# **A road trip on European highways** Considering the spatial qualities of E75 and E50

A phenomenalist approach in the observation of spatial qualities of the E75 Barentsz Sea – Crete and E50 Brest – Makhachkala

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# Abstract

This paper takes the reader on a road trip, travelling the longest highway routes of the European continent and drawing conclusions based on a methodology of practical observation. The paper introduces a phenomenalist approach to highway design research, based on using photos and observations as a source of evidence in its own. The research is based on twelve weeks of driving, shooting photos, sleeping along the road, eating only in road-side restaurants and interviews with waitresses and shopkeepers. There used to be a lot of attention for the scenic experience and spatial quality of highways. In contemporary designs, however, highways are regarded more and more as sewage systems: something not to be seen, heard or smelled. Functional aspects such as noise reduction and traffic capacity prevail above spatial design. This paper shows how different countries are coping with these conflicting issues. It shows best practices and how these relate to the contemporary practice of highway design in the Netherlands. The paper argues that a technocratic and economically driven approach to highway design is a poor and vulnerable strategy. The paper further demonstrates that contemporary design policy in the Netherlands, with a strong focus on the aesthetics of built structures, neglects aspects that have much more impact on the spatial experience. The paper zooms in on five aspects that heavily affect the spatial experience of a highway: the sense of travelling on one continuous route, the sense of surveillance and state control, the sense of being part of a high quality public space, the existence of educating elements along the road and the level of technology. The paper draws conclusions based on methodologically collected observations and translates these into recommendations for designers.

#### KEYWORDS

highways; European highways; E75; E50; public space; transport infrastructure; highway design; phenomenology

#### **1.** INTRODUCTION: THE DECLINE OF THE SCENIC ROUTE

There used to be a lot of attention on the scenic experience and spatial quality of highways. The American parkway concept was based on a scenic route, with the 1940 Meritt Parkway in Connecticut as a bright example (Giedion, 1941). The same goes for the German Autobahn, heavily influenced by the scenic guidelines of the German landscape architect Hermann Fürst von Pückler (1785–1871) (Nijenhuis & Van Winden, 2007). In the Netherlands, the design of the first highways was based on similar intentions and was a co-production of state engineers and state landscape architects (Heesen, 2011a). Until the 1960s, there was an optimistic feel about highways. City dwellers even used the road shoulder as a place to relax: a picnic alongside the highway, watching cars and trucks roll by (O.M.A., 2006).

In the 1970s, the dark side of the highway concept emerged. The first traffic jams, deathly accidents, noise and pollution, the oil crisis and the alerts by the Club of Rome made clear that there were limits to the concept. The optimism of the early days vanished. The spatial intentions became less important than functional and administrative aspects, such as safety, capacity and noise reduction. Highways became canals for cars, isolated by sound-baffling screens and hidden by bushes. For example, since the introduction of the 1979 'Wet Geluidhinder' (law on noise reduction) in the Netherlands, the view upon the landscape along more than five hundred kilometres of highways has been blinded by sound-baffling screens (CBS, PBL, 2007).

Highways became like sewage canals: something merely functional and preferably invisible, not to be heard, nor smelled. The climax of this approach is currently under construction in the meadowlands between Rotterdam and The Hague: highway A4. After sixty years of discussion, the construction of this stretch of seven kilometres of highway was finally accepted by the stakeholders, under the condition that the new highway would be invisible, not to be heard nor smelled (Peijs, 2006).

Being involved as an architect in this project and in a long-term design strategy for the entire route of highway A4 between Amsterdam and Antwerp (Heesen & Top, 2005), a number of questions arose. First of all, how are other countries coping with the design of highways and how do these practices relate to the design practice in the Netherlands? The contemporary Dutch design policy on highways is largely based on technocratic and economic aspects. Spatial aspects of the design are reduced to an aesthetic upgrade and transformation of the network into uniquely identifiable routes, clearly distinguishable from other routes by means of architecture (Patijn et al., 2001). Is this a meaningful design strategy? Is it imaginable that a highway has the high level of spatial quality and attention to detail of, say, an Italian piazza, with the spatial and social quality of what Jürgen Habermas calls the public sphere (Habermas, 1962)? And what are best practices in this? And finally, what can architects and landscape designers learn from all of this? 2. PHENOMENALIST METHODS: A ROAD TRIP ON THE LONGEST EUROPEAN ROUTES

During the initial desktop research on the differences in highway design in different countries, a practical problem arose: in many countries, it is virtually impossible to interview an expert. For example, calling the local road authorities in the Ukraine and asking who has been responsible for the architectural and landscape design of highway E50, is a dead end street. Yet, the intention was to compare different practices in different countries. Instead of the expert approach of collecting and analysing data, a more practical method was used, based on observation: a phenomenalist approach. This method of 'research by observation' is a common method in the field of environmental psychology, where photos and observations are considered to be a source of evidence in its own.

