1102 (9th Cir. 2010).
  \item \textsuperscript{72} A good illustration of how courts have qualified the transaction, regardless of suppliers labeling the contract as a license is Softman Prods. Co. v. Adobe Sys., Inc., 171 F. Supp. 2d 1075, 1086 (C.D. Cal. 2001):
    \begin{quote}
    [T]he following factors require a finding that distributing software under licenses transfers individual copy ownership: temporally unlimited possession, absence of time limits on copy possession, pricing and payment schemes that are unitary not serial, licenses under which subsequent transfer is neither prohibited nor conditioned on obtaining the licensor’s prior approval (only subject to a prohibition against rental and a requirement that any transfer be of the entity), and licenses under which the use restrictions’ principal purpose is to protect intangible copyrightable subject matter, and not to preserve property interests in individual program copies.
    \end{quote}
  \item \textsuperscript{73} Vernor, 621 F.3d at 1110–11.
  \item \textsuperscript{74} Case C-128/11, Usedsoft GmbH v. Oracle Int’l Corp., 2012 E.C.R. at 10.
\end{itemize}
UsedSoft had taken place to decide whether the exclusive distribution right of Oracle International Corp on the copies of his computer programs had been exhausted. The court noted that the download of the copy of the computer program combined with the conclusion of a user license constituted a whole for the purpose of their legal classification. The Court relied on two components of the commercial transaction to conclude that there was a transfer of ownership of the copy downloaded from the Internet: the payment of a one-time fee and the fact that the user was allowed to use the copy for an indefinite period of time. The court reasoned that “sale” needed to be given a broad interpretation and its presence assessed based on the substance of the transaction, otherwise suppliers could easily circumvent the principle of exhaustion.

The practice to license the copy of the information product rather than selling it begs the important questions: what rights does the recipient of the information product precisely have and what rights does the supplier retain in the copy? Where does the personal property in the copy lie in all this and does it make any sense? The practice of licensing and not selling the copy of an information product for an indefinite period of time, often in exchange for a one-time fee may be deceiving. Such licensing practices may easily create a false perception of ownership or quasi ownership, but for an important limitation: often, the recipient of the copy

75. Id. The court was seized with a reference to a preliminary ruling by the Bundesgerichtshof (Germany), that involved the question of whether exhaustion of the distribution right in article 4(2) of Directive 2009/24/EC, applied to a lawful acquirer who had made the copy by downloading the computer program from the Internet to a data carrier. Directive 2009/24/EC, supra note 69, art. 4(2).

76. Case C-128/11, ¶¶ 44–49.

77. Id. ¶ 45.

78. Id. ¶ 49, the court referring to the opinion of Advocate General Y. Bot:

if the term “sale” within the meaning of Article 4(2) of Directive 2009/24 were not given a broad interpretation as encompassing all forms of product marketing characterised by the grant of a right to use a copy of a computer program, for an unlimited period, in return for payment of a fee designed to enable the copyright holder to obtain a remuneration corresponding to the economic value of the copy of the work of which he is the proprietor, the effectiveness of that provision would be undermined, since suppliers would merely have to call the contract a “license” rather than a “sale” in order to circumvent the rule of exhaustion and divest it of all scope.

79. See Carver, supra note 67, at 1896–97 (pointing to the practice of suppliers licensing goods, retaining personal property ownership, but with a permanent transfer of possession as unprecedented and incoherent). Juliet M. Moringiello, What Virtual Worlds can do for Property Law, 62 Fla. L. Rev. 159, at 191–96 (2010) (questioning the increasing practice to license copies rather than selling them in the context of virtual worlds, noting that traditionally in property law, licenses have not been granting a possessory interest but have been used to grant a permission (e.g., to certain uses of reserved intellectual property rights, or to limited access to land)).
does not have the right to transfer it to a third party.80

Questions on the nature and enforceability of the legal transaction in the commercialization of information products are not trivial: they determine the balance of power between supplier and recipient of the information product. The preferred methods of commercialization of information products raise questions that relate to the legitimacy of the progressive expansion of intellectual property rights in recent years.81 They involve evaluating right holders’ commercial practices (often through non-negotiated standard-form agreements) in relation to the underlying objectives of copyright and the delicate balance that it needs to maintain among the competing interests of right holders, authors and users. For instance, should we allow right holders to circumvent exceptions to copyright infringement, also referred to as user rights, through their commercial practices, and if so, under what rationale and parameters?82 At a more basic level, the sale versus licensing of an information product determines whether the recipient owns the copy of the information product with all prima facie open-ended powers and privilege (including of transfer), that come with ownership, against the world (in rem), or if the recipient has a limited contractual right to use the information product (in personam) with no power of transfer, or if the recipient’s entitlements to the information products lie somewhere in the middle.

C. First Sale or Exhaustion Doctrine

The reluctance to apply the first sale doctrine to information products distributed online is another important manifestation of the dividing line that tangibility (or the lack thereof) creates in the regulation of

80. See Pascale Chapdelaine, The Ambiguous Nature of Copyright Users’ Rights, 26 INTELL. PROP. J. 1, 26–28 (2013). At times suppliers of information products refer to words such as purchase and ownership concurrently with language suggesting that recipients do not own the copies that are made available to them.


82. For a discussion on whether exceptions to copyright infringement are mandatory, see Chapdelaine, supra note 80, at 37–43; see also MARGARET JANE RADIN, BOILERPLATE: THE FINE PRINT, VANISHING RIGHTS, AND THE RULE OF LAW 168–70 (2013).
information products. The exhaustion or first sale doctrine is the rule stipulating that once the first sale of physical objects embodying copyright works (such as a book, DVD, or a music CD) has occurred with the authorization of the copyright holder, the copyright holder cannot dictate the fate of subsequent transfers of that object. The first sale or exhaustion doctrine restricts copyright holders’ exclusive distribution rights and does not apply to other exclusive rights (e.g., the right to reproduce the work or to communicate the work to the public by telecommunication). In essence, the exhaustion or first sale doctrine allows owners of copies of information products to exercise one of the basic powers and privileges of ownership (i.e., to transfer their rights in the copies to another party). The first sale or exhaustion doctrine is one among other exceptions to copyright infringement wherein the presence of a physical object plays a determinant role on their applicability.

Only lawful owners of copies of information products can invoke the exhaustion or first sale doctrine; licensees, borrowers or people who otherwise access copies of information products cannot. The prevailing commercial practice to license copies of information products rather than sell copies outright allows copyright holders to avoid the application of the first sale or exhaustion doctrine and to retain control over secondary markets of the information products that they commercialize. Therefore, the diverging approaches adopted by courts in determining whether a sale or license took place have important ramifications on the application of the first sale or exhaustion doctrine.

The prevailing view is that the exclusive right of distribution and its application in other jurisdictions.

83. The doctrine is known as the first sale doctrine in the United States and as the principle of exhaustion in other jurisdictions.

84. At the copyright international law level, see WCT, supra note 81, art. 6; WPPT, supra note 81, art. 8. In Canada, the exclusive distribution right and its exhaustion were introduced in 2012 by the Copyright Modernization Act, S.C. 2012, c. 20 [hereinafter CMA], which amended the CCA, supra note 71, §§ 3, 15, 18. See 17 U.S.C. § 109 (a); see also U.S. Copyright Office, A Report of the Register of Copyrights Pursuant to Section 104 of the DMCA, at 22–23 (2001), available at http://www.copyright.gov/reports/studies/dmca/dmca_study.html [hereinafter DMCA 2001 Report].


86. Other exceptions to copyright infringement require a sale or other transfer of the copy of the information product for the exception to apply (e.g., with respect to computer programs). See CCA, supra note 69, §§ 30.6, 30.61; 17 U.S.C. § 117(a)(1); Directive 2009/24/EC, supra note 69. This requirement tends to favor information products embedded into physical objects over copies distributed online with no physical embedding medium.

87. At the copyright international law level, see WCT, supra note 81, art. 6; WPPT, supra note 81, art. 8. In Canada, the exclusive distribution right and its exhaustion were introduced in 2012 by the CMA. CMA, supra note 84 (amending the CCA, supra note 69, §§ 3, 15, 18). See 17 U.S.C. § 109 (a); see also DMCA 2001 Report, supra note 84, at 22–23.

88. See discussion supra Part II.B.

89. See discussion supra Part II.B.
exhaustion only apply with respect to copyright works embedded in physical tangible objects and does not apply to digital copies of information products made available to recipients with no supporting physical medium exchanged from hand to hand. Article 6 of WCT and article 8 of WPPT impose on their member states the substantive minima to confer an exclusive distribution right to copyright holders for their literary and artistic works (or of their performances fixed in phonograms in the case of WPPT) \( (i.e., \text{to authorize “the making available to the public of the original and copies of their works through sale or other transfer of ownership.”}) \).\(^{90}\) They leave it up to member states to determine the application of exhaustion \( \text{“after the first sale or other transfer of ownership of the original or a copy of the work with the authorization of the author.”} \)\(^{91}\) The agreed statement concerning these articles specifies that the copies that are subject to the right of distribution refer exclusively to \( \text{“fixed copies that can be put into circulation as tangible objects.”} \)\(^{92}\) On that basis, commentators argue that the effect of WCT and WPPT is to exclude the application of the exhaustion of the distribution right to digital copies of information products distributed online.\(^{93}\) The implementation of the WIPO Internet Treaties or existing law of Member States, including Canada,\(^{94}\) the United States,\(^{95}\) and the European

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90. WCT, supra note 81, art. 6; WPPT, supra note 81, art. 8.
91. WCT, supra note 81, art. 6; WPPT, supra note 81, art. 8.
92. WCT, supra note 81 (agreed statements concerning arts. 6 & 7).
93. See André Lucas, *International Exhaustion, in Global Copyright Three Hundred Years Since the Statute of Anne, From 1709 to Cyberspace* 304, 309ff (Lionel Bently et al. eds., 2010) [hereinafter Global Copyright]. The author argues that WCT, art. 6, read in conjunction with art. 8, closed the path to the application of an immaterial exhaustion principle. See also Pierre-Emmanuel Moyse, *Le droit de distribution: Analyse historique et comparative en droit d’auteur* 559–62 (Cowansville, Québec: Les Editions Yvon Blais 2007).
94. CMA introduced the exclusive distribution right and the principle of exhaustion in the CCA. CCA sections 3, 15 & 18 refer to work (or other subject matter of copyright) “that is in the form of a tangible object.” CCA, supra note 69, §§ 3, 15, 18.
Union, tends to confirm that interpretation. Two recent judgments, UsedSoft by the E.U. Court of Justice [UsedSoft], and Capitol Records LLC v ReDigi, Inc., by the South District Court of New York, [ReDigi], have taken very different approaches in determining whether the first sale or exhaustion doctrine applied to information products distributed online. In UsedSoft, the Court of Justice of the European Union was faced with a preliminary ruling by the Bundesgerichtshof (Germany) that involved the question of whether exhaustion of the distribution right in article 4(2) of Directive 2009/24/EC applied to a lawful acquirer who had made the copy by downloading the computer program from the Internet to a data carrier. The outcome of that question was of significant importance to Oracle who at the time distributed 85% of its computer programs through Internet downloads. Article 4(2) of Directive 2009/24/EC provides: “The first sale in the Community of a copy of a program by the rightholder or with his consent shall exhaust the distribution right within the Community of that copy . . .” The Court pointed to various possible interpretations of article 4(2) of Directive 2009/24/EC that revolved around the question of whether there was a need to put the computer


97. In particular, the implementation by the European Union goes one step further than the WCT and WPPT, in emphasizing the need for the transfer of a tangible object embedding the copyright work for the rule of exhaustion to apply. See Directive 2001/29/EC, supra note 96.

