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The legality of roads in Chile, 1842–1969: A historical overview

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CITATION

Muñoz León F. (2024). The legality of roads in Chile, 1842–1969: A historical overview. Journal of Infrastructure, Policy and Development. 8(12): 6576. https://doi.org/10.24294/jipd.v8i12.6576

ARTICLE INFO

Received: 23 May 2024 Accepted: 20 June 2024 Available online: 31 October 2024

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Abstract: Currently, no academic work examines the history of the legality of roads in Chile during its independent existence as a sovereign country. Addressing this gap in the literature, this paper focuses specially on the period from 1842 to 1969, when different actors articulated a set of guiding ideas about the duties of the state and the legal powers of the administrative authority in terms of planning, construction and management of road infrastructure that would allow connectivity between population centers and across regions, according to the ideas and resources available at their historical time. This historical overview of Chilean "road law" is done in the light of insights and questions of contemporary intellectual history and institutional history. In this regard, it is argued that the evolution of road infrastructure norms and institutions during the period under study can be divided into three historical regimes, based on their fundamental legislative milestones, guiding ideas, institutional settings, and strategies of state action: from 1842 to 1887, a period of a decentralized "minimal road state" with precarious roads characterized by both material and juridical uncertainty; from 1887 to 1920, the emergence of a "proto-developmentalist road state" intent on strengthening its grip on the nationwide road infrastructure; and from 1920 to 1969, a period of a "techno-developmentalist road state" that created a nationwide paved road network for the new technology of mobile vehicles.

Keywords: history of public law; law and infrastructure; road law; Republic of Chile

1. Introduction: The historicity of road law

This paper seeks to contribute to the history of Chilean public law through a panoramic study of the legality of road infrastructure, or "road law" for short, in this Southern American nation during an historical arch that ranges from 1842 to 1969. On the first date, a "Roads, Canals, Bridges and Roadways Act" created the first road regulatory scheme in Chilean republican history. On the second date, the Chilean section of the Pan-American Highway, the iconic national highway that crosses this thin strip of land for 3363 km from Arica in the arid north to Quellón in the rainy and cold south, completed the previous year after more than two decades of work, was given the number "5" by Supreme Decree No. 556 of the Ministry of Public Works. Between these two dates, different actors articulated a set of guiding ideas about the duties of the state and the legal powers of the administrative authority in terms of planning, construction and management of road infrastructure that would allow connectivity between population centers and across regions, according to the ideas and resources available at their time.

In other words, this work consists of a diachronic overview of the norms and institutions that governed Chilean road infrastructure in the aforementioned period, in order to contextualize their use in the construction of a cultural and economic space of national scope through the promotion of road connections between different population settlements and different regional and subregional areas. This is a novel

study in terms of its subject matter, the Chilean public law of road infrastructure or road law, which will be studied in a historical perspective.

This paper is disciplinarily situated in the field of the history of public law. The discipline of history is a valuable, if not indispensable, tool for facilitating the understanding of contemporary public law and making its specific administrative institutions intelligible. As the influential German jurist and historian von Stein (1870, p. 11) observed, "Of all the branches of law, administrative law changes the most. This is where legal precedents and legal science are insufficient. Only the history of law, elevated to the status of a science, provides an understanding of the sometimes highly interesting change in phenomena that brings about the life of the administrative law". Of course, this argument is generalizable to the whole of law, as suggested by the American jurist Holmes (1881, p. 1), when he stated that, "The life of law has not been logic: it has been experience". In this sense, this article seeks to delve into the "biography" of the life a specific area of Chilean public law, that of the legality and institutionalization of road infrastructure.

In the remaining part of this introduction, I will present, from a theoretical perspective, the problem of the historicity of road law as a specific manifestation of the historicity of public law and the historicity of law in general. In the next section, I will make explicit the methodology of this work, which draws on intellectual and institutional history as resources for the historical study of public law. Then, in the results and discussion section, I will detail the three historical regimes of road law in Chile between 1842 and 1969, specifying their normative milestones and institutional settings, their guiding ideas and their strategies of state action. A concluding section closes the paper by showing how the current road law regime in Chile reflects a rejection of the developmentalist tradition created during the twentieth century and aligns with the "subsidiary state" created by the 1980 Constitution.

At first glance, the highways that carry travelers and goods seem to have little to say about the history of public law. This first impression is facilitated by the fact that roads, routes and trails are one of those "structures of everyday life", as the French historian Fernand Braudel called them, which, when considered in what he called the "short duration", are rendered invisible by their routine character, which we mistake for a sign of immutability and lack of historicity. In his words, "Omnipresent, invasive, repetitive, this material life is under the sign of routine"; "the everyday is made up of small events that are barely marked in time" (Braudel, 1984, pp. 6–7). In fact, roads are one of those elements of the human landscape that, at first glance, appear to be purely material and static, that is, devoid of history, except for those punctual moments when a road is created, damaged, repaired, or for whatever reasons destroyed. If we believe this, roads would not be important, nor would they have much to say about public law and its history.

