

# OWNING THE WORLD OF IDEAS

INTELLECTUAL PROPERTY AND GLOBAL  
NETWORK CAPITALISM

MATTHEW DAVID  
DEBORA HALBERT

SAGE SWIFTS



 SAGE

Los Angeles | London | New Delhi  
Singapore | Washington DC



# 2

## ORIGINS, HISTORY AND GLOBALIZATION OF INTELLECTUAL PROPERTY

Origin stories can be instrumental in understanding the underlying assumptions that have helped to construct a contemporary policy area. Identifying and understanding the history of the concept of IP is no different. In the previous chapter, we delved into the meanings behind the words intellectual, property and rights, as well as the tensions inherent in this idea. By investigating the origins of IP as a concept, we hope to shed light onto how this umbrella term that is used to refer to a wide variety of different legal regimes has changed over time. While the words themselves have a long history, their meaning has not remained stable but instead has travelled quite significantly as the scope and breadth of what we call IP evolved.

Today, as discussed in the previous chapter, IP is used to refer to a disparate set of practices associated with different technologies, countries and approaches to invention and sharing of knowledge. The term is often used interchangeably to refer to one of the many regimes it covers. For example, it is common to use the words copyright and IP to mean the same thing. Or, the term can be used to refer generally to any type of abstract property claim. It is not unusual to hear people refer to something as ‘their intellectual property’, though such references are made without any clear understanding that multiple possibilities as to what that property is might exist, nor does such a reference indicate an understanding of the complexities of how such a thing might be protected. IP broadly conceived is now even making its way into American national security discourses. US officials claim that foreigners are hacking into US systems and stealing what is referred to as American IP (Halbert 2014). Such use of language is political. Corporate lobbyists similarly claim their ‘war on piracy’ extends the ‘war on terror’ and the ‘war on drugs’ that characterized the decades’ either side of the millennium (David and Whiteman 2014).



As IP has taken on more contemporary significance, the history of its emergence has become an area of scholarly focus. Today, a plethora of scholarship exists interested in mapping the historical terrain of IP, especially as it relates to copyright and patents. This scholarly investigation is multinational and multidisciplinary and uses a variety of techniques to better understand the history of IP so as to make claims regarding its contemporary meaning and policy directions. In this chapter we will first detail the origins of the concept of IP; then provide a brief history of the primary legal regimes this umbrella concept covers – copyright and patent law primary among them; and finally – but most interestingly perhaps – map out the rise of today’s global IP regime, its power, structure, scope and yet also its limits and the resistances to it.

### THE HISTORY OF IP AS A CONCEPT

As Susan Sell argues, the history of IP is not linear and is rife with contestation (2004, 268). The ongoing and historically nuanced debate about IP, as discussed in the previous chapter, is not *just* about whether IP is property but also, if property it be, what type of property it is. Some scholars argue that we should not call the limited rights extended to protect these types of creative work property at all (Smiers 2008; Boldrin and Levine 2008). Boldrin and Levine, for example, titled their book *Against Intellectual Monopoly* because they argue we should not conflate the concept of property with that of monopoly rights. That being said, the language of IP has long been associated with copyrights and patents, to the point that virtually all the literature on the subject uses the concept of IP as a general descriptive term. This does not mean, however, that the idea of IP *as property* should remain unchallenged or uncritically assessed. While the first chapter sought to deconstruct and critically interrogate the term IPRs, in this chapter we will look more historically at the concept.

The contemporary debate over IP, as Sell points out, is intricately linked to public policy. How we define this type of property will influence the balances struck and the policies defended. These theoretical beginnings were discussed in the previous chapter in terms of their Lockean and Hegelian origins. As noted in Chapter 1, Locke’s account was taken in different directions by ‘natural rights’ and ‘utilitarian’ interpretations. While IP holders often revert to the natural rights frame when making a strong case for their ‘rights’, it is the utilitarian balance of interests approach that has been central to the framing of law, even if rights holding lobbies have also always been active in tilting the interpretation of any such balance in their own favour. A utilitarian account of IP focuses on its functional use in fostering mental labour rather than using claims to natural rights arising from authorship and originality as a justification for extending IP protection.

Such utilitarian approaches are most clearly exemplified in the emergence of the American system of copyright where protection of copyrighted works was offered to incentivize innovation by protecting the possibility to profit from the work. In contrast, the moral rights of an author to have his or her name associated with the work is an important aspect of French copyright law where the individual personality of the author must be kept central to copyright claims (Sell 2004, 272).

Justin Hughes in recounting the origins of the term IP suggests that the idea of creative work as property is not new, but has long been associated with copyrighted products, though they were originally designated as literary properties, not as IP (Hughes 2012, 1294–1295). Sell has found references to the concept of IP in the early 17th century (2004, 270). By looking historically at the concept of IP as it evolved in English, French, Italian and Spanish cases, Hughes finds that the term IP was used broadly to refer to a variety of different types of creative works (but still focused on copyrighted works) by the mid-19th century. Other related terms such as industrial property and literary property also remained in use. However, in all cases, by the mid-19th century the term IP was in general use (Hughes 2012, 1303–1310). Ecuador was the first state to enshrine the concept of IP in its constitution, which happened in 1845, primarily to focus on protection of patented inventions (Hughes 2012, 1310). The post-revolution Mexican constitution written in 1917 included the concept of cultural rights, one of the first constitutions to do so (Álvarez 2014, 281).

While calling creative abstractions property has a long history, the use of the term IP, according to Hughes, came to prominence with the creation of the World Intellectual Property Organization (WIPO) in 1967. While the precursor to WIPO, the Bureaux Internationaux Réunis pour la Protection de la Propriété Intellectuelle, did include the phrase IP in its title, Hughes argues that in reality the concept of industrial and intellectual property was largely interchangeable until WIPO helped consolidate the concept through its name (2012, 1297–1298).