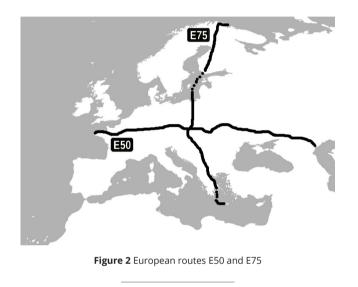
In order to introduce a framework for our observations, the following research method was agreed upon: we would travel one designated route and make an obligatory stop at every public space along the route, for example picnic areas, parking places, gas stations and roadside restaurants. Additionally, sleeping accommodations and food supplies were solely confined to motels and roadside restaurants along the route. During stops, the 'inhabitants' of the E-road, for instance shop keepers and waitresses, were subjected to interviews (figure 1).



Figure 1 Food and the inhabitants of the E75

Local memorabilia related to the route was collected, such as postcards showing a bridge or brochures for new residential areas. Every hundred kilometres on the odometer, a picture was taken of the surrounding landscape. Whenever one of the members of the research team considered a certain aspect to be significant, a stop was implemented. And finally, the use of electronic route navigation was not allowed, following the traffic signs was to be considered part of the experience.

The first road trip took place on the E75, the longest southbound E-route in Europe (figure 2).



The E75 is part of the European international system of route designations, originally envisaged as a grid of highways comparable to the US Interstate Highways (United Nations, 1950). The network measures over 150,000 kilometres and includes every regionally important road. The most significant routes have numbers ending with a five (direction north-south) or a zero (east-west).

The E75 starts in Vardø, a Norwegian fisherman village on an island in the Barentsz Sea, located east of St. Petersburg. The route runs approximately 5,700 kilometres across the continent, ending in the harbor of Sitía, a small village on the Greek island of Crete. It runs through nine countries, linking Norway, Finland, Poland, the Czech Republic, Slovakia, Hungary, Serbia, the Republic of Macedonia and Greece. Part of the E75 is a dotted line crossing the Baltic Sea. This part of the route is a seasonal ferry connection between Helsinki and Gdansk. Including the trip from the Netherlands to the northern tip of Norway and the route back from Crete, the E75 road trip accounted to approximately 12,000 kilometres. The plan was to analyse the spatial characteristics of the E75 in the same way as one would analyse an Italian piazza: by documenting both the physical elements and social, historical and cultural aspects related to public space. In order to document the E75 in a professional way, Hans Stakelbeek, a Dutch documentary photographer and cameraman, accompanied the research team during the whole trip.

After spending one-and-a-half months on European highways for the E75 trip, we decided to expand our research with another six weeks on an eastbound route. We decided to go for European highway E50, a route of approximately 6,000 kilometres between the French harbour city of Brest, located on the western edge of continental Europe and the city of Makhachkala, located on the western shore of the Caspian Sea.

Our method of research and documentation remained largely the same, except for some slight changes based on the previous experiences along the E75. We skipped the obligatory stop at every 100 kilometres: the material gained by this method was not that interesting. In addition, we decided to halt at a number of local cultural organisations (galleries, embassies, universities and so on) in order to collect more information on social and cultural aspects. The biggest difference with the E75 trip, was that on this occasion we would not be able to drive all the way to the end of the route: the final stretch of the E50 runs straight through the war zones of North-Ossetia-Alania, Chechnya and Dagestan.

Experienced journalists advised against trying to drive as far as we could. Instead of hoping not to become a hostage in the Caucasus, we decided to bend south and travel back to the Netherlands on the E90, passing Istanbul. The road trip on the E50 brought the overall distance of the project to 25,000 kilometres.

