



BOOK REVIEW

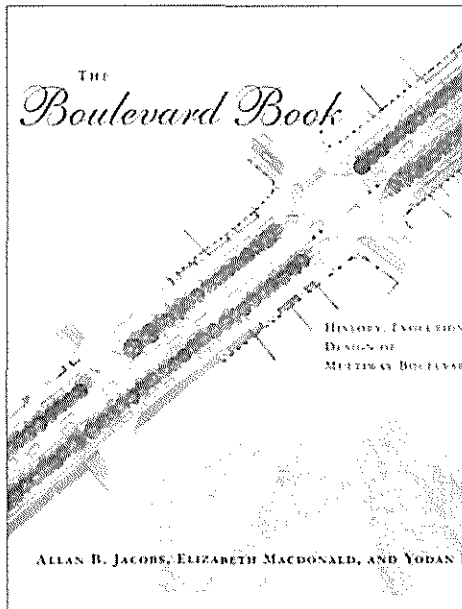
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Book's Title:

Allan B. Jacobs, Elizabeth MacDonald, and Yodan Rofé. 2003.
THE BOULEVARD BOOK. Boston: M.I.T. Press



INTRODUCTION

In the course of our master planning work for new communities, many times we might have tried to come up with new ideas forgetting how invaluable our current urban form which has evolved through the times. Places we are familiar with, our “*Jalan Besar*”, “*Jalan Bandar*”, our “*Padang*”, “*Bulatan*”, “*Pesiaran*”, “*Medan Pasar*”, etc. which offers priceless lessons which can be applied to our new environments.

Perhaps we are trying to stamp our personal identity into the new places which is within our sphere of influence, as planners, to create, especially with modern technology; we can create something out of nothing. For example, cutting an expressway is by blasting through a steep terrain. Of course, not all is bad, some good things can come out of new technology, converting ex-mining land into resorts that appeal and are used by many.

CONTENT OF THE BOOK

Prof Allan B. Jacobs in his book – *The Boulevard Book* (2003), has studied and measured many famous urban streets and boulevards, in order to explore what makes great public streets and boulevards and distil lessons from these examples. He has been a member of the Department of City and Regional Planning at the University of California at Berkeley since 1975. The book is beautifully illustrated by hand-drawn plans, road sections and perspective views of the boulevards, streets and places to give a personal touch.

The book has 50 case studies of boulevards including some Asian examples. Finally, it expounds qualities of user-friendly, human scale boulevards and design guidelines for future good boulevards.

According to the book, the classic European boulevard is multi-way. However, it has fallen victim to vehicular traffic, especially in the US. Jacobs reintroduces the concept of a multi-way boulevard, a street which is not only wide and tree-lined, but also separate through traffic from local traffic with wide medians. The central roadway has at least four lanes for automotive traffic, and parallel to it run one-way streets for slower-paced local traffic only. Pedestrians stroll on the large and tree-shaded medians separating the through and local roads. In short, a multi-way boulevard is a "mixed-use public way" (p. 6), serving car drivers, bicyclists, and pedestrians. The most prominent and best-preserved examples of this type of road in the United States are Eastern Parkway and Ocean Parkway in Brooklyn, New York which the authors called "wonderful, human, community places".

The book argues that boulevards could play an important role in revitalising blight by getting people back in the same places.

Our local major thoroughfares are roughly the equivalent with the boulevard with the major arterial serving the fast-moving traffic, with service roads serving the commercial buildings or housing areas flanking the thoroughfare.

However, our thoroughfares could be more pedestrian-friendly and lined with shade-providing trees.

The book shows how multi-way boulevards relate to many issues that are central to urban life, including livability, mobility, safety, economic opportunity, mass transit, and open space.