By the mid-1980s, Hughes argues, the umbrella concept of IP was being used far more regularly to the point that other terms (literary property and industrial property) fell out of use (2012, 1308). Today, the concept of IP has come to stand internationally as an umbrella term that covers copyright, patents, trademarks, industrial designs and the like. The creation and evolution of IP as an umbrella term does not, however, mean that debate over the nature of this sort of 'property' has diminished. Rather, the legitimacy of IP *as property* has been a consistent part of the historical debate (Rose 1993). As pointed out in Chapter 1, there is nothing natural about the concept of property per se, as Mark Rose elaborates in his foundational work on copyright as literary property.

While John Locke's labour theory of property first gave literary men access to appropriate metaphors to define their work as property (Rose 1993), these metaphorical extensions from the physical to the literary – while taken as literal by some – were never fully taken 'literally' in law.

Thus, as those delving into the history of IP today have articulated, the road to the present was paved with numerous battles over the scope and breadth of these property rights. That being said, while resistance and debate have been integral to the evolution of the myriad legal doctrines under the term IP, the concept has only broadened out over time. In other words, once a new domain of knowledge is defined as 'intellectual property', which can either include a new innovation (like when computer games were invented) or a new genre of rights (like GIs), it is integrated under the larger umbrella of IP. The process of creating these property rights appears to go only one-way. Once a category of work is protected as a kind of IP, so far there have been no instances of deprotection. The expansion of IP brings additional types of creativity under the umbrella of a capitalist property rights regime. As capitalism expands it remains unlikely that a given creative category, once classified as open to ownership, will revert back to a prior legally unprotected state. Individual works will eventually enter the public domain (although the term extension has pushed this 'eventually' ever further into the future), but to date the categories open for inclusion have not witnessed such reversion. So, even as we acknowledge the nature of the property right as a social contract, it is important to note that rescinding property rights once granted is far more difficult than expanding property rights to begin with. As we develop the specific histories of individual regimes, this process of propertization will become clearer (Löhr 2011). The way the concept of IP has expanded over time, despite resistance, is part of the historical story to be told.

Central to the origins and framing of all forms of IP law has been the tension between the ownership of the creation, which implies an ability to control its dissemination, and the desire for social innovation understood as an important element of human progress. Almost every author writing on the subject of IP has noted the constant and ongoing tension between individual ownership (and control) of ideas and the social nature of ideas. A particular version of romanticism presents creativity as the result of the inner workings of the detached and original genius. However, such constructions of 'romantic creation' as purely individualistic acts were only themselves a partial and largely distorted account of 'romanticism's' relationship to culture, community and nature (David 2006). Individual ideas do not exist in a vacuum, but rather emerge out of social interaction and emersion in the general and specific flow of ideas. The social nature of creative work is important to acknowledge, and as such, our current legal

structure does acknowledge that there must be a limit placed upon the right to control inventions and literary works. It helps that IP evolved as a function of the enlightenment, where progress and an unflagging faith in the construction of a better world through ideas were foundational to the policy-making process. To ensure progress, as the US Constitution notes, it is necessary to construct *limited* monopolies, thus acknowledging the relationship of the individual to the need for and value of social interaction within innovation.

As the history of IP is written, one of the significant questions to be asked is how well the extension of limited monopolies has done in sparking innovation. As can be expected, there are numerous answers to this question depending upon how the measure of innovation is framed. For example, Timothy Wu's (2001) excellent book about technological control and monopoly power details how innovation is often slowed by strong ownership rights. From an economic point of view, Boldrin and Levin (2008) have argued against patents as they hamper innovation. There are numerous concerns emerging from fields of creativity where the logic of IP is beginning to rear its head – fashion design, quilting and other material arts, cooking and such. These 'negative spaces' of IP, defined by Raustiala and Sprigman as creative industries that do not as yet have strong IP laws governing innovation, continue to innovate. Yet the pressures to, and complexities of, creating new types of property rights are becoming more visible (Raustiala and Sprigman 2012).

In the next few pages of this chapter we will briefly discuss the origins and history of the myriad IP regimes and how these regimes are internationalized and extended across the globe. Each regime has followed a distinctive path into existence and covers different types of creative works. While we offer some of that history here, we will develop the specifics of these regimes in later chapters as well. The common threads that connect these legal regulatory schemes under the banner of IP are, first, that all these forms of protection regulate the double interface (a) between intangible idea/observation and tangible expression/invention, and (b) between tangible expression/invention and its physical embodiment or carrier. The tangible expression/invention sits conceptually between pure ideas/observations on the one hand and specific physical objects that contain/utilize the expression/innovative step on the other. A pure idea/observation cannot be protected by IP. IP applies only when such 'abstractions' are manifested in tangible forms (which are not themselves the same as individual physical objects as such). So, for example, prior to digitization, a novel was held in the physical print medium of a book. However, it was not the physical book per se that was subject to copyright laws but the expression contained in that object. Thus, you could sell your physical copy of the book or share it with others, but you could not

make additional copies of the text and sell those. Thus, the property rights were divided. The person purchasing the physical book owned a property right to that specific copy, but the copyright owner retained ownership of the expression written in the book. Nobody was supposed to own the pure idea/observation. Today, tangible expression (that which IP covers) encroaches further and further up into 'ideas' and 'down' into physical objects themselves.

Second, laws were originally designed to protect commercial uses of these types of properties, which are otherwise very easy to appropriate (at least by rival manufacturers, publishers, etc.), given their distinct non-tangible nature. This non-rivalrousness, as mentioned in the previous chapter, required the construction of a legal regime to ensure adequate scarcity in what would otherwise flow quite freely. However, today, of course the law has gone well beyond merely protecting commercial uses and now includes all possible uses including derivative works based upon an original, small appropriations and non-commercial sharing.

## HISTORY OF COPYRIGHT

With the introduction of the printing press in Europe and the ensuing radical transformation in the circulation of knowledge there, new concerns about copying and controlling the copy emerged. One aspect of the concern over printing, not typically recorded in the copyright narrative, was the government's desire to control what was printed and to censor that which the state believed should not be disseminated. The second aspect of the transformation wrought by the printing press was the growth of a market in literary works. In this context, commercial publishing could have an impact on the livelihood of both authors and printers, as could 'piracy'. Thus, literary property came to be regulated with commercial interests in mind alongside prior political interests in controlling the circulation of ideas. As conflicts between authors and printers and between 'authorized' printers and 'pirate' printers developed, legal debates over copyright reflected the concerns of the many interested parties (Rose 1993).