#### 3. OBSERVATIONS ON THE E75 AND E50

During our research on the E75 and E50, many different aspects related to the design of the highway were registered. Observations of five significant aspects that affect the spatial experience of the highway are described below.

## 3.1 One unique and identifiable route or just consecutive roads?

In the Netherlands, a governmental policy document on architecture and landscape design aims at transforming four international highways into uniquely identifiable routes. The primary aim of the vision is to prevent urban sprawl and degeneration ('verrommeling') (Fabrique, 2005). The oldest Dutch highway, the A12 between The Hague and the border with Germany, is the pilot project of this vision. The route has been labeled 'A12 Regenboogroute' (rainbow route), derived from the observation that this motorway cuts through a variety of landscape types: meadowland (light green), forest (dark green), city (orange) and urban sprawl (purple).

In order to improve the aesthetics of the highway, an industrial design office created a set of geometrically related elements, ranging from a modular design for sound-baffling screens to specifications for new light poles, road crossings, bicycle tunnels, wildlife crossings and so on. As a kind of logo on this long-term project, each single light pole in the route has already been marked with a sticker showing a rainbow in orange, purple and two shades of green. A similar design strategy of transforming consecutive stretches of highway into one uniquely identifiable route is now implemented for the Dutch part of the route Amsterdam-Palermo (highway A2/E25) and Amsterdam-Paris (A4/E19) (Heesen, 2011b). Driving on the E75 and E50 we wondered if the same applied to the E-routes. Are they more than just consecutive stretches of road through consecutive regions and nations?

As a source of evidence, we decided to ask the 'inhabitants' of the E75 and E50 (such as shop keepers, waitresses and border patrol) where the route that we were driving on actually ended. Nowhere along the E75 did we meet anyone who had any notion of the fact that this route links the arctic circle with the Mediterranean Sea, that it is an international route between Santa Claus and the sunny beaches of Crete. There was one exception to the rule: on the island of Crete, we were able to buy a postcard showing a photo of a topless girl on the beach and a photo of a reindeer in the snow, separated by a thermometer. The text on the postcard stated: *"While I am sun tanning in Greece, you are freezing up north"* (figure 3).



Figure 3 Postcard collected on the island of Crete (Greece)

Sometimes, it was even hard to find the E-route at all. The best feeling of one route was in countries where the E-number shares its route with a national long distance connection. In Finland, for example, where the E75 is called E75 all the way to Helsinki, the road serves as the main and sometimes only southbound route. Up north, where the E75 is occasionally transformed into a landing strip (figure 4), the route even feels like the European version of Route 66.



Figure 4 Landing strip in the E75 in northern Finland

Albeit there is no slogan (Get your kicks on Route 66), the road itself is branded as a tourist destination and lined with shops and Bed & Breakfasts.

In many countries though, the E-route is hard to recognize as one continuous route. In France, the E50 runs on eight different highways, all with a different look and feel, ranging from oldschool national highways to the diabolic Paris Peripherique and state-of-the-art toll roads like the A6. Albeit the main international routes have been given names, for example 'Autoroute du Soleil', there is no such label on European route E50. On the other hand, the lack of border control on the E75 gave us a strong feeling of travelling in one system, on one international route linking regions and nations. We managed to pass twenty national borders and board five ferries in a rusty old Benz without carrying the legal papers of the car (which the Dutch police had confiscated during a routine check of the mechanical condition of the car in the week prior to the start of our trip). Often, the border between nations was only visible because of a slight change in the lay-out and appearance of the highway such as different asphalt and different colors of lining and signing.

In this aspect, the E50 was not as relaxed as the E75. The further east, the longer it took to pass the imaginary lines between nations and regions. From the start of our trip, we already knew that it would be virtually impossible to cross some of the borders in the Caucasus. A prelude to this region was the border between Russia and the Ukraine, which took half a day to pass. Besides physical aspects associated with border control (barriers, gates) and red tape (passports, visa), it turned out that there were also invisible borders in other administrative aspects, such as car insurance. During the trip, we had to switch insurance companies, because the Ukraine and Russia were not covered by some. When the engine of our W123 300TD research vehicle broke down in Germany, we were not allowed to take the replacement car offered by the insurance company into the Czech Republic. Our only option, was to drive all the way back to Rotterdam and pick up another research vehicle (a W124 250TD).

