



Property Rights, Kinship Groups, and Business Partnership in Nineteenth and Twentieth Century Brazil: The Case of the St. John d'el Rey Mining Company, 1834-1960

Gail D. Triner

The case of the British St. John d'el Rey Mining Company in Brazil during the nineteenth and twentieth centuries illustrates the dynamics of kinship groups, firm structure, and property rights. Mining's capital-intensity, high-risk, and long-term time horizon make it ideal for exploring the conjunction of property rights and business structure. Nineteenth and twentieth century challenges to St. John d'el Rey's land transactions demonstrate the legal and economic factors impeding the evolution of business structure. Contrary to previous research, property rights were over-specified rather than under-specified and provisions for rights were mutually inconsistent. Very precise colonial era laws protected fixed capital investment, making dissolving partnerships legally problematic. Inheritance laws mandated partition of personal estates among heirs. Heirs of sellers from whom the company bought land posthumously claimed both land and a share of the company's revenues (essentially partnership rights). Although the St. John d'el Rey Mining Company survived until the second half of the twentieth century, its experience demonstrates the disadvantages for businesses trying to rely on partnerships extending beyond small networks united by kinship bonds.

Property rights are a fundamental theme of the "new institutional economic history"; they are seen as a crucial element in determining the trajectory of economic growth and business development. Theory and historiography on property rights have been closely intertwined in this influential research. The underlying tenet of current institutional economic history research is that well-specified property rights are a

Gail D. Triner is associate professor of history at Rutgers University.

prerequisite for sustained economic growth and market formation.¹ While recognized as only one form of property, land rights have been the property type most thoroughly studied. However, as Libecap asserts, “[m]ineral rights to gold and silver deposits provide almost laboratory conditions for examining contracting for ownership arrangements” because of their uncertainty, the prevalence of asymmetric information, and high fixed-capital investments.² While paying lip-service to the diversity possible in specifying property rights, scholars assume that effective property rights delineate the limits to owner autonomy with respect to asset use, transformation, and transfer. Effective rights do not give rise to counter-claims on property that render autonomy uncertain. However, there is a notable dearth of research concerning specific features of (legally specified or common law) property rights that prove to be ineffective. Another characteristic of the property rights literature is the presumed dichotomy between individual and corporate ownership

This paper was made possible through the generosity of AngloGold, Nova Lima, Minas Gerais Brazil. The company allowed me access to their official archives as well as to the Estates Department archival files. Victor Rodrigues was especially helpfully in explaining the archives and the company’s history and in offering pleasant companionship through days of archival research. Mary Gill was graciously instrumental in arranging both access to the archives and establishing conditions for a stay at the mine. Douglas Libby and Marshall Eakin offered much guidance and background material from their own work. Tamara Swedberg provided the graphics for Map 2.

¹ Douglass C. North and Robert P. Thomas, *The Rise of the Western World: A New Economic History* (Cambridge, U.K., 1973), is the seminal work on this topic; Lee J Alston, Gary D Libecap, and Bernardo Mueller, *Titles, Conflict, and Land Use: The Development of Property Rights and Land Reform on the Brazilian Amazon Frontier*, Economics, Cognition, and Society (Ann Arbor, Mich., 1999), apply its implications to modern land disputes in Brazil.

² Gary D. Libecap, “Property Rights in Economic History: Implications for Research,” *Explorations in Economic History* 23 (1986): 236. Libecap’s research has demonstrated the usefulness of understanding mineral rights in the United States. Gary D. Libecap, “Economic Variables and the Development of the Law: The Case of Western Mineral Rights,” *Journal of Economic History* 38 (June 1978): 338-62; Gary D. Libecap, “The Political Allocation of Mineral Rights: A Re-Evaluation of Teapot Dome,” *Journal of Economic History* 44 (June 1984): 381-91.

structures.³ This assumption ignores familial property, although it has been common through Brazilian history.⁴

Common and statutory law specifies and protects property ownership and use. Uniformity, consistency, and enforceability determine the legal system's effectiveness. Contracts operationalize property rights in transactions between economic agents. Both formal and informal contracts specify the terms of exchange transactions and anticipate problems of contingent claims that may arise in the process of exchange. The evolution towards more sophisticated forms of property rights and larger, more complex organizations, requires more complex contracting. However, asset specificity (the ability to reallocate or transform assets/property) and asymmetric information impose constraints on the ability to specify complete contracts:

Complex contracts are invariably incomplete, and many are maladaptive. The reasons are two: Many contingencies are unforeseen (and unforeseeable), and the adaptations to those contingencies that have been recognized for which adjustments have been agreed to are often mistaken.⁵

The judicial system offers one avenue for settling disputes about contingencies that disrupt contracts. Judicial remedies are limited, however, by the confidence the parties put in the courts, the ability of courts to deal with complex problems expeditiously, and by their expense. Therefore, as contracts become more complex, the parties develop incentives to build in credible commitments that bind them to the terms and intent of their contract and to peaceful extra-judicial settlement.⁶ In sub-surface mining, asset specificity and asymmetric information are particularly vexing problems. Mines can seldom be converted to other uses of equal economic value, and mine owners closely hold information about the likelihood of finding minerals or other resources.

In this paper, I use the St. John d'el Rey Mining Company during the nineteenth and twentieth centuries as a case study to argue that the specification of property rights in Brazil constrained the development of expansive business structures. The persistence of effective laws supporting the indivisibility of fixed assets and the familial distribution of personal estates created contingent claims that limited the advantages of "modern" business organization.

³ Armen A. Alchian and Harold Demsetz, "The Property Rights Paradigm," *Journal of Economic History* 33 (March 1973): 16-27; Harold Demsetz, "Toward a Theory of Property Rights," *American Economic Review* 56 (May 1967): 347-59.

⁴ Alida C. Metcalf, *Family and Frontier in Colonial Brazil: Santana de Parnaíba, 1580-1822* (Berkeley, Calif., 1992).

⁵ Oliver E. Williamson, *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting* (New York, 1985), 178.

⁶ Williamson, *The Economic Institutions of Capitalism*, 166.

Researchers of the history of Brazilian property rights have examined the distribution and contents of personal estates, the issues arising from human property generated by the system of slavery, and the difficulties of acquiring land titles.⁷ Small forays into questions of financial property have recently found that some forms of financial assets from the end of the nineteenth century may have overcome many of the problems that plagued real assets.⁸ However, scholars have not investigated the importance of property rights for economic growth and development of that portion of the Brazilian economy that predominated until the late twentieth century: the traditional primary sector. This paper is an initial effort to identify issues important for filling that gap.⁹

The St. John d'el Rey Mining Company was a British freestanding company totally dedicated to mining gold at Morro Velho near present-day Nova Lima, Minas Gerais (see Map 1.) The gold mine is the longest-

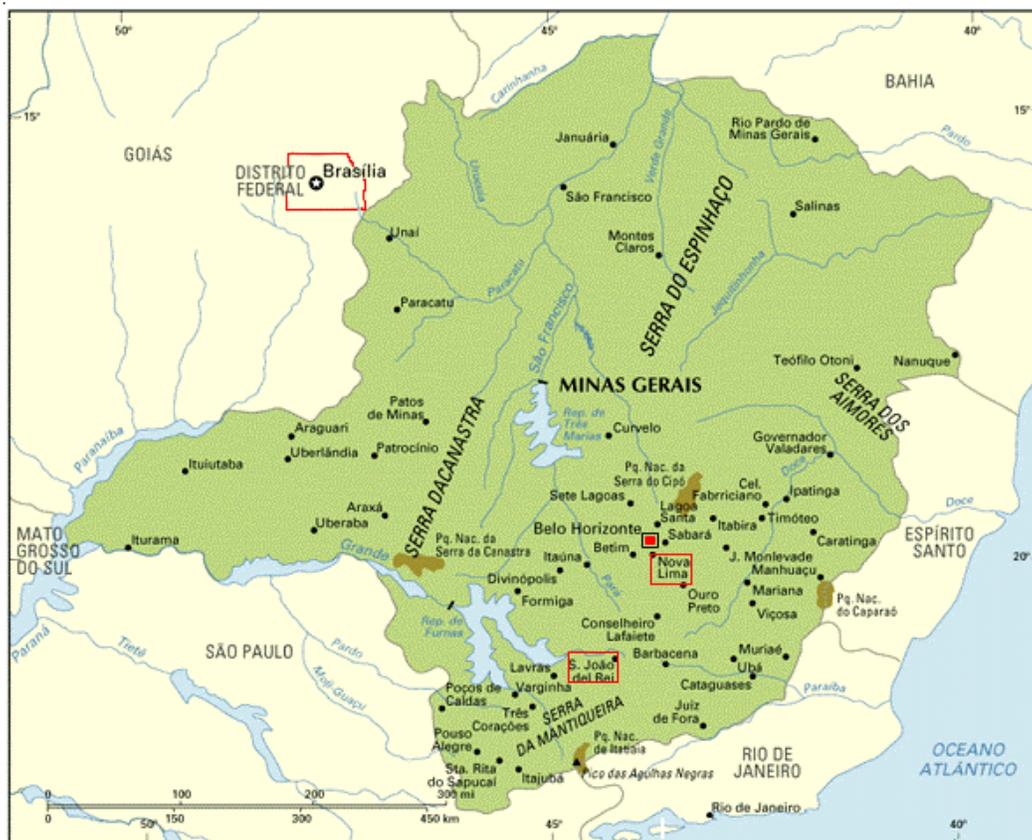
⁷ The best English-language sources covering these topics are Zephyr Frank, "Exports and Inequality: Evidence from the Brazilian Frontier, 1870-1937," *Journal of Economic History* 60 (March 2001): 37-58; Metcalf, *Family and Frontier*; Emilia Viotti da Costa, *The Brazilian Empire: Myths and Histories* (Chicago, 1985); Warren Dean, "Latifundia and Land Policy in Nineteenth-Century Brazil," *Hispanic American Historical Review* 51 (Nov. 1971): 606-25. Keila Grinberg, *O Fiador dos Brasileiros: Cidadania, Excravidão e Direito Civil no Tempo de Antonio Pereira Rebouças* (Rio de Janeiro, 2002) tackles the legal quagmire of human property. Alston, Libecap, and Mueller, *Titles, Conflict, and Land Use* is the best recent English-language monograph on the economic effects of land rights in present-day Brazil.