98. See Case C-128/11, Usedsoft, 2012 E.C.R. The Court had to determine whether the transfer of ownership (sale) of the copy of the computer program had taken place or not and is a requirement of the application of exhaustion.


101. See id. ¶ 21. If copyright exhaustion did not apply to such copies, then Oracle would retain control on future transfers of the copies. If exhaustion applied, Oracle would lose control on the secondary markets of its computer programs.

102. See id. ¶ 17.
program in circulation in a physical medium exchanged hand-to-hand for the exhaustion of distribution rights to apply.\textsuperscript{103} The Court found that the exhaustion of the distribution right in article 4(2) of Directive 2009/24/EC applied regardless of whether the right holder put the copies of computer programs in circulation with a physical supporting medium exchanged hand-to-hand.\textsuperscript{104} The Court emphasized that for the doctrine of exhaustion to apply, the original acquirer reselling his copy of the computer software must make his own copy unusable; to allow otherwise would amount to an unauthorized reproduction, which the exhaustion doctrine would not cover.\textsuperscript{105}

The Court reiterated the \textit{lex specialis} character of Directive 2009/24/EC as regulating the protection of computer programs in relation to the broader framework of copyright protection in Directive 2001/29/EC.\textsuperscript{106} For the time being, the holding of the UsedSoft judgment may not have ramifications beyond the specific case of computer programs distributed online. The Court neither sought to explain why there should be a different treatment for computer programs from that of other copyright works, nor did it have to decide whether the same conclusion could be made in respect of Directive 2001/29/EC under which the exhaustion doctrine is likely to require a sale of a physical embodiment to apply.\textsuperscript{107} The UsedSoft judgment leads to the odd result of a different application of the distribution right and exhaustion rule to computer programs than to other copyright works for no apparent reason.

In ReDigi, Capitol Records, an established record label company, alleged that ReDigi’s platform and services, in particular its users’ resale of digital music files, amounted to copyright infringement.\textsuperscript{108} The relevant issues before the court were whether ReDigi’s resale services involved an unauthorized reproduction of digital music files, whether

\textsuperscript{103} \textit{Id.} ¶ 32. The various interpretations are based on different applications of Article 4(2) of Directive 2009/24/EC and Directive 2001/29/EC. Directive 2009/24/EC, supra note 69; Directive 2001/29/EC, supra note 96, recitals 28 & 29, pmbl.; \textit{id.} art. 4 (being read in conjunction with Article 8 of WCT and the agreed statement concerning Articles 6 and 7 of WCT, the implementation of which forms part of the objectives of Directive 2001/29/EC).

\textsuperscript{104} Case C-128/11, Usedsoft, 2012 E.C.R. ¶ 53ff.

\textsuperscript{105} \textit{Id.} ¶ 70. This is a corollary of the fact that the exhaustion doctrine only applies to the distribution right and not to other acts reserved to copyright holders.

\textsuperscript{106} \textit{Id.} ¶ 56.

\textsuperscript{107} \textit{See id.} ¶ 60 (stating that Directive 2009/24/EC could be interpreted independently from Directive 2001/29/EC, given the clear intent expressed by the European Union legislature in article 4(2) of Directive 2009/24/EC to apply to all copies of computer programs (tangible and intangible)). The Court did not explain the relationship and compliance of Directive 2009/24/EC with WCT, article 6 which has been interpreted as applying only to the distribution of copyright works involving the transfer of a tangible object. \textit{See Art & Allposters Int’l BV v. Stichting Pictoright, C.J.E.U. (2015) (interpreting the distribution right under Directive 2001/29/EC ¶¶ 29–39).}

there was an unauthorized distribution by Redigi of the music files and whether the first sale doctrine applied. The court held that the resale services involved unauthorized distributions and reproductions of music files and that the latter were not covered by the first sale doctrine which does not exhaust any other rights than the distribution right. Therefore, ReDigi infringed the copyright of Capitol Records. The court rejected ReDigi’s argument that at the end of each migration of the music files, the system ensured that there was only one copy of the relevant music files remaining. In doing so, and unlike the E.U. Court of Justice in UsedSoft, the Court applied the first sale doctrine restrictively and based on a literal meaning of the act of reproduction rather than taking a functional and purposive approach.

The different approaches taken in UsedSoft and ReDigi reflect other aspects of the tangible versus intangible property divide. While the technical approach by ReDigi is an attempt to replicate in the digital online world what occurs in the world of physical objects, UsedSoft’s approach reflects an adaptation to the online world that seeks to bridge the differences between the offline and online world, by looking at the function and purpose of the transaction at hand and of the first sale or exhaustion doctrine.

The non-application of the exhaustion or first sale doctrine to digital copies of information products distributed online reflects a copyright holder-centric view of copyright that favors its expansion at the expense of information product recipients’ rights. The non-application of

109. Id. 110. Id. at 661. 111. Id. 112. Id. at 651. 113. Id. at 650. “Simply put, it is the creation of a new material object and not an additional material object that defines the reproduction right.” The dictionary defines “reproduction” to mean, inter alia, “to produce again” or “to cause to exist again or anew.” See Merriam-Webster Collegiate Edition 994 (10th ed. 1998) (emphasis added). Significantly, it is not defined as “to produce again while the original exists.” Thus, the right “to reproduce the copyrighted work in . . . phonorecords” is implicated whenever a sound recording is fixed in a new material object, regardless of whether the sound recording remains fixed in the original material object.” 114. Peters, as former U.S. Register of Copyrights at the U.S. Copyright Office (citing DMCA 2001 Report, supra note 84, at 82–83, 89):

The Copyright Office recommendation was based on interrelated economic and practical considerations. One concern was the impact of a digital first sale doctrine on the ability of right holders to exploit their works. Works in digital format can be reproduced without any degradation in quality and transmitted rapidly with little cost. Thus digital transmissions, and the ease of pirating perfect copies, are likely to affect adversely the market for copies of a work to a greater degree than transfers of physical copies.

GLOBAL COPYRIGHT, supra note 93, at 331; DMCA 2001 Report, supra note 84, at 100–01
digital exhaustion limits the scope of the first sale doctrine significantly in light of this increasingly prevalent method of distribution of copies of information products. The limited scope of application of the exhaustion or first sale doctrine raises the following questions: what is the rationale for why the exclusive distribution right requires a physical object be exchanged hand-to-hand so that exhaustion may apply, and is it justifiable?  

D. Exclusive Copyright Acts Involved in the Commercialization of Information Products

How we define information products and the commercial transactions involved have an impact on the exclusive rights of copyright holders as they make their works available online. Whether a consumer downloads an information product protected by copyright or streams it implicates varying rights of copyright holders.  

Does it involve a communication to the public, a distribution, or a reproduction of the work protected by copyright? Each separate reserved act performed without the authorization of copyright holders may constitute copyright infringement. Moreover, when collective management of copyright is involved, separate compensation mechanisms arise for the benefit of right holders. The determination of the reserved copyright act involved when information products are made available to recipients has important financial consequences for copyright holders, distributors of information products, other intermediaries, and ultimately the recipients.

(considering briefly the reasonable expectations of consumers with respect to digital copies as an argument to support the application of the first sale doctrine to digital copies of copyright works distributed online but dismissed it expeditiously, giving way to the threat that its application would represent to the exclusive rights of copyright holders).

115. See infra Part III.

116. Entm’t Software Ass’n v. Soc’y of Composers, Authors & Music Publishers of Canada, [2012] S.C.R 34 (Can.) ¶ 28, where the Supreme Court made the distinction between downloading and streaming as follows:

Although a download and a stream are both “transmissions” in technical terms (they both use “data packet technology”), they are not both “communications” for purposes of the Copyright Act. This is clear from the Board’s definition of a stream as “a transmission of data that allows the user to listen or view the content at the time of transmission and that is not meant to be reproduced” (para 15). Unlike a download, the experience of a stream is much more akin to a broadcast or performance.

The Court held that the online delivery of a permanent copy of a video game did not amount to a “communication” under CCA, s. 3(1)(f). Id. ¶ 43.

117. Id. ¶ 41.
Two recent judgments, one by the Supreme Court of Canada, the other UsedSoft, from E.U. Court of Justice (Grand Chamber), illustrate the link between the characterization of the information product and the commercial transaction taking place online while assessing the reserved copyright acts that are involved. In Entertainment Software Association, the Supreme Court of Canada had to decide whether downloading video games through the Internet amounts to a communication to the public via the musical works the games contain, thereby qualifying as the object of a separate tariff. In a five-to-four decision, the Court held that this act involved no act of communication to the public and could not trigger the application of a separate tariff. Abella and Moldaver JJ. for the majority, defined the act of downloading copies of information products as follows:

In our view, there is no practical difference between buying a durable copy of the work in a store, receiving a copy in the mail, or downloading an identical copy using the Internet. The Internet is simply a technological taxi that delivers a durable copy of the same work to the end user.

The treatment by the Court majority of various forms of copies of copyright works and methods of delivery as one and the same phenomenon with regard to infringement is pertinent in at least two respects. First, the court majority singled out the presence of an individual consumer copy of the information product, capable of delivery, and assimilated it to a copy embedded in a physical object. Second, the majority of the Supreme Court based its reasoning on the principle of technological neutrality, finding a functional equivalent between the online delivery of the copy of a computer program and the supply of a material medium. In doing so, the Court majority focused its attention on the essence and substance of the copy of an information product rather than on the method or medium of delivery.

