

CHAPTER 3



Motorway Mania in Italy in the 1920s

The Proliferation of Promotional Committees

The Milan–Lakes motorway established an example that many others very soon wished to follow. From January 1923—as soon as news of the governmental decree for the concession broke—dozens of proposals and projects followed on each other’s heels. They were often supported by promotional committees that were instituted specially for the occasion, all determined to realize a motorway across diverse parts of Italy. The enthusiasm for these projects was shared by the TCI, which saw the opportunity for free private initiative in the face of the inertia of public actors. As Italo Vandone, TCI mastermind for road issues, stated,

we must conclude that the seeds sown with the Milan–Lakes motorway have rapidly led to the sprouting of many similar initiatives, which undoubtedly demonstrates, beyond an understandable regional emulation, that the motorway concept effectively responds to the felt need for circulation. It is possible that the poor maintenance conditions of some of our principal roads have given rise to these initiatives. This would not be the case if these great road arteries had already received a modern renewal, in order to permit rapid and convenient circulation of motor vehicles and animal-drawn vehicles side-by-side. Private initiative therefore tends to substitute the slow and imperfect activity of public administration where the extent of the traffic has made it too difficult to bear the damages of the unfavorable road conditions, and aims to take a standing jump over this obstacle by replacing ordinary roads with the motorway. This not only represents a more perfect solution to the problems complained of, but also gives a free hand to private business.¹

The spirit of emulation pervaded many projects, transforming the motorway into a tool with a thousand uses, a messianic work that responded to the most disparate of problems. Where traffic was still developing, the motorway was seen as a valid support of motorization and a solid alternative to the disastrous conditions of the ordinary roads. In regions with a low index of motorization, the motorway was instead seen as an indispensable catalyzer that could trigger the desired development of motoring.

This was the frame of mind of one of the most passionate supporters of the motorway in Italy, Francesco La Farina, a department head in the Ministry of Public Works, and also an official speaker on the theme of the motorway at the fourth roads convention organized by the TCI in 1925.

We do not believe that preexisting local traffic, deduced just from the circulation and transit of private vehicles, should be an absolute condition for the construction of a motorway. Rather, we think that given the scopes that a motorway can respond to and that we have alluded to, it is in itself an element of success in regions in which determined extremes (cities, populous centers, weather conditions) destroy the good roads suited for motor traffic. We also take into consideration that regular [transport] services, both public and private, could be located along the motorway. This observation is true for southern Italy and for many zones with a touristic character, which have been impossible to exploit until now due to the lack of good connections.²

The zealous Farina was actually pointing his finger at the main features of the road-building policies, namely, "development by scarcity" versus "development by excess." As reported by Mauch and Zeller, the post-World War II debate saw how "in some countries, especially the Anglo-Saxon ones, roads were built to supply a scarcity that blocked economic activities, while in continental Europe roads were sometimes built far ahead of demand in the hope that they would stimulate commerce through excess capacity."³

Motorway enthusiasts in the mid 1920s tried to use both arguments, often related to the needs of the tourist industry,⁴ an easy way of overcoming the resource allocation doubts linked to every project. The motorway project outlines of the early 1920s were actually often ideas and sketches done in completely individual style by engineers and other experts, referring to the zones that they operated in and knew best. Sometimes a rudimentary motorway project would gain passionate support from the local chamber of commerce or a group of important figures, who in turn created promotional committees and spread the proposal via brochures, publications, and even films.⁵ Among the most precocious motorway proposals, the initiative of Turin's Count Secondo Frola is worth noting. As we shall see in more detail in chapter 6, on 16 January 1923, he organized a first meeting for the construction of a Turin-Biella-Milan motorway. Similar haste was seen in Tuscany, where the *Ente attività toscane* society organized a meeting to discuss a motorway from Florence to the maritime coast, which has been the subject of deep historical research by Giuseppe De Luca.⁶ But the com-

mittee for the Bergamo–Milan motorway was more rapid than either of these. A brochure created for the inauguration of the Bergamo–Milan motorway in 1927 tells us:

Bergamo, perhaps the most neglected of the Lombard sisters from a railway point of view and which had in vain hoped for a direct [railway] line from Milan to Bergamo, promptly recognized the possibility of making a significant improvement to its connections by means of a motorway.

The local fascist authorities immediately occupied themselves with the question. Finding cordial support from the Chamber of Commerce, the administrations of the city and province of Bergamo, and a group of keen citizens, they created the Bergamo Limited Company for the construction and operation of motorways, which was instituted on 4 March 1923 with a small initial amount of capital for the first preparatory phase of the preliminary draft and the request for a concession for the construction and management of the Bergamo–Milan motorway.⁷

In the meantime there was no lack of motorway connection proposals: between Rome and Frascati;⁸ a coastal road between Genoa and Ventimiglia, the latter town positioned on the French border;⁹ a motorway between Milan and Bologna, via Cremona, Parma, Reggio Emilia, and Modena;¹⁰ one connecting Bergamo through the Stelvio Pass, including a tunnel under the Alps;¹¹ a technical study by Puricelli on a Florence–Perugia–Rome trunk road;¹² a proposal by engineer Belloni for a new motorway project between Livorno and Ancona;¹³ and the Palermo–Mondello motorway.¹⁴ A plan for a Naples–Salerno motorway was prepared during 1923 by the same local notables involved in the foundation of the local Rotary club.¹⁵ Also in the south, Francesco De' Simone dusted off his old (and confused) project to connect Rome and Naples, sending it—in vain—to the prime minister's office in the hope of finding interested patrons.¹⁶ De' Simone explicitly cited the concessionaire agreement of the Milan–Lakes and the Milan–Venice, imitating their founding characteristics.