⁸ The recent research in this area suggests that formal markets for tradable financial instruments (notably, debentures) benefited from protected property rights; the results for banks may have been somewhat different Aldo Musacchio, "Building Credible Commitments: Bankruptcy Law and the Transition to a Republican Government in Brazil 1880-1930," paper presented to the American Historical Association, Washington, D.C., Jan. 2004; Anne Gerard Hanley, "Business Finance and the São Paulo Bolsa, 1886-1917," in *Latin America and the World Economy in the Nineteenth and Twentieth Centuries*, ed. John H. Coatsworth and Alan M. Taylor (Cambridge, Mass., 1998), pp. 115-38; Stephen Haber, "The Political Economy of Financial Market Regulation and Industrial Productivity in Brazil, 1866-1934," in *Political Institutions and Economic Growth in Latin America: Essays in Policy, History and Political Economy*, ed. Stephen Haber (Stanford, Calif., 2000), 69-121; Gail D. Triner, *Banking and Economic Development: Brazil, 1889-1930* (New York, 2000).

⁹ I am concerned with the constraints on, and challenges to, property transfer. As such, I do not address initial claims to land or the distributional effects of early land reform and registration processes, the emphases of da Costa, *The Brazilian Empire Myths and Histories* and Dean, "Latifundia and Land Policy in Nineteenth-Century Brazil." Neither do I address the principles by which the state (imperial or republican) asserted its claims to property, perhaps the most contentious and empirically important aspect of the subject. Those are both subjects of ongoing research.

operating business enterprise in Brazil, and Morro Velho was the world's largest, deepest gold mine prior to South African discoveries. The company's status as a foreigner is of only marginal importance for the purpose of studying property rights. As outsiders, regardless of nationality status, the St. John d'el Rey necessarily relied on formal contracts; it did not have the option of relying on informal local networks. Brazilians, both those coming to Minas Gerais to prospect for minerals and local *mineiros*, relied on the same practices and legal procedures as the foreign-owned mining companies.

MAP 1. Minas Gerais, Brazil



Between its first acquisition in Morro Velho in 1834 and the sale of its assets to the Hanna Mining Company in 1960, the company acquired sixty properties through hundreds of contractual transactions. Because geography separated owners from manager-operators, their actions were coordinated by detailed communications that kept the company's owners informed of their investments.¹⁰ The company was rigorous about tracing

¹⁰ Weekly letters and the Superintendent's daily diary (forwarded to London on a regular basis) form the basis of this information. Additional documentation, such as (translated) transcripts of court hearings also made their way to London,

the ownership history of properties and the mining, timber, and water rights that it acquired.¹¹ Whether the intense focus on documentation was a peculiarly British (or foreign) characteristic or not, the company relied on Brazilian law to structure their property acquisitions, define their rights, and protect their claims.

The St. John d'el Rey Mining Company is a useful prism for studying property issues, not because it was unique, British, or successful. Rather, its struggling longevity, well-defined corporate structure, and interests in a wide variety of property offer a unique opportunity to view concisely the institutional constraints of property rights. The company's detailed records, court proceedings, and correspondence serve to document its treatment of many forms of property: land, subsoil (mineral), and people (slaves).¹² Challenges to the St. John d'el Rey's property transactions throughout the nineteenth and twentieth centuries

as needed. These documents (almost complete) have been preserved and organized at Morro Velho. Rather than considering the detailed level of documentation a peculiarly British trait, it seems the outcome of not being able to meet personally on an on-going basis in business and social settings to consider business issues.

¹¹ Much of the historiography of Brazilian land law and other property focuses on the lack of legal documentation and protection for claims prior to the Land Code of 1850 Dean, "Latifundia"; da Costa, *Brazilian Empire*, chapter 4; José Murilo de Carvalho, "Modernização Frustrada: A Política de Terras No Império," *Revista Brasileira de História* 1 (March 1981): 39-57. As a counter-example to this generalization, the St. John d'el Rey Company documented its acquisitions, with deeds registering their transactions and with the history of prior transactions. Registered deeds dating to 1725 accompanied the company's original purchase of land at Morro Velho. The first task that the Board of Directors required of the Mining Superintendent was to ensure the secure transfer of the mining concession from the real estate developer who scouted the land to the St. John d'el Rey Company; Official letters from St. John d'el Rey Board of Directors to Superintendent. St. John d'el Rey Co. Ltd. Archives, Casa de Memória, Nova Lima, Brazil [hereafter cited as MV Board Letter] #1 [n.d.]. Further, judicial procedures validated and enforced claims in the region at least as early as 1736; see AngloGold-Brasil, Real Estate Department Files. Nova Lima, Brazil; [hereafter cited as MV Imobiliário] File 13.10.37.1 "Concession by Guarda-mor," 8. In this setting, where access to natural resources had significant economic value, as the need arose to protect property institutional structures became effective.

¹² The St. John d'el Rey Company also both owned and hired slave labor until the abolition of slavery. In this regard, the company had a stake in the laws governing humans as property. Douglas Cole Libby, *Trabalho Escravo e Capital Estrangeiro no Brasil: O Caso de Morro Velho*, Biblioteca de Estudos Brasileiros, vol. 1 (Belo Horizonte, 1984) analyzes the company's use of slave labor; however, the consideration of the property law aspect and the constraints imposed by the British abolition movement remain stories awaiting further historical research.

demonstrate the legal and economic factors that impeded the evolution of business structure.

Contrary to the tone of existing research on tangible real property (primarily land), rights were not under-specified; in fact, they were over-specified, and varying provisions for claims were mutually inconsistent, as the St. John d'el Rey's experience demonstrates.¹³ Very precise laws, dating from the colonial era, protected fixed-capital investment to such an extent that dissolving partnerships became legally problematic. At the same time, inheritance practices mandated the division of personal estates among heirs. Generations of claims and lawsuits against the mining company demonstrate the opportunities for posthumously emerged heirs of sellers to claim both resources and a share of the company's profits (essentially to assert partnership rights) as their inheritance rights. Meticulously documented land transactions and legal strategies indicate the possibilities—and costs—of market-based transactions and judicial actions to manage these claims.¹⁴

Although the St. John d'el Rey Mining Company survived until the second half of the twentieth century, its experience demonstrates the disadvantages that impeded businesses when they were confronted with the strength of family-defined property and business networks. In this case, conflicting laws were consistently enforced and made it difficult to attain effective contracts. The example of the St. John d'el Rey Mining Company protecting its claims to mineral, land, water, and timber rights through the nineteenth and twentieth centuries demonstrates the limits imposed on formal property claims and the implications of these limits for organizational development in Brazil.

Brazilian Property Rights

Brazilian law and common practice conceptualizations of property were clear. As an agricultural and precious-minerals colony, regulating and monitoring access to natural resources was always at the center of ideas about property. The legal structures and the practices governing property were remarkably constant over time. Portuguese colonial administration established the principles that would continue to govern property through

¹³ Dean, "Latifundia"; Emília Viotti da Costa, *The Brazilian Empire Myths and Histories* (Chicago, 1985), chapter 4.

¹⁴ The company's long-term and prolific property manager, R. W. Wharrier, compiled a master list documenting the history of the company's property and the supporting legal documentation of deed, registry titles, etc. (MV Imobiliário, File 13.10.66.4). He also oversaw the compilation of a *Registro de Documentos* that summarized the acquisitions and all subsequent legal challenges. These compilations map the property history; other sources (letters, court documents, annual reports, etc.) provide the stories behind the legal documents. Wharrier must have been an on-going nuisance to the mining staff of the company, but his administrative efforts offer an archival trove for the historian.

the nineteenth century.¹⁵ Independence in 1822 did not bring changes in the law or its practical applications. Many changes introduced with the advent of the Republic in 1889 and the Constitution of 1891 did not survive for very long after the fall of the Republic in 1930.¹⁶ The specific aspects of Brazilian property concepts that are important here regard the separation of surface and subsoil rights, protection of fixed assets, and inheritance of personal estates.