What has been variously referred to as a road system, road infrastructure, or road network, however, has not only a history, which, according to Braudel himself, is "more comprehensible in the long run", but also a deep connection with public law as an instrument of action of a given political community in a given territorial space. Indeed, in the modern rule of law, given the need to reconcile public interests and private rights within a framework of legal certainty, roads are directly defined by legality and their management or overview is often the responsibility of a certain

institutional framework. In the case of Chile, roads were defined in the Civil Code of 1855 as "national goods" whose "use belongs to all the inhabitants of the nation" (art. 589), and their legal regulation and institutional structure are currently contained in a complex set of organic laws and decrees of the Ministry of Public Works and Transport, as this institution is currently named. These basic norms of Chilean road law include an extensive regulatory framework, the foundations of which were laid by legal reforms in the 1980s and 1990s, which from the mid-1990s allowed the possibility of granting concessions to private legal entities for the construction, maintenance and management of road infrastructure (Ibarra-Coronado, 2011), resulting in substantial private investment, the release of fiscal resources for the construction of less profitable road sections and the renovation of infrastructure to the highest standards. Currently, the legal status of roads is defined by the Roads Act, Decree with Force of Law No. 850 of the Ministry of Public Works (Biblioteca del Congreso Nacional, 1997); the concession of road construction and management is regulated by the Concessions Act, Decree No. 900 of the Ministry of Public Works (Biblioteca del Congreso Nacional, 1996), and the use of roads, both by pedestrians and motorists, is regulated by the Traffic Act, Decree with the Force of Law No. 1 of the Ministry of Transports and Telecommunications (Biblioteca del Congreso Nacional, 2009).

However, beyond the interest of some scholars of economic regulation in the contemporary modality of road concessions (Engel et al. 2001), roads in Chile seem to be a relatively forgotten topic among both historians and legal scholars. Historian Carolina Sanhueza, author of some of the few recent historical studies on the history of Chilean interurban roads, has noted that although "roads are directly linked to the territory in which our society develops", "few have ventured to study these issues in our country" (Sanhueza, 2018, p. 20). For his part, administrative law scholar Vergara (1997, 2019a), author of some of the few works on the legal status of Chilean public roads, asserts that this issue is "a topic that has received almost no attention in national legal doctrine" (Vergara, 2019b). In fact, the only available monograph on the current legality of roads in Chile was published by a legal advisor of the National Roads Directorate based, according to his own testimony, on the undergraduate thesis of another administrative law researcher (Torres, 2015, p. 10).

Awareness of the ways in which the state administration, acting through public law, actively participates in shaping the national space is present in the origins of the modern theorization of administrative law, as evidenced by the textbook authored by the aforementioned von Stein (1870), the "Treatise on the Theory of Administration and Administrative Law", published in 1870. "The body of the state", von Stein (1870, p. 5) stated there "is the territory", while the soul of the state "is its people". In the confluence of a country and its people, this influential German jurist argued, the state finds its individuality; "the understanding of this mutual influence forms the beginning and the basis of all understanding of the development and shape of the state" (von Stein, 1870, p. 5). In von Stein's sophisticated conception of the state, which could be characterized as an welfarist individualism or individualistic welfarism, internal or domestic administration of the state is the "sum total of those activities of the State which provide the individual with the conditions for his development which he cannot achieve by his own strength and effort" (von Stein, 1870, p. 43). The maintenance of

road infrastructure is directly inserted into this set of tasks, as "the road, in the broadest sense of the word, is the first material, unconditional precondition for all transportation and, thus, for all productivity, indeed for collective life as a whole" (von Stein, 1870, p. 178).

In fact, von Stein characterized the road as a matter defined directly by legality; in his words, "There is no such thing as a road as such; the concept of road belongs entirely to administrative law" (von Stein, 1870, p. 178). In his definition, the road is "the local means of transportation between certain places, to the use of which every individual is legally entitled for the purposes of his traffic"; and the road system is "the totality of all rights, duties and regulations by which the roads are enabled to fulfill their purpose by means of legislation and administration" (von Stein, 1870, p. 178). The strategic importance of this kind of infrastructure allows it, in his eyes, to become a heuristic key to understanding the historical transformations of both administrative legality and the state that uses it; as he put it, "the current principle of the law of country roads is the result of a centuries-long history that has an intimate coherence with the development of the state and the social economy" (von Stein, 1870, p. 179).

2. Methodology: Intellectual history and institutional history as resources for the historical study of public law

From a methodological point of view, this article examines the history of Chilean road law in the light of the questions and insights of intellectual history and institutional history, a theoretical and methodological definition that seeks to establish a dialogue between legal history and these historiographical currents in order to benefit from their theoretical, conceptual and methodological proposals.

Contemporary intellectual history departs from a critique of the methodological idealism that once led the discipline to act as if it believed in the existence of eternal "ideas" that act in history by themselves. It includes different approaches. Some emphasize the importance of the context of production in the configuration of the various discourses and "political vocabularies" used in the public sphere to give meaning to political and institutional action (Pocock, 1971; Skinner, 1969). Others seek to reveal the connection between the emergence of certain fundamental historical concepts and the shifting "spaces of experience" and "horizons of expectation" that give content to these concepts as they accumulate in different temporal strata (Koselleck, 2004, 2018). Others aim to show the agency of those intergenerational intellectual networks that allow the circulation of certain ways of thinking and arguing that serve as spaces of knowledge transmission (Collins, 2002).

Institutional history is a perspective that has emerged in Anglo-American political science, in a context of dominance of quantitative methodologies in the discipline, as an attempt to reserve space for the qualitative study of the historical development of political institutions. One of the existing orientations corresponds to the study of "political development", theorized by Orren and Skowronek (2004) in "The search for American political development", a text that calls for the study of the historical development of institutional sites of authority and their shifts over time. The "political development" approach is exemplified in studies such as "Building a new

American state: The expansion of national administrative capacities, 1877–1920" (Stephen, 1982), a study of the emergence of the administrative state, or "The politics presidents make" (Skowronek, 1993), an influential text on the role of presidential leadership in creating, transforming, or preserving historical political regimes. The latter offers a panoramic view of the historical development of the American presidency, postulating the coexistence of a "secular time" of institutions, a temporality of linear or progressive character that allows them their own "densification" in the form of the accumulation of resources and learning, and a "political time" of presidential leadership, cyclical in nature, in which some presidents exercise a foundational role in the charismatic creation of political-constitutional regimes, others merely manage the regime they have inherited either as its supporters or opponents, and others have to deal with regimes in disarticulation and decomposition without being able to found a new regime to replace them (Skowronek, 1993, p. 30).

