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Intellectual Rights and workers' expropriations

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Perfumery constitutes a sphere of counterfeiting of all sorts. The act ranges from the simple appropriation of a brand name and bottle shape to a slightly more expensive reproduction of fragrances by using a concordance table creating equivalencies between the proposed perfumes and the sale of well-known branded perfumes. For a long time, however, in the absence of methods of objectifying olfactory similarities recognized by the courts, the counterfeiting cases drew principally on games of qualification that allow one to infer an illegal manipulation of brand names for promotional and commercial purposes. At the end of the 1990s, an industrial property consulting firm sought, in connection with a team of chemists, to create a battery of tests to objectify the olfactory proximities and to have the courts recognize this mode of proving the counterfeiting.

Here, we report the remarks of one of the consultants whom we met again during our July 2019 investigation, more than twenty years after our analyses of counterfeits and of the way the experts provide evidence:

At the time, it was a matter between our client and a very important industrial company with Russian and Saudi investors whose business model was issuing perfumes that very closely imitate the fragrance but not as sloppily as in Vintimille or in other locations... and often provisioned by the same suppliers ... They did what all the luxury companies do, they all copy one another, why not us? We succeeded in having them admit to the methodology. The problem was to objectify the olfactory closeness. Fundamentally, copyright does not exclude olfactory creation, but it does not explicitly anticipate it, and the second legal fundamental was unfair competition. Thus, we developed a battery of tests to objectify the olfactory proximity, so with a rather classic first test consisting of analyzing the principal components using a GC [Gas Chromatography], one takes the original perfume and the potentially counterfeit perfume and from 40 main ingredients one determines the number of ingredients that are identical or are just substitutes, knowing that the creator has nearly 150 ingredients on hand... in the case of item B[,] we found 36 of the 40 were identical. So, statistically, the probability of this being a coincidence is extremely unlikely. This process of objectification has been adopted by several courts, including federal courts in the Netherlands and Germany. Well, in France, with the court of cassation, there are two contradictory decisions, but for different reasons...we have since created jurisprudence.

This case is interesting for several reasons. We start with the fact that the cases of counterfeiting are ruled by norms crafted at the international level, which is not new. Indeed, if there is a sector where the law has quickly become internationalized, it is intellectual property law (hereafter, IPL). Beyond diffusion of the individualist model of the author (or even the inventor) since the 18th century, this internationalization can be explained by the specificity of works of the mind that present the characteristics of a public good that can circulate quickly in the distinct sites of the original production. This circulation of knowledge introduces a fragmentation of the knowledge between the sites of production, diffusion, and consumption. This fragmentation favors counterfeit products in different countries (Appadurai, 1986). It is one of the principal reasons there have been efforts, since the end of the 19th century, to standardize IPL at the international level (Paris Convention of 1883, for

the industrial property; Bern Convention of 1886 for the protection of literary and artistic works). In that period, the patent agents and specialist attorneys played a determinant role in the organization of congresses and, later, international conventions in which they discussed extending the law to new objects (Galvez-Behar, 2008). They relied on their daily practices of writing patents and filing trademarks in anticipation of counterfeiting and legal settlements also being concerned with copyright. More than a century later, these professionals are always seeking new objects to protect against competition and processes of objectification of more or less fraudulent imitations with an eye toward steering the jurisprudence. Thus, they play a determinant role in the definition of IPL.

Another contribution of this case, in connection with the question of the authentication, is the reference to copyright in the sector of olfactory creation, raising their “nose” to the status of an author whose works must be protected. The fragrance is thus perceived not only by its chemical composition, which is today protected by patents, but also, following its sensory perception, confers upon it an original form (Binctin, 2012).

This case demonstrates how corporations’ growing interest in how intellectual property rights (hereafter, IPRs) permit them to reinforce their immaterial assets. At the same time, this capitalization of IPRs has been the subject of critique of alternative movements, advocating for forms of economic organization based on the free circulation of knowledge as well as the part of the academic world denouncing the extension of intellectual monopolies conferred notably by the patents for invention (Boldrin and Levine, 2008). It is important to note that the number of patent (and trademark) filings have enjoyed sustained growth since the 1980s and at the global level following American political reinforcement of IPRs.