118. For example, when copyright is administered by collectively, each reserved copyright act may be subject to a tariff or other compensation scheme. In Canada, the collective management of copyright is overseen by the Copyright Board which approves tariffs. CCA, supra note 69, §§ 66–76.
120. *Id.* In that case, the tariff in question had been submitted by SOCAN to the Canadian Copyright Board for approval.
121. *Id.* ¶ 5.
122. *Id.*
than its form.

In *UsedSoft*, the E.U. Court of Justice made an interesting observation on the co-existence of the distribution and the communication of a work to the public.124 The Court interpreted the transfer of ownership of a copy as transforming an act of communication to the public into a distribution under which, if the conditions were present, exhaustion would apply.125 This is consistent with the Court’s determination of an online transmission as “the functional equivalent of the supply of a material medium.”126 The Court pointed to the essence of distribution (which typically involves the transfer of an original or copy of a copyright work) by contrast to a communication presented to the public (which involves a service, the consumption of which always necessitates the intervention of a third party). Both in *UsedSoft* (through the principle of functional equivalent) and *Entertainment Software Association* (through the principle of technological neutrality) the distribution act and the communication to the public act were viewed as mutually exclusive. While the Supreme Court rejection of the presence of the communication to the public in the online purchase of a video game may not hold in light of the subsequent entry into force of section 2.4 (1.1) of Canada’s *Copyright Act*,127 the Court’s majority treatment in *Entertainment Software Association* of online copies of copyright works distributed online remains relevant to the discussion on the (in)determinacy of physical objects in the regulation of information products.

### III. Causes and Effects of the Requirement of a Physical Object

Let us take a closer look at some of the causes that may explain the current tangible and intangible property divide with respect to information products. The purpose of the exercise is to show why the emphasis on a physical object is largely unjustified and how it leads to inconsistent and arbitrary results. The first part of the analysis considers two noticeable trends of how courts, legislatures and commentators characterize information products that result from a misconception of the properties involved in information products. The second part of the analysis explores the role that prevailing commercial practices play in shaping the tangible and intangible property divide of information products, particularly through non-negotiated standard form agreements.

125. Id.
126. Id. ¶ 61.
127. CMA, which amended CCA, by the introduction of s. 2.4 (1.1), entered into force Nov. 7, 2012.
The third part of the analysis assesses the negative consequences of such trends to recipients’ rights to information products in terms of how these rights are degraded as well as the resulting double standards and consequent legal and normative incoherence.

A. Misconceptions of Properties

1. The Meaning of “Tangible Property”

That the presence of a physical object determines whether an information product is a good or the doctrine of first sale applies reflects a misconception of the division between tangible and intangible property. In the case of information products made available online with no supporting physical objects, one could be tempted to conclude that they are intangible property by relying on the ordinary meaning of tangible (i.e., something “capable of being perceived especially by the sense of touch”). Some courts have stated that a physical object needed to be present for information products to qualify as goods. The qualification is important because intangible property (or choses in action) is often excluded from the application of sale of goods and consumer protection law. The contrast between tangible and intangible property is stark in many other areas of the law: the tort of conversion and the common law possessory lien have been held to apply solely with respect to tangible property (chooses in possession). In an increasingly immaterial world, the function of the distinction between tangible and intangible property may have become lost in translation.

A closer look at how “tangible property” and “intangible property” have been traditionally defined at common law and the reason for the exclusion of intangible property under sale of goods law indicate that the lack of a physical object should not be a relevant criterion per se to exclude information products from being tangible property and goods by extension. By the same token, the lack of a physical object should not be

129. See discussion supra Part II.A.
130. See discussion supra Part II.A.
determinant to the application of the first sale or exhaustion doctrine in copyright law. Personal property ("chattels personal") is subdivided between “chooses in possession” and “chooses in action.”

Choses in possession are generally associated with “tangible property” (i.e., those, "unfixed movables perceptible by the senses and thus capable of actual physical possession,"133) or "corporeal things, tangible, movable and visible[,] they are always in the possession of someone."134 In contrast, “chooses in action” are generally associated with “intangible property” and are often negatively defined as “embracing all forms of property not involving actual possession or right of possession as a necessary incident . . . .”135 Choses in action include debt, liquidated damages, promissory notes, shares, and copyright.136 "Choses in action" originally referred to a tangible article which was in the possession of someone other than the owner: to recover it, the owner had to take an action at law, and later evolved to encompass “intangible rights existing only in contemplation of the mind, . . . all invisible and incorporeal rights.”137

The key distinguishing factor between tangible and intangible property revolves around the ability to physically possess and exercise control over the resource with respect to tangible property (chooses in possession). For intangible property (or choses in action) court intervention is generally necessary for the owner to exercise power and control over her resource. Courts have been reluctant to recognize that one could exercise physical possession over an information product that was not embedded in a physical object. In Your Response, Ltd. v Datateam Business Media, Ltd.,138 Moore-Bick LJ, for the Court of Appeal of England and Wales held that the claimant data manager was barred to exercise a common law lien over a database owned by the defendant for unpaid services, as the data manager did not have physical possession over the database.139 For the court, “possession is concerned with the physical control of tangible objects,” and although the data manager exercised “practical control” over the database, he could not exercise physical possession over information because it is intangible.140

The evidence relating to the data manager’s actual and exercised physical

135. KELKE, supra note 133, at 2. Vaines defines choses in action as “all rights and incorporeal things not being chattels real or choses in possession.” VAINES, supra note 134, at 11.
136. KELKE, supra note 133, at 5–6.
137. FRANK HALL CHILD, PRINCIPLES OF THE LAW OF PERSONAL PROPERTY 54 (1914).
139. Id. ¶¶ 22–23.
140. Id.
control of the database did not satisfy the court. Unfortunately, the court of appeal missed an opportunity to take a functional and technologically neutral approach to new shapes of property interests like the one in the case at hand (an online database). In general, with respect to information products delivered online, the fact that recipients are able to access their copy on a permanent basis and to store it on devices that they own or have restricted control over should satisfy the requirement of physical possession, just as it is satisfied with copies of audio CDs, film DVDs, or paper books. The movability and control over access to the copy of the information product at the exclusion of others are important attributes of physical control and possession.

Tangible property (chooses in possession) in contrast with intangible property (chooses in action) is perhaps best understood as things that are physical or concrete versus those that are conceptual or abstract. As one is capable of physically possessing the copy of an information product downloaded to a computer (e.g., a musical recording, e-book, film), the copy is not conceptual but is indeed concrete and physical. Such a copy therefore better fits the definition of tangible property (chooses in possession) than intangible property (chooses in action).

The exclusion of intangible property from sale of goods law is comprehensible when looking at its purpose and scope, which is to regulate the trade between sellers and buyers, dealing with such concerns as methods of delivery and acceptance, perishable goods, implied warranties of quality, fitness for purpose, title and quiet possession. Many of these considerations are largely irrelevant to choses in action as debts, liquidated damages, promissory notes, and copyright. By contrast, the preoccupations addressed in sale of goods law are highly relevant to copies of information products downloaded from the Internet. When was the information product delivered and accepted by the recipient? What implied warranties are attached to the information product? What are the remedies available to the recipient should there be a breach of contract? The rationale for the exclusion of intangible property or choses in action

141. **Id.**
143. For a discussion on how digital assets may fulfill the requirements of possession in the context of the tort of conversion, see GREEN & RANDALL, *supra* note 4, at 118–20 (referring to excludability and movability, excludability and restricted access, and exhaustibility of the digital asset as being the relevant factors).
144. **Id.** (discussing, for example, how the physicality of computer software is apparent from how it changes the hardware capacity once the computer software is stored on it, in the context of the eligibility of digital assets to the tort of conversion).
145. *See generally* OSGA, *supra* note 9, § 1 (defining terms addressed in the Act).
does not apply to these types of information products. Adopting a purposive approach to the U.S. UCC to assess the nature of computer software, one commentator observed that the concerns for excluding intangibles such as “chooses in action” from the definition of goods in the U.S. UCC are not present in the context of computer software. while the UCC does distinguish between goods and things in action, excluding the latter from coverage, software, no matter how it is classified, should not fall within this exclusion. . . . It is unlike intangible legal rights, intangible laws and principles, and intangible assets.”

Looking closer at how property law defines personal tangible property (chooses in possession) and personal intangible property (chooses in action), as well as the reasons underlying the exclusion of intangible property from sale of goods law, the requirement of a physical object to characterize an information product as a good is unwarranted and unjustified.

There is no requirement of tangibility (understood in the narrow sense) in the definition of “goods,” as something that is perceptible by touch. The physical, concrete, and defined nature of information products like software, musical recordings, and e-books should be guiding factors in qualifying them as full-fledged goods conferred with more than the mere conceptual right to sue for their protection (as opposed to the conception of a debt or intellectual property). While they cannot be touched, and in some cases not seen, the pixels and binary codes that make up the musical recording or the film are as “physical” as the CDs or DVDs that support a digital copy. Ultimately, whether a specific information product constitutes a good, service, or both, or is of a sui generis nature, requires further analysis into the core attributes of

146. Horovitz, supra note 23, at 131–32.
147. Id. at 151–52, 162.

The fact that a computer program cannot be seen or felt should not preclude UCC coverage, as the UCC does not make those qualities the test for exclusion. The type of intangibility meant to be excluded from Article 2 that of choses in action, is different from the type of intangibility characteristic of software. That program instructions are intangible does not rule out UCC applicability, as programs can be identified, moved, transferred, and sold in the same manner as other pieces of personal property classified as goods.


148. Bradgate, supra note 12, at 41–42, 50. However, the European Union has made that distinction clear in its directives. See Directive 2011/83/EU, supra note 26, pmbl. (19), 2011 O.J. (L 304) 64, 66 (E.U.).

149. An interesting analogy is found in Québec’s civil code, which states that “[w]aves or energy harnessed and put to use by man, whether their source is movable or immovable, are deemed corporeal movables.” CCQ, supra note 8, art. 906.
The prevailing opinion that there needs to be a physical object embedding information products protected by copyright for the first sale or exhaustion doctrine to apply is another illustration of the confusion between tangible property and services. For example, E.U. regulations reflect a dichotomy between the distribution of physical objects embedding information products and the delivery of downloadable information products online, as if it necessarily implied that online information products could only involve services. By doing so, the E.U. regulations bury the delivery component of the distinct copy of an information product in the services, generally viewed as intangibles.

The function of the division between tangible and intangible property and the impact it has on the definition of goods and on the application of exceptions to copyright infringement (e.g., the first sale doctrine) signal that commercial copies of information products distributed online should reside prima facie on the tangible property side of the divide.