The earliest colonial form of land allocation from 1532-1548, monarchical *doações of capitãias hereditárias* (allocations of hereditary *capitancies*) did not serve to promote land settlement. They were replaced by a system of *sesmarias*, granting full property rights over very large holdings.¹⁷ Squatters could stake a claim (*posse*) to public or private land that was not otherwise in use. This practice always represented a threat to the largest, partially-settled holdings. Although the practice of granting *sesmarias* ended with independence from Portugal in 1822, no alternative land law was legislated until the Land Code of 1850. The Land Code provided a process for squatters to gain title to land they had occupied and attempted to prevent subsequent squatting. Under the Land Code, all existing land titles required re-registration and new claims on land (*posses*) could be formalized.¹⁸

Land ownership was distinct from rights to subsoil resources.¹⁹ Pre-colonial practices firmly established the Crown/State's claim to non-renewable subsoil resources; this was the source of the [in]famous *quinta* (one-fifth) that the Spanish and Portuguese Crowns claimed of precious mineral production, through the collection of rents or concession grants.²⁰

¹⁵ Because these concepts and legal structures were colonial in origin they applied throughout Brazil, though, of course, one would expect further research to reveal that their effectiveness to vary by region, by activity, and across time.

¹⁶ By 1934, another new Constitution, backed by new Mining, Water, and Timber Codes, reverted to prior principles in most regards.

¹⁷ Alston, Libecap, and Mueller, *Titles, Conflict, and Land Use*, 33-35; Dean, "Latifundia."

¹⁸ The Land Law of 1850 offered the opportunity to recognize and legalize existing land occupations, seemingly without changing constraints on the limitations of ownership. In Minas Gerais, the registration period lasted until 1856. See MV Imobiliário, File 13.10.15.22 for examples of some of the St. John d'el Rey's re-registrations under these provisions.

¹⁹ The rights to a specific natural resource on the surface (timber, water, etc.) could also be subject to separate transfer (especially the right to cultivate). These transactions were left to the market, and their contractual enforcement was not different from other types of contracts. The distinction between surface and subsoil rights had a history based on the power of the sovereign.

²⁰ In the area around Vila Rica (the most famous gold mining territory in Brazil, now known as Ouro Preto and about 80 kilometers from the mine at Morro Velho), the Portuguese Crown retained its claims to land ownership, and leased rights to mine ore. In Sabará (the original name of the mining region where

The share of output claimed by the State changed during the nineteenth century.²¹ However, the principle of the State's sovereignty over subsoil resources survived until the 1891 Constitution of the first Brazilian republic, and then it was re-established in 1934.²² The St. John d'el Rey Company's assessment of the nature of subsoil rights in the middle of the twentieth century, when it was in the process of selling its assets to the Hanna Mining Co. was that "[c]omparatively speaking, present [late 1950s] Mining Legislation differs little from that which prevailed when the Company first functioned."²³

Common principles applied to all forms of property. The overriding principle of business property law in Brazil was to preserve the integrity of fixed assets. Once accumulated, property could not be divided if doing so reduced its productive capacity.²⁴ Deviations from this practice required a judicial process. At the same time, one of the most persistent features of personal property law was to preserve the inheritance of personal estates among all legally-recognized heirs, limiting the ability of an individual to determine the distribution of assets within his/her estate.²⁵ To reconcile

Morro Velho is located) the Crown allowed private ownership of land. Access to mining lodes could be a source of dispute between owners and prospectors, but miners needed only the concession to mine gold from the Crown. I thank Victor Rodrigues of AngloGold for this information, which deserves further study and documentation.

²¹ At various times the St. John d'el Rey Company paid taxes at rates between zero and 10% (anon. [J. H. Wharrier?] "Historical Notes," MV Imobiliário, 13.10.66 1943[?] Nova Lima, Brazil; [hereafter cited as MV Historical Notes] 3; MV Board Letter, 2 Aug. 1878).

²² MV Historical Notes, 4 and Marshall C Eakin, *British Enterprise in Brazil: The St. John d'el Rey Mining Company and the Morro Velho Gold Mine, 1830-1960* (Durham, N.C., 1989), 98.

²³ MV Historical Notes, 6.

²⁴ "Indivisibility" applied to real assets in a general sense. Sugar plantations and mills were equally protected, and these provisions made it impossible during the twentieth century to establish credit markets for real estate (mortgages) because of the inability to offer the property as collateral. Stuart B. Schwartz, *Sugar Plantations in the Formation of Brazilian Society: Bahia 1550-1835*, Cambridge Latin American Studies no. 52 (New York, 1985), 202-244; Triner, *Banking and Economic Development*, 135-38.

²⁵ Metcalf, *Family and Frontier*, 95-96. Metcalf offers the most thorough discussion in English of the concept of family property and inheritance in early colonial Brazil. She distinguishes between inheritance possibilities between nobility and commoner, going so far as to say that, among noble families, the concept of property was familial, rather than individual. The paternity suit brought against Pelé [Edson Arantes do Nascimento], the soccer superstar, was the most famous case applying this principle during the 1990s; a share of his estate, equally divided among all his offspring, was at stake. Research is currently underway to determine the estate distribution patterns that applied in Minas Gerais at different times.

the principles of indivisibility and pre-defined distribution of estates, heirs commonly received proportionate shares of estates, without transferring specific assets to individuals. Estates frequently became family partnership enterprises, managed by one or a small number of senior family members. Alternatively, some members purchased others' shares.²⁶ Propertied families implemented a wide variety of sophisticated and complex practices to sustain unified holdings for as long as they retained their profitable life.

Efforts to protect against dividing more valuable property assets were especially strong. The first mining laws, dating to 1603, regulated surface mining. The earliest royal *alvará* to govern mining emphasized the physical integrity of fixed assets by establishing that no party to a mine lode had independent access to the lode, and that veins of unmined gold were indivisible. In 1702, after Europeans had first found large gold deposits during the 1690s, the Regimento dos Superintendentes, Guardas-mores e Oficiais Deputados (an official superintendency) appeared in Minas Gerais to distribute and regulate mining claims. In 1721, with the first attempts at deep-shaft mining, the Guarda-mor took on the task of regulating the subsoil claims. Officials paired the initial practice of granting mining concessions with establishing refining and minting houses near rich lodes in 1713 in order to capture tax revenues.²⁷ Further reinforcing the protection of fixed assets, in 1752, the *Lei da Trintena* prohibited the ability of creditors to force the bankruptcy of concessionaires who also had at least thirty slaves working the mines. With the decline of mining, in 1803, the *Lei da Trintena* extended to all mine operators.²⁸

Beyond extending bankruptcy protection, attempts to provide incentive to moribund mining at the beginning of the nineteenth century resulted in early (perhaps the earliest) corporate partnership provisions. A royal pronouncement (*carta regia*) of August 12, 1817 authorized the formation of joint-stock partnerships for gold exploration, long before the

²⁶ Metcalf, *Family and Frontier*, chapter 4. Constraints on distribution for non-noble, but propertied, families were strong. Among all propertied families, patriarchal control governed efforts to keep estates whole, even while preserving a legal structure that protected the ownership of assets for women.

²⁷ This survey of early colonial mining regulation comes from Roberto Cochrane Simonsen, *Historia Econômica do Brasil, 1500-1820*, 4th ed. (São Paulo, 1962), 276-79.

²⁸ Simonsen, *Historia Econômica*, 280. This law has not been studied. Simonsen states that, logically enough, it limited credit to miners. While such a prohibition would limit short-term credit, mining enterprises in the early eighteenth century were hardly good candidates for long-term debenture issuance. Maria Bárbara Levy, *História da Bolsa de Valores do Rio de Janeiro* (Rio de Janeiro, 1977), 25 states, without citation, that the *Lei da Trintena* "could only be prosecuted for one-third part of their mining profits."

Commercial Code of 1850 recognized joint-stock organizations.²⁹ Introducing the partnership structure into the complicated mix of asset indivisibility and personal inheritance regulations proved to be a difficult innovation.

Finally, separating surface from subsoil rights was, in practice, problematic. As late as the middle of the twentieth century, when:

...[m]ining Concerns had mining rights over 'datas,' as also water rights and possibly timber rights for the purposes of mining, and the legal situation was quite ambiguous. ...It should be noted that the system of concession does not absolutely take away the rights of ownership to the land, but only limits the use that the owner can make of it...³⁰

During the first constitution of republican Brazil (1891-1934), subsoil rights were deemed to belong to the surface owner. Although the St. John d'el Rey Company escaped serious losses, most miners suffered great difficulties.³¹ The practice of common land holdings among small-scale cultivators and grazers and the change in rights resulted in miners having to clarify, and often lose, their access to subsoil mineral lodes and water.³² With the re-introduction of State claims to subsoil rights in the 1930s practices returned to the norms established in the colonial era.³³

The St. John d'el Rey Company

The 1824 Constitution of the newly independent Brazilian Empire offered mining rights to foreign companies.³⁴ In addition to the normal tax of 20 percent (the *quinta*), an incremental tax of 5 percent applied to foreign mining companies, which were required to offer one-third of both equity

²⁹ Simonsen, *Historia Econômica*, 282. The Commercial Code of 1850 included a provision for joint-stock companies with legislative charter and unlimited liability. Standardized rules for chartering joint-stock companies and for limited liability were not enacted until the Commercial Code of 1890.