The proposed work reflects upon the reasons for such hype.¹ This reflection springs from a dissatisfaction in regards to the proposed solutions for regulating this hype: the implementation of market arrangements regulating the functioning of patent offices and to ameliorate the quality of the titles delivered (Caillaud and Duchene, 2011), or to encourage the creation of IPR markets exposing investors to the value of the titles and thus favoring the financing of the innovation (Guellec *et al.*, 2010). On the other hand, if the analyses extolling the “return of commons” (Coriat, 2015) raise an alert to the inherent dangers caused by the decline of technological commons, they underestimate the role of collective management of IPL in the numerous sectors of activity and give too much weight to the figure of the “owner” who is no longer who he was. Originating in the computer industry to characterize a software program, the “owner/non-owner” binary opposition would not be so fruitful and risks muddying the debate. Furthermore, these two approaches to opposing normative solutions draw on a mechanistic understanding of the legal rules erasing the endogenous dynamic of law creation by the legal professions (Edelman, 1992).

We propose to reopen the debate about the question of the transformation of the IPRs system, relying on patent law mutations, emblematic of a deep change. At the beginning of the 1990s, we analyzed this system in our first studies dedicated to the anti-counterfeiting policies, notably to the capacities of expertise that they presuppose (Bessy and Chateauraynaud, 1995). And it is for this reason that the guidance in industrial property, of which we are about to summarize, is part of the problem with the objectification of perfumes. Afterward, we delved deeper by studying the collective management of IPRs (Brousseau and Bessy, 2006), particularly through the practices of licensing technology (Bessy et Brousseau, 1998).

¹ The French version of the book will be as: *Droits intellectuels et expropriations des travailleurs*. We present here an English version of its introduction. The paper has been translated by Benn E. Williams. This book will be published in 2022; EHESS Editions.

The seed for this increased interest for IPRs was evident in 1995-1997 when I, with E. Brousseau, D. Foray, and M. Cassier, co-organized a seminar at Paris University Dauphine, on “Appropriation and rights of access to knowledge and technology.” It came ten years after the famous Yale investigation of Levin et al. (1987) on the modes of protecting innovation. It showed that for American companies the patent was only one mode of appropriating return on R&D investment: secret, technological advances, synergy of assets, etc. The recourse to patents was very widespread in sectors where the knowledge is easily codifiable (pharmaceutical and chemical) and deals more with the products than with the production processes. Articles began to underscore, too, in the American case, the limits of overly broad patents, along the lines Scotchmer’s works (1991), and the extension of the patent system to software and living things (Hermitte and Joly, 1992).

We had invited a leader of an intellectual property office for a large company that relativized the role of the patent in the panoply of modes of protecting innovation. He insisted on both the importance of the contractual arrangements to complete the legal system and the capacities of actors’ self-organization in the management of technological cooperation between companies. But, with the decline, we realized how much this relativization of the interest in IPL masked, at the time, the immense power that these laws began to take, in a diffuse fashion. It was in fact the expression of a well-endowed entity pretending to recognize its importance. This *a posteriori* revelation poses the recurring question in the social sciences about the analytical language utilized and the necessity of finding a meta-language to study the situations while maintaining a critical posture. If not, one is led to reiterate the point of view of people whom one seeks to understand the practices in eliminating other points of view. In a first report, we (I) asked ourselves at the time if the same object of our seminar, the question of the “ownership of knowledge,” was not contributing to the fact that this appropriation becomes an increasingly important economic issue following a form of “theory effect.” Or yet, if the act of debating and devoting seminars and workshops did not eventually participate in intellectual property politics in progress of unfolding before our eyes.

Problematics

By the term “politics,” we designate not only all of the policies leading to the definition of legal and administrative arrangements, corporate strategies, or well-known creators, but also the actions of “legal intermediaries” adjusting the legal rules to the coordination agreements implemented in professional milieus (Bessy *et al.*, 2011). One can expand this category of legal intermediary to all professionals who express their doctrine in this matter, including academic researchers, economists, jurists, and, more recently, philosophers and sociologists. All the actors participate politically by lending these politics a certain legitimacy in the public sphere and in assuring them a performative power for other things -- knowledge, expertise or even styles -- where the proprietary evidence is less evident than for the property of bodily things as long as very early alternative models develop (*free, open-source, copyleft, etc.*).