#### 3.2 A sense of personal freedom or state surveillance?

Park your car on the hard shoulder of a motorway in the Netherlands and within ten minutes, the police or a service vehicle of the national road authority will arrive, the adjacent highway lane will be closed by means of a digital red cross and your car will get towed away for safety reasons. The cameras along Dutch highways are able to detect any object larger than 50 centimeters. The software is programmed in such a way that anything out of the ordinary is being registered, for example, a vehicle that is not moving.

One of the striking aspects of travelling on the E75 and E50 was that in many countries we were able to park our vehicle anywhere, at any time without any authority or road assistance service showing up. The absence of surveillance led to a great sense of personal freedom. It meant for example, that whenever we saw a nice panorama, we were able to stop and immediately take a photo. Or two. Or three. Except, of course, for the Ukraine and Russia. The main roads of the Ukraine are a source of income for the local police squad: they typically place a 30 km/h traffic sign in such a way that it is almost invisible from the road (behind a tree, for instance), point a laser gun at all approaching luxury vehicles and start collecting penalties. Occasionally, the man pointing a laser gun turned out to be made of cardboard, placed by inhabitants to bring down the speed of passing vehicles.

In Russia, especially in the Caucasus, local policemen did not even pretend to collect a fine. They simply made all luxury vehicles pull over and pay. According to some of the locals we interviewed, the required fee depends: locals pay less than foreigners, who pay less than Northern European foreigners, who pay less than Moscow citizens. The further we travelled east, the worse it got. The highest fee paid during our trip was 4,000 Russian ruble (about 120 US dollars). The number was written down with a pencil and erased immediately after. The local policeman enforced the payment of this fee by commanding me to sit down on the passenger's seat of his blinded Lada and pointing a machine gun at me. Then he showed the photos of my children that he had found in my passport and told me how my car would be confiscated and I would be thrown in jail until Christmas. It sounded so ridiculous that I felt like negotiating, which brought the fee down to 50 US dollars. The consecutive rip-offs by local policemen had a negative effect on our spatial experience: whenever a village or roadside restaurant came ahead, we were no longer enjoying the landscape. In order to avoid our foreign licence plate to be spotted from afar, we tailgated Russian Kamaz trucks.

Halfway into the Republic of Kabardino-Balkaria, the practice of collecting fees suddenly seemed to have vanished. In fact, there seemed to be no police at all. On a roadside market, we noticed how people were trading without paying, bartering onions for coleslaw. Facing the steel canopy of the border with the Republic of North Ossetia-Alania, we decided to contact experienced journalists, who advised to make a U-turn: this sounded too much like the eye of the storm. A beautiful landscape is hard to enjoy in the vicinity of danger. And then again, despite the fact that there was a nasty taste to the bribery practice in the Ukraine and Russia, the whole thing turned out to be relatively inexpensive after all: the total amount of 'fines' and 'fees' added up to less than the toll levied on the E50 in France. One kilometre on the average Péage, the French network of toll roads, costs about 10 Eurocents.

## 3.3 A truly public space or Eurodisney?

If you take the exit to a Dutch 'verzorgingsplaats' (fuel station) along one of the state owned highways, you are likely to observe the following layout: the highway exit leads to a junction where you will have to choose between the actual fuel station with shop or a picnic area behind the fuel station. The picnic area is equipped with wooden furniture and has either no pedestrian route to the fuel station or a dead-end route, leading to a fenced collection of garbage cans and a back door with smoking employees. You will probably also notice differences in the materials used. The picnic area is owned, maintained and operated by the state, which generally results in grass and asphalt. The fuel station with shop is leased by an oil company, usually for a period of ten years. The relatively short time for return-on-investment stimulates them to use the cheapest available pavement on their parcel.

Now, compare the described Dutch layout to the general spatial concept of a French 'Aire de repos' (literally: rest area). The French space is structured like a backbone: with the bones being the parking places and the spine a kind of pedestrian boulevard, a clearly distinguishable path leading to the back entrance of a shop or restaurant. Along this pedestrian route, you are likely to find services like a playground or a bouncing castle for your kids.

France has over 8,000 kilometres of toll roads maintained and operated by private companies. It is big business with increasing revenues that exceed inflation. In 2011, the top three of corporations (Vinci Autoroutes, Eiffage and Sanef) levied 7.6 billion Euro (Cour des Comptes, 2013). The privatisation of the French motorways has had an effect on their physical appearance.

