A three-dimensional analysis of the redefinition of alpine freight transportation policy

Olivier Klein and Lisa Sutto
This article follows on from a series of earlier studies concerning the changing goals of the Lyon-Turin project to build a new rail link across the Alps and the gradual development of a transport policy specific to the alpine region (Sutto, 2009a and 2009b). These studies showed how changes have contributed to a process of alpinisation, or a process in which the scale of the alpine massif has gradually become imposed as the spatial framework for action. From a technical point of view, for example, we saw models of traffic flow forecasts for the Lyon-Turin project enlarged their reference area from a linear (corridor) axis to simulations integrating other points of passage. At the interface between technical and political considerations, we observed how the identification of the transfer of flows from one passage to another leads to recognition of the need for a coordinated policy between the different corridors of movement. The Zurich Declaration by the transport ministers of the Alpine countries and the setting up of a permanent cooperative structure between all the countries concerned – the Zurich group – is an expression of this recognition.

The process of alpinisation reflected in transport policy has thus developed from a series of changes that have taken place in several different spheres. It is also stems from an important transformation of the very goal of transport policy in this region. Until the beginning of the 1990s, the Alps were largely seen as an obstacle to the movement of goods and people that needed to be overcome, but today the objectives of “modal shift”– the transfer of flows between road and rail networks – are advocated and defined in a
very explicit manner for crossing the Alpine arc, expressing recognition of the specific character of the alpine region by the different actors concerned.

3 It was also observed that this transformation in the scale of reference for transport policy implemented in the Alps was accompanied by a change in the geographic areas of discussion and negotiation. The regions, in particular, became more involved at the heart of issues, demanding a more assertive role on consultative committees and breathing new life into policy-shaping processes through their participation. The alpinisation movement therefore seems closely linked with pressure to set up a multi-level system of governance associating the areas and regions concerned with the decisions in the field of transportation taken at the State and European Union level.

4 In this article, we present an interpretation of these developments with a view to better understanding the progressive transformation of the reference framework that underpins or shapes alpine transport policy. The notion of a reference framework was introduced by B. Jobert and P. Müller (1987) who described it as “the representation that one forms of the sector concerned as well as its place and role in society (translation)” (p. 63). In another article, B. Jobert (1992) distinguished three dimensions to this framework: cognitive, through which “the references provide the elements of causal interpretation for the problems to be solved (translation)”, normative, which defines “the values that must be respected in dealing with these problems (translation)”, and instrumental, documenting the “principles of action that must direct action (translation)”. In order to “appreciate the complexity of the processes constructing the referents of public action (translation)”, B. Jobert (1995) also suggests distinguishing the negotiation spaces for public policies, called he calls “arenas”, from the discussion spaces for such policies, known as “forums”.

5 Within this framework, the present article proposes an interpretation of the changes observed in the transport policy in the Alps, organised in terms of three axes: the development of knowledge, the changing goals associated with public action, the evolution of policy preparation and implementation. This transport policy associates, on the one hand, the definition of measures (or principles) for regulating road freight traffic and, on the other, the realisation of major rail infrastructure projects. These two aspects are closely interrelated. This paper combines these two scales of observation in examining the infrastructure project of the Lyon-Turin rail link. In the final section, we will examine the recent waning of the alpinisation process in shaping transport policy, using the analytical framework we have developed to gain insights into the increasing fragility of this process.

Development of knowledge base

6 The development of a shared knowledge base and vision by the different States concerned is a necessary condition for cross-border cooperation (Fabbro and Haselsberger, 2009). With this aim in mind, shortcomings in the statistical means used to measure flows were identified from the heterogeneous character of the national databases (CEMT, 1993; Rathery, 1999).

