FOUR

# *The Precautionary Principle and Its Application in the Intellectual Property Context: Towards a Public Domain Impact Assessment*

GRAHAM J REYNOLDS[1]

ABSTRACT (EN): This chapter considers whether the precautionary principle—a central element of contemporary environmental law and policy—can be usefully applied in the intellectual property context as a means through which the public domain can be protected. Assuming the importance of the public domain, and arguing that expansions in intellectual property protection risk harming the public domain, this chapter contends that it is appropriate to apply the precautionary principle in the intellectual property context in order to guard against harm to the public domain; suggests several ways in which a precautionary principle (or a precautionary approach) could be applied in the intellectual property context; and considers one possible instantiation of the precautionary principle in the context of intellectual property reform, namely in the form of a Public Domain Impact Assessment (PDIA). Modelled on the *Canadian Environmental Assessment Act*, the PDIA is envisioned as a process through which proposals for intellectual property reform, prior to their enactment, are evaluated by an in-

1 The author is grateful to Scott Campbell, Meinhard Doelle, Matthew Herder, Jennifer Llewellyn, Meghan Murtha, Justine Pila, David VanderZwaag, and two anonymous reviewers, for their valuable comments on an earlier draft of this chapter. He would also like to thank participants at the Multidisciplinary Approaches to Intellectual Property Law workshop in Ottawa, Ontario, for their valuable feedback on a presentation of an earlier version of this chapter. Any errors or omissions are solely the responsibility of the author.

dependent review panel in order to determine their potential impact on the public domain.

RÉSUMÉ (FR): Dans ce chapitre, on examine dans quelle mesure le principe de précaution — un élément central du droit et des politiques en environnement — peut être appliqué à bon escient dans le contexte de la propriété intellectuelle, en tant qu'outil servant à protéger le domaine public. En tenant compte de l'importance du domaine public, et en affirmant que l'extension de la protection de la propriété intellectuelle risque de porter préjudice au domaine public, on soutient dans ce chapitre qu'il convient d'appliquer le principe de précaution au contexte de la propriété intellectuelle dans le but d'éviter de nuire au domaine public. L'auteur propose différentes manières d'appliquer le principe de précaution (ou, à tout le moins, une approche de précaution) au contexte de la propriété intellectuelle; il examine en outre une éventuelle mise en application du principe de précaution dans le contexte de la réforme de la propriété intellectuelle, notamment sous la forme d'un Processus d'évaluation de l'impact sur le domaine public (PÉIDP). Façonné suivant le modèle de la *Loi canadienne sur l'évaluation environnementale*, le PÉIDP est conçu comme un processus au moyen duquel des propositions de réforme de la propriété intellectuelle seraient, avant leur adoption, évaluées par un comité d'examen indépendant, chargé de se prononcer sur leur incidence éventuelle sur le domaine public.

## A. INTELLECTUAL PROPERTY LAW, THE ENVIRONMENTAL MOVEMENT, AND THE PUBLIC DOMAIN

In 1997, James Boyle, seeking to protect the public domain through the construction of a politics of intellectual property, drew inspiration from the environmental movement.[2] Pointing to the ways in which the environmental movement "piggybacked on existing sources of conservationist sentiment, including the aesthetic and recreational values held by hikers, campers, and birdwatchers" in order to "buil[d] coalitions between those who might be affected by environmental changes,"[3] Boyle argued that "[i]n one very real sense, the environmental movement *invented* the environment so that

2 James Boyle, "A Politics of Intellectual Property: Environmentalism for the Net?" (1997) 47 Duke LJ 87.

3 *Ibid* at 112.

farmers, consumers, hunters and birdwatchers could all discover themselves as environmentalists."[4] Boyle concluded that "[p]erhaps we need to *invent* the public domain in order to call into being the coalition that might protect it."[5]

Just as Boyle drew inspiration from the environmental movement in order to "invent" the public domain, techniques developed by the environmental movement or drawn from environmental law and policy can be employed to help safeguard it. Molly Shaffer Van Houweling states that since Boyle issued his call to action to "invent" the public domain, "advocates for the value of open access to cultural raw materials [have borrowed] not just the politics of the environmental movement, but also specific techniques that environmentalists have used to protect important natural resources."[6] Van Houweling herself, for instance, has discussed the ways in which "lessons that emerge from the conservation easement movement . . . might inform copyright policy."[7]

In this chapter, I will consider whether the precautionary principle — a central element of contemporary environmental law and policy — can be usefully applied in the intellectual property context as a means through which the public domain can be protected. This chapter is part of a broader project in which, building on the work of Boyle, Van Houweling, and others,[8] I examine whether and to what extent concepts, tools, and techniques developed by the environmental movement or drawn from environmental law or policy can assist in protecting the public domain.

---

4 *Ibid* at 113.