A study of the history of road law illuminated by both intellectual and institutional history should ask itself questions such as how the social, political, and legal meaning of the concept of "road" changes over historical time, and how the different historical regimes that organize and govern the construction and maintenance of roads are related to each other, either building on what was learned before or rejecting the principles and logics of the previous regime, in order to describe the "secular time" and the "political time" of historical regimes of road law. More generally, it should focus on the norms and institutions that govern roads and the ideas that either inspire them or interpret them.

3. Results and discussion: Three historical regimes of the legality of roads in Chile, 1842–1969

This section will provide a concise and description of the three historical regimes of road law that existed in Chile between 1842 and 1969, with a short explanation of what came before. What came after, as well as what happened in other countries in the region at the time, will be briefly discussed in the concluding remarks.

3.1. The legality of the minimal road state, 1842–1887: Decentralized and precariously executed road management

The history of the planning and management of roads throughout the territory occupied today by the Chilean state begins in the pre-Hispanic period, when the Inca rule extended the Qapac Ñan or Road of the Mighty King, a network of roads known today as the Inca Trail, to the geographic region known as the Central Valley, characterized by its temperate climate and fertile valleys crossed by rivers. There, the Inca Trail crossed a small Inca administrative and ceremonial center on the banks of the Mapocho River, which became known as Santiago after the arrival in 1541 of Spanish explorer and conquistador Pedro de Valdivia; this ancient pre-Hispanic road layout survives today and corresponds to the downtown streets of Independencia and Bandera (Stehberg and Sotomayor, 2012; Stehberg et al., 2016). Likewise, in other cases, pre-Hispanic irrigation ditches, routes, and trails influenced the colonial occupation and road layout of the territory, and were used, renovated, and

supplemented by the Spanish authorities according to the scarce resources available in this distant and poor colony.

From the beginning of the Republican period, after the Declaration of Independence in 1818, the national authorities were concerned with providing the nascent nation with legal means to manage its road needs. The first regulation on roads issued during the republican period was the Decree on the Width of Streets and Roads (Biblioteca del Congreso Nacional, 1820), issued by Supreme Director Bernardo O'Higgins on 24 November 1820. This decree reveals the problems of roads in Chile at the beginning of the 19th century, and also introduces us to the classifications and distinctions that existed at that time between the different types of roads. In its justification, the decree stated that it sought to regulate the "common ways that must be opened for the transit and communication of the inhabitants of the Republic", with the desire to "avoid the arbitrariness with which some owners of rural and urban lands narrow the roads by erecting buildings, walls or fences that cross the line that corresponds to these roads, to the detriment of other owners and public comfort". However, perhaps following the logic of the colonial period, characterized by the weakness of the state administrative apparatus, this decree recognized its limits and declared respect for the acquired rights of landowners, stating that "by virtue of this law, the old roads could not be modified to the detriment of the possessions of owners". As for the categories of roads, this decree distinguished three types of roads and regulated their respective widths: "city and village roads", which were to be twelve rods ("varas") wide; "rural roads between rural estates", which were to be sixteen rods wide; and "general and common roads leading to the cities, villages and towns of the Republic", which were to be twenty rods wide. This regulation, however, had weak institutional means to manage these categories; it only provided for the intervention of an officer of the municipal police with first instance jurisdiction in cases where a new road was to be opened that might affect a neighbor.

The issue of roads made a modest appearance in the debates over the constitutional organization of the new independent country. In the draft constitution drawn up by Juan Egaña in 1811 and published by a Junta de Gobierno in 1813, a Council of Public Economy was created to "supervise and direct" a wide range of matters relating to the "economy, police and industrial, rural and commercial progress of the republic", including roads (Egaña, 1813, p. 45). The constitutions of 1818 and 1822, both dictated by Supreme Director Bernardo O'Higgins (Biblioteca del Congreso Nacional, 1818, 1822) and thus repealed when his government was overthrown shortly after the latter's promulgation, recognized the existence of cabildos, a local government structure established in Spanish America by colonial legislation, and while the former constitutional text charged them with promoting "public welfare", including the maintenance of hospices and hospitals and the "education of youth", there was no mention of road maintenance as one of their responsibilities. On the other hand, the utopian Constitution of 1823, also drafted by Juan Egaña (Biblioteca del Congreso Nacional, 1823), reestablished the organism envisioned in his previous constitutional project, but this time with the name of Directorate of the National Economy, an institution also entrusted to "supervise and direct", among other things, roads. This constitutional text, however, was immediately discarded as impracticable because of its ambitious objectives and its demanding regulations of social life.

The Constitution of 1828 (Biblioteca del Congreso Nacional, 1828), drafted with the help of the Spanish liberal intellectual José Joaquín de Mora, for the first time changed the traditional name of cabildo to the more modern municipalidad, still in use, for the local governments, and gave them a power in matters of road maintenance that was later reiterated in almost the same words in the Constitution of 1833 (Biblioteca del Congreso Nacional, 1833), drafted by the conservative Mariano Egaña, son of Juan, after the triumph of his sector in a civil war in 1829. Both texts assigned to the municipalities the "construction and repair" of "roads, roadways, bridges" and all other "public works" of a local nature. In this way, the constitutional text of 1833, which remained in force until 1925, consecrated a "minimal road state" of a decentralized character, based essentially on the activity of local governments to satisfy road needs. The Municipalities Act of 1854 confirmed this allocation of responsibility for roads to local governments. It stated that they should "take care of the repair and improvement of the internal roads within the municipal territory" (Biblioteca del Congreso Nacional, 1854), either with their own funds or those provided by the central administration.