The proposed arterial road—between Naples and Rome—will be reserved exclusively and solely for cars and primarily traffic of people and postal services, without, however, excluding adequate transport of valuable and perishable goods. This dedicated infrastructure will have a separate carriageway for the entire route, without level crossings, will go close to inhabited centers without entering them, and will cross roads using viaducts and cross railways via underpasses, thus allowing cars to travel at greater speeds without risk of collisions, without the need for intermediate breaks, and with maximum liberty and safety for the drivers.¹⁷

But De' Simone—as early as 1923—went a lot further, and imagined a form of coordination of the various projects, dreaming up a national motorway system with two axes, one north–south between Naples and Milan, along the Tyrrhenian coast, and one east–west from Turin to Venice.

It should be part of this free-ranging fantasy that the Rome–Naples motorway proposal could be the start of a vaster conception and protract beyond Rome like a dorsal spine toward Tuscany, Liguria, and Lombardy and reach Milan, after a 650-kilometer route from Rome, thus shortening the distances of the peninsula, with its overly long geographical configuration. . . .

In Milan the imagined prolongation could connect to the in-construction Milan–Lakes and with Venice, thanks to the planned Milan–Venice. This latter, when it is lengthened in its turn in the opposite direction for another 120 km west, would reach Turin, and thus gather together the north of our continent [country].¹⁸

With the exception of De' Simone's futuristic intuition, the motorway projects between 1923 and 1926 reveal geographically limited and uncoordinated characteristics. Every city advanced projects with a local flavor, formed of brief or very brief trunks, rarely planning beyond a regional scale. The only common point was Puricelli: the notoriety of the Milanese entrepreneur made him an inevitable reference point, to the extent that nearly all the motorway promotional committees contacted him to ask for technical and logistical support. This was support that Puricelli was happy to give, freely and at his own risk, but with the promise that some of the construction work would be entrusted to him should the project be realized.

In 1925, to summarize the Italian motorway projects—with the brevity of citing only those where he was involved personally, including by founding *ad hoc* companies—Puricelli collected and showcased the fragmentary character of the proposals and the need for a new phase that could lead to a first master plan for motorways.

The gratifying results obtained by the “Milan–Lakes,” and moreover the concept of the opportunity of the motorway, has captured the public imagination, seeing that there are many projects on the table, and some have already entered or are entering a concrete and definite phase.

These latter include:

- the “Bergamo–Milan,” already being executed by the Bergamo Company for the construction and management of motorways. . . .
- the “Naples–Salerno” (50 km) in concession to the Southern Motorway Company;

- the “Rome–Ostia” (23 km) by the Motorway Company of Lazio.

But the field of planning is much vaster. From the studies and preliminary drafts already executed for the “Milan–Turin,” for the “Milan–Genoa,” for the “Genoa–Ventimiglia,” for the “Padua–Mestre–Venice,” and for the “Merano–Bolzano,” we arrive at a real master plan. With this, based on a single directive, governed by a single legislation, homogenized according to the particular usage [of motorways], we can join these sparse trunks of motorway, constructed or to be constructed, into one grand network at a national level.¹⁹

In reality, Puricelli was not so enthusiastic about the proliferation of motorway initiatives. In the same year, he denounced the excessive frenzy of promotional committees, writing that the “fervor of activity—regarding Italy—has perhaps run a bit ahead of the times, given that motoring is not yet adequately developed here.”²⁰ He revisited this theme many years later in 1940, in a draft of a report discovered by Annabella Galleni. On that occasion, Puricelli retraced the activities that were carried out, arguing that there had been an excessive development of motorway planning. “As soon as the first motorway was launched on the road to realization, similar ideas appeared and bred. Every city wanted its motorway. Now the seeds that had been sown threatened to grow too quickly. Because this abundance of initiatives might shift the terms in which the real Italian roads problem was posed. Now the idea of the motorway should have, yes, been affirmed and developed, but it should not have twisted the real question and distracted from the first hypothesis of the real Italian roads renaissance: the renewal of the entire principal roads network of the country.”²¹

Puricelli found himself unable to control his own creature, afraid that the theme of the motorway would supplant that of ordinary roads, where, it should be remembered, he had focused his major business interests. However, the devious fascination of the motorway contaminated a good part of Italy, making the less prudent forget that without a solution for the provincial and national roads, the land motor transport industry could not advance. Lando Ferretti, journalist, former athlete, and future president of the Italian Olympic Committee, represented this viewpoint in February 1925 when he commented that motorways, while beautiful and commendable, nonetheless remained a useless trinket in the hands of a wealthy few. “With very limited development, very high costs, open only to the privileged few who can afford the most onerous tariffs, the motorway represents a luxury that honors the spirit of initiative and the genius of our people but must not make us forget the needs, in terms of roads, of 40 million Italians. . . . At the risk of being paradoxical, we must have the courage to state that the motorway has

contributed only a little more to solving the Italian roads problem than the construction of the Monza speedway contributed."²²

The Zenith of Puricelli's Success: The International Roads Congress in Milan, 1926

The limits and difficulties of Italian motorway projects—despite Ferretti's statements—had not yet made themselves overly evident. Mussolini's enthusiastic support of Puricelli's project and the extraordinary communicative and networking capacity of the Milanese entrepreneur meant that the Milan–Lakes motorway assumed a public relevance that was quite disproportionate, becoming an icon of the social interest in motorization.