5 *Ibid*. This is not to suggest that Boyle was the first to discuss the public domain. See, for instance, David Lange, "Recognizing the Public Domain" (1981) 44 Law & Contemp Probs 147. In the years since Boyle's call to action to "invent" the public domain, many developments have occurred with respect to the public domain. Among other developments, numerous works exploring the topic of the public domain have been published: see, for instance Carys J Craig, "The Canadian Public Domain: What, Where, and to What End?" (2010) 7 CJLT 221. Courts have commented on the nature and importance of the public domain. In Canada, for instance, see *Society of Composers, Authors and Music Publishers of Canada v Bell Canada*, 2012 SCC 36 at para 10; and institutions devoted to the study of the public domain have been founded: see, for instance, online: Center for the Study of the Public Domain at Duke University http://web.law.duke.edu/cspd.

6 Molly Shaffer Van Houweling, "Cultural Environmentalism and the Constructed Commons" (2007) 70 Law & Contemp Probs 23 at 24.

7 *Ibid* at 49.

8 See, for instance, James Boyle & Lawrence Lessig, eds, Symposium, *Cultural Environmentalism @10* (2007) 70 Law & Contemp Probs.

Boyle defines the public domain as "material that is not covered by intellectual property rights."[9] For the purposes of this chapter, I will use Boyle's definition as a starting point and expand upon it by suggesting that the public domain encompasses material that has never been covered by intellectual property rights; material formerly covered by intellectual property rights in which the grant of rights has expired (or has been declared invalid); uses of material that are deemed not to be covered by intellectual property rights through the application of defences/exceptions to intellectual property infringement (or that can be considered to be user's rights[10]); and uses of material that are not covered by intellectual property rights by virtue of the application, by intellectual property owners, of flexible licences through which certain rights are disclaimed.[11]

This chapter assumes the importance of the public domain. It accepts that the public domain fosters creativity, facilitates innovation, enables self-expression, and that it is instrumental in both the development of individual identity and in the construction of communities.[12] If these assumptions are correct, and the public domain is important, then it is necessary to develop mechanisms through which it can be protected. Among other potential threats, expansions in intellectual property protection (for instance by increasing the term of copyright) risk harming the public domain by placing more material under the control of rights-holders for longer periods of time.[13]

Although recognizing that the risk of harm to the public domain that may flow from the expansion of intellectual property rights differs from the risk of harm to the environment that may flow from persons engaging in polluting or environmentally destructive activities, I suggest that it is appropriate to apply the precautionary principle in the intellectual property context. Both the environment and the public domain provide significant benefits to society. These benefits may be overlooked in favour of other benefits that might flow from development or enhanced intellectual prop-

9 James Boyle, *The Public Domain: Enclosing the Commons of the Mind* (New Haven: Yale University Press, 2008) at 38.

10 *CCH Canadian Ltd v Law Society of Upper Canada,* 2004 SCC 13.

11 Creative Commons licences, for instance. See Ronan Deazley, *Rethinking Copyright: History, Theory, Language* (Northampton: Edward Elgar, 2006) at 107 for a similar definition.

12 For an in depth discussion of the importance of the public domain, see, for example, Craig, above note 5; and Boyle, above note 9.

13 It can also be argued that the intellectual property regime does not sufficiently consider the impact of the exercise of rights on the public domain.

erty protection, respectively (such as economic benefits for certain industries or political benefits). As well, in the case of both the environment and the public domain, the impact of harm caused by polluting/environmentally destructive activities and intellectual property expansion, respectively, is both uncertain and difficult to establish.

There are several ways through which a precautionary principle or a precautionary approach[14] could be implemented in the intellectual property context. For example, a precautionary principle/approach could be applied in determining whether intellectual property rights such as patents and trademarks ought to be granted, as an interpretive tool in determining whether rights have been infringed, or at the point at which proposals are submitted to ministers or Cabinet for approval.

In this chapter, I will discuss another way in which the precautionary principle could be applied in the intellectual property context. Specifically, I will suggest that the precautionary principle could be applied at the point at which proposals for reform of intellectual property legislation are formally introduced as part of the legislative process. In the final section of this chapter, I will propose the creation of a Public Domain Impact Assessment (PDIA), a process through which proposals for intellectual property reform, prior to their enactment, are evaluated by an independent review panel in order to determine their potential impact on the public domain.

## B. OVERVIEW OF THE PRECAUTIONARY PRINCIPLE

The roots of the precautionary principle can be traced back to Swedish and German domestic environmental law and policy. Joakim Zander states that "something resembling a modern precautionary principle guiding all environmental and health regulation has been in effect" in Sweden "[s]ince the late 1960s."[15] At approximately the same time as the concept underlying the precautionary principle emerged in Sweden, the principle of *Vorsorgeprinzip* began to appear in German environmental policy.[16] Mike Feintuck,

14 In this paper, I refer both to a precautionary approach and the precautionary principle. I employ both terms in order to acknowledge that there are several ways through which precautionary measures may be implemented.

