

## Access, Benefit-sharing and the Interface with Existing IP Systems: Limits and Opportunities

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It is fairly well-established that the intellectual property baseline for protecting innovative/creative endeavor poses important challenges for considerations of an appropriate legal framework for the protection of biodiversity, genetic information and associated traditional knowledge. Of those challenges, the non-economic values often associated with the protection of animal and plant life, the timeless character of traditional principles that underpin conceptions of ownership, and an entirely different perspective on what constitutes "property" or "knowledge" stand out as significant limitations of existing global proprietary schemes. Notwithstanding these concerns, the principles attendant to cultural systems that generate and support the development of traditional knowledge are, to varying degrees, already captured by aspects of the orthodox intellectual property (IP) system.<sup>1</sup> Consequently, the interface between existing categories of intellectual property rights and a *sui generis* legal framework for the protection of traditional knowledge and biodiversity merit ongoing attention to determine how the IP system might affect a new international regime. The relationship between IP and access and benefit-sharing is particularly crucial given the weakening criterion for IP protection in developed countries, which has resulted in an even more significant overlap between traditional knowledge, biodiversity and IP subject matter. Such shifting legal standards in developed countries will have an important impact on the security and stability of new legal forms designed to govern access and benefit-sharing arrangements (ABS).

The following brief comments will focus on strategic ways the IP system might influence the formulation of normative principles as well as the design of a legal framework for an international ABS regime.

### First Principles: the Appropriate Regulatory Design

Discussions about the insufficiency of the intellectual property system as a strong or preferable model for traditional knowledge focuses on a number of challenges that include the problem of valuing traditional knowledge, both for purposes of developing substantive norms to govern protection as well as to facilitate how ABS might be implemented. It is important to note, first, that the design of a regulatory framework is not necessarily connected to the mechanisms or principles used to appropriate economic gain to the owner. For example, patent or copyright protection in and of themselves do not guarantee economic gain for the innovator or creator. Economic value is more likely the function of market forces but it is undoubtedly the property right that facilitates the appropriation of such economic gain. With this in mind, let us then consider the problem of how to set values for traditional knowledge

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<sup>1</sup> See the matrix depicting possible correlation between intellectual property subject matter and traditional knowledge.

*The Problem of Value*

Two principal goals are generally associated with proposals for ABS. The first is the prevention of misappropriation and/or misuse of traditional knowledge (including plant and animal life). A second goal is to manage access to and protection of biodiversity by ensuring that any economic value derived from traditional knowledge is extended to the rightful owners of that contribution. The first issue raised by these two goals involves the conceptualization of "value." As many commentators have pointed out, traditional knowledge encompasses immeasurable components -religious, cultural, and moral - that make the task of legal definition and protection under the intellectual property system less than meaningful for most traditional knowledge owners and providers. While the intellectual property system, with its categorizations and formal requirements, is in tension with the value systems reflected by traditional communities, both systems to some extent share the public goods characteristics of non-rivalrous consumption and non-excludability. In other words, multiple individuals can use the knowledge without depletion of the original, and once produced there is no way to prevent others from enjoying its benefits. Consequently, legal rules that govern ownership are necessary to preserve the ability of owners to set a value on the goods at issue.

It is the case, however, that the valuation of intellectual property rights is typically divorced from the substantive principles that govern protection. In other words, the value of patents, copyrights, trademarks or tradesecrets is not reflected in the norms of protection *per se*. Instead, these categorizations of intellectual property reflect the type of creativity at issue and to some extent, the presumed level of investment. Likewise, how we define "traditional knowledge" is not as much the issue as making sure a rule exists that governs the terms of access to this knowledge. The fact is that the IP system also recognizes forms of non-economic value. The system thus structures ownership rules that allow owners to control access and use by others. In the IP context, value is typically accounted for in the nature and extent of remedies available for misappropriation. For example, in copyright law the concept of wilful infringement draws on non-economic standards of ethical/moral conduct. Wilful infringement thus attracts significantly higher penalties. Furthermore, the availability of statutory damages<sup>2</sup> in copyright suggest that economically "harmless" infringement is still compensable and would be meaningful to the owner whose non-economic interests in, or connection to, the work may have been adversely impacted by the infringer. Thus, even in the absence of explicit recognition or protection for non-economic harm, the notion of value as reflected indirectly through the availability of certain types of damages is cognizable under the traditional intellectual property system.