The support of the fascist government, as we have seen, was decisive in rapidly obtaining state approval. The impetuous diffusion of the motorway gospel, strongly promoted by the widespread TCI journal,²³ found fertile soil in Italian public opinion. The motorway was envisaged as a tool to bridge the gap with other European nations; even better, appealing to nationalism, it would place Italy at the avant-garde of the world. The fascist government understood very well that constructing 84 kilometers of hypermodern road could have a multifaceted propaganda benefit.²⁴

And those elements of propaganda were also used on the international stage the moment the occasion presented itself. In April 1923, on the probable initiative of the Italian Touring Club, the government toyed with the idea of holding the fifth international roads congress in Italy, receiving ready government approval to do so. As mentioned earlier, the first international roads congress was held in 1908 in Paris, and was then repeated in 1910 in Brussels, under the auspices of PIARC, and in 1913 in London. After the congress of 1913, "Munich was fixed as the location for the next congress; but the war naturally interrupted this as it did any other form of international collaboration. When peace was achieved, the association restarted its activities and expressed the desire for the fourth congress to take place in Italy. The Italian delegates, in the meeting of the Permanent Commission [PIARC] that took place in June 1920, could not hide their pleasure. However, regrettably, the government of the time did not allow the gathering, citing as their reason the scarcity of accommodation and hotels to host the attendees."²⁵

The fourth congress was therefore held in Spain, in Seville, in May 1923, but—after the poor showing of the liberal government—the occasion was ripe to offer to host the following congress. Mussolini, under-

standing the potential of the offer and the opportunity of the initiative, did not stop at gathering ministerial suggestions, and stated that "given the character of the congress, the proposal for the location could be Milan: this location is more advantageous than other cities, because of its motorway and position as the seat of the TCI."²⁶ During the 1923 congress in Spain, the Italian representatives (who notably included Italo Vandone as the TCI delegate) therefore advanced their candidacy explicitly justifying it with the creation of the motorway network in the peninsula. "The organizing commission desires that this new Italian conception and creation is not just an attraction but a theme of the Congress."²⁷ In fact, the motorway became one of the six themes dealt with at the congress, and this decision "was naturally a pleasing agenda for us Italians, since it gave us the possibility to bring the results of an experiment conducted for the first time in Italy to the awareness of an authoritative international meeting. And so, with the cordial consensus of the Executive Office of Paris, the issues regarding the motorway were designated as the sixth theme [of the congress]."²⁸

As can be imagined, the Milan–Lakes motorway went from the unusual roads experiment of a private company to a subject of discussion and debate in the biggest roads organization of the time, guaranteeing international diffusion of Puricelli's idea and giving the fascist government something to preen over. In addition, the international event increased Puricelli's prestige and facilitated his access to the foreign market: he already had contacts and correspondence abroad, but after the Milan congress, he was able to write—in one of his numerous memoirs—that by the end of the 1920s half of his engineers and technicians worked in "Spain, France, Switzerland, Poland, and Brazil."²⁹

As has been noted, well before the start of the 1926 congress—and in some cases before the construction of the Milan–Lakes—initiatives were developed in the European roads sector expressly aimed at automobiles, and with special characteristics. One of the earliest realizations in the motorway field was the German Avus (Automobil-Verkehrs und Übungstrasse), which in 1909 built a road without intersections in the Grunewald Forest, between Berlin and Potsdam, with work starting in 1913. The Avus was basically a test and race road for vehicles, as the name suggests, with its use broadened to include sports competitions.³⁰ In 1924, the same year in which the first stretch of the Milan–Lakes was opened to traffic, the *Studiengesellschaft für den Automobilstrassenbau* (Stufa) was founded in Germany. This company planned a German motorway network, publishing an ambitious project for around 22,500 kilometers of construction two years later.³¹ The general proposal was imitated by Hafraba, another company originally created for a motorway

project on the north–south axis of the country, connecting the Hanseatic cities (Bremen, Hamburg, and Lübeck) with Frankfurt and Basel.³² In 1925 a motorway project between Cologne and Aachen and to connect Düsseldorf–Cologne–Bonn was proposed, and indeed the Cologne–Bonn stretch of this latter project was completed in 1932, and was the only one effectively realized in Germany before the Nazi rise to power.

France also saw motorway plans advanced between the two world wars, including the routes Paris–Cherbourg, Paris–Deauville, Paris–Côte d’Azur, and Lyon–Saint-Étienne. The most advanced project was that of engineer Edmond Pigelet, who sketched a toll motorway between Paris and Lille. In 1927 he founded the *Compagnie des Autoroutes*, a private society that aimed to construct and manage the motorway. The Spanish,³³ English, and Dutch motorway initiatives did not meet with better success,³⁴ but they demonstrated the continental attention to the subject, and were often explicitly inspired by Puricelli’s project. Puricelli himself did not spare energy in spreading the motorway’s gospel. His companies were lobbying actively not only in Europe, but on a global scale, ranging from South America to China, and with the most different activities, from pamphlet production (among others, in 1929 a Finnish-language booklet about motorways was printed, leading the national debate on road development)³⁵ to project support, as in Germany, France, and Spain, up to direct engagement as contractor, as in Brazil, among other countries.