The first stretch of the E50, the N12 running through the Brittany region in France, is a toll-free highway. This part of the route has been designed by the Germans during World War II and is clearly a road from another era: some of the buildings along the road are located extremely close to the asphalt, the public spaces look worn out and they are monofunctional: fuel stations without a picnic area, picnic areas without a shop.

A different experience is travelling on the E50 between Paris and the border with Germany (Autoroute A4), a toll road operated by Sanef: this is a well-maintained highway with public spaces that offer a high service level, where picnic areas, fuel stations, restaurants and 'traveller's wellness' are combined in one stop. The upside of this corporate exploitation is the abundance of convenient things like massage chairs, excellent Italian espresso and clean toilet seats. The downside of it is that these franchised spaces feel very much like Eurodisney or the food-court in a shopping mall: a highly serviced private space with the appearance of being public space, where the traveller is invited to become a consumer, an example of the *non-lieux* described by Marc Augé (1992).

Another aspect of the corporate highway is that there is no escape from fast food. Roadside restaurants in France, Germany and the Czech Republic are often part of the same chain, serving the same food. The imaginary line between 'international food' (such as refrigurated triangular sandwiches) and locally inspired food is drawn somewhere in the vicinity of Bratislava, the capital of Slovakia. Order a sausage here, and you will be served a bent piece of meat, smiling at you in a pool of gravy and mustard. In this aspect, the E75 and the E50 are guite different. The shops and restaurants along the E75 offer an incredible variety of food, albeit hardly any vegetables and fruits. The menu gradually changes from Scandinavian food (such as reindeer sausage soup and minced reindeer meat with mashed potatoes and blueberries), via Central European food (cooked potatoes, onions and hash meat with lots of gravy) to the Mediterranean kitchen (grilled lamb, olives and bread). Ordering a coffee gets you anything between an Italian style espresso and locally inspired 'cappuccino' (for example: coffee with whipped cream, three table spoons of sugar, an ooze of lemon syrup and cacao powder).

The climax in the privatisation of highways was observed in the Czech Republic. There, not only all roadside restaurants are part of the same franchise concept, also the road shoulders and structures crossing the highway are loaded with advertisements. In fact, we made the observation that every single concrete structure crossing the E50 carried one or more advertisements. Instead of a scenic route, a cinematic experience of the landscape, this part of the route felt like one continuous commercial.

## 3.4 A functional road or a way of educating the people?

In the Netherlands, brown-and-white signs along the highway mark the existence of culturally significant landscapes such as national heritage landscapes or reclaimed land. Highway A6, for example, is a route running on reclaimed land and is equipped with signs showing the level of the highway relative to sea-level. The signs were a gift from the 'Algemene Nederlandse Wegenbond' (ANWB), a private association that has historically been involved in traffic signing and breakdown service in the Netherlands. They were inspired on a similar system of brown-and-white signs in France and Germany, where people are educated on history (for example on the vicinity of a battle field), culture (the vicinity of heritage buildings, wine regions, famous cheese) and on technology (the span of a bridge).

Another way of 'educating the people' in the Netherlands, is by means of art. For example, highway A27 starts in Almere, where Tom Claassen designed a herd of elephants in a concrete jungle. The highway ends in Breda, where Joep van Lieshout created Big Funnelman, a polyester figure lying on his back. The artworks were part of a regulation on art ('percentageregeling beeldende kunst'): if a building initiative financed by the national government exceeded 1 million Euro, 1% of the budget had to be spend on visual arts.

During our road trips on the E75 and E50, we observed many 'educating elements'. Often in the shape of signs pointing out heritage and historical facts, occasionally a work of art. In the Ukraine, educating elements are found inside the concrete bus stops along the E50, where mosaics of tiles propagate healthy athletes, cornfields and other aspects of the utopian communist life-style. When we mentioned the beauty of the bus stops during a lecture in a bookshop in Kiev and pitied the lack of maintenance, people in the audience were surprised that we saw beauty in the old mosaics. They valued the mosaics first of all as part of the former totalitarian regime, as part of a dark episode in history, not as cultural heritage.