Another insight for traditional knowledge protection can be found in the flexible definition of valuable information under tradeseecret law. Like copyright law, and to a more limited extent, patent law, tradeseecret law in leading developing countries observes considerable discretion in compensating violations of intellectual property rights in a manner that reflects both the value added positively by the creators' knowledge and the value reflected by knowing negative information - that is, information about what does *not* provide a remedy to a particular problem. This form of "negative" knowledge or information is valued in tradeseecret law as a "blind alley,"<sup>3</sup> that is, information that gives an individual a positive gain by saving

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<sup>2</sup> These are damages that the copyright owner is entitled to without a showing of any actual economic harm caused by the infringer. See 17 U.S.C., 504(c).

costs associated with investigations that are unlikely to succeed. Thus even if traditional knowledge does not result in a positive economic value in terms of a patentable product, any lead time gained by learning from traditional knowledge would still be compensable under the tradeseecret regime. In addition, since tradesecrets are protected as part of a larger regulatory system for addressing personal harm, the kind of emotional, cultural or spiritual concerns inherent in traditional knowledge systems could benefit from protection under this scheme.

For traditional knowledge that is associated with art, ritual, and performances, there is also the strong possibility that the concept of moral rights might add a positive layer of protection to traditional knowledge. A new ABS regime could eschew the categorizations of IP subject-matter but still employ doctrines that would promote stability, consistency and coherency in the interface between IP and ABS subject-matter. In sum, concerns about the incompatibility of intellectual property and traditional knowledge that revolve around "value" should be reconsidered in light of the recognition and protection of non-economic values that already exist within the intellectual property system.

#### *The Strategy of Overlapping Rights*

Despite the ostensibly rigid categorization of intellectual property, there is considerable overlap between copyright, patents and trademarks or tradesecrets. A single product may be subject to multiple, and overlapping rights. For example, a pharmaceutical drug may be subject to patent protection for the actual drug; there may be protection for the process; the package design is subject to copyright protection while the name of the drug is protected by trademark law. Each layer of protection addresses distinct creative or innovative elements, and allows the owner to continue de facto legal control of certain markets when one set of rights may have expired.

In considering various regulatory schemes for traditional knowledge protection, it is important to emphasize that rigid categorization or definition of what is being protected (is it more like patent or copyright? More like copyright or trademark?) is increasingly less relevant in the intellectual property system. New technologies, market convergence (or segmentation) and malleable legal standards that constitute the normative core of each category of protection have resulted in an intellectual property scheme that is more like a continuum rather than a classification system. Traditional knowledge should benefit immensely from this system of overlap, particularly given the rational reluctance to make traditional knowledge "fit" into precise subject matter categories.

This same benefit flowing from minimal distinctions between subject matters can also be a limitation in considering the design of ABS regulation. The increasingly weak standards of patentability in developed countries, are precisely what makes traditional knowledge even

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<sup>3</sup> See Restatement (Third) of Unfair Competition, § 39, and Uniform Trade Secrets Act, §1(4) which define trade secrets as any information that can be used in business or other enterprise, and that is not generally known. Under some proposals, a misappropriation model could also sanction unauthorized or otherwise illicit use or diversion of information whether or not such information is held in secret. See, e.g., J.H. Reichman, Legal Hybrids Between the Patent and Copyright Paradigms, 94 Colum. L. Rev. 2432 (1994). The misappropriation model (regardless of the secrecy status) has been considered for genetic information in publicly sold agricultural products. See Note, The Genetic Message from the Cornfields of Iowa: Expanding the Law of Trade Secrets, 38 Drake. L. Rev. 631 (1989).

more susceptible to misappropriation. Low standards of originality, inventiveness and utility, especially in the biotechnology area, more likely heighten interest in genetic information and other raw materials. The possibility of patenting some forms of traditional knowledge may compel a legal framework that can straddle both a *sui generis* system of protection at the national level, and the international intellectual property system. Hence, identifying ways to constructively navigate between both systems will be an important aspect of designing a successful ABS regime.