How did these things, until recently judged inappropriate, become or acquire the qualification of “good,” an object of property right, at the cost of rampant legal codification? Writing a patent’s description and claims provides the perfect illustration of the law’s “hold” on both the technical equivalencies defining the field of potential counterfeits of protected products, and vendors, transforming the technical mastery of market power. Through the prism of the question of “ownership rights,” we wish to return to this legal alchemy of a patent, based on a textual representation of the product. The power of the brand rests on the exclusive use of distinctive symbols defining the domain of counterfeit products.

In these two cases, like in the futures markets described by the anthropologist A. Appadurai (1986), this transformation of symbolic goods, disconnected from the material conditions of production, offers new sources for profit and the accumulation of capital contributing to different forms of expropriations of workers. Our book seeks to reconstitute the distinctive features of IPR politics, to reveal them to the public, and to provide arguments for their critique. Specifically, we focus on the double movement of capitalization of the IPRs and of expropriation of workers, via the growing legal instrumentation of economic relations sustained by legal intermediaries. This central issue is based on an interdisciplinary project and on a certain conception of the law, property and value of things.

Since the 1980s, the economic and legal literature has exploded on this question. We would need months to cover the topic because it is increasingly narrow and the realm of specialists within each discipline often ignores the contributions of the others. Our reflection seeks to establish bridges between disciplines, particularly with the legal sciences, in adopting an interdisciplinary perspective and a more endogenous conception of the law, defined in part by the actors whom it seeks to regulate. This perspective splits with most of the approaches that consider the law as a simple exogenous incentive defined by the macro-actors, i.e., the legislator, administration, and judge (Bessy *et al.*, 2011).

The contributions of Jérôme Baudry's dissertation (2014) on the patents for inventions have been confirmed by an interdisciplinary approach as well as by our regular commerce with jurists. To this day, and according to our knowledge (we must verify for the United States), there has been no veritable history of this institution over the *longue durée*, nor for the contemporary period. We shall linger over the latter. From the French case, we will dive into European law on the matter and the international conventions in place since the end of the 19th century. The accord on intellectual property and commercial aspects (ADPIC) re-actualized these conventions specifically in 1994. Providing a full account of this process of harmonization of IPL would constitute a subject in and of itself, as would the dissemination of the expression "intellectual property law." We note that Americans prefer to speak of "intellectual property rights," no doubt testifying to their fundamental characteristic as a human right.

IPL encompasses quite heterogeneous domains.² Certain jurists prefer to speak of intellectual properties (plural) from the point (mid-19th century) when patent law made the distinction between the inventor and the holder of the title. Other jurists deny any reference to classic intellectual law. Following in the footsteps of the jurist Roubier (1952), they see rather the right of clientele (capture of a client source of economic value) on the model of the intangible asset, to some extent, the idea of return on investment, dear to economists, which can explain the affinity for trademark law in IPL. They highlight the strong incertitude of the economic value of these rights that concern the future and indeterminate production unlike assets in classic property law. But What are exactly their function?

As M.-A. Hermitte (1985) has shown, the true function of "intellectual rights" in the contemporary period would be during to provide access to one part of the market. This juridification of market rests on the notion of the "asset," which permits the projection of the asset into the future and to calculate the expected benefits. This asset is reported to the benefit of the investor, constituting property, and not to the asset's beneficiary (Commons, 1924). This reflection leads, additionally, to a study of the legal categories, specifically to a critical

² Created in 1992 in the wake European policy extended to objects of IP (semiconductors, software), the French Code of Intellectual Property, largely propelled by the United States, distinguishes eight schemes: copyright, ancillary rights and database, designs and models, patents, know-how, the topography of semiconductors, the proprietary plant breeders' rights, and trademarks (Binctin, 2012).

analysis of their extension beyond the spirit from which they were conceived. Why does the category “intellectual property law” grow today when it should be shrinking? This distortion questions the critique addressed to the “proprietary system” (Hess and Ostrom, 2007), a critique that emerged to defend the intellectual commons in the face of what certain have called the “second enclosure” (Boyle, 2003), that is to say, the strategies of exclusive appropriation, the companies loudly claimed their patents and trademarks or their copyright. But is this title ownership?