## 3.5 A simple stretch of asphalt or a highly serviced piece of technology?

In the Netherlands, safety and capacity measures have a great impact on the spatial experience of motorways. The main routes are nowadays wide planes of asphalt with four to five lanes in each direction, crash barriers, automatic speed detection, light poles, route and traffic flow information, traffic jam detection, emergency harbours, fog warning, dedicated carpool lanes, rush hour lanes and so on. Every 600 meters, the highway is spanned by a steel construction carrying traffic signing equipment.

In an international context, the Dutch high-tech highways, with meticulously levelled planes of asphalt, turned out to be exceptional. At the other side of the spectrum was the E50 in the Ukraine, where the potholes in the road surface were sometimes deep enough to absorb an entire wheel. Near Donetsk, we observed road construction workers equipped with dust blowers, removing sand and mud out of large potholes before refilling the holes with asphalt. On several occasions cars were observed trying to make it home with three wheels or a broken axis. Our own vehicle was no exception: the suspension broke down.

The bad quality of the roads had an effect on our scenic experience: travelling 30 km/h on a road that looks like a battle field is a very different experience from gliding on a meticulously levelled plane of fresh, black, rain directing, noise reducing, highly maintained tarmac with glow-in-the-dark striping.

Our mechanical trouble also showed the difference in service level between different parts of the E50. In Germany, where the worn-out engine of our first research vehicle broke down, we were towed away to the nearest Mercedes-Benz workshop and offered a taxi to our destination, some 60 kilometres away. Calling the insurance company from the Ukraine however, their call center employee was unable to find a single workshop in the database. The next day, after we had found a workshop ourselves and were already back on the road, the insurance company called back: *"We have found the nearest Mercedes-Benz workshop: it is located in Charkiv."* The city of Charkiv was about 420 kilometres from where our suspension broke down.

In countries like Slovakia, the Ukraine and Russia, the whole concept of a service system with insurance and tow away service seemed to be nonexistent. Although in the Ukraine, there is help to some extent: the government has equipped parking places with concrete roll-on/roll-off structures, on which you can repair your vehicle or truck. The absence of services was one of the reasons why we had chosen a Mercedes-Benz research vehicle. As American investor and traveller Jim Rogers states in his book 'Adventure capitalist', even in the worst failed states, there is at least one workshop with Mercedes-Benz spare parts, since the dictator usually drives one (Rogers, 2004).

#### 4. CONSIDERATIONS FROM THE OBSERVATIONS

We came home with many new questions, some on the design of highways, many on the future of Europe. In 2020, will we still be eating a smiling sausage in a pool of gravy or will all road side restaurants have been franchised? Will it become easier or even harder to travel the E50 in the Ukraine and Russia? We also found answers to our initial research questions.

One of our questions was: how are other countries coping with their infrastructure and how does this relate to the design practice in the Netherlands? The start of the answer to this question is: it depends on the stretch of asphalt that you're looking at. How old is it? Who has designed, build and financed it? Who operates and maintains it?

Traditionally, European long distance roads have been designed, built, financed, maintained and operated by the state. From the Via Appia and the other paved streets in the network of the Roman Empire to the Dutch network of 'rijkswegen' (main roads), initiated by Napoleon. In all European countries, the design and construction of highways was a state-run business, with state employed engineers and landscape designers. Only the actual construction was often outsourced to private companies. In some countries, this tradition is continued: in the Scandinavian countries, for example, and in Russia. In many countries though, not only the construction, but also the design, engineering, maintenance and often even finance is outsourced to private companies or public-private partnerships, for example in France, Poland, the Czech Republic and Slovakia (figure 5).



Figure 5 Built by Design & Construct: the new E50 near Prague (Czech Republic)

These kinds of contracts, based on Design, Build, Finance, Maintain, Operate (DBFMO), have got momentum: the initial costs do not show up as a deficit in the state budget. Also in the Netherlands, where private-public partnership used to be limited to farmers mowing the road shoulder and keeping the grass as a reward (1950s), the latest highway projects are all based on Design & Construct (D&C) or DBFM-contracts.

The new contracts affect the spatial experience. The contracts often highly reward functional and economical aspects, such as traffic flow. Spatial quality is qualified as a 'risk' that has to be 'managed' (the risk of not getting a building permit for aesthetic reasons).