Most origin stories focus upon the 1709 Statute of Anne as the first copyright statute extending a limited monopoly to literary works (Ochoa and Rose 2002). While publishers sought a perpetual right in their products, the Statute of Anne only provided a limited term of protection, a decision that was upheld in the landmark case *Donaldson v. Beckett* (1774) (Ochoa and Rose 2002, 917). The Statute of Anne in the UK, its creation and contested interpretation, exemplifies the struggles over how to define ownership in literary products. These same debates became central to the construction of the US constitutional language designed to protect IP. As Ochoa and Rose note, the framers of the American

Constitution ultimately settled on a utilitarian view of IP. As the framers understood it, these were not 'natural' rights but rather monopoly rights granted by government for a limited time. Even with these arguments in place, many in the newly formed US were deeply suspicious of the power of government to grant monopoly privileges (Ochoa and Rose 2002, 926–928).

What is interesting about copyright from the perspective of the present looking backwards is how far the idea has travelled since its inception. Establishing copyright over literary works was central to the original legal debates and statutes. However, it is now the case that far more than books are protected under copyright law. From copyright's limited initial goal – to protect booksellers (and note that it was booksellers, not authors that were protected here – as assigning ownership to the author was not to come until the mid-19th century) – the metaphor of ownership, or we might say the social contract, began its expansive journey. As indicated by the evolution of things covered by copyright under US law, expanding copyright to cover things other than books was part of the process of further owning the world of ideas (Association of Research Libraries 2014). The American expansion follows and has been followed by other countries in a very similar sequence, especially given the requirements associated with membership in WIPO and its associated treaties. Late to join the Berne Convention (only in 1988), the US was once strongly resistant to international copyright enforcement, which it saw as exerting 'Old Europe's' control over knowledge. Yet, once the US became the dominant player in the production and sale of such culture, it became the primary driver in attempts to expand and harmonize copyright worldwide. Today, American IP protection mirrors and is mirrored in the international agreements that defend copyrightable works worldwide.

The common denominator found in all forms of copyrightable works is that they are types of creative labour that can be 'fixed in a tangible form'. Once fixed, the law prohibits unauthorized copying. What also becomes clear is that copyright has evolved over time in reaction to technological innovation. As new technologies make new forms of expression possible, copyright law broadens to include more things. However, given the already existing assumptions about authorship and ownership, the underlying principles upon which copyright is based remain the same, even though one might argue that a computer program is a far different creature both creatively and commercially than a movie or a book. What connects all these things together – from sound recordings and architectural works to literary works and maps – is the fixation of the creative expression of an individual (identifiable subject/legal personality) into a form that can then be shared with others.



Despite the common requirement for tangible fixation, the diversity in copyrightable subject matter raises significant concern. Michael Carroll identifies what he calls the uniformity costs of IP, when the law protects so many different things in the same way. Copyright law as 'one size fits all' has its own policy consequences. Many businesses and all end-users would be better served by specific, flexible and shorter legal terms, suggesting a need to rethink policy beyond one blanket copyright framework (Carroll 2005). Instead of expanding the ownership of ideas through perpetuating one broad and uniform instrument, specialized regimes for particular purposes might make more sense, especially given that the economic life of most copyrightable products ends many decades before the copyright does.

## HISTORY OF PATENTS

Innovation and technological development in the world of patents, while sharing a common trajectory with copyright law, has a separate history. Often this lineage is traced to the guild system and the relatively secret methods used and carefully guarded by such a system. The earliest emergence of a patent system is traced to Renaissance Italy and the 15th-century Venetian system of protection for devices and processes requiring skilled labour and ingenuity (Duffy 2002, 710–711). From there the idea of patents spread to Germany and on to France and England, brought by Italian innovators as they travelled (Duffy 2002, 711–712).

In England, the precursor to the patent was the letters patent, designed to encourage trade and innovation in England. These royal decrees began in the 14th century as England sought to encourage foreigners to travel to the country, with a promise of monopoly protection for 14 years – the span of two apprenticeships to train people in their trade (Mossoff 2000, 1259). However, the first Anglophone patent law was the English Statute of Monopolies in 1624, though patents as privileges granted to inventors and craftsmen existed prior to that date (Biagioli et al. 2011, 25–26). The English state began granting monopoly privileges in the mid-1550s, but it was the 1624 Statute that was the first law that granted patents as rights secured for achievement rather than as privileges granted through favour. The act was passed to end what many saw as the political abuse of patent privilege by the Crown. The new law undermined the idea of a patent as a privilege and opened the way to patenting a swathe of new inventions, rather than just incentivizing the travel of old ones to England from abroad (Ochoa and Rose 2002, 912–913; Mossoff 2000, 1264–1265).

US patent law, much like copyright law, takes up the debates that the British model initiated. According to Mario Biagioli, the 1790 Patent Act passed in the US represented a conceptual break in how governments designed patent law. Prior to the 1790 Act, the privilege of a monopoly went to the person who put the invention to work first. Such a process focused on the local application of knowledge. The US Patent Act, in contrast, focused upon novelty in who thought of the idea, not where that idea was first reduced to practice (Biagioli 2011, 29–30). Shifting the focus of patents to novelty instead of practice produces a different type of focus for patent law. Such a shift, while seemingly insignificant, did as a matter of policy mean the workability of an idea became less central to its patentability claims than its manifestation in the form of something novel. Fast forward to the 21st century and the broad patents issued over novel ideas and the long-term implications of such a shift can be seen in patents for generic inventions with broad but as yet unused potential applications. We return to this issue in Chapter 4.