15 Joakim Zander, *The Application of the Precautionary Principle in Practice: Comparative Dimensions* (Cambridge: Cambridge University Press, 2010) at 152.

16 Mike Feintuck, "Precautionary Maybe, but What's the Principle? The Precautionary Principle, the Regulation of Risk, and the Public Domain" (2005) 32 JL & Soc'y 371 at 374; Scott LaFranchi, "Surveying the Precautionary Principle's Ongoing Global Development:

quoting Sonja Boehmer-Christiansen, states that "[i]mplying both 'foresight' and 'preparedness,' *Vorsorge* requires that 'if wisdom and science combine to warn that current actions may lead to harm, government has the duty to change society by persuasion and regulation.'"[17]

In the 1980s, a precautionary approach began to be incorporated into international environmental declarations. For example, in 1987, the Declaration of the Second International North Sea Conference on the Protection of the North Sea (Second Declaration) "gave explicit reference to a precautionary approach."[18] In 1992, the precautionary principle was enshrined in the Rio Declaration on Environment and Development (Rio Declaration). Principle 15 of the Rio Declaration states that "[i]n order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."[19]

Nicolas de Sadeleer notes that since its incorporation in the Rio Declaration, the precautionary principle has been included in the "majority of bilateral and multilateral international treaties relating to environmental protection."[20] While the question of whether the precautionary principle has reached the status of customary international law has not yet been definitively resolved,[21] Charmian Barton concludes that "its widespread use

---

The Development of an Emergent Environmental Management Tool" (2005) 32 BC Envtl Aff L Rev 679 at 681; Ronnie Harding & Elizabeth Fisher, "Introducing the Precautionary Principle" in Ronnie Harding & Elizabeth Fishers, eds, *Perspectives on the Precautionary Principle* (Sydney: The Federation Press, 1999) at 4.

17 Feintuck, above note 16, quoting Sonja Boehmer-Christiansen, "The Precautionary Principle in Germany — Enabling Government" in Tim O'Riordan & James Cameron, eds, *Interpreting the Precautionary Principle* (London: Cameron May, 1994) at 39.

18 LaFranchi, above note 16 at 682.

19 United Nations Conference on Environment and Development, "Rio Declaration on Environment and Development" (1992) 31 ILM 874 at 879 (Principle 15).

20 Nicolas de Sadeleer, "The Effect of Uncertainty on the Threshold Levels to which the Precautionary Principle Appears to be Subject" in John S Applegate, ed, *Environmental Risk, Volume II* (Dartmouth: Ashgate, 2004) 453 at 457.

21 Harding & Fisher, above note 16 at 5. In "The Precautionary Approach and the International Control of Toxic Chemicals: Beacon of Hope, Sea of Confusion and Dilution" (2011) 33 Hous J Int'l L 605 at 629, David L VanderZwaag notes that the Seabed Disputes Chamber of the International Tribunal for the Law of the Sea, in an Advisory Opinion, stated that "the Rio Declaration has initiated a trend towards making the precautionary approach part of customary international law": See *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (2011), Advisory Opinion, Seabed Disputes Chamber of the International Tribunal for the Law of the Sea No 135.

indicates that it is recognized as a legitimate approach to environmental protection."[22]

There is no single, universally accepted definition of the precautionary principle. Rather, multiple versions of the precautionary principle have been proposed and implemented in different contexts. One way of classifying differing conceptions of the precautionary principle is by characterizing some as "weak" versions of the principle, and others as "strong" versions of the principle.[23] As Noah Sachs states, "[w]hereas weak versions of the Precautionary Principle *permit* the government to regulate risks under conditions of scientific uncertainty, the Strong Precautionary Principle suggests that some precautionary regulation should be a *default response* to serious risks under conditions of scientific uncertainty."[24] Sachs notes that "strong" versions of the precautionary principle also "explicitly [place] the burden on the private proponent of the risk-creating activity to . . . [prove] that risks are acceptable or reasonable."[25] Both "weak" and "strong" versions of the precautionary principle, though they differ in certain ways, also share some common characteristics. Recognizing that not all harms can be remedied after the fact, both versions emphasize anticipating future harm.[26] Both versions also emphasize that, in the face of uncertainty with respect to harm, preventative measures should be taken.[27]

Despite its widespread use and application,[28] the precautionary principle has been subject to criticism from numerous commentators.[29] Cass Sunstein, one of the most prominent critics of the precautionary principle, while suggesting that "weak" versions of the precautionary principle are "sensible,"[30] "unobjectionable and important,"[31] has advocated for the rejec-

---

22 Charmian Barton, "The Status of the Precautionary Principle in Australia: Its Emergence in Legislation and as a Common Law Doctrine" (1998) 22 Harv Envtl L Rev 509 at 518.