A selection of the boulevards studied is:

| | | Length | Width of road reserve | Width of carriageway (inc median) | Width of Access lane | Tree-planting interval @ median | Width of Side planting strip | Comments |
|-----------------------|------------------------------------|--------|-----------------------|-----------------------------------|----------------------|---------------------------------|------------------------------|---|
| INDIA | | | | | | | | |
| 1 | C.G. Road, Ahmedabad, Gujerat | 1.6km | 30.4m | 13.1m | 6.2m | 1m width | | 3.8m angled parking |
| 2 | Chelmsford Rd, New Delhi | .8km | 32.3m | 12.2m | 5.5m | | 3m | |
| 3 | Dr Zakir Hussain Rd | 2km | 36m | 16.5m | | | 2.4m | |
| 4 | Katsurba Ghandi Marg | 1.8km | 37.8m | 15.8m | 4.3m | - | 6.7m (inc walkway-layby) | |
| VIETNAM | | | | | | | | |
| 5 | Pasteur Boulevard Ho Chi Minh City | 3km | 18.9m | 7.3m | 2.4m (2-wheelers) | Keruing/ Bo Chet 8.5m apart | 1.8m | One way for cars & buses; other for 2-wheelers |
| 6 | Boulevard Ton Doc Thang | 2km | 39.0m | 7.3m | 4.87m | So Khi 2m apart | 2.4m | Abt 40m tall trees. Access lanes for 2-wheelers |
| 7 | Boulevard Ham Nghi | 1km | 51.8m | 22.6m | 6.4m | 3.3m | 2.4m & 5.8m (+walkway) | Access lanes for 2-wheelers |
| 8 | Le Loi Blvd | 1km | 54.8m | 18.3m | 8.2m | Keruing 7.9m apart | 4.3m & 5.8m (+walkway) | |
| 9 | Blvd Nguyen Hue | .8km | 60.9m | 16.5m | 7.9m | 1.8m | 7.9m & 6.4m (+walkway) | |
| FRANCE (Paris) | | | | | | | | |
| 10 | Avenue | | 38.4m | 12.8m | | - | 2.1m | 3 lanes |

| | | | | | | | | | |
|---------------------|----------------------------------|----------------|--------|-------|-------------|----------------------|--|--|---|
| | Montaigne | | | | | | | | through traffic 2 access lanes roadside parking |
| 11 | Boulevard Beaumarchais | .55km | 35.3m | 15.8m | - | - | 9.7m x2 | | Planting strip + walkway |
| ITALY (Rome) | | | | | | | | | |
| 12 | Via della Conciliazione | .4km | 45.1m | 18.9m | 5.2m | | No trees but 4.3m strip with historic lighting | | St Peter's on axis |
| 13 | Via Nomentana | 1.6km | 39.6m | 14.0m | 3.9m | | 2.4m & 3.6m | | |
| PORTUGAL | | | | | | | | | |
| 14 | Avenida da Liberdade, Lisbon | 1.2km | 80.46m | 14.6m | 6.1m | 5.5 – 7.6m apart | 5.4m & 7.3m | | Two 8.2m walkway flanks medians. 5-10 story bldgs |
| 15 | Avenida da Republica, Lisbon | 1.2km | 53.3m | 21.0m | 5.5m | 1.5m 6.4 – 10m apart | 6.1m (inc carpk) | | |
| SPAIN | | | | | | | | | |
| 16 | Avinguda de Roma, Barcelona | 10 city blocks | 51.2m | 12.8m | 6.1m | | 3.6m & 12.8m | | |
| | Paseo de Recoletos, Madrid | 6.4km | 87.8m | 19.8m | 7.6m & 9.4m | | | | 35m & 12m median-walkway |
| USA | | | | | | | | | |
| 17 | The Esplanade, Chico, California | 2km | 50m | 19.5m | | 9 – 11m | 3m | | |
| 18 | Grand Concourse, NYC | | 53.3m | 15.2m | 10.7m | | 2.3m | | 4-lane. Although impt arterials, these 2 are historic landmarks |
| 19 | Ocean Parkway, NYC | | 64m | 21.3m | 7.6m | | | | 6-lane |

| ARGENTINA | | | | | | | | |
|-----------|-------------------------|--|--------|---------|---------------|-----------|------------------|---|
| 20 | Avenida 9 de Julio | | 136.5m | 56.7m | | | | 8lanes each way, not pedestrian friendly |
| AUSTRALIA | | | | | | | | |
| 21 | Royal Parade, Melbourne | | 59.7m | 16.1m | 7.3m & 7.6m | | 10.0m | Bicycle lane Moving & Rdside carpark |
| 22 | St Kilda Rd | | 60.0m | 19.5m | 9.1m | | 5.2m; 5.8m; 6.1m | |
| 23 | Victoria Parade | | 68.8m | 14m x 2 | Tramway: 5.5m | 13.1m x 2 | 4.6m | No access lane for cars but tramway in the middle |

(Units have been converted from imperial units).