Puricelli was strongly engaged in the German plans: according to the German archival sources, in 1925 Puricelli was already in close connection with Prof. Robert Otzen, founder of Hafraba,³⁶ stating that “the real aim of his plans was a European road network.”³⁷ Puricelli was “a key inspiration for Hafraba’s initiators, such as Hermann Uhlfelder and Willy Hof,”³⁸ and was soon a member of Hafraba’s board (Vorstandsmitglied). Puricelli’s ambitions went further, aiming to stretch Hafraba’s motorway toward Milan and Genoa, to close the gap between the constructed Italian *autostrade* network and the Hafraba project. To lobby for the plan, “in 1927 Puricelli organized a conference in Zurich together with Hafraba that inspired the Canton of Basel-Stadt to organize a meeting resulting in the Association pour la Route Automobile Alliant de Bâle à la Frontière Italienne, later transformed into the Association des Autoroutes Suisses.”³⁹

This was a sort of transnational scheme, the first evidence of which was published by Puricelli in 1927. With the title of “Carta probabile della rete futura delle autostrade d’Europa” (possible future map of the Motorway of Europe),⁴⁰ it was actually not a network, but a sum of national plans, often not even linked at all, as in the case of the road legs in Spain, Belgium, and the Netherlands. As Frank Schipper notes, the “straight

lines drawn on Europe's map testified of their highly fictitious character, further underlined by the fact that the map did not take political factors into consideration,⁴¹ let alone the predominance of Milan as the network's hub.

This all demonstrates that, even without the PIARC meeting, "the interest engendered by the first motorway, and all of the studies, projects and initiatives that followed it, had caught the attention of foreign engineers and governments," including in France, "where important committees have been founded, with the involvement of Italian experts,"⁴² as well as in Spain, Portugal, Egypt, and Argentina. But even U.S. technicians, to give one example, expressed interest in the Italian motorway, as in the 1925 visit of "Professor Duff A. Abrams of the Lewis Institute of Chicago" (the current Illinois Institute of Technology) and director of the influential Portland Cement Association.⁴³ In other words, the enthusiasm for Italian motorways was spreading well out of the country.

In this vein, the trajectory of the Spanish motorway debate seems particularly interesting. First, the Spanish discussion was openly fueled by the Italian example. Having similar background conditions, namely, a lack of resources and ordinary roads that answered badly to motor vehicle needs, motorways in the Iberian country were also conceived as a tool to force the onslaught of modernity. Second, as in Italy in the 1920s, in Spain between 1927 and 1930 "we can count about twenty motorway proposals,"⁴⁴ with the same concessionaire model that was envisioned by Puricelli in Italy,⁴⁵ and that were loosely linked, with no real national network. And as in Italy, there was a party against motorways, which claimed the motorway projects were distracting resources from the renewal of the ordinary roads.

However, the apex of success for the Italian motorways was at the PIARC congress in 1926, held in Milan, with the participation of almost two thousand participants and great journalistic clamor. On 6 September 1926, at the inaugural ceremony conducted by Senator Luigi Luiggi, all the Italian and foreign speakers glorified the Milan–Lakes motorway and its creator, while Gabriele D'Annunzio sent a poem—a tract of *Alcyone*—dedicated to Puricelli's work.⁴⁶ The laudatory tone of the presentations can be well summarized in the words of the president of PIARC, Frenchman Albert Mahieu: "We have also come to Italy to receive training, and I allow myself to congratulate the Italian engineers on the results already obtained, which they will present tomorrow. The results are the precursors to the creation of special roads for automobiles, putting Italy at the forefront of progress."⁴⁷

The head of the U.S. delegation, John A. MacDonald, in the poorly written minutes, also had words of praise for the Italian example. "For

about ten years the new means of transport, which we call 'highway transport,' has undergone such considerable development that today it should be possible to transport in our automobiles, at one single time, the entire population of the United States. We are therefore able to give you useful training on the effect of automobiles on the road, but we come also to return together to the past and understand what your experience has been and the effect of the perfected road on the population of a country."⁴⁸

The next day, under the presidency of Carlo Isnardo Azimonti of the Milan Polytechnic University, the congress discussed the sixth theme of the meeting, "Special roads reserved for motor vehicles (Motorway)." The official orator on the theme, Michele Carlo Isacco, was an Italian top official at the Ministry of Public Works. Seven presentations were received at the congress, from Belgium (by E. Cauterman and P. de Graer), France (E. Chaix and G. Raffard, both from the Automobile club de France), Great Britain (Sir Lynden Macassey), the United States of America (Th.H. MacDonald, head of the Bureau of Public Roads, J.A. MacDonald, and W.G. Sloan), Italy (F. La Farina and A. Depetrini from the Ministry of Public Works), the Netherlands (D.A. Van Heyst, G.J. Van Den Broek, and P.J. Van Voorst Vader, Jr.) and Sweden (K.K. Adler).