Beyond the reference to the notion of “property,” the question is the value of the IPRs without reducing it to the microeconomic estimation of a price. At the macroeconomic level, this reflection on the value of IPRs raises the question of its social utility. Is such law truly useful to the social well-being or does it constitute a temporary monopoly reinforcing the market power of its holder per certain liberal economists (Boldrin and Levine, 2008)? Most economists do not think that theoretical models exist to settle the problem.

The question of the value of IPRs also arises in other words, namely how did they become "values" as such leading to inflation of IP titles or of their claims. This is particularly the case of patents. In fact, one notices a more significant increase in the number of patents filed than in R&D spending, which increased during the contemporary period due to competition based on permanent innovation. This increase is also linked to a search for wider geographical protection, filed in the most important patent offices. At the global level, one must count the growth of emerging countries and their progressive adherence to IPR politics to accompany their policy of innovation (in particular in digital communication and pharmaceuticals), like China, which eclipsed France, in 2019, in the number of patent requests filed with the European Office of Patents with 12,247 filings for 10,163 for France, behind the United States (46,201), Germany (26,805), and Japan (22,066). The total number of filings continues to increase, thereby boosting tensions with the Office.

One could certainly question the political factors and the different lobbying games that recently contributed to the fact that the filing of patents would become a performance indicator in matters of innovation, including in the public research sector, participating at fueling this spiral. From a macro-historical perspective, this policy would attest to the development of capitalism in search of new sources of profit, transforming net assets of shares formerly considered as technological assets, profitable through licensing agreements, or as elements of creator status. This transformation is underscored by the recent work of K. Pistor (*The Code of Capital*, 2019) in which this jurist demonstrates how the legal codification of knowledge and know-how transforms this type of asset into an exclusive, durable, universal, and convertible capital in the same fashion as land-use practices have been transformed into property rights. The author highlights the determinant role of played by *global lawyers* in the process of legally transforming a simple asset into profitable capital at the international scale to the point of questioning state sovereignty.

This towering posture is useful at the macro-historical level, but it does not take into account the reflexivity of actors who, by their activities, contribute to this dynamic by relying on different conventional forms of valuing IPL. According to Boltanski and Esquerre (2017) in their work *Enrichissement*, articulating these two levels according to a form that the authors qualify as “pragmatic structuralism.” The different valuation conventions of IPRs began to pile up after the genesis of IPL at the end of the 18th century, without voiding the earlier uses. This multiplication of usages would have made the IPRs object of value, sufficiently liquid assets to be negotiable on a market organized by new intermediaries close to the finance sector.

The aim of our analysis is to discard a positivistic explanation for the value of IPRs based on the “fundamentals” and whose prices would be determined efficiently on a market (Orlean, 2011). We do not deny that these “fundamentals” could be in play in the financial evaluation of the prices of the shares. We seek, however, first to show how the IPRs have been blessed with the power to attract within a community of investors to the point that certain intermediaries elaborate computational spaces proper to the functioning of an IPRs market increasingly attracting capital. We will reveal the decisive role of the power of valuing of the market’s intermediaries (Bessy and Chauvin, 2013) and, further upstream, the more hidden work of the legal intermediaries seeking to develop a market of legal services in the matter, intermediaries whom we consider institutional operators of IPRs politics.

Finally, the IPRs politics raise the stakes of division and of inequalities, due to the increases of certain products like medications, notably patent-protected diagnostic cancer tests. It is in the name of the disproportion of the prices penalizing poorer consumers that the American firm *Myriad Genetic* had its patents revoked by the Supreme Court after having been the subject of opposition procedures in the European Patent Court (Cassier, 2007).

But, what our book proposes to analyze in more depth are the issues of distributing the fruits of the employees’ creativity which seem invisible within businesses including in their relationship with independent workers. In effect, as the IPR incrementally becomes negotiable assets on a market, the investors and other financial operators lose sight of the production sector of the assets and of their industrial exploitation -- in becoming simple symbols doomed for exchange and speculation. Consequently, this financialization of immaterial assets renders invisible the businesses’ appropriation of expertise and the litigations, if not the conflict that they can cause. This work proposes to delve into this question of expertise’s appropriation, designating both mastery of a new technology and attribution of private rights. It is important to return to the nature of the enterprise form and of the wage integration along the line of Marglin’s (1973) Marxist scholarship to the birth of manufacturing at the period of corporations, but also to the first patent or privilege letters that give an operational monopoly to foreign artisans allowing them to train new apprentices in their trade secrets. The duration of the “patent” (14 years) represented twice the time as the training of an apprentice (7 years) thereby protecting the artisan of his eventual departure and competition (David, 1998).