Jacobs' personal favourites include Paseo da Garcia (barcelona), Avenue Montaigne (Paris) and La Ramblas (Barcelona) and San Francisco Boulevard (Sacramento). The book contends that multi-way boulevards are just as safe if not safer than conventionally-designed roads by traffic engineers (Table 3.2 for US Boulevards and Table 3.3 for European Boulevards). Queens Boulevard is cited as being a dangerous boulevard (60.96m wide; 3-lane each way & 2-lanes each way on the access lanes, capable of 3-lanes and traffic speed equally fast); trees are not prominent; low pedestrian movement. A possible reconfiguration is to widen the median between the main carriageways and narrow down the access lanes to provide one traffic land and 2 parallel parking lanes.

DESIGN GUIDELINES

The book lists down the following design guidelines for boulevards:

- **Location, context and use**

Where there is a need to carry both through traffic and local traffic, especially if the through traffic is faster than the local traffic and there is potentially, a conflict between both

At major significant elements in the city; the special places.

Where there is a significant volume of pedestrian movement, such as commercial streets, streets with high residential density, streets with public transit or those with significant presence of public buildings.

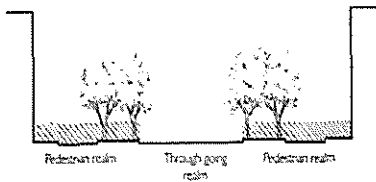
- ***Buildings that face the boulevard***

The difference between a boulevard and an ordinary arterial street is that access to buildings fronting boulevards is not limited from access lanes to encourage pedestrian accessibility and improve visibility of commercial areas.

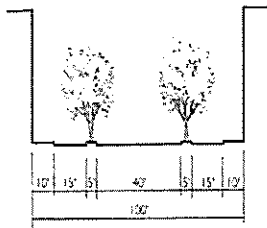
When a boulevard borders a public park or civic institution and parking is not desired, it can be one-sided with an access street only on one side with ordinary buildings. A wider pedestrian promenade might front a park or civic institution and reinforce its importance. If one side has buildings fronting it and the other is a commercial development surrounded by parking lots, a one-sided boulevard with a pedestrian promenade along the parking lot frontage can mitigate the impact of the open parking lot. However, Jacobs mentions that the latter can be replaced by buildings facing the boulevard and an access road.

- ***Boulevard realm and overall size***

The multi-way boulevard comprises two distinct realms: the fast through traffic realm and the pedestrian realms of continuous tree-lined medians separating them, the narrow access roads and the sidewalks. This tree-planted median can be of varying widths.



Boulevard realms



Hypothetical minimum width boulevard

The proportion of the two realms on a good boulevard is roughly 1:1 up to two-thirds of the width for the medians, access roads and sidewalks as shown in the book's Table 5.1 and the diagram (attached). From the analysis in the book, 30.48m is the minimum with a dual 2-lane of 3.2m each lane; access roads of 4.9m for passing and parking lane; two medians 1.5m each and sidewalks of 2.4m wide each.

Jacobs, MacDonald, Rofe, *The Boulevard*

Boulevards, narrower than 30.48m, is possible but might not have 7.6m to accommodate one moving lane and one parking lane.

- ***The Through-going realm***

A minimum dual of 2-lane boulevard to serve the through-going realm up to a maximum of dual 3-lanes for greater flexibility.

Overall width of central realm should be balanced with overall right-of-way, traffic capacity desired, and need for safe crossings by pedestrians. Widths exceeding 25m should be avoided due to safety of pedestrians crossing it.

- ***The pedestrian realm***

A minimum of 9.1m pedestrian realm comprising 1.5m tree-planting, 4.6m access lane each direction and a 3m sidewalk is advocated. This is to allow pedestrians to walk on the access road and on the median if the pedestrian traffic is heavy

Access road can be treated with slight change in elevation from the centre realm (carriageway) and rougher surface material to promote slow-moving pace.