Central to both copyright and patent debates are theoretical arguments about natural rights, social contracts and utilitarian justifications for government-sanctioned monopolies, the philosophical foundations of which we discussed in Chapter 1. In both cases, what began as a government grant of a monopoly privilege by the Crown shifted into a different type of social contract entirely. Adam Mossoff argues that the transition between a royal patent prerogative and the understanding of patents as a property right negotiated within a larger social contract was made possible, in the UK at least, through the adoption of a natural rights approach to IP laws (2000, 1258).

As was the case with copyright, the scope and depth of patent law has expanded over time to include new forms of subject matter. So, for example, under contemporary patent law in many states one can patent a business method, a seed, a living organism and much more. While the limited duration of protection for patentable subject matter has not increased in the same way that copyright duration has expanded, many industries have found ways to continue to enforce their patents even after they have technically been terminated through a process called ‘evergreening’. Thus, while not perpetual, patents have become a far more expansive and powerful form of legal protection than they were in the past. We will return to patents in more detail in Chapter 4.

## HISTORY OF TRADEMARKS

Trademarks, as a form of IP, offer a different type of social contract between the mark holder and the general public than that found in patent and copyright law. In part, the difference is the result of who authors a trademark. While both

copyright and patent law retains the legal fiction of an individual creative author and indeed the appropriate registration in both cases requires that the author/inventor be named, trademarks are clearly the child of a commercial enterprise. Obviously, trademarks, especially modern ones, are the creative work of advertising agencies or company employees, but unlike copyright or patents, the individual authorship of such marks is rarely, if ever, central to their use or protection.

While other forms of IP offer a limited time of protection prior to entering the public domain so that these creative works or inventions can then be used as the scaffolding for new works, trademarks exist to assure the public that the product they are purchasing is from an authorized dealer. A trademark is a perpetual property right so long as the company that owns the mark uses the mark in conjunction with their products. A trademark may be believed to ensure the quality of a product by aligning it with its brand name. However, this is a misattribution (Chon 2014). The public may be protected by trademark enforcement from a dishonest business seeking to market its product under the name of a better known and more trusted competitor. However, trademark protection does not ensure that the 'trusted' brand is in fact trustworthy, only that they are the legal seller of a product carrying that mark, an idea we will return to in Chapter 5. Trademark regulates the identity of the seller, not the quality of the product or even the origin/originality of the producer (the design and manufacture of which is very often outsourced even as the corporation retains the 'brand'/'trademark'). Thus, while trademarks are considered an important kind of IP, their existence is not premised upon protecting the genius of an original author, despite the fact that, of course, this type of work can be quite creative.

*Sandforth's* case (1584) marks the first known legal case involving a trademark dispute (Stolte 1998, 507–508). The case involved a clothier who filed a complaint against a person who was marketing an inferior product under the same name as his own, a practice that ultimately hurt the plaintiff's business (Stolte 1998, 529–533). While the court did not find for the plaintiff, what is important about the case is that, according to Stolte, it is the foundation of Anglo-American trademark and an indication of the protection from trademark infringement as a common law right (Stolte 1998, 510).

While the legal history of trademark law predates the industrial revolution, trademarks gained popularity in the late 19th and early 20th centuries as factory-based manufacturing became more central to the production of goods. National markets meant the birth of national brands, and modern trademark law can be associated with the national marketing and distribution of products (Merges 2000, 2206–2207). Thus, while its roots also dig deep into history, trademark law comes into its own with the growing importance of advertising and mass marketing.

Today, trademarks go well beyond simply protecting a company name. Trademarks can include colours, sounds, phrases associated with advertising the product and any other possible aspect of a branding scheme that identifies a specific product. Trademark law is the foundation of what modern corporations sell – not simply a product but the brand itself. It is not just the product that a person is interested in purchasing but the image associated with these commercial goods as well. Thus, corporate branding instills trademarks and the law surrounding them with far more power over how we make our commercial choices than the legal category originally commanded (Klein 2009). As efforts are put into controlling ‘non-traditional marks’ such as shapes and smells, it is clear that much like other areas of IP law, the scope of trademark law has changed from its origins into something much broader today.

## HISTORY OF TK AND ITS PROTECTION

The construction of IPRs as time and otherwise limited by necessity places some knowledge (sometimes from the start but otherwise eventually) outside the protection of law in what is called the public domain. Given that both copyright and patents exist for a limited time (though in the case of copyright this is quite a long time), it means that once the law ceases to protect the rights associated with the copyright or patent, the work becomes publically accessible without requiring permission from the owner to reproduce or use the work. A limited monopoly is extended to an author or creator with the understanding that the works will at some point be freely available for use by the public once the period of protection ends.

However, conceptualizing IP as limited and developing the associated concept of the public domain creates problems over how one ought to recognize the cultural significance of TK, traditional cultural expressions and other forms of creative and innovative work that have never been protected by modern IP regimes. It is often difficult to protect these other types of knowledge because they existed before and/or beyond commercially oriented western IP law, despite being appropriated and commercialized by colonial and corporate actors. Furthermore, the logic of the sole inventor or original author does not fit well within cultures where individual contributions are not recognized as separate from collective cultural survival. In some cases, such cultural processes are lost to history, and even if it would have been possible to locate an individual creator, those names are long lost. All cultural works that are no longer within the scope of IP protection are subject to appropriation and

use without the authorization of a creator or a creator's heirs. Such work is within the public domain. The appropriation of indigenous peoples' knowledge from such a public domain by western commercial actors has led some to ask whether the logic of such a public domain works when balancing protection and access between different cultures rather than within the history of any particular society.

First, the collection of knowledge from indigenous peoples throughout the globe is closely aligned with the colonial projects of the European past. Colonization by western forces included numerous investigatory trips around the planet to collect plant life, animal life and people, including their cultures, in the name of progress and science. Such widespread appropriation could occur because western explorers did not conceive of indigenous peoples as existing in anything more than the state of nature. They were certainly not protected by the IP regimes systematically emerging to protect profitable knowledge in the west itself. Thus, colonization and the appropriation of indigenous knowledge have gone hand in hand (Smith 1999; Halbert 2014).