23 See Julian Morris, "Defining the Precautionary Principle" in Julian Morris, ed, *Rethinking Risk and the Precautionary Principle* (Woburn: Butterworth-Heinemann, 2000) 1.

24 Noah M Sachs, "Rescuing the Strong Precautionary Principle from its Critics" (2011) U Ill L Rev 1285 at 1295.

25 *Ibid*.

26 *Ibid*.

27 *Ibid*.

28 In addition to the field of environmental law and policy, the precautionary principle is also influential in the field of health policy and practice.

29 See, for instance, Morris, above note 23; Frank B Cross, "Paradoxical Perils of the Precautionary Principle" (1996) 53 Wash & Lee L Rev 851.

30 Cass R Sunstein, "Beyond the Precautionary Principle" (2003) 151 U Pa L Rev 1003 at 1018.

31 *Ibid* at 1016.

tion of "strong" versions of the precautionary principle. Stating that "every step, including inaction, creates a risk,"[32] Sunstein argues that "strong" versions of the precautionary principle, by requiring parties to "[a]void steps that will create a risk of harm," have the effect of "forbidding inaction, stringent regulation, and everything in between."[33] Rather than assisting policy-makers in determining which route to pursue when faced with the risk of harm, Sunstein states that strong versions of the precautionary principle "[offer] no guidance" [34] and "[lead] in no direction at all." [35]

Notwithstanding this criticism, some commentators, such as Sachs, argue that the precautionary principle, in both its "weak" and "strong" formulations, remains a valuable tool in seeking to assess and regulate risk in environmental and other contexts.[36]

## C. APPLYING THE PRECAUTIONARY PRINCIPLE IN THE INTELLECTUAL PROPERTY CONTEXT

In considering the application of the precautionary principle in the intellectual property context, three preliminary questions must be addressed. First, is it appropriate to apply the precautionary principle in the intellectual property context in order to guard against harm to the public domain? Second, in what types of situations (if any) might the precautionary principle be usefully applied in the intellectual property context? Third, how might the precautionary principle be instantiated in the intellectual property context?

### 1) Is it Appropriate to Apply the Precautionary Principle in Order to Guard Against Harm to the Public Domain?

As noted above, the precautionary principle emphasizes both anticipating future harm (recognizing that not all harm can be remedied *ex post facto*),[37] and taking preventative measures in the face of uncertainty with respect to

32 *Ibid* at 1003.
33 *Ibid*.
34 *Ibid* at 1020.
35 *Ibid* at 1003.
36 Sachs, above note 24. See also LaFranchi, above note 16; Feintuck, above note 16; David Dana, "The Contextual Rationality of the Precautionary Principle" (2009) 35 Queen's LJ 67.
37 Sachs, above note 24 at 1295.

harm.[38] As is the case with harm to the environment, not all harms done to the public domain can be remedied *ex post facto*. For instance, it has been argued that copyright laws may prevent individuals and institutions from taking steps to preserve, for the benefit of society, existing expression in which they do not hold copyright, such as by transferring old movies from film prints to digital files.[39] The loss of this expression through the passage of time, or by an unfortunate event such as a fire or a flood, is irreversible and would have a negative impact on the public domain.[40]

However, it cannot be assumed that the risk of harm to the public domain caused by expanding intellectual property protection is the same as the risk of harm to the environment caused by pollution or development. For instance, it is generally not argued that permitting the release of a noxious substance into a waterway would benefit the environment. In contrast, if we accept that intellectual property acts as an incentive for individuals to invest in the creation and dissemination of expression, and that this incentive leads to the creation and dissemination of expression that would not otherwise have been created or disseminated, then increasing intellectual property protection may benefit the public domain, as opposed to harming or impoverishing it. Expression, once created, immediately becomes part of the public domain with respect to certain uses (fair dealing, for instance, in the context of copyright), and, at a later date (after the expiration of the term of intellectual property protection) for all other uses.

This is not to say that increasing intellectual property protection always (or ever) has a net benefit on the public domain. While increasing intellectual property protection may act as a further incentive for the creation of new expression, it also expands protection for existing works. Thus, although expanding intellectual property protection, for instance by increasing the term of copyright, may result in new works being created (making certain uses of those works, such as fair dealing, immediately available as part of the public domain), it also extends the period of time in which other uses of existing works will not be available as part of the public domain.

---

38 *Ibid*.

39 For instance, see Diane Leenheer Zimmerman, "Can Our Culture Be Saved? The Future of Digital Archiving" (2007) 91 Minn L Rev 989.

40 This material, once lost, would be unavailable for use in ways that would be encompassed by the fair use or fair dealing defences, and would not be available for unrestricted use upon expiry of the copyright in the work.

