

The national road 1 (EN1): a street of a sprawled city

Ana Isabel Silva

Faculdade de Arquitectura da Universidade do Porto

Via Panorâmica, s/n, Telefone 00 351 226057100

ana.isabel@arq.up.pt

The dialectic between mobility and centrality arises in the context of urban management as one of the key issues of contemporary urbanism. Our study stems from our understanding of the need to focus on the territorial network so as to design and manage infrastructures as part of an anthropomorphic landscape.

A series of studies, performed in the seventies by the MIT, helped build a broad sense about the loss of quality affecting the contemporary road, both in terms of the physical structure and in terms of its meaning and social use. These studies, remarkably convened on the book “*On Streets*”, edited by Stanford Anderson, pointed to the common need of recovering the complexity of the physical structure of the road and its character as a collective place.

With indications from urban morphology, which views the road as one of the compositional elements of the physical image of the territory, we found that some national roads could develop their potential as vectors for the enhancement of the landscape, as construction on its sides motivated and urged a relational and complementary vision between what was built and the road plan.

The analysis of a case study, the Estrada Nacional 1 (EN1) (national road number one), in the counties of Santa Maria da Feira and São João da Madeira, located south of Oporto, allowed us to reflect on a specific type of roads that, due to a number of factors including physical characteristics, location and function first, went through a rapid transformation that left this territory notably disordered.

We used two levels of representation of the territory under study, the first based on the analysis and interpretation of the Cartas Militares do Instituto Geográfico Português, on the scale 1 / 25000, (from fieldwork from 1945 to 1948 and from 1973 to 1975, later related the current mapping from the Municipal Councils), and the second, on the scale 1 / 1000, which favoured the observation of the immediate surroundings of the urban element EN1. These levels of analysis allowed us to address both the physical characteristics of the road and the forms of occupation of its sides (surrounding land). We further concluded that the sustaining roots of the metropolis involved the continuous transformation and actualization of the linear structures, often contradicting the frequent expansion through *small fragmentary packets that generate isolated and discontinuous pockets*.

By using Unidades de Leitura (UL) (reading units) we attempted to identify, within that territory, a rate of frequency of structuring moments along the whole – road and surrounding land – so as to give it an identity, or to enhance it, if that were the case. Only this would allow the setting of a possible intervention along the main road through we call Unidades Similares de Intervenção (USI) (similar units of intervention). As such, we were able to formulate an operational base that differentiated between units that, due to their territorial status and condition, could propose a selective intervention in that territory dominated by the road.

The road remains the main engine of urban growth, although it has been considered the place of hegemony automobile with consequences for its use. The various configurations and valences that, over time, marked the areas dominated by road definitely changed the perception, knowledge and experience of those urban pieces. Our analysis recovered the road as an urban element belonging to the field of Architecture, taking into account the transversal and relational dimensions (Moretti, 2000). Our work incorporated the physical components involved in the whole – road and surrounding land – that allowed us to approach the concept of public domain that includes both the *design of the ground* as well as the *urban forms* (Silva, 1998), that is, what is constructed in terms of buildings or what is left empty along the road.

We found that the disruptions in design occur in the weak matrices that exist along the road. This is where we found the opportunities for (re)stating the concepts of road, crossing and built with the aim of structuring circumstances able to build identity moments along the road.

We conclude that some of the roads that constitute the Portuguese road network, in particular what we call “estradas nacionais” (national roads) went from stepping stones of the urban sprawl to a fact of life of the new urban condition, going from a national road that serves the country to a street (local road) serving mostly the sprawled city. This prompts the need to look at the territory under a holistic lens that will allow the adjustment of certain circumstances taking into account the road and its surroundings.

Keywords: national road, street, road plan, road network, sprawled city.

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