Second, as the concept of IP has taken hold and as different forms of IP have become more pervasive, the protection of TK has become an important issue in IP debates (Dutfield 2006; Oguamanam 2006; Sherman and Wiseman 2006; Graber and Burri-Nenova 2008; Boateng 2011). Given the widespread and continued appropriation of indigenous cultures by the west, one political approach to protecting TK from further exploitation has been the attempt to establish property regimes based not upon the individual contribution but on collective rights over cultural expression. While there is an uneasy fit between IP and TK, there is now an effort at WIPO to establish some method of protection that would align the needs of indigenous peoples throughout the world, and to value their cultures, with WIPO's mission to promote IP.

More recently, the advent of a new type of IP, GIs, has found resonance with indigenous groups. GIs of course move well beyond the protection of IP in TK and were developed in part to more rigidly protect products perhaps best associated with trademarks. Thus, the names of French cheeses and wines can be more clearly controlled based upon a regional marker of identity. GIs are a layer of property rights that build upon trademark in an individual brand. As a property right based upon a territory rather than an identifiable individual innovation, and designed to protect the commercial products of a region, the creation of GIs (like trademarks) create a different type of ownership in ideas disconnected from the original genius of any individual. Indigenous groups have found that such rights resonate, though not unproblematically, with historical cultural practices (Coombe et al. 2014a, 2014b).

## THE HISTORY AND EVOLUTION OF INTERNATIONAL IP

The acquisition and spread of knowledge has been integral to national development and progress. As part of that development, intellectual and academic exchange has long reached well beyond national borders, with early inventors sharing their findings through publications and letters that traversed the globe. While the pace at which such information could be exchanged was limited by the transportation methods of the time, sharing knowledge is the foundation of the enlightenment ideal of progress. Furthermore, as people travelled from one place to another, they brought with them their ideas and innovations. As discussed earlier in this chapter, one of the original justifications for patent privileges was to provide an incentive for foreign innovators to share their knowledge across national boundaries. Where ideas were not shared, they were appropriated. For example, the 19th-century American approach to copyright was to unabashedly copy international works without paying the original authors, an issue that became a central feature in copyright debates at the time (Hughes 2012, 1328–1329).

Despite the colonial underpinnings that framed the global acquisition of natural and cultural objects from around the world, such practices also indicate that the flow of knowledge has long been global in scope. While the contributions of indigenous people was almost always appropriated into western knowledge structures without attribution, the global appropriation of indigenous knowledge suggests that widespread exchange of ideas happened in many directions (Smith 1999). Even today, western thinkers draw from the political and social thought of indigenous people without attribution (zotofoto 2014). Fields such as ethnobotany and anthropology have begun to map these exchanges and to make much more visible the global connections between cultures, people, plants and their environment.

Knowledge does not respect the political borders of the nation. It is of course possible with sufficient regulatory effort and enforcement resources to halt the unauthorized production and distribution of knowledge-based products, such as books, movies or pharmaceuticals. However, it is much less possible to stop people from being inspired by seeing the works of others, or keeping them from talking to each other, playing music together or viewing different types of innovations. Today, from North Korea to the US the inability to control how knowledge is shared via communication networks is seen as a new national security threat. A recent report on the threat of IP theft concludes that foreign students threaten American national security when they come to the US to study and then return home with valuable IP inside their heads (The National Bureau of Asian Research 2013, 13). These students may not steal tangible

items while in the US, but the government fears the flow of knowledge itself. The claim that getting an international education is now an act of IP piracy should seriously concern those interested in progress and innovation.

The literature available on the history and scope of international IP is vast (Ryan 1998; Drahos and Mayne 2002; Gervais 2003; Sell 2003; Yu 2004; May and Sell 2006; Bird 2008; Netanel 2009). Countries embrace nationalist discourses about innovation and cultural creation, where any innovation that occurs within their territory can be aligned with the nation-state. The state can derive a level of legitimacy for governance by aligning with the underlying cultural creativity of its people. However, the inspiration brought about by contact across national borders, cultures, languages and the like is not easily confined within the boundaries of the state system. As a result, laws promulgated at the international level are developed in such a way that signatory states can extend protection over IP beyond their own borders and thus beyond the sovereignty of their domestic law. Despite the fact that the law of a country stops at the border of its sovereign territory, the internationalization of IP protection means a country's 'intellectual property' continues to be secure as it travels the world. International IP law exists because ideas travel so easily across national borders and those who claim to 'own' these ideas wish to extend protection through the law further than the boundaries of their own state.

The earliest international treaties dealing with IP – the Berne Convention (1886) and the Paris Convention (1883) – were both negotiated in order to make domestic IP secure as it travelled the globe. Concepts such as national treatment, that a nation should treat the IP of another nation like they would treat their own, were developed to secure ideas and innovations that could otherwise not be controlled. Today, there are numerous international regimes focused on widening, lengthening and deepening IP protection. Central to the international negotiation of IP laws are the WIPO, and the WTO which is home to the TRIPS Treaty. Together, these agencies form the modern foundation for international IP laws.

In both cases, these agencies function under the auspices of the nation-state with negotiations taking place between representatives of the member states who have signed the agreements. In addition to the WIPO-administered treaties (most notably the Berne and Paris Conventions) and WTO TRIPS, other international organizations have an ongoing interest in how IP develops. UNESCO, with its focus on education and culture, has played a role in IP-related discussions and is home to the Universal Copyright Convention (UCC), signed in 1952 by the US and numerous developing countries who were unwilling or unable at that time to meet the standards set by the Berne Convention, in particular in regard to the enforcement of copyright on the works of foreign authors.

Specifically, the Berne Convention reflected the European approach to copyright law with a focus on the rights of the author, while the American approach was statutory and more limited and included notice and registration requirements not found in European law (Sandison 1986, 89–90). However, when the US agreed to sign the UCC it marked the end of US isolationism on issues of copyright, and many saw this treaty as paving the way for US membership of the Berne Convention (Sandison 1986, 90). The US finally joined the Berne Convention in 1988.