This local allocation of road responsibilities did not prevent the national authority, represented by the President of the Republic, from intervening in a matter of such practical importance as the roads that crossed the country enabling the movement of persons and goods. Sometimes this concern was linked to the control of the merchants and commodities that circulated along the overland routes; at other times it manifested itself in the need to have the legal means to carry out initiatives. Thus, in January 1835, President José Joaquín Prieto signed a decree establishing "the only roads by which overland traffic should be conducted" between the province of Coquimbo and "the cities on the other side of the Andes", and stipulating that goods, livestock, or other "traffic objects" found outside the established routes would be confiscated when entering Chile from Argentina (Gobierno de Chile, 1835a). In a law of September of the same year, President Prieto was authorized by Congress for six years to contract the construction of roads, bridges, and canals to "entrepreneurs" who were given the power to collect tolls (Gobierno de Chile, 1835b). This authorization was renewed by Congress in 1841 at the request of President Manuel Bulnes. The concession of public contracts to private individuals was thus one of the first strategies for state action in the construction of new roads in the repertoire of the "minimal road state".

In fact, it was the government of President Bulnes that sent a bill on roads, canals, bridges, and roadways to the National Congress for discussion in 1842. The presidential message that accompanied the bill declared "the necessity and importance of good roads" in the young republic, while recognizing "the insufficient means that the government possesses to build and maintain them" and denouncing "the abuses committed in the countryside by landowners" (Cámara de Senadores, 1908a, p. 40). The bill was quickly processed; nine sessions of the Senate were held to discuss it between 13 July and 7 October 1842, and another six in the Chamber of Deputies for the same purpose, between 10 October and 6 December of the same year. During these legislative debates, the text sent by the president was approved almost without modification. Concurrently, important issues were being discussed in Congress, such

as the official regulation of weights and measures or the creation of a new national university to replace the colonial-era one, as evidenced by the President's call for extraordinary sessions of Congress to complete the discussion of these and other bills (Ministerio del Interior, 1835). At the same time, they had to respond to numerous requests from individuals, including applications for citizenship or nationality from foreign residents.

Thus, in 1842, the Act of Roads, Canals, Bridges and Roadways, henceforth the Roads Act, was enacted (Biblioteca del Congreso Nacional, 1842). With it, to use the terminology of Scott (1998), the Chilean state began a gradual process of imposing strategies of "legibility" on the Chilean territory that would allow it to acquire the greatest epistemic and administrative capillarity possible over the territory within the constraints inherent to its historical condition and the budgetary, technological and institutional possibilities of the time. This legislative text contained three chapters composed of thirty-eight articles, plus seven "additional" articles that established measures of various types to facilitate the correct entry into force of the law. Its first chapter established a roads board in each province, which, in cooperation with the role of the municipalities, was to "watch over the state of the roads". The roads board in each province was to be composed of two local authorities and a surveyor resident in the same province, for whom no salary was provided. The foreseeable national shortage of surveyors led the president to order by decree in August 1843 that in four of the ten provinces, the most distant from the urban, administrative and productive centers, the Roads Boards would function only with their administrative officers (Cámara de Senadores, 1908b, p. 428). Likewise, the first chapter of the Roads Act also created a Corps of Engineers, headed by a chief engineer and six members of the same profession, who would provide the technical knowledge necessary to improve the road network. However, the lack of professionals in the field until the end of the 1880s meant that this body had little capacity to act; in Jaime Parada's words, the creation of this Corps was "little more than a declaration of intentions" (Parada, 2011, p. xv).

The second chapter of the Roads Act provided for the collection of tolls on roads, bridges and navigable rivers to finance the construction, opening and maintenance of roads. However, as Sanhueza (2018, pp. 96-97) has shown, these sources of income of colonial origin, which implied a charge for those who passed through certain points, had an exceptional character in Spanish law and in the colonial organization of the territory, and therefore lacked the magnitude and continuity that would have allowed a sustainable expansion of the road network. Finally, the third chapter of the Roads Act established two categories of roads according to their use: "public roads", consisting of "those that serve to connect a city, town or village with another city, town or village", and "rural roads", corresponding to "those that connect private estates with public roads". While the latter could be modified "with the consent of the interested parties" and with the authorization of the respective roads board, without further indication of the characteristics that these country roads should have, the public roads were regulated in many of their characteristics. Thus, the law regulated, among other things, the manner in which they were to be constructed, by digging a ditch on each side and depositing the earth "in the middle of the road, so that it assumes a convex shape"; the manner in which water from ditches and rain was to be disposed

of by means of bridges, paved roads, or canals, so as not to interrupt or destroy the roads; and numerous rules regulating what neighbors and, in general, owners of land adjacent to roads could and could not do. The Roads Act concluded by giving the governor of each territorial department jurisdiction to settle disputes over "the opening, direction, or any other point related to roads" between private individuals or between them and the public authority, with the litigants being able to appeal their decisions to the Road Board of the province.

Considering this is a work of intellectual legal history, it is interesting to wonder whether the first Chilean authors of public law were or were not aware of the importance of the spatial dimension of statehood and, in particular, of the way in which road law expresses a certain way of collectively appropriating space. The nineteenthcentury liberal precursors of constitutionalism, it should be noted, had little to say in this regard. In his philosophically ambitious work elements of theoretical, positive and political constitutional public law, Lastarria (1846, p. 173) placed the issue of roads within the "municipal power", stating succinctly that each local community of neighbors "has roads, aqueducts, dams, and other public works that are under its direction" and to whose management and expenses it contributes, "seeing its own benefit linked to these matters". Carrasco (1858, p. 208), in his "Commentaries on the constitution of 1833", succinctly mentioned the powers of the municipalities in relation to roads as one of the powers of these bodies in relation to "matters of common interest". In his work "The constitution before congress", Huneeus (1891, pp. 281-84), in reviewing the constitutional powers of the municipalities, did not elaborate on the subject of roads, limiting himself to stating that the municipalities lacked the necessary resources to carry out this and other of their constitutional functions.