³⁰ MV Historical Notes: 6.

³¹ Because the St. John d'el Rey Company had acquired the land above and surrounding its mines, the change had little effect on them. Complications could arise because inheritance laws did not change. In one case, the company tried to acquire land containing a stream; but "it was impossible to obtain absolute rights since some parcels remained with the heirs in common and the new legislation did not alter the succession regime in general." See AngloGold-Brasil, *Registro de Documentos*; Real Estate Department. Nova Lima, Brazil; [hereafter cited as *MV Registro*,] Document 10/1. Even so, the most serious effect seems to have been that, in some cases, the company acquired land when their interests were limited to resource rights.

³² *MV Registro*, Document 10/1; MV Historical notes, 4.

³³ MV Historical Notes, 6.

³⁴ MV Historical Notes, 1. This provision was one of many that opened the new Empire to business with non-Portuguese Europeans in the early nineteenth century.

shares (in the case of joint-stock companies) and jobs to Brazilians.³⁵ As the Brazilians had hoped, British ventures received charters, invested their capital, and brought deep-shaft technology to the mines of Minas Gerais.³⁶

The St. John d'el Rey Mining Company was, in 1830, one of the earliest British gold-mining companies to receive a Brazilian charter.³⁷ Few companies lasted more than a few years, and the St. John d'el Rey was the only one to survive beyond the first years of the twentieth century. The average life of British gold-mining companies in Minas Gerais during the nineteenth century was 26.5 years.³⁸ The St. John d'el Rey became the longest operating company in Brazil. In 1934, the Company established a Brazilian-owned subsidiary, the Companhia de Mineração Novalimense to meet the nationalization requirements of the Vargas regime in order to mine minerals other than gold. In 1960, the St. John d'el Rey liquidated, selling its assets to Hanna Mining, a U.S. mining company; subsequently the Companhia Mineração de Morro Velho formed as a Brazilian-owned subsidiary to meet national ownership requirements. The gold mine remains in operation, currently owned by AngloGold; the company also actively participates in the real estate boom that reflects the dynamic industrial growth of the region.³⁹ The company's history, its important role in the development of the town and surroundings of Nova Lima, and its unique role in the use of slave labor have received attention from historians.⁴⁰

The St. John d'el Rey was a freestanding company; its only operations were gold mining on Morro Velho.⁴¹ The company took advantage of legal and organizational innovations as they became

³⁵ In practice, at least for most of the nineteenth century, companies negotiated tax rates with the national government. The St. John d'el Rey was taxed at rates between zero and 10% (MV Historical Notes, 3; MV Board Letter, 2 Aug. 1878).

³⁶ Warren Dean, *With Broadax and Firebrand: The Destruction of the Brazilian Atlantic Forest* (Berkeley, Calif., 1995), 170-71; Libby, *Trabalho Escravo*, 29-30; Eakin, *British Enterprise*, 15-20 and especially Table 1.

³⁷ Douglas Cole Libby, *Transformação e Trabalho: Em uma Economia Escravista: Minas Gerais no Século XIX* (São Paulo, 1988), 266-7, found that the company was the fourth foreign gold mining company. Eakin, *British Enterprise*, Table 1 lists it as the second British company.

³⁸ Eakin, *British Enterprise*, Table 1. These include the 14 companies for which Eakin has known dates of operation (4 companies are of unknown opening or closing dates. Excluding the St. John d'el Rey, the average life of these companies was 18.5 years. The Ouro Preto Gold Mines Co., Ltd., the second most recent British mining company, closed in 1927.

³⁹ Marshall C. Eakin, *Tropical Capitalism the Industrialization of Belo Horizonte, Brazil* (New York, 2001).

⁴⁰ Eakin, *British Enterprise*; Libby, *Trabalho Escravo*; Bráulio Carsalade Villela, *Nova Lima: Formação Histórica* (Belo Horizonte, 1998).

⁴¹ Mira Wilkins and Harm G. Schröter, *The Free-Standing Company in the World Economy, 1830-1996* (New York, 1998).

available. Originally established as a joint-stock company, it adopted limited liability in 1856 as quickly as British law allowed.⁴² The company was organized as a modern business enterprise, in the Chandlerian sense.⁴³ Ownership and management were separated.⁴⁴ Managers strictly adhered to their obligations to shareholders; vertical integration of management and production functions allowed the company to internalize many transactions costs of supply, technological innovation, labor management and managing the production process from mining, refining, transporting and distribution. Management and control/auditing functions evolved with the scale and scope of production.⁴⁵ These organizational features and the transparency provided by the limited-liability joint-stock features should have, according to industrial organization theory, minimized transactions costs and aligned the interests of owners (equity investors) with managers. As a result, the company could have expected enhanced profitability and widespread share ownership. Instead, it appears that ownership was neither widespread nor rapidly changing.

Originally, the company leased land and mining rights in the area of São José and São João.⁴⁶ In 1834, after the failure of the original mines, the company acquired land and set up operations approximately 170 kilometers to the north at Morro Velho (see Map 1).⁴⁷ Because the

⁴² Eakin, *British Enterprise*, 22. Limited liability protected shareholders and could be expected to lower the cost of capital on secondary equity markets by lowering the transactions cost of transferring share ownership; see Jack L. Carr and G. Frank Mathewson, "Unlimited Liability as a Barrier to Entry," *Journal of Political Economy* 96 (Aug. 1988): 766-84.

⁴³ Alfred D. Chandler, Jr. with Takashi Hikino, *Scale and Scope: The Dynamics of Industrial Capitalism* (Cambridge, Mass., 1990), vii.

⁴⁴ Even so, British mine managers and expatriate workers often owned shares in the company.

⁴⁵ Managerial separation and minimizing costs by replacing market with internal transactions are the most important traits of the "modern business organization" Chandler, *Scale and Scope*; Ronald H. Coase, "The Nature of the Firm," *Economica* 4 (Nov. 1937): 386-405. As with most firms, the control function was not perfect. The company was vulnerable to fraud and malfeasance by managers, as the case of J. N. Gordon, the long-time (1857-1877) superintendent who retired in a scandal involving the use of the company store, fraudulent gold reduction (refining) reports, political influence peddling and employee abuses; see MV Board Letters, all letters from April-June 1877.

⁴⁶ The original mines proved a failure and the company closed those operations in 1832. Charles Herring, the first mining Superintendent remained in Brazil to search for new acquisitions; MV Historical Notes, 2; Eakin, *British Enterprise*, 23.

⁴⁷ MV Historical notes, Appendix B. The earliest gold mining on Morro Velho (the "old hill") may have dated to 1725; MV Historical notes, 1. Other evidence suggests that the first documented land transaction on mining *datas* may have

company had a concession to mine for gold (but only for gold) in Minas Gerais, it did not need to acquire additional concessions to mine within any specific location in the province.⁴⁸ However, it did need to acquire the rights to access mine veins from their existing owners.

As a result of the unpredictable exigencies of gold mining, the company flirted with bankruptcy at times and it often went for years without paying dividends to its investors.⁴⁹ In 1840, without sufficient early gold discoveries on Morro Velho, the company anticipated winding up its affairs.⁵⁰ Two major collapses in the mine (in 1867 and 1886) kept the mine closed for a total of approximately 12 years. Enlarging and modernizing the mining and refining technologies after the 1886 collapse allowed the company to open the mine to greater depth and they found increasingly rich deposits. The company depleted their reserve funds to avoid liquidation in the aftermath of both accidents; and, unable to raise equity capital, it incurred long-term debt after the second accident.⁵¹ Rebuilding from each accident required extended excavations that provided evidence of the mine's continuing richness. By the time the mine re-opened in 1894, the St. John d'el Rey was well positioned to profit from the rich lode; it actively and successfully innovated deep-shaft mining technology to enhance its extractive potential and its refining techniques to increase the retrieval of gold from the ore extracted.⁵² An attempt to issue new common shares in 1902 failed. However, in 1904 the company raised capital by issuing preferred shares.⁵³ These actions ensured the mine's viability through the twentieth century.

been registered as late as 1728, and that the first mining on the hill occurred in 1728; see MV Historical Notes: Addendum.

⁴⁸ Eakin, *British Enterprise*, 86.