As well, at a certain point, it can be assumed that the incentive function mentioned above will cease to operate. At this point, expanding intellectual property protection will not result in the creation and dissemination of any new works (works that would not have been created or disseminated absent the expanded intellectual property protection). Said differently, any expansion of intellectual property protection at or past this point will not provide any benefit to the public domain. Instead, it will only result in a contraction of the public domain.

In applying the precautionary principle in the intellectual property context, the risks posed to the public domain by expanding intellectual property protection must be balanced with the benefits to the public domain that flow from expanding intellectual property protection. This is a complicated calculus. However, the complicated nature of this calculus should not bar the application of the precautionary principle in the intellectual property context. Given the significant degree of uncertainty with respect to the impact of any expansion of intellectual property rights on the public domain, and the possibility that expansions in intellectual property might negatively impact the public domain, it can be argued that if the public domain is seen as valuable and worth protecting (an assumption upon which this chapter is built), preventative measures should be taken, and some version of the precautionary principle ought to be applied.

The application of the precautionary principle in the intellectual property context can also be justified by reference to the values that may be seen to underlie the precautionary principle. Feintuck, for instance, has suggested that the precautionary principle has an "essentially collective orientation,"[41] and that it has "potential utility .... as an aspect and reassertion of the public domain in the face of private economic interests."[42] In referencing the public domain, Feintuck is referring broadly to the set of interests that belong collectively to the public and not specifically to the public domain in the intellectual property context. However, his statement is directly applicable in the intellectual property context. The application of the precautionary principle, in the intellectual property context, may provide some degree of protection for the set of collective interests and values that are furthered by the existence of a robust public domain in the face of

41 Feintuck, above note 16 at 398.

42 *Ibid* at 372.

private economic interests that may attempt to encroach upon the public domain through intellectual property reform.

## 2) In What Types of Situations is it Appropriate to Apply the Precautionary Principle in the Intellectual Property Context?

In considering the application of the precautionary principle in the intellectual property context, a second question that must be addressed relates to the types of situations in which the precautionary principle could be applied. In the environmental context, the precautionary principle is applied in two types of situations. First, parties that wish to initiate a project, engage in a behaviour, market a product, or use a substance that would otherwise be prohibited by law are required, in certain circumstances, to apply to a regulatory body or administrator for permission or for a licence. In determining whether to grant permission or a licence, the regulatory body or administrator may be required to apply the precautionary principle. Second, legislators may be required to consider the precautionary principle or to adopt a precautionary approach when developing legislation.

In the intellectual property context, a precautionary principle/approach could be applied in several ways. First, a precautionary approach could be applied by the relevant granting bodies in determining whether a patent ought to be granted[43] or whether a trademark ought to be registered. Second, the precautionary principle could be applied as an interpretive tool in determining whether an intellectual property right has been infringed;[44] whether a compulsory licence ought to be granted; or whether a defence to copyright infringement ought to apply. Third, the precautionary principle could be applied at the point at which proposals, the implementation of which may result in "important" effects on the public domain, are submitted to a minister or Cabinet for approval.[45]

---

43 In Europe, for instance, it can be argued that the "ordre public" or morality exclusion from patentability enshrined in Article 53(a) of the *EPC* embodies a precautionary approach. See *Convention on the Grant of European Patents* (5 October 1973) 13 ILM 268 (*European Patent Convention*, as amended) (*EPC*).

44 See, for instance, Timothy Endicott & Michael Spence, "Vagueness in the Scope of Copyright" (2005) 121 Law Q Rev 657.

45 This suggestion is modelled upon Strategic Environmental Assessment, "a tool that contributes to informed decisions in support of sustainable development by incorporating environmental considerations into the development of public policies and strategic

Fourth, and the subject of this chapter, another situation in which the precautionary principle could be usefully applied is at the point at which proposals for intellectual property reform are introduced. The application of the precautionary principle in the context of intellectual property reform could require legislative bodies, when evaluating proposed amendments to their intellectual property legislation or new intellectual property legislation, to explicitly consider the impact of any such proposals on the public domain. In the following section, I will consider one possible instantiation of the precautionary principle in the context of intellectual property reform, namely in the form of a PDIA.

## 3) Applying the Precautionary Principle in the Context of Intellectual Property Reform: Towards a Public Domain Impact Assessment

In considering how the precautionary principle might be applied in the context of intellectual property reform, it is informative to look to existing works that have advocated for an approach to intellectual property reform that could be characterized as "precautionary." One commentator, Thomas F Cotter, has explicitly suggested the application of the precautionary principle in the context of copyright, stating that "policymakers would be wise to incorporate something analogous to the Precautionary Principle, in order to minimize the risk that aggressive copyright laws will decimate the cultural environment."[46]

Cotter proposes several ways in which the application of the precautionary principle could impact intellectual property reform. First, he suggests that the principle could "shift the burden of justifying a proposed, but potentially harmful, rule to the affected industry."[47] Cotter states that the burden of proof could vary depending on factors such as the "magnitude of the potential harm, its irreversibility, and the current state of scientific understanding of its probability."[48] Second, Cotter suggests that "advocates of further copyright expansion" could be required to demonstrate, through "some meaningful degree of proof that further expansions are necessary to

---

decisions": Canadian Environmental Assessment Agency, online: www.ceaa-acee.gc.ca/default.asp?lang=En&n=A4C57835-1.