It is on this question of the appropriation of know-how that the analysis of the IPRs politics becomes intriguing because it truly reveals its ideological, hidden dimension. Indeed, following Locke, the institution of intellectual property law is born of the union of the figure of the author or of the inventor and that of the proprietor of his works (like land), who finds herself compensated for her creative work. This union is elongated with the emergence of the figure of the IPRs stock investor seeking the best returns (Hermitte, 1985). What was supposed to protect the property of the creator made possible an expropriation: to create intellectual property is paradoxically to create a right to assign a property and to value it in markets

This figure of the creator is nonetheless still very present during the contemporary period, as shown by the perfume case introduced at the beginning, driving each to claim intellectual property. The category of creator has been extended to include individuals who would have been previously considered artisans inscribed within trade communities. Incidentally, our interlocutor did not hide that the legal instrumentation of the products’ quality and originality has had the consequence of imperiling the professional equilibria in these artisanal milieus in increasing competition.

This claim to a right to property can uniquely target the statute accorded in terms of social distinction, which, for writers and artists, has existed for a long time. Today, designers of all

genres seek to protect their creation via the law of trademarks, designs, models, or even copyright, but also plenty of other small inventors in culinary matters (chefs, pastry chefs, cheesemakers, etc.), encouraged by guidance from industrial property and marketing of the French National Institute of Industrial Property (since denominated recently by the “city of innovators”) living from these filings. The latter are often of little utility but can constitute a symbol of a product’s quality. This claim to property has been most recently sublimated by the *copyleft* for the authors, but without eliminating their desire for paternity in creating an Internet buzz. It is thus important to delve into this individualist ideology specific to the “*critique artist*.” (Chiapello, 2008).

If attorneys still defend certain creators in the name of the right to intellectual property, most of them have become specialized in the matter and counsel investors in the so-called creative industries in profiting of their extension of the aura attached to this revolutionary right. This extension is to the detriment of the principal contributors to these industries, summoned occasionally and working for free. This work proposes a systematic analysis of this paradoxical expropriation and interpretation of the new forms of productive organization based on the free circulation of know-how like an attempt for the “makers,” for example, of rediscovering the mastery of technologies, but without really a strong claim to property, to the exception of paternity, and, of collective *authorship*.

Approach and method

We begin with the French reform of patent law in 1968, a period still marked by the system of trade secrets implemented by large corporations and organized in internal markets. This modernization of the French system is inscribed in European law with the creation, in 1973, of the European Patent Office. At the end of the 1990s, we launched a research project on this question of patents and technology licensing. In making comparisons to the collective management of copyright, we sought to chart the conditions for the emergence of a technology market (Brousseau et Bessy, 2006) and, notably, of the decisive activity of professional organizations and of market intermediaries (Bessy, 2006).

Next, our study on the legal profession enabled us to better understand the role of these legal intermediaries, in particular law firms specializing in IPL who are members of the most prestigious firms in the profession with very high billing rates (Bessy, 2015). This aristocracy of the Paris bar signals the economic challenges of the matter and the complexity of his legal corpus has been subject to the “Legal Code of Intellectual Property” since 1992. We extended this perspective in studying, using a series of interviews, the role of counselors in industrial property (*Conseils en propriété industrielle*, in French) in connection with attorneys.³ These interviews have been supplemented with socio-demographic statistics constructed from professional directories from 2008-2018 in order to discern the evolution in how the practitioners operated. The idea is to deviate from the transformations in the professionals’ activities in order to account for both the change in the law they use and the strategies that they counsel companies to use for valuing IPRs. It is important to examine their role of mediator (between general principles and specific productive configurations), of linkage, of prescriber, and of strategist, given their political lobbying efforts, of strategic use of the law, with *patent trolls* being emblematic.