⁴⁹ The company began paying regular dividends to its shareholders in 1842. In the 113 years between then and 1955 (when dividends stopped) no dividend payments were made for 21 years, and in 13 years, dividends were severely reduced (a decline of more than 50% compared with the last year of "regular" dividends); see St. John d'el Rey Co. Ltd. *Annual Report to Shareholders: London, 1830-1960*. St. John d'el Rey Mining (SJdR) Co. Ltd. Corporate Archives, Nettie Lee Benson Library, University of Texas, Austin, passim. These idiosyncratic shocks continue to typify gold mining. I thank the geologists at AngloGold for this insight during many evening conversations at the St. John d'el Rey Retiro Guest House.

⁵⁰ MV Board Letter, 8 Jan. 1840.

⁵¹ SJdR Annual Report: 1867-1894.

⁵² The company's most important technological innovations occurred during the 1890s when the company considered taking out a patent on its cyanide method of amalgamation and the mine superintendent introduced an oxygen-based method (with his patent application he had to guarantee the company free use). Within a year, both methods were in use; see MV Board Letters, 7 March 1895, 3 Oct. 1895, and 7 Oct. 1896).

⁵³ SJdR *Annual Report*, 1902 and 1904.

While not conclusive evidence, the company's longevity suggests that a general pattern of ineffective management also does not explain its financial difficulties. When the company sold its assets to Hanna Mining in 1960, the long-term effects of a depressed gold market, Brazilian regulations on the sale of Brazilian-mined gold, and continually constraining the effects of nationalizing subsoil rights seem to explain the near-bankrupt condition of the company.⁵⁴

Property Claims and Challenges

The experiences of the St John d'el Rey Company in acquiring and defending its claims to property in Morro Velho demonstrated the range of constraints that economic agents faced in establishing business enterprises that were independent of family-defined partnerships. The company tried to merge its claims to subsoil and surface land rights; it always made a point of owning the surface above its mines and often acquired the rights of other miners.⁵⁵ Acquiring the land close to and above their subsoil excavations was one strategy to keep poachers from accessing the same vein while also protecting the water and timber supplies that were crucial to mining and refining. Sufficient water and timber to sustain mining and mineral refining operations were of continual concern to the company.⁵⁶ The company not only established its title to land and other resources, it also documented the prior history of title registration to the properties that it acquired. Within Brazil, providing access to the surface resources (timber and water) and protecting its claims were among the major on-going operational challenges of the company.⁵⁷ In the early twentieth century, the company's understanding was that:

With the confusion that exists in this country resulting from the laws of succession in force for the last century, it is next to impossible to keep entirely clear from lawsuits.... In properties where the Company is part-owner and the other owners will not sell

⁵⁴ MV Imobiliário, File 13.10.66.24 ("A crise na mineração de ouro no Brasil").

⁵⁵ Of course, following veins below the sub-surface rendered the company's extension of sub-surface mining area questionable.

⁵⁶ The company first acquired land for the purpose of gaining timber rights in 1839. Recurrent concerns about the deforestation of local lands arose as a problem from the first years of operation. By 1845, as a result of the shortage of timber, the company purchased more than one-half of its supply, and in 1892, the company considered importing lumber from the United States; see *SJdR Annual Report*, 1839, 26, 1845; MV Board Letter, 1 Jan. 1892.

⁵⁷ While the company tried to acquire land that included water and timber rights, it sometimes also purchased water rights to streams not on their land. I have not seen cases of the company acquiring timber rights on land they did not own. However, at least one important court case (discussed below) concerned a party claiming timber from the company.

for a fair price, or do not care to sell at all, we are bound to resort to legal division, which is also a slow & troublesome process but unfortunately, in such cases there is no alternative, as it is not in any way convenient that the Company should have property in common with others.⁵⁸

These needs kept the company focused on identifying its rights to resources.

One of the company's most perplexing practices throughout its existence was to maintain the geographic integrity and nomenclature of the holdings that it acquired.⁵⁹ Doing so required a great deal of effort and multi-generational patience on the company's part. When holdings were adjacent, the company did not consolidate them. For example, as late as 1959, the six adjacent holdings of Bela Fama and California, Santa Rita, Fernão Paes, Honório Bicalhau, and Faria were accounted for as separate properties (see Map 2.) The company acquired these holdings in 1883, 1934, 1862, 1901, and 1908, respectively.⁶⁰ During the twentieth century, the company often donated land for public works (for such purposes as urban development in the town of Nova Lima, highway construction, and laying the electrical network.) When these donations came from a variety of holdings, the company registered and documented them separately.⁶¹

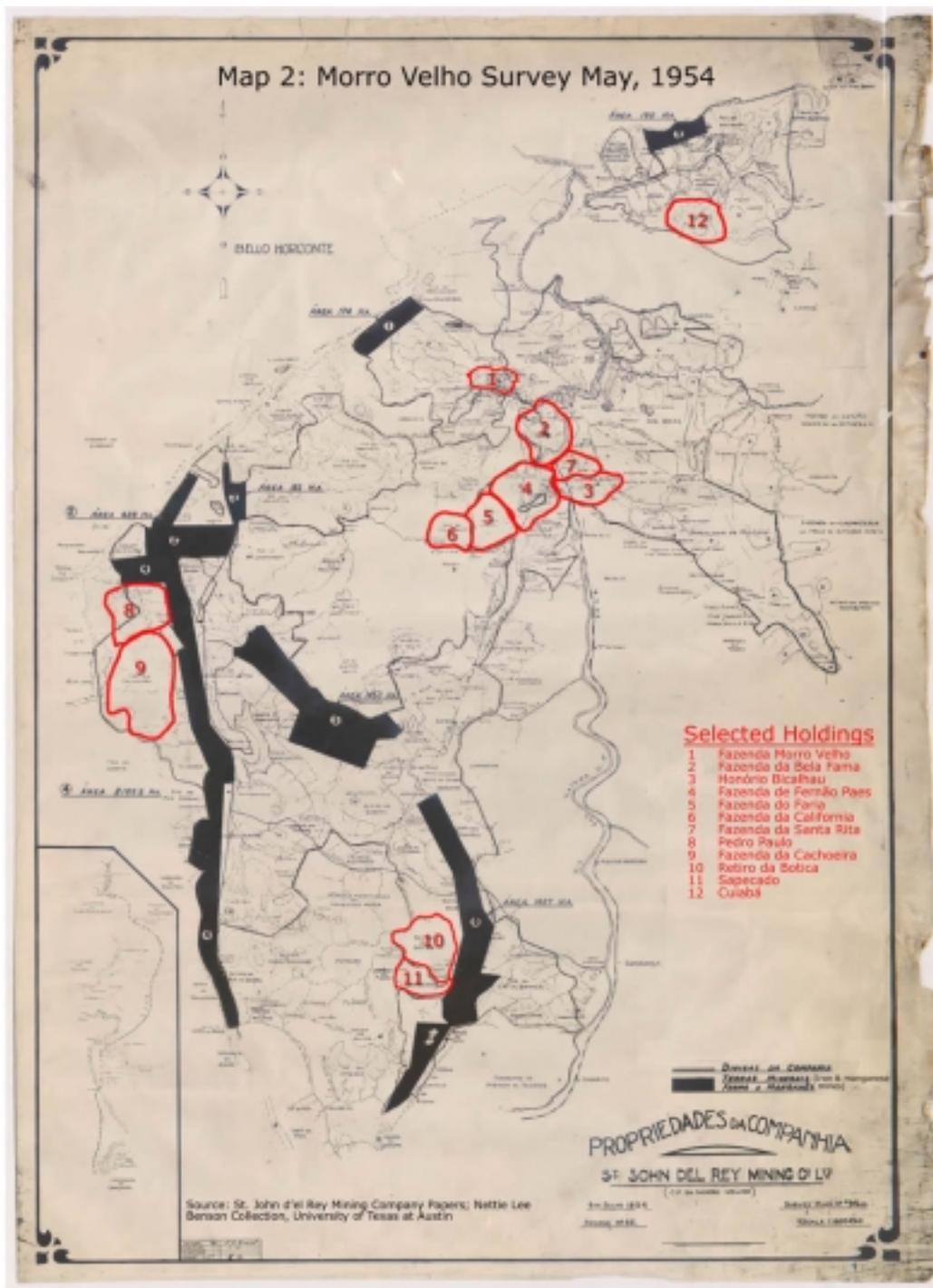
Frequently, the company purchased estate or mine shares, rather than specific assets (land or mining *datas*). When this occurred, the company later tried to accumulate the entirety of the estate, as it had been configured prior to the company's initial acquisition. Often the company negotiated with multiple generations of heirs in order to re-establish sole ownership of the original property.

⁵⁸ SJdR *Annual Report*, 1905, pp 48-49. The annual reports to shareholders in 1909 and 1912 again refer to efforts to consolidate holdings, enter into exchanges and judicial divisions in order to ensure their sole ownership of property. These efforts antedate those of the 1930s and 1940s.

⁵⁹ This practice antedated the Company. They note that "The Mine and Fazenda do Morro Velho along with the adjoining Fazenda da Ana da Cruz belonged to José Correa da Silva and Wife Ana Joaquina da Silva." MV Historical Notes: Appendix B. The same practice seems to continue, if in less rigid form.