46 Thomas F Cotter, "Memes and Copyright" (2005) 80 Tul L Rev 331 at 409.

47 *Ibid* at 404.

48 *Ibid*.

maintain incentives, and are likely to do no harm to the other relevant goals of copyright."[49]

Modifying the intellectual property reform process in such a manner as to require evidence demonstrating the probability and seriousness of harm that may result to the public domain from the adoption of proposed reforms, and demonstrating the consistency of proposed reforms with the goals of intellectual property laws, could be of significant benefit to the public domain. It is unclear, however, how the burden shift suggested by Cotter might function should multiple industries propose the same reform or should reform be proposed by parties other than industry. As well, questions could be raised as to whether it is in the public interest to permit the industry proposing legislative reform to act as the party providing evidence justifying this same reform. Cotter, acknowledging the potential for abuse inherent in such an approach, notes that "affirmative findings [could be required] from the Copyright Office or from Congress."[50]

Building on Cotter's approach, I will conclude this chapter by proposing another possible instantiation of the precautionary principle in the context of intellectual property reform. Specifically, I will propose the creation of a PDIA. I envision the PDIA as a process through which proposals for intellectual property reform, prior to their enactment, are evaluated by an independent review panel in order to determine their potential impact on the public domain. Given the space constraints of this edited text, I will not describe the PDIA in exhaustive detail. Instead, I will introduce the framework of the PDIA, leaving the specific details to be expanded upon in a future work.

---

49 *Ibid* at 406.

50 Cotter, above note 46 at 406. Although Cotter's paper is the only work to explicitly suggest the application of the precautionary principle in the context of copyright, other works can be seen as supporting, in principle, the call for the adoption of a precautionary approach in the intellectual property context. For instance, see two "companion studies" prepared by Ian Kerr for the Copyright Policy Branch of the Department of Canadian Heritage: Ian Kerr, "Technical Protection Measures: Part I — Trends in Technical Protection Measures and Circumvention Technologies" (Ottawa: Minister of Public Works and Government Services Canada — Department of Canadian Heritage, 2004); Ian Kerr, "Technical Protection Measures: Part II — The Legal Protection of TPMs" (Ottawa: Minister of Public Works and Government Services Canada — Department of Canadian Heritage, 2004). Cotter, above note 46, also suggests that the proposal developed by Neil Netanel in Neil Weinstock Netanel, "Locating Copyright Within the First Amendment Skein" (2001) 54 Stan L Rev 1 at 47–54 can be characterized as an application of the precautionary principle in the context of copyright law.

My proposed PDIA is modelled on the *Canadian Environmental Assessment Act* (*CEAA*).[51] The *CEAA* can be seen as an instantiation of the precautionary principle in the context of Canadian environmental law. As in the case of intellectual property, in which private rights are balanced with the public interest, the *CEAA* attempts to achieve a balance between economic development and environmental concerns.

I envision the PDIA process as an open, public process, conducted by an independent review panel. Individuals, groups, and industry could have the opportunity to submit documents and provide oral testimony to the review panel with respect to the impact of certain legislative proposals on the public domain. Documents and testimony under consideration by the panel could then be published online, giving the public the opportunity to examine and comment on the submissions, the evidence contained in the submissions, and the methodology employed by parties that have submitted evidence.[52] Structuring the process in such a manner, as opposed to relying on the party desiring a specific reform to provide evidence justifying that reform, reduces the risk that the party desiring the specific legislative reform might, as Cotter states, make "rosy predictions" or engage in "sleight of hand."[53]

As is the case in the procedure set out under the *CEAA*, a number of mandatory factors could be considered under the PDIA process, including:[54]

---

51 *Canadian Environmental Assessment Act*, SC 1992, c 37 (*CEAA*), as repealed by *Jobs, Growth and Long-Term Prosperity Act*, SC 2012, c 19. On 29 March 2012, Bill C-38, *An Act to Implement Certain Provisions of the Budget Tabled in Parliament on March 29, 2012 and Other Measures*, 1st Sess, 41st Parl, was introduced by Canadian Finance Minister Jim Flaherty. Among other measures, Bill C-38 proposed to repeal the *CEAA* and replace it with a new environmental assessment act (the *CEAA 2012*). *Jobs, Growth and Long-Term Prosperity Act*, SC 2012, c 19 received Royal Assent on 29 June 2012. Given uncertainty as to how the *CEAA 2012* will operate in practice, I have chosen to base my approach, and the PDIA, on the *CEAA*.