Once the Soviet Union signed the UCC in 1973, the treaty served Cold War détente purposes, being acceptable to both the US and the Soviet Union, an outcome that had taken numerous decades of negotiation. Having both parties as members of the UCC was completed in an effort to better secure the circulation of ideas between the US and the USSR (Levin 1983). When the Soviet Union signed the UCC, the US expressed concern that the Soviets were only signing to use copyright law to censor Samizdat works that were being published outside the Soviet Union (Johnston 1999, 123). Ironically, Cuba accuses the US of using copyright to stifle the spread of knowledge today (Álvarez 2014).

The Convention on Biological Diversity has also elaborated on the importance of IP for conservation work, specifically as this relates to plants and TK. Furthermore, Article 31 of the UN Declaration on the Rights of Indigenous Peoples states that Indigenous peoples ‘have the right to maintain, control, protect and develop their Intellectual Property over such cultural heritage, traditional knowledge and traditional cultural expressions’ (<http://www.wipo.int/tk/en/resources/faqs.html#c2>). However, there remains substantial debate over the relationship of IP to human rights (Graber 2008; Torremans 2008; Brown 2014).

WIPO is now home to numerous treaties that go beyond the initial protection of copyrighted works, industrial property and patentable subject matter. Today, there are treaties on the protection of GIs, also known as appellations of origin (Lisbon Agreement), phonograms and broadcasting (Rome Convention), audiovisual performances (Beijing Treaty), satellite signals (Brussels Convention), microorganisms (Budapest Treaty), access to publications for the blind, visually impaired and print-disabled (Marrakesh Treaty), and the not-yet-enforced agreement on integrated circuits (Washington Treaty). Since 2007, WIPO’s larger mission has been framed by what is called the development agenda. WIPO’s development agenda seeks the integration of development goals with an outcomes-based assessment strategy for WIPO programmes (Basheer and Primi 2008; de Beer 2009; Netanel 2009). The development agenda’s 45 recommendations for action require WIPO to measure and report on how its activities facilitate development in the global south (Yu 2014, 113).



Along with development agenda issues, WIPO has also been involved in attempts to bring the protection of TK into the general sphere of IP protection and has supported the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore. However, the protection of TK becomes problematic when WIPO's governing body only recognizes states as parties. Most indigenous peoples are governed by settler states that may or may not have their best interests in mind. The limit of an international system that only acknowledges states as legitimate negotiating parties is best illustrated by the gap between state power and indigenous communities. This gap in addition to the uneasy alignment of TK with mainstream ideas about IP has meant that WIPO's development committee has as of yet been unsuccessful in developing acceptable rules governing TK.

The WTO, replacing the previous General Agreement on Tariffs and Trade (GATT), has been a more forceful agent pressing for deregulation of international trade but tighter regulation of international IPRs. The creation of the WTO in 1994 (and enacted a year later) marks an international change brought on by the end of the Cold War and the rise of neo-liberal global network capitalism. Since its inception, the WTO has pursued a policy of deregulating global labour, trade and production regimes and of undoing regional and national barriers to free-market competition. However, the WTO also, as one of its founding acts, negotiated into being the TRIPS Treaty. TRIPS required all 161 signatories to the WTO to introduce into domestic legislation a requirement to uphold international IPR standards as developed in the TRIPS agreement. As such, while national monopolies and protections have been dismantled, global IPR monopolies and protections have been enforced and extended. Relative to GATT, TRIPS is backed up by tougher sanctions made available under WTO rules for punishing restrictions in the case of international trade and for punishing the non-enforcement of trade restrictions in the case of IP.

The emergence of the WTO and the TRIPS agreement created waves at the international level. Some commentators saw the TRIPS negotiation as a deliberate attempt to undermine WIPO's control over IP. As a 'forum shifting' effort, locating control over IP with the WTO was seen by some as an effort to bypass the myriad demands of the developing world, all of whom had a voice in the WIPO assembly but who had difficulty pressing for their interests during the TRIPS negotiations (Drahos 2003). The control exerted over the TRIPS negotiations by the US and other western powers meant that the language in the agreement favoured the developed world where already high levels of IP protection existed and where most IPR holders reside. The WTO more generally included a variety of trade issues of immediate concern to developing countries. IP was built into

the foundations of the WTO, via TRIPS, as a concern of developed countries. It became a condition of joining the WTO that developing countries signed up to TRIPS. In exchange, joining the WTO offered developing societies some relief from prohibitive trade barriers on their goods entering the markets of developed states. Not joining threatened continued exclusion and marginalization. Most developing countries signed up feeling they had little alternative and no negotiating power over the terms of their entry. Implementation of TRIPS by developing countries was deferred for some years. The implications of the agreement were not therefore immediately clear. When implementation was required, around the turn of the millennium, resistance in the south intensified.

After TRIPS, WIPO negotiated the WIPO Copyright Treaty in December 1996, to which there are currently 93 members. This treaty was even more stringent in extension and enforcement than TRIPS. Christopher May (2007) suggests that immediately after the founding of the WTO/TRIPS treaty, WIPO sought to reposition itself as an agent ratcheting up global IP expansion relative to what WTO/TRIPS secured as the 'baseline' of global harmonization. Nominally UN agencies WIPO is funded by IP holders and the WTO by IP-rich states. While seeking to regain its position as primary agent for the IP holders that fund it – after losing out to the newly created WTO – WIPO sought to take a harder stance, but this led to further resistance from developing countries. In time both organizations (WIPO and WTO/TRIPS) saw resistance from developing country members, and this has led to IP lobby groups migrating in recent years towards bilateral treaties like the now-defunct Anti-Counterfeiting Trade Agreement (ACTA) and the ongoing TTP and TTIP negotiations to continue ratcheting up IP enforcement at a global level, even if not by means of global (i.e. multilateral) agencies and treaties.