⁶⁰ MV *Registro*, Documents. 12, 33, 31, and 32, "Esboços históricos" and associated document lists. Map 2 displays other examples of contiguous holdings. As another example (not identified on Map 2), Fazendas das Feixas and Varginha de Ouro Podre, acquired in 1832 and 1903, were considered separate properties; see MV *Registro*, Documents 21/1 and 21/2. The Company's records trace the original registration of this estate to the registration of land, water, and mineral rights from 1769 to 1783.

⁶¹ For example, during the late 1940s and early 1950s, the company donated land to accommodate the route of the highway between Belo Horizonte and Rio de Janeiro. On 16 May 1950, they registered two distinct donations of contiguous land that came from estates they had previously acquired separately; see MV *Registro*, Documents 23/1 and 24/1.



These practices began very early in the company's history.⁶² The St. John d'el Rey Company began its second acquisition in the region, Mingú,

⁶² The St. John d'el Rey's first land purchase in the "Morro Velho Mine and Estate" (after its failures in São João region) were in two transactions with three of the original British partners (or one of the partners' heirs), who seemed to function at least as much as real estate scouts as miners. Both transactions were

in 1834.⁶³ Two partners had jointly owned Mingú, and the St John d'el Rey initially purchased a share of the partnership from one of them. The final transaction to reconstruct the original holding from the heirs took place in 1898, 64 years later. Through one side of the partnership, the company bought land and shares from four generations of heirs in sixteen transactions. This holding was particularly complicated because the partner from whom the company began purchasing land had as his heirs a wife and fourteen offspring. Among the heirs, some traded their interests in Mingú for other holdings in the inheritance, allowing for some concentration of ownership in individual land parcels. The heir-partners tended to jointly sell their proportionate shares of the property, either to the St. John d'el Rey, other miners, or real estate speculators. The company began acquiring the estate of the second partner in 1862, from an intermediary buyer. Four generations were also required to reconstruct holdings from this side of the partnership. Finally, in 1898, the company could assert that it had “absolute docile and peaceful possession that assures it the right over all of the property now called ‘Morro do Bonfim or Mingú’ ”⁶⁴

The company clearly negotiated many of the transactions jointly to reassemble Mingú. Transactions occurred on the same date, with identical prices, and from various heirs. However, a separate contract registered the sale of each heir's proportionate share. The registered transactions denoted that the company bought shares in the estate, rather than specific parcels of property.⁶⁵ In another extreme example the St. John d'el Rey purchased twenty-five separate “parts in common” from two couples between 1904 and 1923 in order to gain rights to another holding, the Retiro do Hermenegildo. Finally, in 1931, a legal division and final sale permitted the consolidation of the estate.⁶⁶

The company amicably resolved most of the instances of residual claimants attempting to use company resources. Individuals commonly resided, farmed, logged, and practiced other occupations on “company

dated 3 Dec. 1834. The third piece from the fourth partner was dated 8 Dec. 1834. Additional small purchases of small plots retained by one previous resident were completed in 1834, 1839 1845; see MV *Registro*, Documents 1/1 - 1/5.

⁶³ Chronologically, the Mingú acquisition began 2 months prior to the Morro Velho purchase; its deed was dated 9 Oct. 1834. The company's History does not indicate why this purchase is recorded as the second estate. The value of the initial transaction was insignificant (about 0.5% of the value of the Morro Velho land; MV *Registro*, Document 2.1; MV Imobiliário, File 13.10.66.4, MV Historical Notes.

⁶⁴ MV *Registro*, Document 2 (Esboço Histórico). The term “ a companhia tem posse absoluta, mansa e pacifica que lhe assegura o direita sobre todo o imóvel agora denominada “Morro do Bonfim ou Mingú” denoted that no known outstanding claims challenged the company's holding.

⁶⁵ MV *Registro*, Documents 2/1-2/16.

⁶⁶ MV *Registro*, Documents 39/1-39/27.

land.” Sellers and their heirs commonly retained access rights that did not impede the company’s use. However, individual opportunism and the inability to specify completely secure contracts left the company exposed to long and complicated legal cases. Continual challenges to the St. John d’el Rey’s property claims demonstrate the constraints imposed on the ownership of real property through the nineteenth and first half of the twentieth centuries. Challenges came in forms as simple as having purchased the same land a second time to settling the claims of heirs who emerged subsequent to completed property transactions.⁶⁷ Often the company settled these claims in private negotiations; otherwise, the judicial system provided procedures for disputes.

Even the simplest confusions over rights could require decades to resolve. In 1901, the St. John d’el Rey purchased the same land twice; this error was not resolved until 1920.⁶⁸ In September and October of 1901, the company purchased all of the shares from nine heirs to the Fazenda Gorduras (or Pimental). Only a month later, they bought another piece of land that ultimately the courts determined had originally been part of the estate. The confusion arose because, in 1868, an amicable judicial division of land in the Fazenda’s inheritance allowed the widow to sell land that was her inheritance separately from her deceased husband’s offspring. When the widow and her next husband sold land to St. John d’el Rey in November 1901, the transaction included a portion that they had previously sold, under the name Pimental (and not properly registered), but had been part of the company’s previous purchase in September-October. The resolution of the dispute required the heirs of all previous owners of the land (going back to 1868) to declare that “they possessed no property denominated ‘Gorduras’.”⁶⁹ More than recouping the financial value, apparently, the St. John d’el Rey’s concern in the matter was to prevent subsequent heirs from re-claiming an interest in the land.⁷⁰

One of the most peculiar cases that confronted the company involved an acquisition in 1911, which they called Morro Velho e Pedro Paulo.⁷¹ Documents registering this land date to 1839, when the then-owners provided for their legacy. Without direct heirs, Dona Antonia

⁶⁷ Through its history, the St. John d’el Rey had to resolve many property disputes arising from ambiguous demarcation of geographic boundaries. These problems are not the topic of this paper.

⁶⁸ MV *Registro*, Documents 19/1-19/3; Fazenda dos Gorduras [sic] “Esboço Histórico” and supporting documents.

⁶⁹ MV *Registro*, Document 19/3.

⁷⁰ These documents do not record a settlement payment to the disputants. Many such payments were recorded in the *Registro de documentos*, suggesting that none took place in this case.

⁷¹ A portion of the holding was on the same mountain (Morro Velho) as the original land purchases. Pedro Paulo was located at the western side of the company’s holdings (See Map 2).

Gertrudes da Fonseca specified that her share of her and her husband's estate be distributed to her slaves, as usufruct heirs, and to her local church, the Capela de Piedade.⁷² Further, the property was to remain available to the slaves and their descendants for ten generations, when it would transfer to the Capela. When he died in 1842, Antonia Gertrudes' husband left his share of the estate to a single heir. The St. John d'el Rey acquired the husband's portion from a subsequent owner, in 1911. In 1920 and 1938, judicial actions resolved challenges to some of the land use. The 1938 case finalized the judicial division of the original estate between the St. John d'el Rey and another claimant.⁷³ The Pedro Paulo property seemed to be incorporated into the company's total real estate portfolio without major problems. In 1944, the company ceded water rights and use of portions of the land to the State of Minas Gerais.

The St. John d'el Rey had not purchased the portion owned by the church. The company's original purchase deed included a provision that it held "half of the fazenda's agricultural land, fields, forest, streams and water sources in common with the heirs [*herdeiros usufrutuários*] of D. Antonia Gertrudes da Fonseca who have the other half."⁷⁴ This land holding remained denominated as shares of property, rather than as fully-owned geographically-distinct territory. As late as 1936 (when it filed a manifest of its properties under the 1934 Mining Code), the company represented that it "own[ed] the property in common with the Church...."⁷⁵

Nevertheless, in 1951, 40 years after the company acquired their portion of the estate and 112 years after the original inheritance provisions, the company objected to the slaves' descendants violating the *de facto* division of land use.⁷⁶ The "supposed heirs (blacks) of Antonia Gertrudes da Fonseca, which is to say the part belonging to the chapel, invaded the Company's land, and in doing so they destroyed the forest."⁷⁷ After 112 years, although the company did not identify individual heirs, "blacks"—commonly understood to be descendants of the original slave-

⁷² The documents in the company's possession do not address the slaves' legal status; it is unclear if they were to be emancipated as well as becoming landowners.

⁷³ MV *Registro*, Document 54/2.

⁷⁴ MV *Registro*, Document 54/2, 13 June 1911. This wording indicates that the parties had established *de facto* geographic boundaries to their uses of the property.

⁷⁵ MV Historical Notes: Appendix D.

⁷⁶ This time period, however, was still prior to the passing of ten generations of descendants. It is not clear how the Church became the recognized owner of the land that it would have received after ten generations (beginning in 1839).

⁷⁷ 'No ano de 1951 os supostos usufrutuários (negros) da parte de Antonia Gertrudes da Fonseca, vale dizer na parter pertencente a Capela invdem o quinhão da Companhia, havido nas divisão devestando os matos.' MV *Registro*, Document 54 "Esboço Histórico." *De facto* geographic division of land use among common properties seems to have been widespread.

heirs—could still exercise a claim to the land (through their common partnership with the Capela de Piedade) that took years to settle. With the dispute in 1951, the company obtained a judicial division of the property.⁷⁸ A court order ultimately evicted the “blacks” in 1954.