Summarizing the presentations, the U.S. and British representatives were opposed to motorways such as the one being constructed in Italy, the Belgians and Swedish were keeping open minds, and the others were in favor.⁴⁹ For Isacco—who would have the work of formulating the final resolution to be voted on by the attendees—there was no doubt about the worth of the motorway idea. He took comfort from the views of the many delegations from continental Europe, South America, and Asia. The congress therefore had to formulate an invitation to construct motorways not just where there was "heavy traffic [that] produces saturation or congestion," but also where "with its incoming prevalence, we should ensure that motorized traffic and its individual types (transport of passengers or of goods, rapid or slow vehicles) achieve maximum performance." The enthusiasm for the motorways clashed with the fear, repeated in the debate, that their construction could lead to a ban on the circulation of motor vehicles on ordinary roads. The Italian orator took care to underline that "the motorway could not in general substitute for the existing roads, and does not claim to exclude motor vehicles from such roads, even when routes are identical."⁵⁰ Finally, Isacco commented on preventing traffic streams from crossing within the motorway, by creating entrance and exit junctions separated for both directions, unlike those constructed for the Milan–Lakes.

Isacco's conclusions were approved by the congress, although with the important abstention of the British and American representatives, who could not come to terms with charging a transit toll, and maintained that the motorways were extravagant and anti-economic.⁵¹ The vote of the Anglo-Saxon representatives confirmed a dichotomy within PIARC between the position of the continental European engineers and those from the United States and the U.K.: a difference of opinions had already been apparent in the Seville congress in 1923.⁵² This is also the perspective from which the closing session should be viewed. The resolution hoped for the construction of motorways in Europe, which could give an idea of the atmosphere of confidence, if not exaltation, that the delegates of the old continent displayed for the theme. Proposed by the Italian delegates, including Vandone and Luiggi (but not Puricelli), the approved agenda read: "The congress hopes that at a subsequent event all the great capitals and the principal holiday locations of the continent will be united by means of motorways, and our resolution expresses that this idea is favorably regarded by the automobile clubs and the touristic associations of the various countries."⁵³

On 9 September, around 1,700 attendees from fifty-three nations took part in the visit to the Milan–Lakes motorway, forming an "imposing" convoy of buses,⁵⁴ although not everyone found the experience interesting or pleasing. The Dutch delegates were worried about the driver of their bus, who in their opinion was dangerously drunk. They were even less enthusiastic about the motorway itself, badly constructed and defined as a horrible cement scar in the middle of the countryside.⁵⁵

On 13 September in Rome, the "solemn closing ceremony" of the congress was held, obviously "presided over by S.E. Mussolini."⁵⁶

Conflicting Intentions

The 1926 roads congress was accompanied, as was the tradition, by an exposition on mobility, similar to a trade fair. On the roads stand of the international exhibition, Puricelli exhibited both the details of the motorway in Liguria from La Spezia to Ventimiglia (i.e., from Tuscany to the Italian border with France) and the project, already sketched out in 1925, to endow "Italy with a systematic motorway network."⁵⁷ The concept of a "national" master plan was also relaunched by engineer Carlo Cesareni, an important second-rank politician, linked to Giacomo Suardo and close to Puricelli. In 1926 Cesareni published a map of motorways to be constructed only in northern Italy—imagining motorways along the

axes of Turin–Venice, Milan–Genoa, and Genoa–Ventimiglia, in addition to the Milan–Lakes.⁵⁸

What emerged, as Cesareni and Puricelli understood, is the need in the mid 1920s to achieve a new scale of planning, partly to overcome the impasse in which Italian motorway proposals had stalled: the fundamental limits of the initiative in the field were the enormous difficulties of finding resources for financing the works even partially. Even in cities like Turin or Brescia, where the manufacturing and automotive industries had a considerable presence, collecting funds was beset by a thousand difficulties and years could pass before a sufficient critical mass was achieved to activate the projects. Elsewhere, the initiatives were drastically limited, like with the Naples–Salerno. In some less fortunate cases, the local committees remained in an embryonic state and were not able to even fund the preliminary studies or surveys of the works. The uncertainty of the operations, the precariousness of the forecasts for traffic, and, more generally, the scarcity of capital, made it difficult to achieve the minimum of share and bond subscriptions. Despite these limitations, the response of local politicians, particularly those of the Fascist Party, to this river of proposals was nonetheless enthusiastic.



Figure 3.1. Bergamo–Milan motorway, late 1920s.

Author's collection.

The historically best-known initiatives were strongly supported by the local fascist politicians, while in general—with the exception of Milan—the representatives of the economic and financial establishment were absent or in second place.⁵⁹

If locally the fascist politicians were keen on motorways, the attitude of the central government, after the enthusiasm for the Milan–Lakes motorway, was instead very cautious. The success that smiled on Piero Puricelli's 1922 initiative can be understood only if we frame it in its historical and political context. The substantial immobility of the public actors in the roads sector had made space for the initiatives of private actors, who were more alert and unscrupulous, and grasped the importance of the theme of modernization of transport and, more particularly, of the roads. The fascist government had therefore conceded the construction of a motorway from Milan to the lakes to Puricelli, but, as had happened to the Milanese entrepreneur, Mussolini also found that, despite his wishes, he was obliged to humor the many local committees that claimed a motorway in their turn, and he tried to limit their excessive proliferation as much as possible. The government concession became the subject of bargaining between the head of the government and the



Figure 3.2. Bergamo–Milan motorway, late 1920s.