Albeit these public-private partnerships have led to highways with a high service level, clean toilets and comfortable restaurants, these places also lack the feeling of being a truly public space: they feel like airports or Eurodisney, like consumer space, not public space in the sense of what Jürgen Habermas calls the public sphere.

Traditionally, the landscape design of highways was to some extent influenced by landscape architects, whereas the design of steel and concrete structures was merely a civil engineering job in which architects were not involved. On the German Autobahn, for example, curves and panoramic views celebrate the qualities of the landscape, whereas the structures crossing the highway are pure and simple, not crying for attention.

In the current practice however, 'landscape design' is often reduced to the area of the road side shoulder. Part of that has to do with modern demands in terms of noise reduction. The E75 running through Hungary, for example, is almost continuously accompanied by wooden sound-baffling screens. Where the landscape has become invisible, and therefore also the orientation on these landscapes, the designers have fallen back on architectural means. In Slovakia, for example, the exit to every city along the elevated E75, is marked by a different color scheme (figure 6). On some highways in the Netherlands, designers have introduced the same architectural vocabulary, for example a yellow color scheme on the highway A2 through the city of 's-Hertogenbosch. This focus on architectural means seems to neglect more meaningful aspects of the spatial experience, such as the experience of the landscape, the public character of the space and the impact of technology.

Why are architects focusing on color schemes when a scenic view of the surrounding landscape could also tell the driver where he is? Instead of creating strong architectural identities for sound-baffling screens, why not making them out of glass, offering an unhindered view of the landscape and of cities and industrial areas? Then, the role of the architect would not be to create a new identity, but to stress existing qualities by designing the highway in such a way that all the functional aspects do not degenerate the scenic experience.



Figure 6 Purple color scheme in the new E50 near Presov (Slovakia)

Finally, we wondered if we were able to find a highway with the high level of spatial quality and attention to detail of an Italian piazza. I used to think of the German Autobahn as the climax of infrastructure designed as a public space: a highway owned, maintained and operated by the state, open and accessible to everyone, where no entrance fee is required, no toll is levied and speed limitations are the exception. A social space that is part of German culture and acclaimed in songs, for example in the 22 minute long hit single Autobahn by Kraftwerk: *"Wir fahren, fahren, fahren, auf der Autobahn…"*. (Hütter, Schneider & Schult, 1975)

Albeit trucks are now obliged to pay *Maut* (toll) in Germany and there is political discussion on levying toll on foreigners, the Autobahn is still very much a truly public space. A symbol of this is the Autobahnkirche, a nationwide network of churches located in the vicinity of the highway and visited by over a million people a year. The small churches are the religious version of a roadside restaurant: located next to the highway and filled with convenient religious fast food, such as electrically powered candles and small take-out booklets with prayers suitable for trips. Instead of complaining on the temperature of the French fries in the guest book, the traveller can write down the names of victims of traffic accidents: enlisting them in the book will lead to extra prayers by the reverent. The whole concept shares resemblance to an Italian piazza: a public space with a high level of spatial quality and attention to detail, a place of social significance, even equipped with its own church.

The social significance of the Autobahn was equalled by an experience on the E50 in central Ukraine. We pulled over at a huge concrete landmark: a word in cyrillic script signifying the administrative border of the Khmelnytskyi Oblast (province). The sign itself was not that extraordinary: many regional borders in the Ukraine are marked by a large chunk of concrete from the communist era. Extraordinary was the fact that a couple of newly weds was blocking the road, urging passing vehicles to pull over (figure 7).



Figure 7 Newly weds collecting gifts on the E50 near Chmelnytsky (Ukraine)

After drinking champagne and swallowing a snack of cholesterol rich animal parts, we were allowed to move on. Fastening our seatbelts, we watched a family member climb up the concrete landmark, trying to put an empty bottle of champagne as high up as he could.

This place in central Ukraine felt even more like a 'classic' public space: engineered around a central monument, a social space, commonly shared by the community, open and accessible to the people. A space with explicit rules (Don't drink and drive) and implicit rules (Drink! It's our wedding!). This was where European highway E50 truly became a piazza.

It is hard to imagine that the current practice of DBFM-contracts, with their focus on efficiency, functional and economical aspects, will lead to the same kind of spatial quality and social significance. In this sense, the older examples offer a lot of inspiration. To all architects and landscape architects: get out there, it's inspirational and free of entrance.

Have a nice trip.

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