7 Switzerland began collecting data as early as 1984, gathering available information from both Austrian and French government sources to set up an alpine database (Alpinfo). This base provided evidence of the interdependence, unsuspected until then, between
transport corridors through the Alps, resulting from changes in the itinerary of in-transit flows. This supported fears that road traffic rejected by the Swiss might come to asphyxiate the valleys of neighbouring regions (Köll, Lange, Ruffini, 2007) or that the new railway tunnels planned by the Swiss might dry up the potential traffic of neighbouring, and consequently competing, projects. Alpine passages are thus part of an interdependent system, a functional space that pleads for a change in the scale of public action (Nahrath, Varone, 2007).

Implementation, in the transport sector, of the concept of the dissociation of growth, on the one hand, and consumption of the planet’s non-renewable resources, on the other, is another example of how the development of knowledge has affected the alpine transport issue. By making the distinction between absolute dissociation and relative dissociation (Baum, 2002), the concept can be adapted to the field of transport where the alternatives are either reducing overall mobility or maintaining it by using “clean” means of transport. The second choice, which enjoys greater consensus, is restricted, however, by the fact that the anticipated technical progress in road transport is considered insufficient to achieve the objectives defined (Crozet, 2002). Consequently, relative dissociation has been reflected more in the transfer of traffic from road to rail. This is what has been called the modal shift policy. In the Alps, these ideas are contributing to gradual change in the goals of major projects such as Lyon-Turin rail link, projects that must now make modal shift possible rather than respond to a risk of congestion.

At the beginning of the new millennium, the orientation of alpine transport policy in favour of modal shift seemed to have been decided on, but was poorly expressed in the Lyon-Turin project, the capacity of which to attract traffic to the rail network had not been demonstrated in studies. This drew criticism from both technical and administrative sources, mainly in France and Brussels, summarised in an official audit in 2003 (Conseil Général des Ponts et Chaussées et al., 2003). The same argument was also voiced in Italian criticism of the project. In response, the geographical reference space for traffic forecasts was enlarged so that it then reflected the truly alpine dimension of the project. Most importantly, the parameters of modal choice in traffic forecast models, at first quite approximate, were refined by the innovative introduction in this field of data on declared preferences.

The question of the knowledge base used was addressed in the limited context of technical and economic expertise. This does not mean that alpine transport policies have not been affected during this same period by new fields of knowledge, particularly in relation to the environment, as reflected in numerous European study programmes such as AlpNap 2001-2006, Monitraf I-II, and AlpenCorS. But this focus on the economic analysis of traffic flows reflects an important characteristic of transport policies, often strongly influenced by heavy sectoral constraints, both material and cognitive, as noted by S. Barone (2007). It may be asked whether this characteristic is not an obstacle to using a much broader knowledge base. Another question relates to the possibility of encouraging greater local input, but neither the sectoral influences in the transport field nor the geographical extension of the reference framework (alpinisation) would appear to favour this (Ruegg, 2007). These limits will be considered again with respect to the increasing fragility of the alpinisation process, a subject addressed in the conclusion.
Changing goals

The policy of major rail construction projects was not developed on environmental grounds. Until the end of the 1990s, the Lyon-Turin project, for example, was a response to the saturation of the road network. The environmental argument was reflected in the political impossibility of carrying out projects to double the road network.

The change in the goals of alpine transport policy was to come from Switzerland. Both Switzerland and Austria, being of relatively modest size and crossed by major alpine transit routes, experience heavy traffic. The sensitivity of their populations to environmental questions (Perlik, 2007) explains why these countries implemented, at a very early stage, unilateral policies to restrict road traffic. From the end of the 1980s, Switzerland thus limited the total weight of trucks crossing its territory to 28 tonnes (that is, a payload reduced by half for a normal 40 tonne vehicle in Europe). In 1992, Switzerland also started construction on two railway tunnels to cross the Alps. In the same year, Austria introduced an ecopoint system, fixing a quota for the number of HGVs crossing its territory on the basis of their nitrogen oxide emissions.

The European Union, encouraged by its member countries and arguing for freedom of movement, opposed these measures and forced Austria to abandon their ecopoint system when it joined in 1995. With Switzerland, a non-member of the EU, it was through negotiation that the protagonists sought to solve this divergence of opinion.