Author's collection.

local fascist *ras*⁶⁰ who supported the promotional committees. From 1923 to 1927 only two motorways were approved: the Bergamo–Milan and the Naples–Salerno. In the case of the Bergamo–Milan, the activities of Giacomo Suardo, state undersecretary for the prime minister, were instrumental. Highly faithful to Mussolini, as well as the *ras* of Bergamo, he used all his influence to achieve the approval of the proposal. In the absence of deeper research on the Naples–Salerno (reduced in 1927 to just the Naples–Pompeii stretch), today we can only highlight Puricelli’s presence on the local committee⁶¹ and the direct interest of Mussolini, who in May 1925—returning from the southern Italian city—pressured the Milanese entrepreneur to plan the works.⁶²

Mussolini’s original impetus had cooled, thanks as much to the evident economic difficulties of the committees as to the resurfacing of the ordinary roads problem. In 1925, the Ministry of Public Works relaunched the theme of the ordinary roads renewal program, with the proposal for a national Roads Agency, which naturally reduced the margins of maneuvering for the motorway adventure. There were also open critics, coming from the same Italian technical and automotive world. The journal *L’auto Italiana*—as Federico Paolini notes—was, by September 1924, already caustic about Italian motorways. Making the evidence even clearer, their construction denounced the poor conditions of the ordinary roads. “We mustn’t forget that while today in Italy, purely due to private initiatives, the first motorways emerge; the need to ensure appropriate and modern roads for automobiles has risen imperiously from the current deplorable state of almost complete abandonment of the majority of important roads in our country, made almost unusable by the intense traffic.”⁶³

The same journal made a more circumstantial attack several months later, predicting—mindful of the railway story—a ruinous future for the Italian motorway affair, without imagining that the reality would be even more onerous for the public treasury.⁶⁴ “We know well how these famous agreements of concessions for a certain number of years will finish. Either they will take advantage of the operation in a way that gives the state a company in disastrous conditions at the last moment, or a reshuffle will occur before the deadline that allows the concessions to be extended.”⁶⁵

Enrico Cantalamessa, head of an engineering office in the province of Rome, made similar criticisms during the 1925 TCI roads convention. Cantalamessa, like many others, felt that motorways were a luxury that took already-limited resources from the roads sector, a concept that was to be repeated in the years to come.

The motorway, in my opinion, is a luxury expense, while until now we have not yet heard anything but the poverty of the roads network. . . . In these conditions, spending many millions on a motorway seems excessive, forgetting the real problem of equipping the entire roads network. When I hear that Italy is at the avant-garde of motorways, I ask myself if perhaps it is not true that Italy is a poor nation in regard to roads. I hear talk of the Naples–Salerno motorway; well, the roads in that region are the worst of all of Italy. They are spending 100 million [about the equivalent in today's USD] there to have an oasis in the middle of a desert.

We must remember that the cost of a kilometer of motorway is close to a million, a sum that could fix 40 kilometers of ordinary roads.⁶⁶

In other words, after a promising start, and right in the moment that the entire world was celebrating the success of the Italian proposal at the fifth international congress of roads, the motorway projects were in trouble. However, the Bergamo–Milan and the Naples–Salerno, for which the concessions would be granted on 4 September 1925,⁶⁷ re-animated the hopes of the promotional committees, strong in the unshakable conviction of the validity of their own proposals and a determined perseverance.

Notes

1. Italo Vandone, "A proposito di autostrade," *Le strade* 11 (1923), 328–331, here 328.
2. *Atti del IV Convegno Nazionale Stradale promosso ed organizzato dal Tci. Perugia 25–28 giugno 1925* (Milano: Tci, 1926), 97–98.
3. Christoph Mauch and Thomas Zeller, "Introduction," in *The World Beyond the Windshield: Roads and Landscapes in the United States and Europe*, ed. Christoph Mauch and Thomas Zeller (Athens, OH: Ohio University Press, 2008), 1–13, here 6. I agree with Gijs Mom: "Freeway and modern highway construction ran ahead of traffic development, including in the United States." *Atlantic Automobility*, 593.
4. For the German case and the need of the motorway to meet tourist needs, see Richard Vahrenkamp, *The German Autobahn 1920–1945: Hafraba Vision and Mega Projects* (Lohamr: Eul, 2010), 32.
5. A "propaganda" film was created for the Turin–Biella–Milan motorway; see "Una conferenza dell'ing. Giay per la Torino–Biella–Milano," *Torino* 1–2 (1928), 45.
6. See Bortolotti and De Luca, *Fascismo e autostrade*.
7. Paolo Bonomi, "Storia dell'autostrada Bergamo–Milano," in *L'autostrada Bergamo–Milano* (Bergamo: Istituto italiano d'arti grafiche, 1927), 8–11, here 8.
8. Acs, Pcm, 1924, 7/1-2/2774, *Autostrada Frascati–Roma*.
9. Acs, Pcm, 1927, 7/1-2/395, *Autostrada San Remo–confine francese–Inaugurazione lavori*.