Much has changed since the original TRIPS negotiations. As Daniel Gervais points out, TRIPS has moved through three phases. The first was the implementation (addition) phase (Gervais 2014, 101) through to the end of the 1990s, where signatories were pressed to sign into domestic law strong IP enforcement and harmonization. Second, there was a reactionary (subtraction) phase triggered by the controversy over the issue of access to medicine (Gervais 2014, 101–102). Access to essential medicine brought attention to the TRIPS agreement in the late 1990s and early 2000s when western pharmaceutical companies (and states) sought to prohibit the production of generic HIV/AIDS medications by countries throughout the global south. The issue of access to medicine became a lightning rod for the globalization of IP laws. The debate over access to medicine was a visible example for many that the neo-liberal framework placed maximizing profits from pharmaceutical products, which were well protected under assorted IP laws over protecting human life.

Even if TRIPS included the necessary provisions to accommodate such emergency measures as producing generic versions of life-saving drugs (which some argued it did), pharmaceutical company litigation against developing states and lobbying within WIPO aimed to ensure this interpretation did not prevail, and that patented drugs stayed within their control.

For many states in the global south, a viable generic pharmaceutical industry allowed them to provide medicine at affordable prices for their people, and health care was conceived of as a human right. For western states or at least their powerful pharmaceutical lobbies, in contrast, access to medicine should only come through the preservation of a for-profit industry incentivized to test and distribute medicine by financial rewards. Western states, and their pharmaceutical industry lobbies, also claim that only monopoly-based prices generate sufficient profits to incentivize drug production in the first place (and into the future). As Chapter 4 details, such claims are highly self-serving, selective and exaggerated.

The tension between the developed and developing world sparked by the access to medicine debate initiated the Doha Round of TRIPS, culminating in the Doha Declaration in 2001. Access to medicine exemplified dispute over the neo-liberal approach to development, inequality, technology transfer and TK. At this point, the WTO began to encounter similar problems to those experienced by WIPO. Once developing countries came to appreciate the full implications of TRIPS, and built up some traction in opposing it, this multilateral forum became far less easy for developed countries to dominate.

While the WTO was negotiating the Doha Round and becoming a battle ground for international IP disputes, WIPO continued to be a forum for similar resistance to IP expansion from within the global south. Initiated by NGOs with an interest in development and member states from the global south, WIPO began to focus on its development agenda, a list of goals that if met will better align WIPO with the underlying mission of the UN to promote development. WIPO formally recognized its development agenda in 2007. These development-focused disputes create the conditions for a new phase in international IP protection.

According to Gervais, TRIPS has now entered a third phase, the calibration phase, where countries at very different stages of development seek to calibrate international protection with their domestic needs (2014, 102). We would locate the emergence of this third phase as arising gradually in the period between the TRIPS Doha Declaration in 2001 and WIPO's formal acceptance of its development agenda in 2007. This calibration approach would look more closely at the link between the local and the global and would allow (if implemented) different countries to create the types of IP regimes (strict or permissive) that best suited their level of development. This approach challenges attempts to

foster a harmonized – strong, absolutist and universal – ‘globalized’ IPR regime and, as will be set out below, has led to the formation of alternative vehicles for dominant economic actors and developed states to pursue such ends for as long as WIPO and TRIPS remain open to a wider, democratic and open set of interests and voices.

Since 2007, the WIPO development agenda and its multiple development goals, multilateral IP negotiations have changed. Both WIPO and the WTO have had to come to terms with the fact that not all nations view the strong protection of IP as an end in itself. Attempts to align the protection of IP with the longer term goal of development have been proposed, but remain contested. However, even as WIPO and the WTO deal with development-related challenges to their primary focus upon promoting IP protection as the general good, other vehicles to cement strong IP laws with no room for nuance and manoeuvrability have been constructed. Many bilateral treaties, known as TRIPS plus, have now been negotiated with the US as the dominant negotiating partner, requiring many emerging economies to embrace IP regulations that go beyond those found in TRIPS. Most recently ‘country club’ treaties between a limited number of negotiating partners have developed to further expand international IP (Gervais 2014, 107). Agreements like the now-failed ACTA and its twin offspring, the TPP and the TTIP, alongside a number of others, show a retreat by the strong IP lobby from the multilateralism of WIPO and TRIPS. While WIPO and TRIPS sought to bind the whole world in one go, but then united large parts of that world against such attempts at global standardization, bilateral ‘country club’ treaties favour a more controlled negotiating environment (Yu 2014). What these bilateral IP-related treaties have in common with one another, and with previous multilateral treaties such as were brokered by WIPO and WTO, is that they seek to bind states within powerful legal regulative frameworks that limit the future scope of states to independently determine their own IP laws. That the (third) ‘calibration phase’ of TRIPS, noted above, moves away from TRIPS’ original aim of creating globally binding legal frames above and beyond the control of states highlights that neo-liberal globalization was not inevitable and helps explain the shift by those seeking to further these original aims through a return to bilateral (sub-global) international treaties.

### **THE GLOBAL NETWORK SOCIETY AND INTERNATIONAL RESISTANCE**

Manuel Castells in *The Rise of the Network Society* (2000a) argues that the global economy as we now understand it did not arise naturally from free-market forces, but was rather produced through the policy choices of governments and

international financial institutions. As Castells notes, to function globally, multinational corporations need the international structures produced by the WTO, including the TRIPS agreement. The examples above show that such global structures were initially negotiated by corporate and dominant states' lawyers and are difficult to renegotiate by less powerful actors, but such difficulties can be overcome, if often in only partial fashion.

Despite the success of global network capitalism as manifested through the network society, the same global network society has also placed in the hands of (now) billions of citizens the capacity to infringe IP as never before (regarding copyright and trademarks), just as attempts to protect IP in fact intensify the incentives and scope to infringe it (in relation to patents and designs). The global popularity of file-sharing sites is perhaps the best example of a networked and global flow of those things formally protected as IP. Sites like *The Pirate Bay*, Kim Dotcom's *MegaUpload* and his new encrypted service *Mega* are examples of the global flow of IP not yet controlled by copyright owners. Literally billions of downloads from people living in all parts of the globe show the popularity of accessing movies, music, video games, pornography and any other form of digital content on demand and in formats that can be used instantly.