2. Confusing Intellectual Property with Personal Property of an Information Product

The inconsistent qualification of information products also occurs through the confusion between two distinct property rights: the intangible personal property of the intellectual property right holder in the information product (e.g., copyright in the musical or literary work) and the personal property of the recipient in the copy of the work. At times, courts are confused by the presence of the intangible property rights of copyright holders when ascertaining the nature of the object at issue (e.g., commercial copies of the information product per se). This trend is notable in computer software related case law (e.g., whether they

150. See discussion infra Part IV.A.
152. Tai, supra note 151.
153. Jean Braucher, Contracting out of Article 2 Using a “License” Label: A Strategy that Should not Work for Software Products, 40 LOY. L.A. L. REV. 261, 268 (2007). Robinson v. Graves offers an older illustration of that confusion. See Robinson v. Graves, [1935] K.B. 579, 583–84. There, the English Court of Appeal needed to decide whether the commissioning of a painting was a contract for skill and labor or one for the sale of goods. Id. Three of the judges invoked the exclusive copyright of the painter, which could only be assigned to the eventual purchaser of the painting by an act in writing, to conclude that the contract was one of skill and labor and not for the sale of goods, confusing the copyright with the property rights in the physical embodiment of the painting. Id. at 585, 591, 593.
constitute goods or whether copyright infringement took place), in a recent case involving the property nature of databases, or when courts conclude by extrapolation that a license to the embedded intellectual property necessarily implicates that the copy of the information product is licensed and not sold to the recipient. The confusion between intellectual property rights of the supplier and the property rights of the recipient or buyer is predominant in virtual worlds. As Greg Lastowka noted:

[I]t is not unusual for many people, including lawyers, to assume that because virtual worlds feature creative expression and forms of intangible value, they are entirely controlled through the laws of intellectual property.

That is not correct. While intellectual property law plays a key role in virtual worlds, it is a significant mistake to think that it occupies the entire field.

For Lastowka, virtual property (e.g., copies of creative works made accessible to virtual world users), may be akin to William Blackstone’s “incorporeal hereditaments,” and are properties distinct from the intellectual property of their supplier.

As opined in two leading American cases, the presence of the copyright in the information product is irrelevant to the qualification

154. See generally Perzanowski & Schultz, supra note 2 (giving an illustrative review of U.S. Copyright Case Law). In Southwark LBC v. IBM UK, Ltd., the Queen’s Bench Division decided that the U.K. Sale of Goods Act did not apply to software licenses because there was “no transfer of property.” 2011 EWHC (TCC) 549, [95]. In doing so, the court placed particular emphasis on the intellectual property rights of the supplier, and on the terms which pertained to the copy of the copyright work (i.e., no right of transfer, obligation to destroy the copy upon termination) with less emphasis on the fact that the licence in the copy of the software was perpetual (which could indicate that the copy had been transferred to the purchaser). See id. The same confusion arose in Advanced Computer Servs. of Mich., Inc. v. MAI Systems Corp., 845 F. Supp. 356 (E.D. Va. 1994), and in Applied Info. Mgmt., Inc. v. Daniel P. ICART & Brownstone Agency, Inc., 976 F. Supp. 149 (E.D.N.Y. 1997). The confusion between the exclusive rights of copyright holders and the ownership rights in the copy of the work also arises in the application of exceptions of copyright infringement including 17 U.S.C. § 117 “Limitations on exclusive rights: Computer programs.”

155. See Your Response, Ltd. v. Datateam Bus. Media, Ltd., 2014 EWCA (Civ.) 281 (holding that the common law lien could not apply to a database, the latter being intangible property). In Your Response, the court relied on the applicable Copyright and Rights in Databases Regulations 1997 (SI 1997/3032) reg. 6, which define the intellectual property rights in database as intangible property, without considering that the copy of a database could be a distinct form of property, separate from the intellectual property rights therein. Id. at [17].

156. Braggate, supra note 12, at 37.


158. Id. at 168–69.
of the information product as good, service or of a *sui generis* nature. In *Advent Systems, Ltd. v. Unisys Corp.*,\(^{159}\) and *Triangle Underwriters, Inc. v. Honeywell, Inc.*,\(^{160}\) computer software was held to constitute goods under the relevant statutes.\(^{161}\) In *Triangle Underwriters*, the U.S. District Court of E.D. New York observed:

> Although the ideas or concepts involved in the custom designed software remained Honeywell’s Intellectual Property, Triangle was purchasing the product of those concepts. That product required efforts to produce, but it was a product nevertheless, and though intangible, is more readily characterized as “goods” than “services.”\(^{162}\)

To be sure, the copy of a musical recording for which the copyright has expired (*i.e.*, in which the copyright in the musical work, sound recording and performers’ performance no longer survives) after the consumer purchased the copy, does not change the nature of what the consumer is accessing (*e.g.*., the copy of a musical work). Whether there is intangible copyright attached to the copy of the musical work or not should not be conclusive for the purpose of determining the nature of the product.\(^{163}\)

Confusion may arise in determining whether an information product is a good or service, between the ideas, the artistic or intellectual effort or quality that go into the completion of an information product, and the end product itself.\(^{164}\) This is a variance from the confusion between the

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161. The distinction between the intangible intellectual property rights of the copyright holders which often remain their property and the nature of the product delivered to the purchaser was made in *Triangle Underwriters*. This case involved the supply of turnkey system including hardware, custom application software, training services and maintenance support services. *Id.*

162. *Id.*

163. By contrast, the intangible nature of the rights of the copyright holder could be relevant to ascertain whether, in a transaction under which the copyright holder assigns her copyright to another party, sale of goods laws apply or not. See *Atiyah & Adams, supra* note 23, at 66: “items of intellectual property such as copyrights, patents and trademarks are not personal chattels or corporeal movables and so fall outside the definition, although of course goods may exist which embody these intellectual property rights.” See also *Rodau, supra* note 23, at 882.

164. For example in the case of software, it is reflected in the algorithms, coding instructions, and sequences leading to a software which performs distinct functions. This is particularly the case for contracts involving the delivery of a prototype or customized software or other product, in spite of the fact that the end product involves a physical, tangible, movable medium. Courts seem to be paying particular attention to the presence or not of standard commercialized product (a good) or an unfinished product (such as a prototype). For example,
intellectual property rights of the producer and personal property of the recipient of the information product discussed here. In *Advent Systems*, the U.S. Court of Appeals, Third Circuit, distinguished the two discreet components comprising copies of information products (i.e., the ideas and the commercialized end result) and emphasized the need to focus on the latter:

Computer programs are the product of an intellectual process, but once implanted in a medium are widely distributed to computer owners. An analogy can be drawn to a compact disc recording of an orchestral rendition. The music is produced by the artistry of musicians and in itself is not a “good,” but when transferred to a laser-readable disc becomes a readily merchantable commodity. Similarly, when a professor delivers a lecture, it is not a good, but, when transcribed as a book, it becomes a good.

In that case, the Court held that computer software was a good for the purposes of the relevant statute. Courts make similar distinctions in strict liability cases whereby only the “tangible” end result—as opposed to the information, ideas, or embedded expression—may qualify as a product falling under such a purview. Thus, the presence of

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165. The focus on the intellectual labor here typically serves to distinguish between contracts for the sale of goods and contracts for labor and material, as opposed to determining who owns the rights to the copy of the information product, and whether a sale or license of the copy took place.


167. *Id.* See Keillian West, Ltd. v. Sportspage Enters., Ltd., 1982 1251 (AB QB) where the court made the distinction between the labor and the end product to decide that a contract for the printing of 20,000 sports programs was a contract for the sale of goods, not for the provision of services: “There is no reason to suppose that the substance of the contract was the skill and labour involved in the production of the programmes rather than the programmes themselves.”

168. For example in *Winter v G.P. Putnams’s Sons*, 938 F.2d 1033 (9th Cir. 1991), the U.S. Court of Appeals, Ninth Circuit, made the distinction between the ideas, expression and commercialized end result:

A book containing Shakespeare’s sonnets consists of two parts, the material and print therein, and the ideas and expression thereof. The first may be a product, but the second is not. The latter, were Shakespeare alive, would be governed by copyright laws; the laws of libel, to the extent consistent with the First Amendment; and the laws of misrepresentation, negligent misrepresentation, negligence, and mistake. These doctrines applicable to the second part are aimed at the delicate issues that arise with respect to intangibles such as ideas and
intangibles, such as ideas and information, in the creation or commercialized end result does not disqualify the end result from being defined as a good. It is almost inconceivable that ideas, concepts, trade secrets, information in the development process, or the end product are not part and parcel of goods.\textsuperscript{169}

The classification of various forms of property is not foreign to the concept of transformation (\textit{e.g.}, from immovable to movable property or from real to personal property in the Anglo-American tradition) depending on the context.\textsuperscript{170} While sounds and visual elements have an intangible nature that may well constitute the essence of a musical recording or a film, they form part of “goods” when embedded in a commercialized product through their registration in binary codes or otherwise.\textsuperscript{171}

As physical boundaries disappear for information products distributed online without a physical object, eliminating the reminder that there is some personal property and a good involved, it is likely that the observed trend of the intangible intellectual property of right holders defining the whole transaction will continue.

\textbf{B. Suppliers’ Role in Shaping Information Products}

Suppliers’ commercial practices, particularly where non-negotiated standard terms of use prevail, shape to a large extent courts characterization, as well as how recipients perceive information products.\textsuperscript{172} This is especially true with information products, where new expression. Products liability law is geared to the tangible world.

In that case, the plaintiff claimed that product strict liability regime applied to the publishers of a book on mushrooms on which they relied and as a result of which they became very sick after having eaten certain mushrooms. \textit{See also} Sanders v Acclaim Entm’t, Inc., 188 F. Supp. 2d 1264 (D. Colo. 2002); James v. Meow Media, Inc., 90 F. Supp. 2d 798 (WDKY 2000).

\textsuperscript{169} Crescent Amusement Co. v. Carson, 187 Tenn. 112, 213 S.W.2d 27 (1948) (noting this):

\begin{quote}
There is scarcely to be found any article susceptible to sale or rent that is not the result of an idea, genius, skill and labor applied to a physical substance. A loaf of bread is the result of the skill and labour of the cook who mixed the physical ingredients and applied heat at the temperature and consistency her judgment dictated. A radio is the result of the thought of a genius, or several such persons, combined with the skill and labour of trained technicians applied to a tangible mass of substance. An automobile is the result of all these elements, and of patents, etc.; and so on, ad infinitum.
\end{quote}

\textsuperscript{170} For example, in the civil law tradition, see CCQ, \textit{supra} note 8, arts. 900–03.