In 1999, the agreement reached between Switzerland and the EU governing freight traffic through Switzerland was therefore the result of a classic planning compromise between environmental objectives and economic development objectives (Counsell and Haughton, 2003). Switzerland then lifted its restrictions on HGV traffic but introduced a per kilometre tax system (the RPLP) linked to environmental pollution from the roads. In addition, the EU recognised the legitimacy of the objective to decrease the volume of road traffic and transfer it to the rail network.

Negotiations for this agreement took place in a context where the EU was gradually enlarging its field of political intervention in two directions. After the European Court of Justice drew attention to shortcomings in the transport field, the EU concentrated its activity in the 1990s on the planning and financing of infrastructures. At the end of the decade, the setting up of the single market led the EU to direct its efforts to removing borders and opening up the sector to competition.

At the same time, the EU was recognised as a legitimate player in dealing with environmental questions. The “White Book” on transport policy in 2001 confirmed this double responsibility by making the modal shift of freight traffic from road to rail an official objective at the European level.

At the scale of the Alpine massif, the series of accidents in alpine tunnels in 1999, together with a greater awareness of the interdependence of alpine crossing points (see first part of this article), imposed the idea of a coordination of transport policies on these routes and encouraged the extension of the Swiss objective of a modal shift in freight traffic to the entire Alpine area.

At the beginning of the 2000s, therefore, the modal shift objective, backed by environmental arguments, became the central thrust of alpine transport policies and replaced the objective of more fluid exchanges. This change in goals, however, did not
take place at the same speed or for the same reasons in France and Italy as in Switzerland and Austria. Specific national visions of alpine problems played a large part in this (Gerbaux and Zuanon, 1995). In France and Italy, the defence of the Lyon-Turin project was important in getting the modal shift objective adopted, since the project had become a necessity, no longer to simply absorb an increasingly hypothetical growth in traffic, but to enable a significant reduction in the number of HGVs crossing the Alps, without calling into question the level of economic exchanges.

19 Aggregating these different motivations around the modal shift objective was not achieved without conflict. Italy in particular remained on the sidelines of this process for a long time. Furthermore, while Switzerland introduced into its basic laws an upper traffic ceiling (650,000 HGV/year), or half the current traffic, Austria, Italy, and France made no such announcements, nor indeed did they fix any precise objectives.

20 The Swiss were in favour of a modal shift policy as early as the 1990s, while the Austrians, faced with the European veto, had to reconstruct their policy, and France and Italy made implementation of the Lyon-Turin project a condition for agreeing to the modal shift policy. It was only from 2003 that it became accepted that the modal shift policy should be implemented as soon as possible and that realisation of the rail project was only a stage in this process.

21 Finally, regarding the means of achieving modal shift, Switzerland proposed completing the RPLP with an alpine transit stock market (Bourse du Transit Alpin or BTA), whereby a limited number of exchangeable journey rights would be issued. France and, to a lesser extent, Italy are more in favour of regulation through road tolls, which are much higher in these two countries than in Switzerland.

22 The harmonising of alpine transport policies around a shared goal of modal traffic shift has not therefore been a perfectly consensual process. On the contrary, it has taken place through successive compromises and adjustments. Despite that, until now the different public actors involved (States and local and regional authorities) have always claimed their support for a shared objective to reduce road problems by a modal shift in traffic, and they continue to express this ultimate goal, to a greater or lesser extent, in defining the actions they take with respect to transport in the Alps. Finally, despite tensions stemming from the current economic situation, they have not withheld their participation on joint committees where information is exchanged and measures are discussed and debated with a view to coordinating action to regulate road traffic flows at the scale of the alpine region.