Another of the St. John d'el Rey's properties had multiple ownership claims that remained problematic through the twentieth century. The lawsuits over claims to land and mining concessions at Cuiabá starkly demonstrated the pulls of competing property rights. During 1877, the company acquired 95 percent of Cuiabá from the heirs of its British owner, John Pennycok Brown. In 1878, it purchased the small share belonging to Brown's minority Brazilian partner.⁷⁹ In addition, in 1878, the company petitioned to have all abandoned mining *datas* declared *devolutas* (abandoned for lack of use and reverting to public ownership) and transferred to its name.⁸⁰ The following year, it received an Imperial Concession for gold-mining rights specifically pertaining to Cuiabá.⁸¹ The St. John d'el Rey claimed 797 mining *datas* in the estate.

In 1879, the National Brazilian Mining Association, another British freestanding mining company, challenged claims to 146 *datas* at Cuiabá.⁸²

⁷⁸ MV *Registro*, Document 54/1. Another “descendant of the Negro Slaves” tried to assert a claim against the St. John d'el Rey in 1955, but withdrew it a year later; MV Imobiliário, File 13.10.66.4, 56.

⁷⁹ MV Imobiliário, Files 13.10.66.4 (“List of Documents...”) and 13.4.4.4 (“Histórica de Cuiabá”). The first indication that the St. John d'el Rey was considering the acquisition came in a Board letter of 8 Sept. 1873, raising the issue of negotiation with the British partner's estate; MV Board Letter, 8 Sept. 1873. The original 1827 partnership in this holding, the National Brazilian Mining Association organized as a British company, provided for the indivisibility of the estate. At the partnership's expiration in 1876, the property reverted to the heirs of one of the British partners. John Pennycok Brown's heirs (95% of the partnership) sold to the St. John d'el Rey. The remaining 5% transferred in to the National Brazilian Mining Co., which subsequently failed; MV Imobiliário, File 13.4.4.4 (“Histórico...”) 3 and 10-11; MV Board Letter, 8 Dec. 1877. In 1897, the National Brazilian tried to claim the mining lodes based on their prior ownership, despite having left the lodes unexplored. In 1918, the company settled with the successor of the failed National Brazilian in order to drop all subsequent claims; MV Imobiliário, File 13.10.37.1 Decreto Guarda-mór.

⁸⁰ MV Imobiliário, File 13.10.37.1 (“Concession of the Guarda-mór.”)

⁸¹ MV Imobiliário, File 13.4.4.4 and MV *Registro*, Document 60/1.

⁸² MV Imobiliário, File 13.4.4.4 (“Histórico de Cuiabá,” annexed “Brief description of right of Company at Cuiabá, extracted from Dr. Fonseca's reports of 7th January 1888 and 29th January 1889,” 2). When purchasing this estate, the company believed that “the National Brazilian Company or their creditors—the Brazilian Land and Mining Company have no freehold rights, the Board understand, on any part of the property purchased from the Executors of the late Mr. Brown will exclude them from any mining or water rights they may have fancied, or been informed by their attorney in Brazil, they were entitled to.” See MV Board Letter, 8 April 1878.

The St. John d'el Rey won the case, on the grounds that the property had returned to public ownership because its owners had left it idle (*devoluto*.) Nevertheless, 21 years later in 1900, the failing National Brazilian continued to appeal the judgment. The company that formed as its successor in 1902, the Rotulo Company, Ltd., pursued the appeal to the Brazilian Supreme Court.⁸³ Although the St. John d'el Rey asserted that it won the appeals, it also agreed to a settlement with the Rotulo Co. to drop all subsequent claims.⁸⁴

During the course of the case with the National Brazilian, the St. John d'el Rey began to purchase the rights of remaining claimants.⁸⁵ Meanwhile, the heirs of Brown's Brazilian partner and of the previous Brazilian owners who had sold to Brown also tried to exert their personal inheritance claims to both land and mining *datas*. Heirs of the partner had property shares, rather than distinct holdings and the long-term possession of property supported their claims.⁸⁶ Clear demarcation had not delimited holdings. A large number of heirs and much inter-marriage among the heirs of the original holders left specific claims and distribution patterns irresolvable.⁸⁷ The St. John d'el Rey did not believe that the property could be divided, and tried to compel claimants to sell their interests to the St. John d'el Rey. Further challenges emerged in the 1930s and the company entered into agreement with eight additional claimants (the fifth and sixth generations of heirs) in 1933.⁸⁸ By then, Cuiabá held

⁸³ MV Imobiliário, Files 13.4.1.2 ("Asuntos diversos da Região de Cuiabá," letter dated 31May 1947, from Wharrier, estate Agent) and 13.4.4.4 ("Histórico de Cuiabá"). The leading Brazilian jurist, Rui Barbosa, argued the final appeals before the Brazilian Supreme Court on behalf of the St. John d'el Rey's ownership claims in 1901; see MV Imobiliário, File 13.4.4.5). The legal requirement that land and natural resource concessions be "in productive use" was a continuing challenge for all property owners; MV *Registro: passim*. The concept remains an underlying principle of Brazilian land claims.

⁸⁴ MV Imobiliário, File 13.10.66.4 and MV *Registro*, Document 60/1.

⁸⁵ Between 1900 and 1911 (the settlement with Rotulo), the St. John d'el Rey entered into seven agreements to settle claims. Another 18 settlements were contracted between 1917 and 1928; see MV Imobiliário, File 13.10.66.4 "List of Documents."

⁸⁶ See, for example, MV Imobiliário, File 13.4.1.22. A deed from 1838 represented that Brigadier Texeira and his wife were one-quarter partners of the mines of Cuiabá. As individuals settled into dwellings and resource usage, *de facto* assertions to specific resources emerged, and these holdings acquired separate names. However, they did not achieve legal status; see MV Imobiliário, File 13.4.1.1 ("Informações Histórico" 21-36).

⁸⁷ MV Imobiliário, File 13.4.1.1 ("Informações sobre a Região de Cuiabá," 9-13 and "Histórico do Imóvel" 21-23). The original Brazilian owner had 10 children.

⁸⁸ MV Imobiliário: File 13.4.1.2 ("Asuntos diversos..." memo dated Nov. 1932, entitled "Cuiabá Properties-Observations, extracts from report"). Between 1879 and 1933, the St. John d'el Rey entered into 42 transactions to preclude this set of potential claimants.

no gold-mining interest for the company; it estimated that the property's worth lay in its substantial timber rights for producing firewood and coal.⁸⁹

In 1936, the company brought eviction proceedings against José Abdo Abjaudi, who resided in Cuiabá and had purchased the inheritance claims of two remaining possible heirs.⁹⁰ Abdo continued to press the rights that he had purchased. While doing so, he was destroying the remaining natural brush on the estate to make coal.⁹¹ The St. John d'el Rey pushed for a mandated judicial division of the property. Relying explicitly on the original *alvará* of 1603 “and other legislation in force in Brazil” the company argued that:

[t]wo or more parties having a mine in common or separately any of them who works it must do it in the name of all of them ... hence it follows that he who possesses a just claim to the tenth part of Cuiabá Mine, has not lost his right to this part... Amongst the indivisible items are (among others) the gold veins...⁹²

While the company was trying to force a judicial division of the property through the 1940s, Abdo was able to assert claims through inheritance partnerships for more than 50 percent of the value of Cuiabá.⁹³ Although Abdo was an opportunist, he clearly invoked claims to partnership with the St. John d'el Rey that had legitimate bases within Brazilian property law. The company was aware of seven descendants of the original partners, still living within the confines of Cuiabá, who could follow Abdo's example. Therefore, it initially refused to negotiate a settlement with Abdo because it feared that a settlement would encourage still more claimants.⁹⁴ In 1960, as the company transferred its assets, it negotiated a settlement with Abdo and another claim emerged.⁹⁵ For nearly a century, the constraints on property arising from productive use

⁸⁹ MV Imobiliário, File 13.4.4.4 (“Histórico ...” letter of 1 Dec. 1957 to H. G. Watson [General Manager], this text refers to the 1940s, 1-3).

⁹⁰ MV Imobiliário, File 13.4.1.2 (“Cuiabá land question”). The company always saw Abdo as an opportunist, who persistently pressed a frivolous suit. They referred to him as “a well known meddler in property disputes” and variously as an “Arab,” “Syrian,” or “Turco.” The company probably was correct that he was an opportunist; but he was able to keep the company in court and exert a serious claim to a substantial portion of their resources for more than 25 years.

⁹¹ MV Imobiliário, File 13.4.1.1 (“Informações...” 4).

⁹² MV Imobiliário, File 13.4.1.1 (“Informações...” 4). See also File 13.4.4.4 (“Histórico, letter dated Feb. 1908 to G. Chalmers [Superintendent]).