\textsuperscript{171} In the context of the nature of computer software, see Rodau, \textit{supra} note 23, at 875.

\textsuperscript{172} Perzanowski & Schultz, \textit{supra} note 2, at 1225, 1231–35. Attribute the deference courts have to how suppliers characterize the information product in the contract to a specific view of
technologies and commercial offerings challenge previous conceptions and bring the law to unchartered territories. The new grounds provide more leeway to align and shape the information products with the suppliers’ interests, a trend that can be observed in virtual worlds. Framing the contract as one of services may engender lower levels of protection of recipients and different remedies than if the contract involves goods. Licensing the copy of the information product rather than selling it allows suppliers to retain more control on the product generally, and circumvent the application of exceptions to copyright infringement beneficial to recipients (including the first sale or exhaustion doctrine).

Courts generally rely on the terms of the contract to assess whether the information is a good, a service or sui generis, whether there is a sale or a license, and how the rights of intellectual property suppliers should hold in these assessments. Unless there is a legal principle or doctrine that makes the terms unenforceable, courts tend to defer to the terms of the contract. The deference to the terms of the contract to determine the nature of information products begs several questions. For one, to what extent are property interests malleable by contract and to what extent is it desirable to delegate the regulation of information products to private ordering, particularly given the current prevalence of standardized non-negotiated-contracts? Second, what legal species are suppliers precisely creating? In order words, how does the law affect recipients and suppliers of copies of information products purchased for a one-time fee? Does the recipient maintain indefinite autonomous control even if she may not transfer the copy to another party? To what extent does the supplier retain property rights in the copies made available once the product is delivered to the recipient? Do these uncategorized rights to copies of information products, both from the perspective of suppliers and of recipients, not deserve more legal scrutiny?

The confusion identified above, between the personal property of the recipient in the information product, and the intellectual property of suppliers embedded in the product, enables suppliers’ ability to shape the nature of the information product and related transaction. The intellectual property rights of suppliers overshadow the underlying

property as being “an infinitely malleable bundle of rights.” Recipients may be favorably biased toward the accuracy and legality of standard terms and conditions based on their trust of the firm, in particular of large, reputable firms. See also RADIN, supra note 82, at 12. 173. On how suppliers are seeking to eliminate emerging virtual property through contract, see Joshua A.T. Fairfield, Virtual Property, 85 B.U. L. Rev. 1047, 1082–84 (2005). 174. See supra Part II.A. 175. See discussion supra Parts II.B & II.C. 176. I look further into these questions in infra Part IV.B. 177. See discussion supra Part III.A.2.
property rights of recipients unfairly shifting the balance of power to favor the holders of intellectual property. This imbalance overrides basic rights, privileges and powers that are common attributes of recipients’ property, giving intellectual property right holders carte blanche in how they shape the entire transaction through standard non-negotiated contracts.

C. Assessment: What is at Stake?

Looking at the uneasiness to transmute the law of physical objects to the online virtual world described so far, one could respond with skepticism at attempts to mirror the offline world to the online world: what are the underlying justifications to defer to old property rules to define information products in the online world? Should concepts such as delivery, possession, powers of transmission and transfer give way to new rules given their transformation in the online world? The short answer to critiques against mimicking traditional property concepts to the online world is that property, as a hard-wired concept, remains at the center of the commercialization of information products online, including virtual worlds. Suppliers invoke their intellectual property interests and rights in various ways: to restrict recipients’ power to transfer copies of information products, so as to avoid the application of the first sale doctrine; to claim rights to recipients’ enhancements to the information products they supplied, or to bury possible ownership rights of information product recipients in the platform which suppliers own or through the related services that they provide to recipients. Suppliers’ stronghold on information products requires an evenhanded legal and normative approach that calls for a greater articulation of recipients’ property rights. The questions become: what reallocations of property interests take place as a result of the requirements of a physical object, juxtaposed with the intangible intellectual property rights of right holders? What are the legal and normative effects of these reallocations and do they give rise to double standards? Should they be rectified?

1. Replacement of Recipients’ Property Freedoms with Suppliers’ Control Powers

The trends identified so far lead to a decrease of recipients’ rights to information products. The trend adds on to the well-documented constraining effects of technological protection measures and their legal endorsement worldwide on recipients’ rights to information products.178 There too, the emphasis on the presence of a physical object is noticeable,

as courts have been more reluctant to enforce technological protection measures when embedded in a physical object (e.g., a garage door lock) than in absence of it. Some may argue that this is the inevitable result of the digital revolution, that in order to survive, suppliers of information products must respond with legal and technological ammunition to the facility with which users can copy, share and distribute information products. Recipients have much to gain too by technological enhancements: increasing multiplicity of uses, flexibility and convenience (e.g., through the cloud: storage space, shifting access devices, on-demand access, and increased offerings). Under that view, the shrinking of recipients’ legal rights may be largely compensated by their gains as technologically empowered consumers. For this line of argument to have value, one needs to assume that the decline in recipients’ ownership rights is necessary for information products to subsist and for their recipients to benefit from incessant technological empowerment. Otherwise, the allegedly inevitable trade-off of recipients’ property rights for enhanced consumer experience should be more adequately described as a window of opportunity for suppliers to increase their power over recipients, by sowing dependency and creating new revenue streams. The case has yet to be made that the reallocation of property rights away from recipients of information products is essential and inevitable.

To assess what it is that recipients are losing and if it is of significant value, one may turn to the theoretical foundations of property as a means to organize everyday life, commerce and relationships, and as a tool of power allocation. James Harris’s influential conception of property in Property and Justice usefully provides a detailed account of the “ownership spectrum” which proves particularly helpful to assert the nature of rights to information products.

Harris views property as a necessary vehicle of freedom and autonomous choice, through the ubiquitous manifestation in society of a wide spectrum of ownership interests. Ownership is an “organizing idea” under which all of these interests share (to varying degrees) open-

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180. The shrinking or recipients property rights at the expense of suppliers raises similar questions to the ones involved in the debate on the merits of technological protection measures as endorsed by international copyright conventions and national legislation worldwide. See Chapdelaine, supra note 80, at 21–26; Carys Craig, Locking Out Lawful Users: Fair Dealing and Anti-Circumvention in Bill C-32, in FROM RADICAL EXTREMISM TO BALANCED COPYRIGHT: CANADIAN COPYRIGHT AND THE DIGITAL AGENDA 177 (Michael Geist ed., 2010).

181. HARRIS, supra note 3. See PROPERTIES OF LAW: ESSAYS IN HONOUR OF JIM HARRIS (Timothy Endicott et al. eds., 2006).

182. See discussion infra Part IV.A.

183. HARRIS, supra note 3.
ended privileges, powers and self-seekingness with respect to a resource.\textsuperscript{184} To invoke freedom as a moral justification for maintaining a property institution, one must ask, “whether inherent property freedoms are a necessary feature of the just society.”\textsuperscript{185} The proposition is that quite apart from instrumental reasons, “property institutions, by their very nature, confer freedoms (ranges for autonomous choice) which would not exist without them; and for this reason no citizen is treated justly by his community unless it institutes or maintains a property institution.”\textsuperscript{186} Hence, open-ended uses and privileges nurture freedoms that contribute to autonomous choice and \textit{prima facie} justify property institutions.\textsuperscript{187} Harris arrives at this conclusion by finding no convincing argument that any of the powers and privileges on the ownership spectrum should be \textit{a priori} excluded from the concept of ownership: “[t]he spectrum has evolved in human history and is available within property institutions as a means of conferring ranges of autonomous choice on individuals or groups.”\textsuperscript{188}

\textit{A contrario}, if there were no property-specific justice reasons to support those freedoms, “countless day-to-day unquestioned assumptions about people being free to do what they like with their own things and their own money would turn out to be morally suspect.”\textsuperscript{189} Autonomy is a value frequently invoked to justify property and more particularly personal property.\textsuperscript{190}

When suppliers constrain the capacity of recipients to own

\textsuperscript{184} Id. at 63ff. \textit{See} discussion \textit{infra} Part IV.A (applying the three components of the ownership spectrum to information products).

\textsuperscript{185} Harris, supra note 3, at 231.

\textsuperscript{186} Id. at 230; \textit{see} James O. Grunebaum, \textit{Private Ownership} 182–83 (1987) (basing the moral justification of ownership in autonomy, developing a theory of “autonomous ownership,” and within that framework, acknowledging how use controls of consumer goods violate autonomy: “Community control over consumer goods, either in the form of what goods are produced or control in the form of what uses consumer products may be put to, would violate autonomy.”).

\textsuperscript{187} Harris, supra note 3, at 231.

\textsuperscript{188} Id. at 275.

\textsuperscript{189} Id. at 65; \textit{see also} Grunebaum, supra note 186, at 183.

\textsuperscript{190} \textit{See}, e.g., Grunebaum, supra note 186, at 183:

The idea that autonomy requires a wide range of rights of title over consumer goods implies that so called consumer sovereignty is a moral as well as the economic requirement to maintain the value of income and to achieve or measure efficiency. That consumers legitimately exercise a wide range of rights of title over goods for personal consumption applies not only to what they actually purchase but to what is available for their purchase. Not only should individuals be able to exercise a broad range of rights of title over their living quarters, for example, but they should also have a wide range of options about the kinds of living quarters made available.
information products through contract, and when courts endorse such schemes, the nurtured freedoms allowing open-ended countless acts unrestricted by state control are impaired. To some extent, the level of autonomy and freedom away from the state, made possible through the vehicle that is property, is taken away for the benefit and control of the firm. The *prima facie* open-ended powers and privileges that go without saying when owning a resource become potentially suspicious reviewable acts subject to the firm’s surveillance. This is the shift occurring when contract, instead of property concepts, dictates the rights to information product that in all respects have the attributes of a resource. The shift to contracts to control innumerable resources utilized by recipients undermines the traditional justification for the creation of property rights to ensure the most effective allocation and use of resources.\(^{191}\)

Consequently, the shift takes away recipients’ benefit to sale of goods warranties that would otherwise apply (implied warranties of quality, fitness for use, title and quiet possession) and the application of the first sale doctrine and other exceptions to copyright infringement to the benefit of recipients of information products. Given the overall policy objective of consumer protection laws and the additional level of protection that they offer to consumers,\(^{192}\) any issue of scope that may discredit the application of statutory implied obligations to consumer transactions needs to be examined carefully. When this exclusion affects an increasingly large segment of the consumer market (*i.e.*, information products distributed online), there is cause for concern. When it is compounded with the increasing trivialization of the ownership rights in copies of information products, an alarming pattern of diminished rights and protection for consumers starts to take shape.