Changes in the shaping and implementation of policies

23 The transformation of the transport policy in the Alps cannot be understood without examining the procedures involved. Often, changes in the goals of public policies are linked to the diffusion of consultation procedures. In the Alps, a gradual institutionalisation of participative democracy can also be observed (Revel et al., 2007), but in this multinational space, it takes on forms and brings together actors – state government departments – that are not necessarily those usually involved in such changes.
The first significant point in terms of procedure in the alpinisation process affecting transport policy relates to the bringing together, in an exchange and coordination arena (Jobert, 1995), of actors responsible for these questions throughout the Alpine arc. Ollivier-Trigalo (2000) has already pointed out the challenges involved in seeking coordination between the multiple actors of major projects. Before 1999, contact between government departments responsible for transport issues throughout the alpine region was mostly sporadic and bilateral. Studies for the creation of the Alpinfo base helped initiate more regular contact, with a permanent network of correspondents within the Swiss, French and Austrian government departments. This early initiative, despite its shortcomings, encouraged the emergence of a better-coordinated measure in 1993, in the form of the Cross Alpine Freight Transport (CAFT) Survey, the aim of which was to obtain regular traffic data. The measure became more permanent in 1999 when it obtained financial support from the EU.

Italy, which at first remained on the sidelines of this measure, contested its results during negotiations between Switzerland and the EU to reach an agreement on alpine transit traffic. A redefinition of the traffic categories used, aimed at watering down the notion of transit and adapted to the small size of Switzerland and Austria, enabled Italy to become involved in the preparatory work for the third CAFT survey in 2001.

In the same year, following accidents in the alpine tunnels, the transport ministers of Germany, Austria, France, Italy and Switzerland (plus Slovenia in 2005, and the European Commission) created the Zurich Group, a permanent structure whose aim was to promote a coherent policy at the scale of the Alps around three themes: safety of crossings, knowledge of traffic and the promotion of measures in favour of a modal shift in traffic. It was largely within the Zurich Group that the alpine transport policy was drawn up.

The importance that each partner attaches to the existence of this coordination structure has encouraged compromise. Switzerland, which hoped to strengthen the modal shift idea, submitted its alpine transit stock exchange (BTA) proposal to the Group, while at the same time recognising that its application would require close consultation with all the alpine countries and the Commission. In return, the EU and Italy, the two actors least in favour of a restriction of traffic, agreed to take it into consideration in a series of common studies. This multilateral structure helped strengthen the alpine transport policy: when several parties have officially agreed on something, it is more difficult for just one of the parties to later question it. The structure is rather special within Europe due in part to the specific status of Switzerland; it confirms the political recognition of the specificity of the alpine space, at least with respect to the question of transport.

The vigorous protest in Val de Suse (Italy) in 2005 against the Lyon-Turin project, resulting from a long marginalisation of local actors (Bobbio, 2006), provides another example of the way procedures can evolve. To get out of this conflict situation, the Lyon-Turin project was taken out of the framework of Legge obiettivo, which confined the preparation process to within a state department. A “technical observatory” was created between the State and the regional authorities and, at the same time, the representation of opponents was reduced, with the explicit aim of reaching a common position on questions of a technical nature – capacity of existing line, evolution of trans-alpine traffic, insertion of project in the Turin rail hub, possible layouts for the new infrastructure – but which in reality determined the implementation of the modal shift policy in Val de Suse (Sutto, 2009a, pp 212 and following.). This involvement of local actors in implementing the alpine modal shift policy was not only an opportunistic way of
getting the project accepted, but was also in line with the ultimate goal of the modal shift policy to protect the local population and the environment. It was by taking into account local interests that the observational studies helped the initial project to evolve. All in all, this episode bears witness to the increasing “territorialisation” of the shaping of public policies in the fields of planning and transportation (Ascher, 2004). It also illustrates the way in which conflict helps bring about change in forms of governance (Torre et al., 2006).

Apart from their role in reconfiguring the decision arena, the Zurich group and the Virano observatory were also involved in a renewal of technical and economic expertise. From a sustainable development perspective, such expertise provides one of the sources for renewing methodologies (Hanley, 2001). In the case under study, this expertise is confronted with new questions (cf. 1st part), but above all it is called on more as input for simulations and preparations for compromise than as a simple element of justification, that is, as a tool for “political trial and error” rather than for “technocratic certainties” (Crozet, 2004).