52 In many ways, the PDIA process proposed in this chapter can be seen as an extension of current legislative practices. For instance, in Canada, the public is already given the opportunity to comment on proposed regulations. As well, in Canada, Parliamentary Committees considering legislative changes have the power to call experts to give evidence. The main difference between the PDIA and current legislative practices would be the explicit focus of the PDIA on the potential impact of proposed legislative reforms on the public domain.

53 Cotter, above note 46 at 406.

54 The following factors are drawn from and based on s 16(1) of the *CEAA*, above note 51. Some of these factors are also suggested by Cotter, above note 46.

- The projected impact of the proposed legislative reform on the public domain, including the cumulative effects on the public domain that are likely to result from the proposed reform in combination with existing legislation or other reforms that have been or will be undertaken.
- The significance of this impact.
- Comments from the public received during the course of the PDIA process.
- Measures that might mitigate any adverse impacts of the proposed legislative reform on the public domain.[55]
- The purpose(s) of the legislative reform.
- Alternative means of achieving this/these purpose(s) and the effects of such alternative means on the public domain.
- Evidence demonstrating that the proposed reform will (or will likely) achieve the desired result.[56]
- The impact that the proposed reform might have on groups.[57]

While the factors noted above may already have been considered by bureaucrats and politicians in the legislative drafting process,[58] several advantages flow from formalizing their consideration in a public manner through a PDIA. First, formalizing these factors and mandating their review through a PDIA would ensure that each factor is explicitly considered. Second, formalizing these factors and mandating their review through a PDIA would increase openness and transparency within the legislative process, ensuring that the factors are not simply analyzed by bureaucrats and politicians, but that they are seen, by the general public, to have been analyzed. Third, formalizing these factors and mandating their review through a PDIA would create a record of evidence that could be helpful for courts

---

55 For instance, if a bill proposes to increase the period of copyright protection (an act that might have an adverse impact on the public domain), additional defences or exceptions to copyright infringement could mitigate any adverse impact.

56 A detailed analysis comparing and contrasting the application of the precautionary principle in the intellectual property context with an evidence-based approach to law-making in the intellectual property context is beyond the scope of this chapter, and will be the subject of another paper.

57 See Siva Vaidhyanathan, "The Anarchist in the Coffee House: A Brief Consideration of Local Culture, The Free Culture Movement, and Prospects for a Global Public Sphere" (2007) 70 Law & Contemp Probs 205.

58 For instance, these factors may have been considered in a Regulatory Impact Analysis or a Regulatory Impact Assessment.

and others seeking to interpret the legislation. This record could also be relied on in future years in seeking to further reform, develop, and shape intellectual property legislation and policy.

The consequences of determining, through the PDIA process, that proposed legislative reforms might negatively impact the public domain could vary. One possible approach could be for legislative bodies to bind themselves to the determination arrived at through the PDIA process.[59] This approach would represent the strongest instantiation of the precautionary principle of the options outlined in this chapter. Under this approach, if the PDIA process concludes that proposed intellectual property reforms might negatively impact the public domain beyond a certain threshold (for instance, might have a "severe impact" on the public domain), the legislative body would not be permitted to pass the legislation as proposed.

Several criticisms of this approach could be raised. First, this approach could raise democratic legitimacy concerns, as elected officials would be prevented from passing legislation by a decision made by an unelected body of individuals (the PDIA review panel). Second, adopting an approach that limits the ability of the legislative body to expand intellectual property protection (if one assumes that expanding intellectual property protection, at least past a certain point, negatively impacts the public domain) could create the risk of harm in other areas, for instance with respect to foreign relations, international trade, or the development of a nation's cultural industries.

A second option that could be pursued in the event that the PDIA process concludes that proposed legislative reforms might negatively impact the public domain beyond a certain threshold could be to require the legislative body to take steps to mitigate the potential impact of their proposals on the public domain. One step that could be taken is the creation of a body that has the authority to take certain steps to mitigate harm that might be done to the public domain should certain legislative reforms be enacted into law. This body could be given the authority to create or recommend the creation of additional defences to copyright infringement or to grant specific licences in order to partially (or completely) offset potential harm to the public domain that might result from the enactment of the proposed intellec-

59 This suggestion goes beyond what is prescribed in the *CEAA*, which provides the administration with discretionary power to approve or not approve a project (see *CEAA*, above note 51, s 37).

tual property reforms.[60] Depending on how this mechanism is structured, democratic legitimacy concerns could arise under this approach, as well.

A third option that could be pursued in the event that the PDIA process concludes that proposed legislative reforms might negatively impact the public domain beyond a certain threshold could be to permit the legislative body to pass the legislation as proposed, without mandating any of the mechanisms outlined above. The legislative body could choose, however, to implement any or all of the proposed mechanisms.