- ***Continuous tree-lined medians***

Continuous tree-lined medians protect the pedestrian realm from the central through traffic. A median is the area between the central through traffic realm and the pedestrian realm. It does not refer to the central median in between the two directions of through traffic.

Medians should be provided with bus-stops, subway access points, regularly-spaced benches, pedestrian-scaled street lights, at intervals not exceeding 15.2m, water fountains, kiosks, public toilets, café seating, flower stands.

- ***Rows of Trees and Tree Spacing***

Trees are the defining characteristic of all boulevards and have 3 functions:

- They define the various boulevard realms as in trees at medians.
- They break down the visual scale of wide right-of-ways
- They create a pleasant environment for pedestrians and drivers alike.

Trees at medians should be closely spaced and continue all the way to the intersection. The maximum spacing is 10.6m, 7.6m is preferable. The spacing should be such that the branches can form a continuous overhead canopy.

Trees should be deciduous as they provide shade in the summer and yet allow sun in the winter.

- **Public transport**

Multi-way boulevards are a natural location for public transport

Bus lanes can be designated along the carriageway. If light rail is incorporated into the boulevard, it can run on the central median.

- **Parking**

On-street parking is critical on the access roads. It discourages cars from speeding on access roads, gives direct access to buildings fronting the boulevard, increases the pedestrian movement along a street and encourages street-oriented development. Parking should be avoided in the carriageway.



Address Boulevard de Strasbourg
Boulevard de Strasbourg. Jacobs, MacDonald, Rofe, *The Boulevard Book*, 2003

Parking lanes should be narrow, about 1.8m or 2.1m up to a maximum of 2.4m/2.7m. Angled parking can be incorporated into wide medians (Boulevard de Strasbourg).

If more parking is needed near boulevard, it can be underground parking under the carriageway with entries/ exits for cars under the access roads and from medians for pedestrians without disrupting the pedestrian character of these spaces.

- **Lane Widths**

Ideally, 2.7m – 3.3m for lanes on the carriageway and 2.1m – 2.7m for the access roads. The access roads function as local roads and design to encourage slower traffic speeds while the lanes on the carriageway should be wider but not too much as to encourage speeding.

- **Bicycle Lanes**

Local bicycle traffic can be incorporated into the access roads. Designated bicycle lanes for faster commuter bicycles can be provided in the median on

a designated path or a narrow first lane in the carriageway, next to the median.

CONCLUSION

The book presents the controversial idea that pedestrians and cars can mix and interact and this encourages a vibrant and safer community for all. Perhaps we have let the car control us too much and have accommodated the rising reliance of the cars to get us anywhere and everywhere and as close as possible to our destination.

According to Jacobs' findings, when cars are more fully aware of and integrated into the pedestrian realm, both pedestrians and drivers are safer as seen in some European examples.

"If we can develop and design streets so that they are wonderful, fulfilling places to be – community-building places, attractive for all people – then we will have successfully designed about one-third of the city directly and will have had an immense impact on the rest."- Jacobs

Additionally, referring to the book's design guidelines on the importance of trees, especially deciduous trees and how they are the defining characteristic of all boulevards, I would like to appeal to local authorities and developers to see the need for shade-providing trees. My several work trips to North China from winter to summer make me appreciate our majestic *Pukul Lima*, stately *tembusu* and evergreen *angsana* not forgetting our fragrant *Chempaka putih* and frangipanni. The trees there grow much slower than ours. The Northern Chinese know it is spring when trees bud. We live in a lush tropical environment and should **capitalise on our luxuriant flora** in our towns, new developments, housing *gardens*, in front of the ubiquitous shop office, in our car *parks*, industrial *parks*.

The book mentioned that the Pasteur boulevard (Ho Chi Minh and the narrowest boulevard discussed) have *Dipterocarpus alatus rex (keruing)* along the medians. Isn't it great if our central medians are lined with magnificent *meranti*, *jelutong*, *pulai*, and *balau* that tower over the street lighting? Not just the *jati* trees along our N-S expressway? How about planting a **rainforest** in our Open Spaces in the urban areas? And put swings on the Tembusu & build tree houses in these Open Spaces for our children to play in?