### Coordinating between ABS Models and the IP System

#### *Extra-IP Models of Protection: Tension and Contradiction*

Property rights in and of themselves are usually insufficient to protect the full range of an owner's interest. Regardless of the form of property, owners will at various points require protection from other legal sources to supplement their interests. In some cases, such alternative regimes may completely replace property rights. For example, an innovator may choose to protect his/her patentable product or process by relying on the tort of misappropriation to prevent unauthorized access to and use of the item at issue. Such an approach may be strengthened by relying on contract law to bind consumers who purchase the product to utilize it only on the terms set by the owner.

Much of the appeal of a *sui generis* protection system for traditional knowledge lies precisely in the open-endedness of a loosely regulated system. Torts, contracts or other quasi-property rules are not subject to duration rules that are associated with intellectual property rights. *Sui generis* systems can avoid the limitations of twenty years for a patent term, or life plus seventy years for copyright, to more fully account for the timeless values that undergird traditional knowledge. Interestingly enough, resorting to extra-intellectual property regimes in developed countries has occurred primarily as a means to *circumvent* some of the access mechanisms embedded in the structure of the intellectual property system. Thus, for example, legal protection for works not subject to copyright protection has been secured through contract law. This result, which can undermine the public interest values embedded in the copyright scheme, ironically has strong prospects for ABS by granting greater control to owners in setting terms of access and use of genetic material, plants and other aspects of traditional knowledge that would not benefit from intellectual property rights. Contractual protection, not intellectual property, thus potentially offers the greatest level of protection (control) for ABS. Whether such a strong level of control is consistent with the CBD, or even TRIPs is contestable.<sup>4</sup> There is also the significant problem of extra-territorial enforcement of contracts that govern ABS arrangements. The possibility of simultaneous protection under an IP system would make extra-territorial enforcement of ABS schemes more feasible under the foreign country's IP system, particularly where the breaching party is located in a developed country with strong domestic IP enforcement.

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<sup>4</sup> Both the CBD and TRIPs require a balancing between a number of objectives. Art 8(j) of the former requires countries to balance environmental protection, ABS and respect for traditional knowledge. TRIPs requires a balance, among other things, between incentives to create, access for public interest goals and economic development. A regime that gives concentrated control to owners without the opportunity to consider other public concerns, may be ill-advised at this stage.

*Transacting Over Traditional Knowledge: Liability Rules versus Property Rules*

The possibility of a regime outside of the intellectual property system for ABS raises the fundamental question of appropriate legal baselines. A property rule is a legal entitlement that permits infringement (use) only after negotiating with the owner. Property rules permeate the intellectual property system and have been the dominant choice for international intellectual property treaties. On the other hand, a liability rule regime allows use to occur through an implicit license, and the appropriate compensation is determined subsequently. Of course, variations on the distinction between a liability rule and a property rule can be designed and, in features of both regimes even co-exist.<sup>5</sup>

In the context of ABS, the possibility of a liability regime has been seriously tendered as an alternative baseline for traditional knowledge and other forms of creativity<sup>6</sup> deemed to be incompatible with the traditional justifications for intellectual property protection. Features of the dominant proposals for ABS revolve around a property rule approach typical of existing sui generis regimes in other areas. However, a liability rule system offers some important solutions for chronic concerns about the high transaction costs associated with ABS systems. These transaction costs result from the dispersed nature of traditional knowledge and associated biodiversity, the possibility of multiple groups that own (use) the same knowledge in different geographical areas, and the problem of assigning ownership to knowledge that is communally generated. The tremendous challenges these issues bring to the traditional intellectual property table, have forced most commentators and scholars to advocate a sui generis system to address these issues. In the intellectual property system, high transaction costs have caused industry participants to invest in institutions that facilitate the efficient exchange of intellectual property rights. In a liability rule regime, such institutions are unnecessary because the system permits automatic use. However, there still remains the question of assessing, enforcing and collecting the costs of accessing ABS. For this reason, there will still be a need to give serious attention to the development of institutions necessary to effectuate the objectives of any ABS model.