A reference framework undergoing change

For a few years now (with the economic crisis, the stalling of international negotiations on greenhouse gases and the election of a European Parliament less proactive in environmental matters), the general process of alpinisation has shown signs of weakening, an observation that has already been developed elsewhere (Klein, Sutto, 2011). This has been reflected in a halt in the development of those measures envisaged earlier to regulate road traffic and in the calling into question of infrastructure projects that had hitherto been an integral part of alpine transport policy.

In order to better analyse these recent developments, we propose considering the alpinisation process and multi-level governance as no more than two individual elements in a more general process of broadening the framework within which alpine transport policy is developed. They constitute its geographic (or territorial) and institutional dimensions, to which could also be usefully added a cognitive dimension (the integration of other knowledge into the process) and an ideological dimension (corresponding to an opening up to different philosophies of action). This interpretative grid provides an extended framework of analysis that may be seen as an adaptation, to the terrain under study, of the three constituent dimensions of the reference framework according to B. Jobert (1992): cognitive, normative and instrumental. It may help in understanding the increasing fragility of the alpinisation process and the continuing opposition to the Lyon-Turin project. For it to do this, we can return to the three axes along which alpine transport policy has evolved and which we have described earlier in this article: the development of the knowledge base, the changing goals of public action and the evolution of the procedures adopted in the context of decision making.

The opening up of the cognitive dimension may be considered as a systematic consolidation and broadening of the knowledge base used. We have described how the alpinisation process operated through a gradual improvement in the knowledge used in the limited field of economic analysis for traffic forecasting. It may also be seen, throughout the changes observed in alpine transport policy, how the environmental question has gradually come to the fore by focusing, in the field of transport, on the technical question of impact measurement (Thudium, 2007). However, discussions on alpine transport policy and the confrontation surrounding projects like the Lyon-Turin
rail link involve new fields of interest, or at least areas that do not figure strongly among the concerns of actors in the decision arena, areas such as the tourism economy, the heritage and symbolic value of natural areas, or even the protection of local cultures or the detailed knowledge of the behaviour of a certain animal or plant species for which the issues are not immediately quantifiable. In short, the cognitive opening up of the process shaping alpine transport policy took place through alpinisation, but only in a partial manner in that it remained for the most part limited to economic expertise and, more generally, to a technical approach.

33 With regard to changing goals and developments in discussion procedures, the Virano observatory illustrates – within the decision-making framework of the Lyon-Turin project – the limits of the ideological rethinking that has taken place. Firstly, in the context of this project, the advocates of certain alternative ideologies made a conscious choice not to be part of a participation process that in their eyes entailed compromising their principles. But the Virano observatory was also clearly an instrument for selection (and division) among the ideologies underpinning the opposition to the Lyon-Turin project. Project authorities only listened to those actors interested in defending local interests or local development (following a logic that in the end was truly productivity-based) and excluded others who, with different motivations relating to public ethics, the redefinition of the notion of development, or resistance to an established order, were finally considered to be non-constructive. Opposition to the project thus found itself isolated though not entirely defeated, as illustrated by the persistent troubles of 2011.

34 The a priori definition of the goals of open discussion – here the continuation of the infrastructure project for numerous local or national political representatives or its categorical rejection for other actors – appears as a factor limiting a re-examination of ideological bases. The possibility of calling initial goals into question, however, is part of the re-examination process that could be seen as an element in favour of setting up a normative framework for discussions on alpine transport policy from a perspective of ensuring “sustainable development in the Alps”, which though certainly somewhat vague is less exclusive than one geared to implementing the Lyon-Turin link (or not implementing it).