10. See Franco Botteri, *L'autostrada Milano–Bologna via Cremona, Parma, Reggio Emilia, Modena con allacciamento a Salsomaggiore* (Bologna: Società poligrafica editrice, 1926).
11. See Giuseppe Chito, *Le nuove comunicazioni nella provincia di Bergamo. Traforo dello Stelvio, Autostrada Bergamo–Milano, Strada prealpina orobica* (Bergamo: Istituto italiano d'arti grafiche, 1926).
12. See Bortolotti and De Luca, *Fascismo e autostrade*, 57.
13. *Ibid.*, 45; unfortunately, the volume does not give greater archival or bibliographical indications on Belloni's project.
14. See Michele Isca, *Linee generali di progetto di massima per un'autostrada Palermo (Piazza Porrazzi)–Pietrazzi–Inzerra–M. Billiemi–Torretta–Carini–Capaci–Isola delle femmine–Sferracavallo–Tommaso Natale–Mondello: Palermo (Piazza Campo) e cenni dei monti della Conca d'oro* (Vicenza: G. Raschi, 1926).
15. See Vandone, "A proposito di autostrade," as well as Giovanni Da Rios and Savino Rinelli, "Autostrada Napoli–Pompei," in *Le autostrade della prima generazione* (Milano: Spa per l'Autostrada Serravalle–Milano–Ponte Chiasso, 1984), 66–73.
16. Acs, Pcm, 1924, 3/11/2596, *Ing. Comm. Francesco De Simone. Progetto per un'autostrada Napoli–Roma*.
17. Francesco De' Simone, *Autostrada Roma–Napoli* (Roma: Società Editrice Dante Alighieri, 1923), 8.
18. *Ibid.*, 14.
19. Piero Puricelli, *Le autostrade e la Milano–Laghi*, 41.
20. *Ibid.*, 42.
21. Account by Piero Puricelli dated 23 April 1940 in Acs, Iri, numerazione rossa, busta 527; the text of the report is reproduced in Annabella Galleni, "Strade, autostrade e fascismo," 47–82.
22. Lando Ferretti, "Salviamo le strade ordinarie!," *L'Auto Italiana*, 28 February 1925, 23–24, here 23.
23. In January and December 1923, the journal of the TCI, *Le vie d'Italia*, published two long articles on the motorway and revisited the theme in the society's annual report published in the May issue; see Luigi Vittorio Bertarelli, "Le autostrade Milano–Laghi," 468–478; Italo Vandone, "Sei mesi di lavoro per le autostrade," *Le vie d'Italia* 12 (1923), 1283–1293.
24. As Antonio Gramsci sarcastically points out in his Prison Notebook, "The fact that a country [e.g., Italy] is gaining infrastructure, already achieved in other countries, is declared and blared out, and it is said to the others: do the same if you can. But the others cannot, because they already did, and this is claimed as their 'impotence.'" Antonio Gramsci, *Notebook 15* [1933] in *Quaderni del Carcere*, vol. 3 (Torino: Einaudi, 1975), 1751.
25. Letter from the Ministry of Public Works to the Pcm dated 25 April 1923 in Acs, Pcm, 1926, 14/1/2254, *Milano–Mostra internazionale strada*.
26. Letter from the Pcm to the Ministry of Public Works dated 5 May 1923 in Acs, Pcm, 1926, 14/1/2254, *Milano–Mostra internazionale strada*.
27. "I lavori del V° congresso internazionale della strada. Milano 6–10 settembre 1926, seconda parte," *Annali dei Lavori pubblici* 12 (1926), 981–1132, here 1131.
28. *Ibid.*
29. Account by Piero Puricelli dated 2 March 1932, in Acs, Spd, Cr, busta 60, Piero Puricelli. See also the interview conducted by Lando Bortolotti and Giuseppe

- De Luca on 2 November 1992 of Pacifico Pellis, engineer from Puricelli's technical office, also referred to in Bortolotti and De Luca, *Fascismo e autostrade*.
30. See Volker Ziegler, "Les Autoroutes du IIIe Reich et leurs origines," in *Les années 30. L'architecture et les arts de l'espace entre industrie et nostalgie*, ed. Jean-Louis Cohen (Paris: éditions du Patrimoine, 1997), 207–213, here 207, and Volker Ziegler, "Il progetto autostradale tedesco fra città e territorio: 1925–1955," *Storia urbana* 100 (2002), 85–120, here 87.
 31. The map is published in Ziegler, "Il progetto autostradale tedesco," 100.
 32. See, among others, Reiner Ruppmann's recent works: "Das europäische Autobahnnetz: Weiterhin Hoffnungsträger oder primär Funktionsraum für die Transit-Ökonomie? (Teil 1)," *Zeitschrift für Weltgeschichte* 14, no. 2 (2013), 81–107 and "Teil 2," *Zeitschrift für Weltgeschichte* 15, no. 1 (2014), 163–180.
 33. Between 1927 and 1930, the year that saw the end of dictator Primo de Rivera, around twenty motorway projects followed each other, all marked for failure, but that demonstrated the vitality of the theme in a country, like Italy, with a low automobile density. Puricelli was also present in Spain; see Teresa Navas, "Il riflesso della modernità: le autostrade spagnole, 1920–1960," *Storia urbana* 100 (2002), 26–54. In 1931 in Spain 177,900 motor vehicles were in circulation, one for every 122 inhabitants (a greater density than in Italy); see *ibid.*, 35. Puricelli visited Spain, after an invitation by Giuseppe Bottai, as early as 1927; see the documents preserved in Acs, Spd, Cr, busta 60, Piero Puricelli.
 34. See Gijs Mom, "Roads without Rails," 754–755.
 35. Kimmo Antila and Marko Nenonen, "Relief Works, the World Bank and Private Business," *Scandinavian Economic History Review* 48, no. 2 (2000), 47–71.
 36. Ruppmann, "Das europäische Autobahnnetz: (Teil 1)," 84.
 37. Frank Schipper, *Driving Europe*, 104.
 38. *Ibid.*
 39. *Ibid.*
 40. *L'autostrada Bergamo–Milano* (Bergamo: Istituto italiano d'arti grafiche, 1927), 7.
 41. Schipper, *Driving Europe*, 105.
 42. Puricelli, *Le autostrade e la Milano–Laghi*, 41.
 43. It was Italo Vandone who in 1925 proudly recalled the occasion, remembering it as if it were a conversation with an American colleague in a long discussion on the tarring of the roads; see *IV Convegno Nazionale Stradale*, 25.
 44. Navas, "Il riflesso della modernità: le autostrade spagnole, 1920–1960," 43–44.
 45. *Ibid.*, 44–46.
 46. "Rapidly, rapidly, most joyful / triumph over the grievous burden, airy / fever, thirst for the wind / and all its splendor / first to be born from the strung bow / which people know as Life!" Message sent by D'Annunzio, cited in Italo Bonardi, *Le autostrade italiane, loro organizzazione e loro importanza turistica* (Bologna: Tip. de Il Resto Del Carlino, 1942), 4.
 47. Associazione internazionale permanente dei congressi della strada, *Quinto congresso internazionale della strada*, 56–57. On Albert Mahieu, president of PIARC and "Ingénieur en chef des Ponts et Chaussées," see Nuad, "Soixante ans de l'Aipcr/Sixty years of Piarc," 17.
 48. *Quinto congresso internazionale della strada*, 62.
 49. We should recall that Germany was not represented at the conference; its experts rejoined PIARC only at the 1930 congress.
 50. *Quinto congresso internazionale della strada*, 157 et seq.