Beyond taking away open-ended powers and privileges of information product recipients, some suppliers’ efforts to become owners of all enhancements made gratuitously by recipients on their copies of information products have been analogized, endorsed even, as a new form of feudalism.\(^{193}\) Are these resource allocations desirable? What ground rules, if any, may limit the malleability of how suppliers can define resources, constrain recipients’ property interests, or inflate their own property interests through contract?

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\(^{191}\) See Fairfield, *supra* note 173, at 1064–76 (application of various property theories to virtual property).

\(^{192}\) See discussion *supra* Part II.A.

\(^{193}\) See, e.g., James Grimmelmann, *Virtual World Feudalism*, 118 YALE L.J. Pocket Part 126 (2009) (analogizing the relationship between operators and users of virtual worlds as one of feudalism and arguing that such relationship is defensible).
2. Double Standards

The requirement of a physical object juxtaposed with the intangible intellectual property of right holders in the information products leads to double standards in how courts and legislators account for the property rights of suppliers (intellectual property holders) in comparison to the rights of recipients. The general trend of courts and legislators to favor the rights of intellectual property holders by minimizing property rights in the copies of information products exemplifies the double standard.\textsuperscript{194}

The requirement of a physical object for the copy of an information product to qualify as a good under sale of goods law, while the same requirement of a physical object is not required for a copy to be infringing under copyright law, further illustrates the double standard being applied between right holders and recipients of information products.\textsuperscript{195}

Moreover, the non-application of the first sale doctrine to information products distributed online is yet another manifestation wherein the rights and interests of intellectual property holders are bolstered at the expense of the power of transfer normally vested to recipients of information products.\textsuperscript{196}

A possible response to the double standard critique is that it may be justifiable on policy grounds to assign different weights to competing property interests given the interests’ inherent nature and respective functions. No property interests are absolute; all can be subject to legitimate limitations including property-limitation rules.\textsuperscript{197}

For example, copyright restrains the right of users to make reproductions of the work, unless the copies are permitted pursuant to an exception to copyright infringement (e.g., fair dealing, fair use, reproduction for private purposes, non-commercial user generated content). The intellectual property of copyright holders would take precedence over the personal property of users by restraining their ability to make copies without compensation in a way that competes with the economic rights of copyright holders. In the case of the requirement of a physical object for the copy of an information product to qualify as a good or for first sale to apply, the discussion about the competing property interests is at times completely absent, or at best, fails to duly take into account the purpose.

\textsuperscript{194} See discussion supra Part III.A.2.


\textsuperscript{196} See supra Part II.C.

\textsuperscript{197} See Harris, supra note 3, at 34 (defining property-limitation rules as where prima facie normative claims, founded on the prevailing ownership conception, are overridden, and said rules are premised on the notion that, but for the limitation they contain, the owner would be free to do as he pleases).
and function of personal property interests in copies of information products.\textsuperscript{198} The question for courts and legislators is whether the disparate treatment that different types of copies of information products receive does not amount to an illegitimate double standard. Unfortunately at this point, it does not appear that this question has been addressed properly.

3. Legal and Normative Incoherence

The resulting legal and normative incoherence caused by both the degradation of the property freedoms afforded to recipients of information products for the benefit of suppliers’ contractual powers and the double standards to how concepts of goods or property are applied should concern courts and policymakers.

As information products share the same attributes of property in all respects, failing to enforce the personal property rights of recipients of such products either by deferring to the terms of supplier contracts or by disqualifying such products due to physical form may lead to dissonance and arbitrary results.\textsuperscript{199} Ultimately, it risks undermining the efficiency and moral grounds imbued within property institutions that have helped to shape and organize human societies for millennia.\textsuperscript{200} In order to avoid this legal and normative degradation, what are the attributes of personal property that should enlighten conceptions of and the co-existence between tangible and intangible property? How can property interests be altered by contract and if so, under what justifications and ground rules?

\textsuperscript{198} See Perzanowski & Schultz, supra note 2, at 1245–60 (arguing that copy owners need to be distinguished from the public as a matter of copyright policy on the basis of inter alia, consumer incentives to discourage copyright infringement).

\textsuperscript{199} See Green & Randall, supra note 4, at 124 (raising similar concerns of consistency on the reluctance to apply the tort of conversion to digital assets).

\textsuperscript{200} Id. at 124–25 (regarding the reluctance by courts to apply the tort of conversion to digital assets):

Digitized assets are commodities in the same way as those assets which are conventionally protected by the law of property. Failing to safeguard property interests in them will have the same effects as failing to recognise property in traditional assets, since the legal relationship between person and asset is much the same where both types of assets are concerned. As we have seen, it is the behaviour of the parties in relation to the assets in question which is, or should be, determinative of whether a conversion has occurred.
IV. RELOCATING THE PERSONAL PROPERTY IN INFORMATION PRODUCTS

What are the required elements of an information product that justify dispensing with the physical object and treating it as a functional equivalent for the benefit of its recipient? When should property rights in the information product (the good) be recognized and allocated to the recipient and when should the information product be treated as a service with the related property interests being mostly retained by the supplier? The answer lies in great part in the relationship the recipient has with the information product and in particular, her ability to own the information product. It also depends largely on the malleability of property interests through contracts.

A. Recipients’ Ownership of Information Products

As information products that have no supporting physical media tend to be fluid, the dividing lines between the product, the method of delivery, the underlying code structure and operational services are not clear. The concept of ownership as an organizing idea and legal construct focuses on the relationship between the person and the resource, which is central to the proper characterization and regulation of information products. While possession is useful to identify the presence of personal property and of a good, ownership, when asserted in favor of recipients is a tipping point in how information products are regulated.

The legal analysis of ownership aims to distill the essential characteristics that should be present for an information product to qualify as the personal property of its recipient and as good. This exercise will bring a more refined understanding of tangible personal property beyond an object capable of being touched, and broaden the meaning of tangible by encompassing its secondary meanings.

In Property and Justice, James Harris defines the essence of every property institution as the twin manifestation of trespassory rules and

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201. See Harris, supra note 3, at 63ff.
202. See id. at 67 (“Ownership powers of control and transmission all involve capacity to create relations with others by virtue of a person’s ownership of something. Powers to control uses by others are as open-ended a class as are ownership use-privileges.”).
203. See Definition of Tangible, CANADIAN OXFORD DICTIONARY (2d ed. 2004) (stating the secondary meanings of “tangible” are “clearly intelligible; that can be grasped by the mind, not elusive or visionary” or “substantial” definite; that may be clearly viewed, evaluated, or calculated” or a “tangible thing, esp. an asset.”).
204. See Harris, supra note 3, at 24, 86 (referring to “trespassory rules” as all rules which, by reference to a resource, impose obligations (negative or positive) upon an open ended range of persons, with the exception of some privileged individual, group, or agency (i.e., the owner(s)); they are open-ended and give rise to various civil or criminal remedies such as damages,
the existence of an ownership spectrum. Harris’s influential conception of property offers one among numerous accounts of the main attributes of property and of the nature of ownership. The “twin-manifestation” framework that Harris proposes to define property emphasizes the “bundle of rights” notion that is often ascribed to property, as well as the power to exclude, opposable to all.

According to Harris, we need to understand the underlying “property-specific justice reasons” that withstand each form of property to determine its proper scope. Harris’s tailored approach to the nature of the resource (e.g., an information product) and the underlying reasons for its legal protection are highly pertinent to define the personal tangible property of information products.

The various forms of ownership on Harris’s “ownership spectrum” have in common: (i) a juridical relation between a person and a resource, (ii) privileges and powers that are open ended and (iii) that authorize self-seekingness by the owner. These three requirements will serve to identify when tangible personal property may subsist in information products accessed by recipients.

1. Juridical Relation Between a Person and a Resource

The requirement of a juridical relation between a person and a resource on the ownership spectrum implies that the person and the resource can be separately identified. Identifying a resource requires that it can be circumscribed. In the context of information products, possessory recovery, injunction, or restitution, and they presuppose the existence of a separate, reasonably identifiable resource.

205. Id. at 5 (stating the ownership spectrum spans from “mere property” to “full-blooded ownership.”).

206. See TONY HONORÉ, MAKING LAW BIND ESSAYS LEGAL AND PHILOSOPHICAL 165–79 (1987) (providing on the concept of ownership a detailed account of the incidents of ownership which include: the right to possess, the right to use, the right to manage, the right to the income and capital of the thing, the right to security and the duty to prevent harm); see also GRUNEAUM, supra note 186, at 3, 182.

207. See HARRIS, supra note 3, at 5 (describing property institutions as encompassing the twin manifestation of trespassory rules and the presence of an ownership spectrum which comprises powers and privileges between a person and a resource that are prima facie open-ended). For a brief overview of various conceptions of property, see Pascale Chapdelaine, The Property Attributes of Copyright, 10 Buff. Intell. Prop. L.J. 34, 52–53 (2014).

208. HARRIS, supra note 3, at 168.

209. Id. at 332 (implying the ability to identify each and a separateness between the two); JAMES E. PENNER, THE IDEA OF PROPERTY IN LAW 105–28 (1997).

210. HARRIS, supra note 3, at 65 (Self-seekingness refers to this intimate relationship between the owner and the resource as to how she chooses to dispose of the resource, with prima facie no duty to account to any one for the merit or rationality of that preference).