Although representing the weakest instantiation of the precautionary principle of all of the options described in this chapter, numerous positive benefits, for the public domain, would flow from the adoption of this approach. As is the case with the first two approaches, the public, open, and transparent nature of the PDIA process would bring attention to the risks to the public domain that might flow from the proposed intellectual property reforms; individuals would have the opportunity to give testimony to an independent body about the potential impact of the proposed reforms on the public domain, creating opportunities for discussion and deliberation; any evidence presented in support of the proposed reforms could be scrutinized; and lack of evidence provided to support any proposed reforms could be noted.

Additionally, while under this approach the legislative body would not be compelled to make changes to proposed legislative reforms as a result of the conclusion reached in the PDIA process, legislators could be held to account in future elections for their decision to pass the proposed intellectual property reforms notwithstanding the determination of the PDIA process. Given these benefits, and the democratic legitimacy concerns mentioned above with respect to the first two options, I would advocate for legislative bodies to consider adopting this approach.[61]

In a manner similar to the way in which the implementation of the procedure outlined in the *CEAA* guards against certain risks to the environ-

---

60 A model for such a mechanism can be found in 17 USC §1201(a)(1), which permits the Librarian of Congress to determine "whether there are any classes of works that will be subject to exemptions from the statute's prohibition against circumvention of technology that effectively controls access to a copyrighted work": see James H Billington, "Statement of the Librarian of Congress Relating to Section 1201 Rulemaking" (2010) US Copyright Office, online: www.copyright.gov/1201/2010/Librarian-of-Congress-1201-Statement.html.

61 Before any approach is formally adopted, however, more detailed consideration of the constitutional impediments to introducing a mandatory review of proposed legislation would be required.

ment, the introduction of a PDIA into the context of intellectual property reform would guard against certain risks to the public domain. First, the introduction of a PDIA into the context of intellectual property reform would provide some measure of assurance that legislative reform is "considered in a careful and precautionary manner" with respect to the possible impact of legislative proposals on the public domain.[62] Second, introducing a PDIA would also "ensure that there are opportunities for timely and meaningful public participation" on the issue of the potential impact of intellectual property reform on the public domain.[63] Third, incorporating a PDIA into the legislative reform process in the area of intellectual property law might also "encourage" parties to "take actions" that maintain a healthy public domain.[64] Lastly, the mere presence of the PDIA (and the public nature of its process) would serve as an affirmation of the importance of the public domain, of the public values that underpin intellectual property, and of the interconnectedness of private rights and the public interest.

Certain issues with respect to the PDIA would need to be addressed prior to its implementation in any jurisdiction. For instance, the legislative body would need to determine what types of consequences it wishes to have flow from a determination that the proposed reforms negatively impact the public domain beyond the applicable threshold; what ought this threshold to be; what limitations, if any, would need to be placed on the ability of individuals, groups, or industry to give testimony or to comment on testimony in order to ensure that the legislation can be considered within a reasonable time frame; who ought to bear the cost for a PDIA; how ought the selection process for the independent review panel proceed; whether (and/or to what extent) the PDIA would be conducted a second (or third) time in the event that amendments to the proposed legislation are introduced; and what steps could be taken if the PDIA process determines that there is no way to mitigate potential harm to the public domain that might arise from proposed legislative reforms.

## D. CONCLUSION

This chapter assumes the importance of the public domain. If this assumption is correct, then it is necessary to explore different ways through which

62 *CEAA*, above note 51 at s 4(1)(a).
63 *Ibid*, s 4(1)(d).
64 *Ibid*, s 4(1)(b).

the public domain can be protected. Concepts, tools, and techniques developed by the environmental movement and drawn from environmental law and policy-making can play (and have played) an important role in this project. In this chapter, I have considered whether one concept originally developed in the context of environmental law — namely the precautionary principle — might usefully be applied in the intellectual property context in order to protect the public domain.

I have suggested both that it is appropriate to apply a precautionary principle in the intellectual property context, and that the precautionary principle could be applied in the intellectual property context at the point at which proposals to reform intellectual property legislation are introduced. In the final section of this chapter, I have drawn upon the *CEAA* to suggest one possible instantiation of the precautionary principle in the context of intellectual property reform. Specifically, I have proposed the creation of a PDIA: a process through which proposals for intellectual property reform, prior to their enactment, are evaluated by an independent review panel in order to determine their potential impact on the public domain.

The adoption of such an approach by legislative bodies would signal broad acceptance of the idea that the public domain is important; that it is valuable; and that, like the environment, action must be taken to ensure that it is protected. While the adoption of a PDIA may not prevent legislative bodies from enacting legislation that negatively impacts the public domain, it would, at a minimum, help to clearly articulate what is at stake (and what might be lost) should proposed reforms to intellectual property legislation be enacted into law.