Although all of these authors taught and wrote when the 1842 Roads Act and its embryonic institutional framework already existed, the significance of these advances was lost to them from the heights of the constitutional text. For this reason, it is not surprising that those who took on the task of theorizing and analyzing the role of public law in relation to road infrastructure were the first Chilean scholars of administrative law. Santiago Prado, professor at the National Institute, in his "Elementary principles of Chilean Administrative Law" (Prado, 1859, pp. 251–255), a text that reveals a significant influence of Spanish doctrine, placed this issue within the duties of the administration with respect to things, in this case roads as national assets for public use, pointing out the economic and political importance of public roads and identifying the duties and powers in this respect of the government, the road boards, and the Corps of Engineers. In Prado's words, roads are both "a means of transportation and an element of wealth and prosperity" and "necessary instruments for social action". His reflection on roads and connectivity deserves to be transcribed because of the profound meaning he ascribes to them in the following paragraph:

"Without short, easy and cheap communications, trade, which nourishes agriculture and factories, exchanges fruits for artifacts, and takes one and another from the centers of production to the centers of consumption, languishes and dies. The citizens can neither exercise their rights, nor demand justice, nor invoke the protection of distant authorities in favor of their persons and property. The government, isolated in the middle of the nation, neither sees nor hears nor is obeyed; its action, which should be felt in the extremes of the territory, does not

cross a short distance, or reaches the distant points without forces to preserve intact the prerogatives of power and to demand from the governed the fulfillment of the laws.

There is no public spirit either, because the contact of ideas and feelings so necessary to the formation of opinion is lacking, and in the midst of such a terrible moral anarchy, particular and local interests end up triumphing in the name of individual or collective selfishness and destroying the unity of the State" (Prado, 1859, 251–52).

3.2. The legal foundations of the proto-developmentalist road state, 1887–1920: The emergence of a centralized roads administration

Towards the end of the nineteenth century, the general tendency in Western countries was to strengthen the administrative state apparatus to enable it to perform new tasks related to the industrial age, which was beginning to have a direct or indirect impact on economies integrated into international markets, as in the case of Chile, a seller of raw materials and a buyer of consumer goods and technologies produced in the industrialized countries of the increasingly hegemonic Global North. In the Chilean case, the first ruler to develop a vision of the future around these needs was President José Manuel Balmaceda.

José Miguel Balmaceda was a liberal congressman who came to power in 1886 with a reformist and, one could say, proto-developmentalist agenda. A firm believer in industrial development, Balmaceda seemed to anticipate some of the concerns of Latin American rulers of the 40s, 50s and 60s of the 20th century, who, inspired by the theories and diagnoses elaborated by the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), understood the state as the engine of national economic and industrial development. Balmaceda's government and the full realization of his vision of national industrialization through the expansion of state services and administrative management capacities, however, were interrupted in 1891 by a civil war that pitted him against the National Congress, which favored the preservation of a parliamentary institutional arrangement in which the president was subordinate to the priorities set by that body (Collier and Sater, 2004, p. 154). Defeated in the 1891 civil war, Balmaceda committed suicide in the Argentinean embassy on the last day of his presidential mandate.

Long before that, on 21 June 1887, President José Manuel Balmaceda enacted a law that reorganized the existing cabinet positions, and created the Ministry of Industry and Public Works, entrusting it with "the opening, maintenance and repair of roads, bridges, roadways and waterways" (Biblioteca del Congreso Nacional, 1887). Balmaceda appointed two lawyers, Pedro Montt, who would later on become president himself, and Luis Antonio Vergara, as Minister and first Undersecretary of this portfolio. The next year, a Directorate of Public Works was created, with sections for Railroads and Telegraphs; Bridges, Roads and Hydraulic Constructions; Architecture; and Mining, Geography, and Geodesy (Biblioteca del Congreso Nacional, 1888). Nevertheless, as Montt (2004, pp. 67–68) has shown, at the time of the creation of these new administrative institutions, it was railroads, not roads, that were the main regulatory target of the new Ministry and its subordinate administrators, as it was the

most technically and financially demanding of the new industries or infrastructures that it had to oversee.

As can be seen, the legislative milestone that marks this period does not come from what I have termed "road law", but rather from the institutional organization of the state administration. The creation of a ministry with an under-secretariat and a subordinate administrative body responsible for implementing the political decisions on public infrastructure that come from the president and his staff, in dialogue with local needs and with the mediation and guidance of technically trained officials, represented an important effort by the state to increase its active control over the country's land transport routes. In this sense, what we witness in this second historical regime, from a historical-institutional perspective, is the adoption of a proto-developmentalist model or paradigm, in which the state seeks to create the institutions that will allow it to carry out, in the medium and long term, an industrial policy of the magnitude that was beginning to be imagined in this new modern era.

The bureaucratic transformation of the state, which began to deal with matters of great technical complexity and therefore highly demanding in terms of the knowledge needed to carry out administrative tasks, also required greater attention on the part of the state to the institutional spaces it had to prepare the appropriate professionals. In this regard, as early as 1853, the curriculum of the National Institute, an elite educational institution that at the time taught the higher courses leading to university degrees (Baeza, 2010), stipulated that the training of civil engineers, one of the five engineering specialties created in that curriculum, should include a course on roads and bridges in the fourth year. However, this course could not function until 1861 due to the lack of a professor (Sagredo, 2011, p. 294). Likewise, although the specialty of Civil Engineering existed since the 1853 curriculum, the first Civil Engineer to graduate from the University of Chile only did so in 1869 (Parada, 2011, p. xvii).