211. Id. at 332 (This is a requirement for any property institution); PENNER, supra note 209, at 105–28.
fixation in some perceptible form for independent and autonomous consumption would fulfill that requirement.\textsuperscript{212} For instance, consumers’ abilities to access digital products on a permanent basis and to store them, should be determining factors for assessing whether digital content could qualify as a good.\textsuperscript{213} Directive 2011/83/EU opted for a different approach, treating digital content with no physical supporting medium exchanged hand-to-hand as neither goods nor services, but as \textit{sui generis}.\textsuperscript{214} As opposed to the ability to access digital products on a permanent basis, the sequential release of information that is not fixed for the ongoing independent and autonomous consumption of the recipient (\textit{e.g.}, a performance in public of a play or a broadcast) would not have the attributes of a resource for the recipient’s purposes.\textsuperscript{215}

Identifying a distinct resource implies some form of scarcity. Intellectual property laws create artificial scarcity (\textit{e.g.}, through copyright) to prohibit unauthorized reproduction and other acts that could otherwise be performed freely with respect to a work of authorship.\textsuperscript{216} Because intellectual property rights are often present in information products, the artificial scarcity enables the creation of rival, individually identifiable lawful copies of information products. The copy of an information product downloaded lawfully from the Internet becomes the copy of the recipient, which sets it apart from all others.\textsuperscript{217} The copy of the information products becomes even more unique when the recipient adapts or modifies it for her own personal uses.\textsuperscript{218} This ability to

\begin{footnotesize}
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  \item \textsuperscript{212} See Horovitz, supra note 23, at 132–33; 151–52.
  \item \textsuperscript{213} Position paper on the regulation of digital products prepared by BEUC. Digital Products, How to Include them in the Proposal for a Consumer Rights Directive, at 5 (June 9, 2010), available at http://www.beuc.org/Content/Default.asp?PageID=2135 [hereinafter Digital Products]; About BEUC, BEUC, http://www.beuc.org/about-beuc/who-we-are (last visited Apr. 6, 2015) (stating that BEUC is the European Consumers’ Organization that acts as the umbrella organization for 40 independent national consumer organizations across Europe. Its main task is to represent the interests of these organizations and all consumers across Europe).
  \item \textsuperscript{214} See Directive 2011/83/EU, supra note 26, recital p. 25.
  \item \textsuperscript{215} Copyright law imposes a requirement of fixation for works of authorship to be protected. See, \textit{e.g.}, Galerie d’art du Petit Champlain, Inc. v. Théberge, 2002 SCC 34, [2002] 2 S.C.R. 336, ¶ 145 (Can.) (stating “[t]he work is, so to speak, the physical outcome of the creative process. Fixation of the work in a medium is a condition sine qua non of the production of a work.” The requirement of fixation in copyright law and the qualification of goods in sale of goods law (and consumer law) share a common preoccupation of an identifiable and perceptible product that persists in time beyond its moment of creation or interpretation).
  \item \textsuperscript{216} Harris, supra note 3, at 42–43; Mark A. Lemley, \textit{Property, Intellectual Property and Free Riding}, Texas L. Rev. 1031, 1055 (2005).
  \item \textsuperscript{217} On the discussion of rivalry and virtual property, see Fairfield, supra note 173, at 1053–55, who suggests that the perfect digital copies of copyright works do not embody the same rivalry aspects as virtual property developed in virtual worlds.
  \item \textsuperscript{218} See, \textit{e.g.}, Geoffrey Fowler, Amazon Pays for Eating Student’s Homework, WALL ST. J.L. BLOG (Oct. 1, 2009, 2:14 p.m.), http://blogs.wsj.com/digits/2009/10/01/amazon-pays-for-eating-students-homework/?mod=rss_WSJBLog (discussing claims recipients of information
personalize immaterial copies of information products largely compensates for the lack of distinct physical object boundaries for the purpose of assessing the actual level of rivalry posed by numerous digital copies of the same copyright work.

2. Open-ended Privileges and Powers

The second feature common to all ownership interests on the ownership spectrum is that the privileges and powers that a person has in a resource are *prima facie* open-ended. The open-ended texture of powers and privileges distinguishes ownership interests from other non-ownership proprietary interests that confer specific privileges and powers. The infinite ways by which a person can *prima facie* interact with a resource distinguish ownership interests in a resource from a product the use of which would be entirely governed by the terms of a contract as is sometimes the case in virtual worlds. The significance of *prima facie* open-ended powers and privileges to define ownership of a resource as opposed to other legal relationships, is often overlooked when defining property as an infinitely malleable bundle of rights.

Copyright increasingly limits some of the *prima facie* open-ended privileges and powers to copies of information products. Although copyright shapes to a large extent the privileges and powers of recipients of information products and is highly relevant in the broader discussion of the scope of copyright user rights, copyright does not preclude ownership in copies of information products. The underlying intellectual property of right holders needs to be separated from the present assessment of sorting out which information products should qualify as recipients’ personal tangible property and as goods, as opposed to the property of suppliers, or as services.

The ability to exercise open-ended privileges and powers implies some physical control of the resource. For instance, recipients of information products may exercise physical control over copies they

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219. Harris, supra note 3, at 5.
220. Id. at 55–58 (stating that easements, for example, would fall under the category of non-ownership proprietary interests).
221. The rights of members to virtual world sites have been largely defined by contract. See generally Fairfield, supra note 173; see also Greg Lastowka, Virtual Justice 193 (2010).
222. A specific view of property as being “an infinitely malleable bundle of rights” has effects in the online world and intersection between contract and property. See Perzanowski & Schultz, supra note 2, at 1225, 1233–34.
download (e.g., ability to identify a copy as one’s own, store it, and autonomously use it without resorting to a service provider). A musical recording or copy of film lawfully downloaded from the Internet (should) give(s) recipients the open-ended privileges and powers to enjoy the work autonomously through physical control, with powers of transfer. By contrast, the streaming or broadcast of a film does not give the same autonomous capacity to consumers, although with on-demand streaming and other services, the level of autonomy that consumers enjoy with respect to the service comes closer to the autonomy of an owner. Recipients of streaming services do not exercise *prima facie* open-ended physical control over the copy they stream, to the extent that a large portion of the physical power remains in the hands of the service provider (i.e., the copy is stored on a server over which the recipient has no physical control, and each individual access to the information product is incumbent upon the service provider making streaming available). Recipients may have a transferable interest in a subscription to the on-demand streaming services, which may share the attributes of a property interest. However, the power of control and transfer pertains to the subscription to the service, not to the information product *per se*.

Movability has been invoked as one of the open-ended privileges that should be a determining factor to qualify information products as tangible personal property as opposed to a service or intangible property, in particular in the context of the U.S. UCC. One commentator noted with respect to the categorization of computer software, “A program is intangible in the sense that it cannot be touched or felt, but not in the sense that it cannot be moved and identified to a contract.” Computer programs and other copies of information products are movable tradable objects regardless of their material form. Movability is the underlying requirement for the transfer of ownership as another means to distinguish specific goods from other products.

The power to transfer title to a resource is among the most important of all open-ended powers and privileges of ownership. The power to transfer title to a resource is central to sale of goods and related consumer

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223. Horovitz, *supra* note 23, at 162 (noting with respect to the categorization of computer software under the U.S. UCC: “A program is intangible in the sense that it cannot be touched or felt, but not in the sense that it cannot be moved and identified to a contract.”).


protection laws, the concept of sale traditionally embedding transfer of title. The ability to transfer a resource to someone else is a determining factor in distinguishing goods from services. As noted with respect to the classification of goods and services under World Trade Organization and E.U. law:

On one level, the notion of property transfer appears inherently bound up with goods and not services because the acquisition of ownership from the producer is predicated on the transfer of possession of the product. Such possession entails “actual holding or having something as one’s own,” implying either physical existence of the thing possessed or the right to exercise control over the product.

Often, recipients’ inability to transfer the copy to the information product is imposed by the supplier, either through a contractual restriction or through technological protection measures. In determining which information products can be owned by recipients, barriers imposed by the supplier need to be distinguished from other physical or conceptual barriers to ownership (e.g., the information product is not under the physical control of the recipient and therefore recipient has no power to transfer it). The distinction between barriers imposed by suppliers and other physical barriers lies in suppliers’ power to shape the nature of information products. When an information product fulfills for all other intents and purposes the requirements of ownership by its recipient, the restriction on transfer imposed by suppliers needs to pass the same level of scrutiny as any other restrictions on the alienation of property.

3. Privileges and Powers that Authorize Self-Seekingness to the Owner

The third feature common to all ownership interests on the ownership spectrum is that the privileges and powers that a person has in the resource authorize self-seekingness for the owner. Self-seekingness is the intimate relationship between the owner and the resource as to how the owner chooses to dispose of the resource, with prima facie no duty to account to any one on the merit or rationality of that preference.

The self-seekingness requirement for ownership to subsist in a resource is particularly helpful to highlight the impact that copyright

228. See Gerald H.L. Fridman, Sale of Goods in Canada 61 (5th ed. 2005) (discussing the various potential meanings of “property” and “transfer of property” when employed in a sale of goods law framework); see also Atiyah & Adams, supra note 23, at 68–71.
230. Harris, supra note 3, at 5.
231. See id. at 65.
holders’ rights have on recipients’ enjoyment of information products. Given the inherent power of copyright holders to restrict the performance of defined acts on their works without their authorization, recipients have a lot to account for to copyright holders. As a result, recipients’ ownership of copies of information products subject to copyright sits significantly lower on the ownership spectrum than other goods.

The self-seekingness requirement of ownership is helpful to distinguish the copies of information products that may be owned by their recipients from those that may not. The self-seekingness aspect common to all ownership interests is also helpful to discern another important feature that recipients are forfeiting when they do not own the copies of information products that they access. An information product accessed through on-demand streaming services would allow some level of self-seekingness to the recipient (i.e., no duty to account to anyone (e.g., the time of day, frequency, purpose of use, in what circles)) while still being constrained to a large extent by the streaming service provider (the specific information product may only be available for a limited period of time, the service may be down from time to time, or the recipient may not have access to an internet connection at any given time, the recipient may abandon the service provider if the fees increase, or the service supplier may be out of business; in all scenarios, the recipient would stop having access to the information product). In contrast, when the recipient downloads the copy of an information product to her computer or on his Internet storage space, the recipient would be allowed to a greater level of self-seekingness in that she could enjoy the information product independently, autonomously, and for an indefinite duration.

Here too, the obstacles to ownership imposed by the supplier contract terms need to be distinguished from other conceptual or physical barriers to owning copies of information products (as it would be the case where the copy is accessed through an on-demand streaming service). Copies of information products provided under supplier contract denying any ownership rights to the recipient, but which for all intents and purposes give the same level of self-seekingness as if they were legally owned by the recipient, are among the factors that a court should consider to determine whether a sale of the information product took place regardless of contract terms to the contrary.

232. See supra Part IV.A.2.

233. Freedom of contract will generally guide courts to defer to the contract terms (assuming they are enforceable). In some cases, and when policy reasons justify court’s intervention, courts have taken a substantive and functional approach to interpret computer license agreements as effectively amounting to a sale. See, e.g., Case C-128/11, UsedSoft GmbH v. Oracle Int’l Corp., 2012 E.C.R. at 10; see supra text accompanying notes 71-87.
B. Property Versus Contracts

Once the relevant criteria to assert tangible property interests in information products have been identified, supplier contract terms that suggest that the information product does not confer property rights to the recipient, or that suppress property powers and privileges, should come under a different scrutiny. Failure to recognize recipients’ property interests may lead to double standards in addition to legal and normative incoherence in a way that risks undermining the foundations and function of the property institution, including important efficiency considerations. The lack of recognition of recipients’ personal property interests in information products may also bring to the fore the legitimacy of the scope of copyright and other forms of intellectual property. As property interests in information products are a vehicle promoting distinct values that need to be recognized and preserved, courts and legislators should be particularly attentive when the contracts are non-negotiated standard terms (which is prevalent in the commercialization of information products). It is beyond the scope of this article to provide a detailed account of the extent to which contracts may shape property interests. Suffice here to make a few remarks on the various legal tools that should be considered to mediate between the property interests in copies of information products and contradictory or unfavorable supplier contract terms.