*An Opt-in, Opt-out Possibility*

The availability of alternative legal sources for the protection of creative endeavor creates an "opt-in" system, where creators choose the kind of protection model that is suitable for their interests. In many instances creators choose tradeseecret protection, contract based protection, or a collection of other legal theories to protect their rights and interests. In essence, even where IP protection is available for a particular product, creators can choose a different protection method. For example, some empirical studies suggest that small and medium size firms often eschew the expensive patent system and opt, instead, for tradeseecret protection or other forms of protection based on unfair competition laws. While the public benefit flowing from these alternatives is significantly less than what the IP system

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<sup>5</sup> For example, although copyright is designed around a property rule, certain musical works are subject to a compulsory licensing scheme akin to a liability rule.

<sup>6</sup> See, e.g., Reichman, J.H., 2000. *Of Green Tulips and Legal Kudzu: Repackaging Rights in Subpatentable Innovation*, 53 VAND. L. REV. 1743. (favoring liability rules for innovation that fails legal standards for protection under patent or copyright regimes).

in theory offers,<sup>7</sup> these alternatives are also less expensive and raise fewer transaction cost problems in the market.

Like intellectual property systems, negotiations over an international ABS regime should contemplate the possibility of allowing "owners"<sup>8</sup> to choose the intellectual property framework for protection where possible, to remain exclusively within the ABS framework or, to straddle both. Appropriate mechanisms for coordination between the two would, of course, be necessary and borrowing from the IP system in ways that I sketched out earlier is one way of coordinating between both regimes. At the very least, IP mechanisms or doctrines can be used to supplement the ABS system - which could be particularly useful in an international setting where these different regimes must co-exist.

Finally, note that owners of creative products often rely on a multiplicity of doctrines to secure market power. A well-crafted overlap between ABS and IP rights will enhance the goals of both systems and limit tensions that might undermine a nascent ABS regime.

### Conclusion

The weakening of patentability standards, and other legal requirements for intellectual property rights, suggests that the interface between intellectual property and ABS is likely to be appreciable for the foreseeable future. Indeed, it is likely that any ABS system created is likely to be a hybrid of IP rights, contracts and unfair competition. Whatever the combination of normative principles in any emergent ABS regime, it seems clear that the IP/ABS interface must be navigated in a way that facilitates coordination, transparency and accountability in the international context, without abandoning the public interest in access, benefit-sharing and innovation.

### INTERFACE: A POSSIBLE MATRIX

Major IP Categories	Subject Matter	International Legal Standards	TK/ABS	Major International Regime
Patents	Ideas, processes, plants, designs, genetic sequences	New, useful, non-obvious	Processes, know-how, systems, chemical compound	Paris Conv., TRIPS, UPOV IUPGR
Copyrights (including neighboring rights)	Creative Expression (art, music, literature, dance)	original work of authorship; perceptible	music, dance, crafts, designs, folklore	Berne Conv., TRIPS, WCT, WPPT

<sup>7</sup> Commentators often point to the fact that the public benefit that comes from the disclosure (and dissemination) of inventions is lost when firms choose alternative avenues for protection.

<sup>8</sup> In an ABS context, the determination of "ownership" is probably best left to national laws. In the IP context, ownership issues are also typically determined by national laws

III. Specific Issues for consideration in the elaboration of the IR:  
Interface with Existing IP Systems & Limits and Opportunities for Existing IP Rights

Trademarks	distinctive symbols, signs, insignia, words, letters, short phrases	capable of distinguishing goods.	geographic names, cultural identifiers, tribal marks	Paris Conv., TRIPS, Madrid
Tradesecrets	unknown information that has value	secret, has commercial value, reasonably maintained as a secret	Sacred processes, formulas, know-how; identification of plants and plant properties	TRIPS, IUPGR