File-sharing has continued to develop, suggesting that even with changes in the law that have sought to bolster IP protection there is a continuing movement in how people acquire cultural products towards free-sharing. State actors have continued to crack down on file-sharing sites and impose criminal sanctions on individuals who file-share. Yet, such efforts appear both futile and misguided given the culture of and the capacity for file-sharing that is emerging. File-sharing has grown as its practice has found ever more complex ways around the law. Increasingly 'distributed' modes of sharing have consistently removed whichever bottleneck within the latest sharing network was being targeted by the courts. While these targets were being removed, so sharers have also systematically undone all the technical encryption and surveillance devices being used by rights holders to lock down content and/or track down infringers (David 2010, 2013). Recent scholarship looking at the motivations and morality of file-sharing suggests complex and nuanced attitudes towards the purchase of cultural commodities and the relationships that are forged through sharing (Larsson 2013; David and Whiteman 2014; Whiteman 2014). Sharers reject the dominant legal frames and have the capacity to act upon such rejection. The law is bypassed both culturally and technically.

There is at one level a political economy of file-sharing where many users see clearly the distinction between supporting an artist and supporting an industry that is exploitative of artists. Even more complex is the way that those engaged in file-sharing perceive their media-sharing habits (Edwards et al. 2014).

It is not the case that those who file-share never purchase copyrighted content, but they do so in different ways now that they have the option to preview and select what they may or may not then purchase. It may be that someone will watch a movie they downloaded for free and then based upon that viewing go see it at the cinema (David 2013). It may be that they listen to a downloaded song and then hear the artist live (Krueger 2004) or purchase related music. In other words, those involved in the sharing of cultural products remain involved in an economy where they purchase media content. However, media industries seek to control the circulation of cultural goods in absolute terms. All unauthorized use or access is deemed 'piracy' and 'theft'. Every possible viewing or exposure to media content is seen as requiring 'purchase'. Such an absolutist paradigm leaves no room in law for the sharing-based media consumption habits of a global file-sharing community. On the other hand, in practice, the law's lack of room to accommodate sharing has not stopped such free circulation of content.

The global resistance which has developed in response to efforts by states and multinationals to secure more restrictive IP laws through trade agreements negotiated by states on behalf of economic interests without public comment or transparency highlights that the global network society is not a one-way street. For example, when the ACTA was being negotiated, the talks were held in secret, with only trade association groups having access to the government representatives developing the rules. However, once made public, people took to the streets in protest (Lee 2012). Such protests were global in nature, spanning multiple cities, especially in Eastern Europe, where ACTA was felt to be reminiscent of Soviet-style surveillance (Kirschbaum and Ivanova 2012). In part, resistance to ACTA was spurred on by the global protest hacker collective *Anonymous*, itself a manifestation of the global network society. While ACTA sought to ensure better security for copyright and trademark holders over their products, the existence of popular revolt highlighted the global divide between states negotiating for corporate interests and the interests of the people living in these respective states for broader access to knowledge and products protected by IP law. The resistance generated by ACTA helped clarify that corporate interests and state officials' support for such interests are not synonymous with the needs of citizens. When protests led some state actors to withdraw from the process, the ACTA negotiations collapsed.

Protests continue against the ongoing negotiations surrounding the TPP and the TTIP, two bilateral transnational agreements that picked up where ACTA left off. TPP and TTIP also seek to enhance IPRs for large patent and copyright holders and, much like ACTA, demonstrate the gap between global economic interests protected by western government negotiations and the

interests of everybody else (Baker 2014). While ACTA was genuinely global, TPP and TTIP are only transnational when taken individually, but are global when taken together. These agreements are designed to bypass national legislative processes and impose even more restrictive IP regulations on signatory states, even as states will be required to act in enforcing their conditions.

## CONCLUSION

The history of IP continues to be written. As IP becomes more globally relevant and academically significant, scholars have turned towards examining its historical origins in more detail by investigating how the law plays out in individual cases and more broadly as part of an ongoing social contract between different social actors. Retelling the larger story of IP origins situates the present within a more clearly understood and political past. Such a process helps reveal the fact that the laws we have today, protecting all forms of IP, are neither neutral nor the product of unanimous consent. Rather, the history of IP is a history of political battles, theoretical disputes and, of course, an interest in monopolizing and controlling markets in intangibles.

For those suspicious of IP extension, however, telling the history of IP is important because it shows that there has always been resistance and debate over what justifies/fails to justify protection of IP. In addition, as has been pointed out in this chapter, a historical account of IP clearly shows that terms of protection and grounds given for protection have diverged over time and have differed between places as well as between different forms of IP. The debates over international IP are no different – while TRIPS may have been implemented initially without significant global resistance, such resistance is now part of every international debate over IP.

Divergent terms of protection between countries, over time and between forms of IP, highlight the non-existence of any discernible ‘natural’ or ‘necessary’ assignment of an origin of ideas (as required to found claims to natural rights) whether to protect individual ‘author’ claims against society’s appropriation or to balance relative claims of individuals and the wider community. Similarly, the different claims as to what warrants protection in ideas – promoting individual ‘originality’ in the case of copyright and patent – in contrast to promoting the preservation of established forms in the case of trademark, GIs and TK – force us to recognize the non-existence of any singular, or natural, foundation for assigning property rights in ideas. The specifics of this historical debate should not be lost to the overarching and prevailing sentiment that IP is somehow a natural right, or that the individual should be rewarded more substantially than the larger cultural and social world within which that person works and is

inspired. Ongoing debate at the international level over how far and how best to protect IP also signals the social construction of these rights which, far from being natural, were initially imposed on the global south.

The rise of IP over the last three centuries has culminated in the last three decades with an attempt at global IP harmonization alongside radical expansion in reach, duration and depth. Powerful lobbies have sought to shape the formation of older and new institutions at the international level. To some extent they have been very successful. However, resistance and failure has also been their lot. In the following three chapters these struggles to extend and resist global IP harmonization and intensification are documented as they relate to the most significant fields of IP, copyright, patent and trademark (with related discussions of GIs and industrial designs). There have been victories and losses on all sides and in all areas. There is no singular and definitive outcome, even as a mapping of the terrain enables a clearer understanding of what is at stake.