It is precisely this intermediaries’ strategic use of the law that helps to explain the sustained growth of patents filed and owing to denunciations of the improper development of this type of property law. This strategic use of the law by the intermediaries is taken into account by

³ In France the two professions are still separated.

the classic micro-economic approaches to IPL (Caillaud and Duchene, 2011). But we must ensure a critical analysis of this approach considering these intermediaries as uniquely opportunistic agents, in showing that these professionals are equally constrained by deontological rules that lead to overstepping the clients' individual interest and to seek the common good. The same applies to their contribution to the definition of IPL at the national and European level with the creation of a specialized jurisdiction in matters of litigation of patents.

While this European jurisdiction may seem obvious, we undertook this study to better understand its foundation and its mode of future functioning, as well as the role played by the "entrepreneurs" of European law, who have nonetheless some detractors (Lazega, 2016). This leads us to study patent litigation as well as the community of legal professionals intervening in these disputes, in particular cases in the pharmaceutical sectors pitting originator versus generic companies.

The most substantial empirical contribution rests on the construction of the exhaustive corpus of legal decisions in the disputes in matters of invention by salaried employees between 2000 and 2018, treating nearly 130 cases, a large increase from the period 1990-1999. The original material on a subject ignored by the social sciences, with the exception of the theoretical points raised by jurists, is the object of a qualitative study in order to understand the form of this type of legal judgment, the structure of the principle actions, and the resources that they mobilize. Founded on interviews completed with a representative of each category of action and of an analysis of litigation brought before the Joint National Commission of Inventions by Employees whose mediation rulings can prevent a trial. Unexpectedly, this corpus of judgments offers access to exemplary and succinct legal cases that, well characterized in their preamble and specific to the careers of salaried employees in the company. But the most important part of the analysis touches upon the statistical exploitation of this corpus. Statistical coding allows us to characterize the litigants and their opponents and to show their plurality from a typology. These disputes distinguish themselves, particularly in following the degree of objectification of employees' missions and performance.

Plan

The book is composed of six chapters each. The first chapter retraces the recent economic controversies around the merit of IPL and certain partial dysfunction, with, conversely, the legal controversies around the pertinence of the reference to property law. We present our analytical framework based on highlighting different conventions for valuing and for appropriating IPRs driven by legal intermediaries. Chapter two analyses the different conventions for valuing patents and their synergy over time, making IPRs into negotiable assets on the market. This market toils nonetheless in developing on a large scale and testifies to the failure of modern finance, as we have shown in the conclusion of this section, using the example of Silicon Valley.

In the two following chapters, we study the role of legal intermediaries in the orchestration of IPR politics. Chapter three examines the construction of a patent that market hinges on competition-cooperation relations on the "patent law market" between the attorneys and counselors in industrial property that are increasingly experts in their domain, in tight symbiosis with the judges. Chapter four is dedicated to the construction of European patent law by intellectual property experts, particularly in their willingness to create a unified jurisdiction for patents. We show how these legal intermediaries contribute to the definition of conventions of patentability in each technological sector, in links with the examiners of the

European office. Litigation in the pharmaceutical sector illustrates the argumentation. The conclusion is devoted to the processes of professional prioritization of the access inequalities to intellectual property law.

The two last chapters analyze the consequences of the politics of IPRs on the appropriation of inventions and creations by salaried employees or by other dependent workers. While the literature on patents is based on a simplified representation of R&D activities, it is important to take into account diverse forms of organizing innovation in order to study the attribution of IPRs between different actors. Chapter five departs from the French model of regulation of employees' inventions to show its evolution from a "regime of secrecy" to a "regime of properties" leading to a regular dispute borne by legal professionals. Our statistical database of litigation allows us to study a typology of cases from different production spheres. Chapter six examines more precisely the processes of expropriating workers' know-how beyond the reservation of patent rights benefitting employers. We analyze the reach of business codification systems and knowledge storing in a configuration characterized by greater employee mobility. Studying this process of expropriation is then extended to all the creators working at the periphery of businesses, specifically the "micro-workers" of digital platforms. This extension of the analysis highlights different attribution conventions of IPRs and the role played by legal intermediaries in their definition and distribution. We conclude with the question of the restructuring of domestic labor markets and processes of transmitting know-how between peers.

Finally, we return to our analytical contributions, specifically understanding the emergence of an intellectual capitalism largely sustained by the intermediaries of IPL contributing more generally to the legal instrumentation of economic relations in an increasingly global world.

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