⁹³ MV Imobiliário, File 13.4.1.1 (“Histórico de Cuiabá” 26-27).

⁹⁴ MV Imobiliário, File 13.4.1.2 (“Cuiabá land question” 14 Aug. 1951) and 13.4.1.1 (“Informações...” letter dated 1 Dec. 1957 from Wharrier to H. G. Watson [General Manager]), 4.

⁹⁵ MV Imobiliário, File 13.4.1.1 (“Histórico do Imóvel” 36) and File 13.4.1.2 (Judicial proceedings of 8 June 1960). I do not know the disposition of this final suit, or if it was frivolous in nature.

requirements and familial inheritance principles plagued the St. John d'el Rey's access to an estate of decreasing value.

These experiences explain the company's persistent reliance on acquiring "absolute docile and peaceful possession" of holdings, as they had been constituted at their original registration.⁹⁶ Doing so was the only means of protecting against subsequent claims. The assertion of prior claims deriving from the principles of indivisibility and familial property imposed strong limits on the sovereignty of private property. The St. John d'el Rey owned much of its property in partnership with economic agents not of its choosing. The company was successful in navigating the shoals of property ambiguities, but it required significant attention, time, and skill.

Maintaining the integrity of property impeded the formation of extra-familial business partnerships, such as those envisioned by the 1817 pronouncement, in fundamental manners. Complicated ownership patterns, subsequent to estate settlements, rendered it impossible to control, or even to know definitively, the composition of partnerships. The severe difficulties of dividing assets when dissolving partnerships compounded the problem. As a result, invoking legal provisions to regulate business relationships remained ineffective, or at best, slow and expensive.

Conclusion

The particular strategies and property challenges of the St. John d'el Rey Mining Company were specific to the attenuated circumstances of a mining company with claims to an exceptionally rich lode. However, all propertied economic agents in Brazil faced the same vulnerabilities to their claims on property from the colonial era through the twentieth century. Clear laws were in place, and when necessary, they were enforced. The conflicts that the St. John d'el Rey faced did not involve inconsistent enforcement, unclear requirements, or possibilities for coercion or exploitation. Instead, conflicting constraints on the limits of personal sovereignty created irresolvable claims.

Fixed productive units could not be divided and owners had little flexibility in intergenerational transfers of estates. As Antonia Gertrudes da Fonseca's and José Abdo's cases demonstrated, specific property was not at stake; rather, parties claimed partnerships (and in some cases, a share of profits) in established businesses. Acquiring property brought with it a significant probability of entering into partnerships with the partners and heirs of prior owners. Because of the complexities of inheritance claims, the St. John d'el Rey could not control (or, at times, even know) the composition of these *de facto* partnerships. Complete and complex contracts could not mitigate these contingencies. The possibility

⁹⁶ MV *Registro*, passim.

for unanticipated claimants to insert themselves into business enterprises served as an important impediment for large business networks attempting to bring together the capital of otherwise unconnected economic agents in risky endeavors. In these circumstances, the imposition of kinship-based business networks could always compromise the benefits of modern business organization. Small, kinship-based partnerships formed around inheritance structures worked with, rather than against, established law.

However serious these constraints were, the experience of the St. John d'el Rey seems to have been unusual. Much rural socio-economic historiography emphasizes the difficulty of maintaining estates through inter-generational transfers and problems of dividing property seldom receive consideration.⁹⁷ It seems that, in most cases, property ownership and transfer accommodates the constraints that the legal structures impose. What explains the differences in the case of the St. John d'el Rey? Moreover, if this company's experience was unusual, why is it important? These questions suggest a research agenda on Brazilian concepts of property that can best be articulated through counter-factual questions.

The most exceptional feature of the St. John d'el Rey's business was the size and purity of its vein. There were other mining enterprises that also could not sustain their value. Their failed excavations and short lives are evidence that they could not match the richness of Morro Volho and, as a result, they lost their productive value. Historically, much of the commercial wealth (and expected wealth) in Brazil has been associated with plantation cultivation of export crops. The most important crops, sugar and coffee, depleted their soils within about 25 years, mitigating the need to maintain the physical integrity of a continually "productive" unit. In short, the property of the St. John d'el Rey Company retained its value, whereas the prevailing experience was for property's productive value to diminish. The purpose of the property laws protecting physical integrity was to ensure production of wealth; depleted land and empty veins were not of value to their holders or to the state.⁹⁸ When that goal remained viable, the legal structure served its purpose. In order to test the consistency of property laws and practices, we need a broader and systematic sample of the actual transfer of real assets in secondary markets and inheritance distributions.

⁹⁷ One of the most explicit examples from this strand of historiography in English is Sandra Lauderdale Graham, *Caetana Says No: Women's Stories from a Brazilian Slave Society*, New Approaches to the Americas (New York, 2002).

⁹⁸ The depictions, prevailing through the early twentieth century, of propertied families sending their sons to settle new frontier lands and open new *fazendas*, while leaving behind diminishing estates, supports this interpretation. Selling off depleted land to transform to new uses, was common; see Metcalf, *Family and Frontier*, Dr. Gerald Arruda interview with author 10 June 2004.

The (presumed) rarity of St. John d'el Rey's experience demonstrates an important facet of Brazilian economic history. The company's origins took advantage of early efforts to allow de-personalized business partnerships in mining. These partnerships' potential lay in their ability to accumulate technology and capital beyond the scope of enterprises defined by personal relationships.⁹⁹ This company not only met these goals, but was lucky in hitting a rich lode. Many other mining ventures lacked the capital, the technology, the time horizon, or the rights to a rich lode. Inconsistent and risky property transfer rules could only complicate the operations and structures of joint-stock companies, and discourage their formation. In the less risky endeavors of agriculture, limitations on capital formation and technological innovation seem to have played an important role in the early decline of the Brazilian sugar processing and commerce.¹⁰⁰ Similarly, innovation in coffee was slow to occur.¹⁰¹ In both businesses, cultivators usually adopted the extensive expansion through frontier settlement, rather than intensifying production within given properties. Abandoning depleted land proved more reliable than undertaking the production and organizational practices to sustain their existing investments.

The Commercial Code of 1890 eased the formation of limited-liability joint-stock firms, enabling the issuance of equity shares and debentures. These financial assets were, apparently, well protected and facilitated large-scale enterprise. However, this form of business organization remained relatively limited. Much of the emerging industrial capability remained within family controlled firms (even when organized as *sociedades anônimas*). Limited-liability joint-stock organization was seldom utilized in the primary sectors, where the preponderance of economic activity remained. Integrating economic history and development economics, and with a strong base in Brazilian history, Leff has identified the prevalence of family-based enterprise, in preference to publicly-traded joint-stock firms, as an important retardant of capital market development.¹⁰² More recently, and close to the subject of this

⁹⁹ For these purposes, national origins are unimportant.

¹⁰⁰ Peter L. Eisenberg, *The Sugar Industry in Pernambuco: Modernization Without Change, 1840-1910* (Berkeley, Calif., 1974).

¹⁰¹ Warren Dean, *The Industrialization of São Paulo, 1880-1945*, Latin American Monographs, No. 17 (Austin, Texas, 1969); Warren Dean, *Rio Claro: A Brazilian Plantation System, 1820-1920* (Stanford, Calif., 1976); Stanley J. Stein, *Vassouras, a Brazilian Coffee County, 1850-1900*, Harvard Historical Studies, vol. 69 (Cambridge Mass., 1957).

¹⁰² Nathaniel H. Leff, "Capital Markets in the Less Developed Countries: The Group Principle," in *Money and Finance in Economic Growth and Development*, ed. Ronald I. McKinnon (New York, 1976), 97-122; Nathaniel H. Leff, *Underdevelopment and Development in Brazil*, 2 vols. (London, 1982). The Commercial Codes of 1850 and, especially, 1890 gradually opened up business practices to accommodate joint-stock limited-liability firms. The business

paper, Eakin argues that the industrialization of Minas Gerais through the late nineteenth and twentieth centuries, based on a small network of closely held family firms, has distorted the potential benefits of rapid growth.¹⁰³ The reformed Commercial Code eased the problems of partible estates by dividing the ownership of assets into smaller portions. However, ultimately, the constraint of maintaining the integrity of physical assets did not change.

The counter-factual questions remain: What were the transactions and opportunity costs generated by the concepts governing property, and how much did they inhibit the formation of sustainable capital-intensive enterprise? The problem of unanticipated partnerships was a result of the structure of Brazilian property law, in its attempt to protect fixed assets while also defending the concept of familial property. This case of one company's long history demonstrates that a "modern" de-personalized joint-stock business organization did not protect an enterprise within traditional economic sectors of the nineteenth century from the imposition of kinship-based partnerships because of this property rights structure.

organization and legal structures allowed were extremely useful in the accumulation of new capital formation. On an operating basis, constraints on real property remained. It is not clear whether the Commercial Code introductions served to alter the framework in which traditional primary sectors of the economy organized.

¹⁰³ Eakin, *Tropical Capitalism*.