To remedy the shortcomings in the professional training of engineers and to adapt the offerings of the state university to the new needs of the state apparatus itself, President Balmaceda himself and his Minister of Justice and Education, Julio Bañados, a professor of Constitutional Law at the same university who had also developed proposals for reforming the teaching of law (Bañados, 1889), issued a decree in 1889 reforming the curriculum of the Faculty of Physical and Mathematical Sciences (Ministerio de Justicia é Instrución Pública, 1889). It established new lines of professional training, including, among five other specializations, that of Roads, Bridges and Hydraulics Engineering; its curricular specialization included subjects such as Foundations, Bridges and Tunnels, and Ordinary Roads and Practical Hydraulics. The number of engineering graduates grew steadily with the turn of the century, as a result of the convergent action of the administrative and educational changes carried out by Balmaceda. In this way, both institutional and intellectual transformations prepared the epistemic and bureaucratic infrastructure of the state that, with the advent of the motorized vehicle and the paved road, rose to the challenge of putting the nation on wheels in the first decades of the 20th century.

Legal thinking also gradually adapted to the reality of the new protodevelopmentalist state, eager to achieve ambitious goals in all areas of modern life. Amunátegui (1907, pp. 403–407), a professor at the University of Chile, reflected on the competencies of the various municipal and provincial authorities who at the time were responsible for road maintenance and reviewed the classifications of roads contained in the legislation of 1842. Valentín Letelier, first professor of the chair of administrative law at the University of Chile, addressed in his "Notes on administrative law" (Letelier, 1907, pp. 182–195), the emergence and development of roads throughout universal and national history, a subject to which he returned in his ambitious review of world institutional history, "Genesis of the state" (Letelier, 1917, pp. 705–716), and called for the creation of "a general road plan to connect the different parts of the territory", observing that "to a great extent, the value of property depends on the greater or lesser distance of a road" (Letelier, 1907, p. 191).

3.3. The legal structure of the techno-developmentalist road state, 1920–1969: The centralized roads administration on wheels

If the last quarter of the 19th century was the era of the railroad and its astonishing territorial expansion, in the first third of the 20th century the new great technological transformation in transport was the mass appearance of the motorized vehicle. This new technology, increasingly available to road users, placed an enormous demand on the "road state" to update its technical and professional skills, but also its technological capabilities in the construction of high-strength infrastructures. The "road state" became a "paving state", eager to extend its asphalted layout to all the places previously occupied by rural dirt or gravel roads. This implied new capacities to act, requiring large budgets that were not always available, leaving the state constantly constrained in its ability to build new roads or repair existing ones by the budgetary constraints typical of a Latin American country.

To describe the state of legality in the new industrial era, Schmitt (2009) coined the concept of the "motorized legislator" to refer metaphorically to the ever-accelerating and cumulative multiplication of laws, decrees, and mere administrative measures that were already overpopulating the sources of public law in his time. It is striking that the metaphor for this increased rhythm of legislative production was that of the "motorized" legislator, an idea which, although not necessarily associated a priori with the technology of motorized vehicles, is undoubtedly the one that comes to mind, precisely because a motorized vehicle conveys to a pedestrian an idea of irrepressible speed.

The first decades of the twentieth century were indeed a dynamic period of constant legal change, in which new ideas and new techniques in all areas of social life demanded a more active and dynamic role for legality; and road infrastructure was no exception in this respect. In the field of Chilean road law, what borrowing Polanyi's (2001) terminology we could call the "great transformation", e.g., the incorporation of the needs of motorized vehicles and motorized drivers into the design and the material structure of the road network, began in 1920 with Statute No. 3.611, the Roads Policing and Revenue Act (Biblioteca del Congreso Nacional, 1920), henceforth the 1920 Roads Act, an event that marked the beginning of a sustained and constant expansion of road norms and institutions. President Pedro Montt, the same politician who had served as the first Minister of Industry and Public Works, sent this bill to Congress in 1910; it took this body exactly a decade to discuss it, during which time the arrival of internal combustion vehicles in the country accelerated, thus increasing

the need for an entirely new regulatory instrument for the management of roads.

The 1920 Roads Act, the first general legislative framework for roads since the 1842 Roads Act, maintained some of the logics of that legislation, such as the importance of the local level, no longer provincial but municipal, in the design of roads. However, it made an epochal change in two crucial aspects. First, it was the first Chilean general road regulation to mention paving as a technical element of road construction, marking the legal dawn of a new technological era in the history of road infrastructure in Chile. Second, and related to the first aspect, it was also the first norm in Chilean republican history to consider permanent resources for the financing of road infrastructure, including a property tax of a territorial nature among other financing mechanisms, in a budgetary scheme that included the existence of budget items preferentially allocated to paving, revealing that a new power/duty had been born for the state administration: to provide its motorized citizens not only with roads, but more specifically with asphalted, preferably divided highways that would allow fast and safe motor vehicle traffic in both directions.