51. See Bruce E. Seely, "An Overview Essay: Roads in Comparative Perspective," in *Road History. Planning, Building and Use*, ed. Gijs Mom and Laurent Tissot (Neuchâtel: Alphil, 2007), 13–32, here 20, 21.
52. See *Quarte congrès international de la route, Seville, 1923. Compte rendu des travaux du congrès* (Rennes–Paris: Oberthur, 1924) and Italo Vandone, "Comenti al congresso di Siviglia," *Le Strade* 7 (1923), 197–198.
53. *Quinto congresso internazionale della strada*, 187; the agenda was presented by Luigi Luiggi, Italo Vandone, Paolo Bignami, and Osvaldo Fioroni.
54. See "Il congresso della strada. Le strade dell'avvenire," *Corriere della sera*, 9 September 1926.
55. See Mom, "Roads without Rails," 758.
56. *Quinto congresso internazionale della strada*, 38. See also "Un discorso dell'on. Mussolini alla chiusura del congresso della strada," *Corriere della sera*, 14 September 1926.
57. *Mostra internazionale della strada, Milano–Settembre 1926* (Milano: Bestetti e Tuminelli, 1926), 316.
58. Carlo Cesareni, "L'autostrada Bergamo–Milano e l'autostrada pedemontana Torino–Milano–Venezia," *I lavori pubblici* 2 (1926), 58–62.
59. The Tuscan case (studied by Giuseppe De Luca) and the Bergamo case (on which abundant materials are available, from both press and documentary sources) are two excellent examples.
60. The word *ras* ("head" or "chief" in the Ethiopian aristocracy ranking) has been largely used to define local bosses of the Fascist Party.
61. "Like the Milan–Lakes and Milan–Bergamo motorways, the Naples–Pompeii, built to a plan by the technical office of engineer Puricelli, ingenious creator of the motorway, will also signal the abolition of level crossings," V. Zanchi, "L'autostrada Napoli–Pompei," *Le vie d'Italia* 2 (1929), 153–155, here 153.
62. "Tell engineer Puricelli of *Autostrade* that after the Naples meeting I intend to confer with him and that I urge him to push forward a preliminary investigation." Telegram from the Prime Minister to the Milan prefect dated 13 May 1925, in Benito Mussolini, *Opera Omnia*, volume XXXIX, appendice III, carteggio II (Milano: Volpe, 1979), 419. See also Acs, Pcm, 1928–30, 7/1-2/2030 *Autostrada Napoli–Pompei–Salerno*. In 1927 Mussolini further wished that Rome—not yet imperial but already seeing imposing urban works—could also have a motorway, one toward Ostia. In fact, it was little more than a renewed ordinary road, but for a certain period it enjoyed the title of motorway: see Giovanni Da Rios and Savino Rinelli, "'Via del Mare' (Roma–Ostia)," in *Le autostrade della prima generazione*, 74–79. In this case the construction, began in October 1927 and concluded a year later by the omnipresent Puricelli company, was financed by the state, but the road was soon classified as a state road.
63. "L'inaugurazione delle autostrade," *L'auto italiana* (September 1924), 33–37, here 32.
64. After nearly 100 years of a concession system, not a single Italian motorway leg has been handed back to the national government. See the insightful work of Giorgio Ragazzi, *I signori delle autostrade* (Bologna: Il Mulino, 2008).
65. "Autostrade," *L'auto italiana*, 3 February 1925, cited in Paolini, *Storia sociale dell'automobile in Italia*, 33.
66. *IV Convegno Nazionale Stradale*, 25, 38.

67. It was Mussolini who wanted to endorse both the concessions in a single day, perhaps in the conviction that he should initiate motorway works in the south as well. In fact, in the papers preserved in the Archivio Centrale dello Stato, a letter from Giacomo Suardo to PCM, dated 3 May 1925, shows how the prime minister wished to make signing the Bergamo–Milan subordinate to the parallel realization of the Naples–Salerno. “Eng. Puricelli tells me that it is the intention of your eminence to not issue the decree of the concession for the Milan–Bergamo motorway if the decree for the Naples–Salerno is not first signed,” in Acs, Spd, Cr, busta 66, Suardo.