The conception of property and ownership adopted here to better define the nature of information products sets inherent limits to the malleability of the bundle of rights that ownership proprietary interests entail. Beyond the size of the circle of persons against whom the property or contract right can be asserted (i.e., trespassory powers in rem versus rights in personam) it is the prima facie open-ended powers and privileges that the recipient has with respect to the product authorizing self-seekingness (as opposed to a closed list of dos and don’ts) that set property interests apart from contract rights.

One may argue that we should confer suppliers as much flexibility as possible to develop their commercial offerings, (with market forces ensuring recipients’ adequate and most efficient access to information products), and that this flexibility should include trumping property rights by contract rights. While free market economies generally support

234. See Perzanowski & Schultz, supra note 2, at 1225, 1233–35 (arguing that the “bundle of rights” theories about property have facilitated a greater blurriness between property and contracts, in the broader context of vanishing personal property rights in copies of copyright works). See id. at 1233–34 (citing Thomas W. Merrill & Henry E. Smith, The Property/Contract Interface, 101 COLUM. L. REV. 773 (2001)) (stating “[i]f property rights are nothing more than in personam right writ large, we should expect property law to embrace the same flexibility and granularity we see in the realm of privately negotiated agreements.”).
flexibility and creativity in how suppliers commercialize their products, allegedly allowing market dynamics to play out for the benefit of all, this line of argument fails to account for a few important points. First, it presupposes that property interests are infinitely malleable at the whim of suppliers’ preferences, which is problematic both legally and normatively. If the information product as supplied has the substantive characteristics of being owned by the recipient, terms of contract that state the contrary should not be taken at face value. In other words, favoring suppliers’ flexibility in how they craft their business offering should not occur at the expense of legal and normative coherence, and recipients’ reasonable expectations. How the creation of double standards in property, copyright and intellectual property law particularly undermines the public policy considerations that withstand the scope of copyright, is a factor that should not be ignored. Second, suppliers retain much flexibility in how they may deploy their commercial offerings (e.g., supply of goods, services, lease, rental, hire, sale, limited term, for specific uses and territory) without having to unilaterally declare that recipients have no property rights if de facto, property interests they have. Third, the alleged market efficiency that supposedly benefits all parties needs to be weighed against the decrease of efficiency occasioned by idiosyncratic rights and interests created by contract terms as opposed to more homogeneous property rights and interests.

Once the relevant criteria to assert tangible property interests in information products have been identified, and once the potential perils of failing to recognize such property interests are acknowledged, what tools are available to legislators and the judiciary to constrain contract terms seeking to trump the property interests of information product recipients? It is beyond the scope of this article to give a detailed account of what legal tools and doctrines may allow courts and legislators to constrain the effect of contract terms on the property interests in information products. Suffice here for our purposes to highlight some of the mostly relevant tools.

First, the numeros clausus principle, by which there is a fixed and closed list of property rights recognized by law and, as a corollary, limitations on how property rights may be altered by contract,235 is one tool that may equip the judiciary (and eventually legislators through legislative reform) in constraining contract terms that seek to alter the rights of recipients of information products to an unrecognizable form of property. This concept is generally understood to be part of the civil law tradition, although it is not immune from inconsistencies in its application.236 The civil law typically enumerates the entitlements of

235. HARRIS, supra note 3, at 58.
236. See David Lametti, Concept of Property: Relation Through Objects of Social Wealth,
ownership and its possible dismemberments. The restriction on “the exercise of the right to dispose of property” is explicitly prohibited except in limited circumstances, and is subject to specific conditions. There is a growing recognition that a similar principle exists in property common law, although this is not without controversy. Thomas Merrill and Henry Smith conducted a survey on the common law of property to demonstrate that the same principle exists in this legal tradition, although not uniformly and without bearing any specific appellation. For Merrill and Smith, numeros clausus is best described as a “norm of judicial self-governance” rather than as a statutory or constitutional tool of interpretation. It is “an extremely important qualification of the freedom of contract.” The survey that Merrill and Smith conducted on the common law of property led them to conclude that there were even fewer forms of property available for personal property than for real property. In other words, there is a greater level of standardization in the realm of personal property than with respect to real property. As Merrill and Smith argue, the justifying benefit of numeros clausus is to constrain information processing costs of all personal property owners of similar copies of information products and,

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237. CCQ, supra note 8, art. 947 (defining the rights of ownership as “the right to use, enjoy and dispose of property fully and freely . . . .”).
238. Id. art. 1119 (listing dismemberments of ownership as “[u]sufruct, use, servitude and emphyteusis” and confirming that they are real rights).
239. Id. art. 1212 (stating a prohibition on the exercise of the right to dispose of property may only be done by gift or will).
240. Id. (stating the “stipulation of inalienability” needs to be in writing and it is only valid “if it is temporary and justified by a serious and legitimate interest.”); id. art. 1214 (providing that “the stipulation of inalienability may not be set up against third persons uses unless it is published in the proper register.”).
244. Id. at 11 (“Jurisprudentially speaking, the numeros clausus functions in the common law much like a canon of interpretation, albeit a canon that applies to common-law decision making rather than statutory or constitutional interpretation, or like a strong default rule in the interpretation of property rights.”).
245. Id. at 5.
246. Id. at 17–18.
at a broader level, of all personal property owners in a given jurisdiction.\textsuperscript{247} 

The application of the \textit{numerus clausus} principle may be even more needed with respect to products without a physical object, where the boundaries between property and contract are more porous and where the rights of the recipient to the product may be harder to define.\textsuperscript{248} In the context of copyright, it is one way to qualify copyright holders’ freedom of contract to balance copyright holders’ interests against the competing interests of copy owners. It constrains copyright holders’ possible inclination to expand their property rights at the expense of personal property copy owners.\textsuperscript{249} It mediates between competing property rights and the effect that contracts can have on those rights.\textsuperscript{250} 

Moreover, the doctrine that condemns restrictions against alienation of property (which may also be viewed as one manifestation of the \textit{numerus clausus} principle) would provide a rationale to constrain contract terms that restrict the right to transfer the information product to another party save the original buyer, a prevailing practice in the commercialization of information products. As one commentator put it assessing the property attributes of members’ rights to virtual world assets and attempts to constrain such property rights by contract:

To state that such [contracts] presumptively knock out any emergent property rights is to beg the question: why should we permit consensual agreements that prevent formation of property rights in the first instance any more than we tolerate other consensual restraints on alienation? The function of property law is in large part to resist contractual limitations on property use. If the restraint on alienation limits the property in question to low-value uses, we term it an unreasonable restraint, and do not enforce it. Thus, property law provides a rationale and a mechanism for resisting the systematic expropriation of emergent online property forms by use of contract.\textsuperscript{251} 

The limitation against constraints on alienation of property was the main rationale leading the U.S. Supreme Court to enunciate the principles of the first sale doctrine in the landmark judgment \textit{Bobbs-Merrill Co. v.}

\begin{itemize}
\item[247.] \textit{Id.} at 26.
\item[249.] \textit{See} Perzanowski & Schultz, \textit{supra} note 2, at 1249–52 (applying the numerous clausus principle to copies of copyright works).
\item[250.] \textit{Id.}
\item[251.] Fairfield, \textit{supra} note 173, at 1083–84 (alteration in original).
\end{itemize}
Isidor Straus, later codified in the U.S. Copyright Act.

What is more, targeted legislative measures, including making certain exceptions to copyright infringement mandatory (or the rights or privileges they create inalienable), or creating presumptions of invalidity against contract terms that would seek to limit the application of exceptions to infringement, are other means to qualify right holders’ freedom to commercialize information products.

V. CONCLUSION

Information products traditionally embed a divide between the intangible personal property (that belongs to intellectual property right holders) and the tangible personal property of copies of information products (that belong, but not always, to their recipients). The dematerialization of copies brings another layer of complexity to the tangible and intangible property divide: the information products that are offered with a physical supporting medium are regulated differently than the ones that are not, through public and private ordering. This demarcation line is to a large extent arbitrary, resulting in unfair to double standards as well as legal and normative incoherence if not degradation. It contributes to the imbalance of power between suppliers and recipients.

While the over emphasis on the presence of a physical object is attributable in part to a narrow understanding of tangible, there is hope for a more reasoned delineation between tangible and intangible property that does not altogether abandon this classification (which does in fact offer conceptual value to a better understanding of property and still plays a role in various areas of law). Taking a substantive and functional approach to the attributes of tangible personal property, regardless of the presence of a physical object, helps to realign the co-existence between tangible and intangible property in many ways. It affirms that information products may qualify as goods in some instances and distinguishes them from services. The substantive and functional approaches to tangible personal property identify situations when personal property in the information product should reside with the recipient, not the supplier.

A functional similarity approach to digital copies of information products, whether delivered online or embedded in a physical object, accords with the principle of technological neutrality applied in

253. The first sale doctrine was codified in the year following Bobbs-Merrill and carried forward in the Copyright Act of 1976. See 17 U.S.C. § 109(a) (2012).
254. RADIN, supra note 82, at 168–70 (arguing that intellectual property user rights should not be fully alienable in the context where “boilerplate” can “achieve widespread cancellation of user rights” which “contributes to democratic degradation.”).
Entertainment Software Association. It preserves the competing property interests in the copy of the information product, which in turn justify many exceptions to copyright infringement.

Contract terms that ban personal property rights to recipients of information products should be subjected to heightened scrutiny. Not taking at face value contract terms that deny personal property rights to recipients of information products will have rippling effects on the application of the first sale or exhaustion doctrine, as well as other exceptions to copyright infringement. Advocating that contract terms banning personal property rights to recipients of information products should be subject to higher scrutiny is a plea against the infinite malleability of property. Just as property continues to be a powerful legal and normative tool for suppliers to promote their interests, the force it carries to protect the interests of recipients of information products needs to be equally recognized.

255. See discussion supra Part II.D.
256. In particular the first sale or exhaustion doctrine.