The 1920 Roads Act introduced distinctions between roads that were refined over time. For example, in order to explicitly concentrate the growing police power and financial resources it foresaw, the law reiterated what the Civil Code of 1855 had already stated in its article 592, namely that roads and bridges built by individuals within their private property were in fact private roads and thus not state property, even if their owners allowed their public use; in this way, the law sought to prevent these landowners from diverting resources to the improvement of their private rural property, an unimportant concern for the impoverished state in the mid-19th century. However, its distinction between first- and second-class roads did not last long. In 1930, Statute No. 4.851, the General Roads Act (Biblioteca del Congreso Nacional, 1930a), came into force, which classified public roads into international, national and regional; national roads, the most important, were defined as those connecting the capitals of each province with the main navigable waterways and received centralized funding, while the sources of funding for regional roads were territorial in nature. The 1930 statute also went a step further than the 1920 Roads Act in declaring as "public utility", which could be expropriated for the construction of roads, not only municipal land but also private land. Its complementary ordinance, Decree No. 2.190 of 1930 (Biblioteca del Congreso Nacional, 1930b), incorporated the recently promulgated 1928 Ordinance on Traffic on Public Roads into road law, thus introducing norms that disciplined the practices of the new automobilists, such as the prohibition of parking vehicles on the roadway or the obligation of the owners of commercial establishments to have parking spaces for their customers so that they would not obstruct traffic when stopping to use their services.

In this period, in terms of legal ideas about roads and their role within the law, Valentín Letelier's ideas inspired the teachings on road services of Antonio Iribarren, professor and radical party politician who served as Vice President of the Republic in 1946. In his "History of law classes", he reviewed the main historical milestones in this area (Iribarren, 1938, pp. 156–160), while in his classes on administrative law, he gave an account of the growing technification of the subject in the context of what I have called the "techno-developmentalist state" through his lectures on the public works contract (Iribarren, 1936, pp. 85–94) and the public works concession

(Iribarren, 1936, pp. 100–103).

Returning to the institutional aspect, the bureaucracy was also refined by the ordinance of 1930, which strengthened the powers of the existing Roads Department. This line of institutional development was subsequently reinforced by various norms aimed at reorganizing the bureaucracy, expanding and specifying its powers and attributions, within the framework of an increasingly activist or interventionist state (Ackerman, 1984), in line with what happened in the Western democracies of the interwar and postwar period, determined to use state power to prevent crises of all sorts and facilitate social interaction. Decree Law No. 150 of 1953 (Biblioteca del Congreso Nacional, 1953) and Statute No. 15,840 of 1964 (Biblioteca del Congreso Nacional, 1964) further improved the bureaucratic structure of the Ministry of Public Works, gradually improving the regulatory and road management instruments.

The budgetary instruments for the development of the road network were also improved. In 1955, a law on large-scale mining (Biblioteca del Congreso Nacional, 1955) provided for the existence of a tax on the copper industry to finance the road from Santiago, the capital, to Arica, the northernmost city in the country, and an unspecified southern longitudinal road. These works were part of the construction of the Chilean section of the Pan-American Highway, a visionary road network whose realization was agreed upon at the 5th International Conference of American States in 1923. In 1965, another law (Biblioteca del Congreso Nacional, 1965) modified the previous one, stating that after the completion of the work on the so-called "Longitudinal Highway", that is, a highway running from north to south, the aforementioned funds would be used for the construction of several transversal roads, that is, highways running from east to west.

I have chosen the year 1969 to symbolically end the developmentalist period because in that year the main highway that currently crosses Chile from north to south, from Arica in the north to Quellón on the island of Chiloé in the south, was baptized with the name "Route 5", so iconic and familiar to generations of Chileans who have since traveled along parts of its extensive route. This came about due to Decree No. 556 of 1969 (Biblioteca del Congreso Nacional, 1969), signed by President Eduardo Frei, a centrist politician who in the 1940s was Minister of Public Works and in that capacity initiated the construction of the road from Santiago to La Serena, the first paved section of the Chilean Pan-American Highway. The 1969 decree established that all public roads in the country had to have a number, and distinguished between national and regional roads, recognizing among the former the international roads and the longitudinal or north-south roads, as well as those connecting the provincial capitals with the longitudinal road from Arica to Quellón or those connecting those cities with airports or ports where the National Airline or the National Maritime Company, both state-owned companies, had stations to stop. In article 2.1.1. of the 1969 decree, the longitudinal road from Arica to Quellón was assigned the number 5, giving rise to the concept of the "Route 5" (Ruta 5), so well-known to Chilean car and truck drivers and passengers who travel from south to north or north to south along this strategic and important land route.

4. Conclusion

To conclude, it is appropriate to answer the questions that intellectual and institutional history pose regarding the historical trajectory of Chilean road legality between 1842 and 1969. How did the concept of the road change during this period? And how did the different historical regimes that existed during this period relate to each other?

In this regard, it is possible to conclude that the concept of road, in the period of the "minimal road state", was associated with precariousness, poor maintenance of conditions, often crossing areas not necessarily suitable for the transit of all types of people or vehicles of the time. In addition to this material precariousness, the road was also conceptually characterized by a lack of legal certainty, with the constant possibility of neighbors, particularly those with large rural estates, destroying public roads by incorporating them into their land or otherwise altering them. In this historical regime, legality was weak, and difficult to enforce on the ground. In terms of its epistemic structures of support, there were few people professionally trained to make judgments about the best way to manage the territory. Financially, things were no different; there were no national budgets to meet local needs, which had to be met with marginal sums of irregular collection that financed few maintenance and repair works.

In a second stage, of a "proto-developmentalist road state", we witnessed an effort by the authority to create a centralized structure and institutions to design and manage the construction of public infrastructure works. This period coincides with a greater budgetary capacity on the part of the state, expressed in a separate cabinet position, the Ministry of Industry and Public Works, and an administrative apparatus specifically dedicated to infrastructure, the Directorate of Public Works. At that time, the State had already acquired the knowledge and expertise to carry out major public works, using new and increasingly resistant technologies. In this way, the concept of the road gradually became more technical, paving the way, so to speak, for the new concept of the road that emerged in the third historical regime.

In the historical phase of the "techno-developmentalist state", a state "on wheels" that coincided with the rise of the Schmittian "motorized legislator", the concept of the road begins to resemble what it is understood to be today: a shorthand for a nationwide paved road network created by an efficient administrative authority, in charge of its maintenance and safety, that should be able to satisfy the needs of motorized transport, reducing the distances between urban points and economic centers, and thus facilitating a type of national integration that is perceptible to citizens on a daily basis.