35 It is important, however, to avoid adopting a position that is too benign, by which any conflict would be solvable as long as there was reciprocal listening. Thus, the particular or sectoral context for discussing alpine transport policy is not disconnected from the more global reference frameworks around which there are conflicts that cannot always be reduced to the scale of the Alps alone. The alpinisation process has certainly been accompanied by numerous modifications in what stakeholders agreed to include in the common framework for discussion (for example, by leading the EU to contravene the principle of free movement written into the Treaty of Rome in order to accept the possibility of a quota of HGVs crossing the Alps, or by persuading ecologists – in principle, not very favourable to large infrastructure projects – to support trans-alpine projects). In Italy, however, the alpinisation process has been more hesitant than elsewhere (which can be explained in large part by the country’s dependence on trans-alpine flows) the framework of discussion has remained largely structured by considerations external to the alpine massif.
Conclusion

It can be seen, by way of this example, that territorial, institutional, cognitive and ideological dimensions form an indivisible base that provides the framework for the discussion and shaping of alpine transport policy. This framework is therefore a structure that is undergoing constant renewal, even if only because it is subjected to changes in the more global contexts to which it is connected. It enjoys, however, a degree of stability that depends directly on the coherence of the different elements on which it is based. Until recently, the reference framework for alpine policy was moving towards a territorialisation (alpinisation) process and an opening up of the decision-making process (which seemed to be a forerunner to setting up a multi-level governance system). This development seemed to facilitate the enlargement of the knowledge base used and the weakening of exclusive ideologies, in a process that was contradictory and far from complete.

The increasing number of constraints external to the Alps (economic crises, political problems) has sorely tested this trajectory by exposing inconsistencies in the normative framework underlying the dynamics of the alpine transport policy. Internal disagreement over this reference framework, namely in relation to infrastructure projects like the Lyon-Turin link, make it more difficult now for different actors to refer to it to assert the specificity of the alpine region in discussion arenas in which they are involved outside the Alps. The Lyon-Turin project and, more generally, the alpine transport policy are caught between a weakening of their traditional political support, on the one hand, and local opposition on the other. The only way out for them is to accept a diluted alpine policy in a less differentiating European policy or to reinvest in building a more open, and thus more solid, alpine reference framework.

BIBLIOGRAPHY


**NOTES**

1. During the 1990s, four trans-Alpine rail projects were launched: the Lötschberg and St. Gotthard tunnels, the Lyon-Turin project, and the Brenner project.

2. The agreement for the construction and operation of a new Lyon-Turin rail link, signed on 30 January 2012 by the French and Italian ministers responsible for transport, thus includes an appendix entitled, very explicitly, as follows: “Promotion du report modal pour les passages franco-italiens” (Promotion of modal shift for Franco-Italian traffic).

3. Since 1994, the Alpine Arc has had a second tool for measuring road and rail transalpine traffic. Road data are obtained by CAFT (Cross Alpine Freight Transport) surveys, conducted by the French, Swiss and Austrian ministries of transport every five years (between 1994 and 2009). These are completed by information on rail traffic flows transmitted by the rail authorities of the three countries concerned. The CAFT survey not only collects data but also observes traffic flows, enabling a more precise study of the demand for transport and of the composition and nature of traffic.

**ABSTRACTS**

This paper proposes an interpretative framework for analysing the political processes shaping freight transportation policy in the Alps. It follows on from a series of earlier studies on “alpinisation” and the emergence of a multi-level system of governance in the Alps. The present study seeks to enrich these earlier contributions by integrating a new approach with a view to obtaining a better understanding of the gradual transformation that has occurred in the normative framework helping determine alpine transportation policy. To this end, the political changes taking place have been analysed in terms of three dimensions: the development of knowledge, the changing goals associated with public policy, the evolution of political
procedures. This interpretation provides valuable insights into recent events such as the weakening of the alpinisation process and the renewal of protests against the Lyon-Turin project.

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**Keywords:** Alpine space, transport policy, evolution of normative framework, modal shift, Lyon-Turin project

AUTHORS

**OLIVIER KLEIN**
Enseignant-chercheur, Laboratoire d'Economie des Transports, Université de Lyon, Olivier.klein@entpe.fr

**LISA SUTTO**
Chercheure associée, Laboratoire d'Economie des Transports, Université de Lyon, Lisa.sutto@developpement-durable.gouv.fr