It is worth noting at this point that the historical development of Chilean road law between the nineteenth and twentieth centuries and its relationship to processes of administrative institutional densification and technological improvement broadly resembles that of other countries in the Southern American Cone during the same period. In general, the material scarcity and institutional weakness of the nineteenth century gave way in the first decades of the twentieth century to an accelerated effort on the part of state agents, engineering vanguards and the motoring public, often with the support of populist or authoritarian governments seeking popular legitimacy, to create paved road networks that would integrate markets and populations in the

various corners of the territory by means of motorised transport. This was the case in Argentina, where the creation of a National Roads Directorate in 1932 by means of a Roads Law allowed for an increasing technification of state planning and management of roads (Ballent, 2008). In Peru, on the other hand, the same effort to integrate the national territory for the purposes of modernisation led to legislation that, in the face of budgetary constraints, made it compulsory for the inhabitants of the territories to contribute to the maintenance of the roads with their personal labour or with a payment in cash, making this obligation fall in practice only on peasants and rural workers, often of indigenous descent and thus exposed to the pressures of accelerated cultural assimilation (Meza, 2009). Generally speaking, in the first decades of the twentieth century, the technological development of the United States, both in terms of its constantly changing automobile industry and its growing capacity in terms of road design and construction techniques, made this country a model for Latin American projects of national integration through highway networks and a center for the promotion of Pan-American initiatives (Booth, 2013, pp. xxv-xxvi). The holding of numerous Pan-American Congresses on roads and transport from the 1920s onwards further disseminated guiding ideas, construction technologies and strategies for state action in the field of roads, and helped to consolidate the project for the construction of a Pan-American Highway, whose international convention was signed in 1936 (United Nations, 1994), committing its signatories, among them Chile, to fund the construction and maintenance of the parts of the highway that crossed their territories; something that, as we saw in the Introduction, did not happen in the case of this country until 1968.

In summary, the three historical regimes of Chilean road legislation that existed between 1842 and 1969 showed some changes in the repertoire of state action strategies as a result of the increasing strengthening of the administrative, budgetary and technical capacities of the state. Nevertheless, we see a relationship of continuity and learning between them, both on the basis of what was desired and what could not be achieved in each of these phases, and on what was actually achieved and built in previous periods, facilitated by a relative continuity in the basic guiding ideas of what the state should do with regard to roads between the three periods.

It is only the changes in Chilean road law that took place between the early 1980s and the mid-1990s that led to a rejection of the consensus of the immediately preceding developmentalist periods. The history of Chilean road law saw little development during the conflict-ridden years of the socialist government of the Unidad Popular (1970–1973) and the first years after the 1973 military coup. It was not until the 1980s that some significant legal reforms in infrastructure law were carried out, hand in hand with the neoliberal revolution carried out by the Military Regime (1973–1990). In the government's own terminology, the 1980 Constitution, inspired by the Church's social doctrine, created a "subsidiary state" in which the state is limited to doing what individuals cannot do for themselves. Since then, constitutional scholars of different ideological persuasions and interpretive approaches have debated whether this fundamental text actually sets insurmountable limits on state intervention in property and the market, or whether it is susceptible to an expansive interpretation by the legislature (Fermandois, 2006, pp. 89–109; García and Verdugo, 2015; Lagos, 2020; Loo, 2009; Quintana, 2014; Sepúlveda, 2023; Varela, 1989; Vallejo, 2016; Viera,

2010).

In 1981, a minor amendment to the law allowed public works, which under the amended 1960s legislation could only be carried out directly by the State and with its own resources, to be put out to national or international public bidding. Two years later, a decree with the force of law established a regulatory statute for the concession of public works (Ibarra-Coronado, 2011, pp. 189–190). They legal changes, however, did not bear fruit until the mid-1990s, in a different global and national political and economic context marked by the fundamental continuity of the Military Regime's public policies by the center-left governments of the Concertación de Partidos por la Democracia (1990–2010). It is truly in this moment that emerged a new historical regime of the "subsidiary road state", based on a strategy of state action, the concession of public works to private individuals, typical of the "minimal road state" period, which, despite its "anachronistic" appearance from the point of view of a linear and progressive understanding of the history of state legality and the political economy, allowed a level of expansion in kilometers and improvement in the quality of the road network unprecedented in Chilean history (Dresdner, 2016), finally realizing the dream of national road integration to which authorities and citizens have aspired since the beginning of the Republic.

Interestingly, one of the most studied decisions of the Chilean Constitutional Court on economic regulation in the 1990s corresponds to a discussion on the tension between the market for outdoor advertising on land near highways and the prevention of the risk of traffic accidents due to distractions or visual obstacles created by billboards very close to the highway (Fermandois, 2006, pp. 140–156, 173–178). Likewise, today one of the many social movements or organized currents of opinion that have appeared in Chilean public debates corresponds to the movement "No more TAG" (https://www.nomastag.cl), which claims against what they consider to be the privatization of urban highways, due to the existence in the main traffic points of these routes of a system that charges for driving on these routes digital devices, the "TAG", that users have to rent from a private provider. Not surprisingly, these are the characteristic debates of the historical stage of the "subsidiary road state".

Funding: This research was funded by Agencia Nacional de Investigación y Desarrollo (ANID), Gobierno de Chile, through its FONDECYT Program, Grant 1211873. The APC was funded by Vicerrectoría de Investigación y Doctorados de la Universidad San Sebastián–Fondo USS-FIN-24-APCS-18.

Conflict of interest: The author declares no conflict of interest.

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