

**"Here and beyond":  
Synergies between Gordon Cullen's townscape qualities and  
Environment / Behavior / Neuroscience Paradigm**

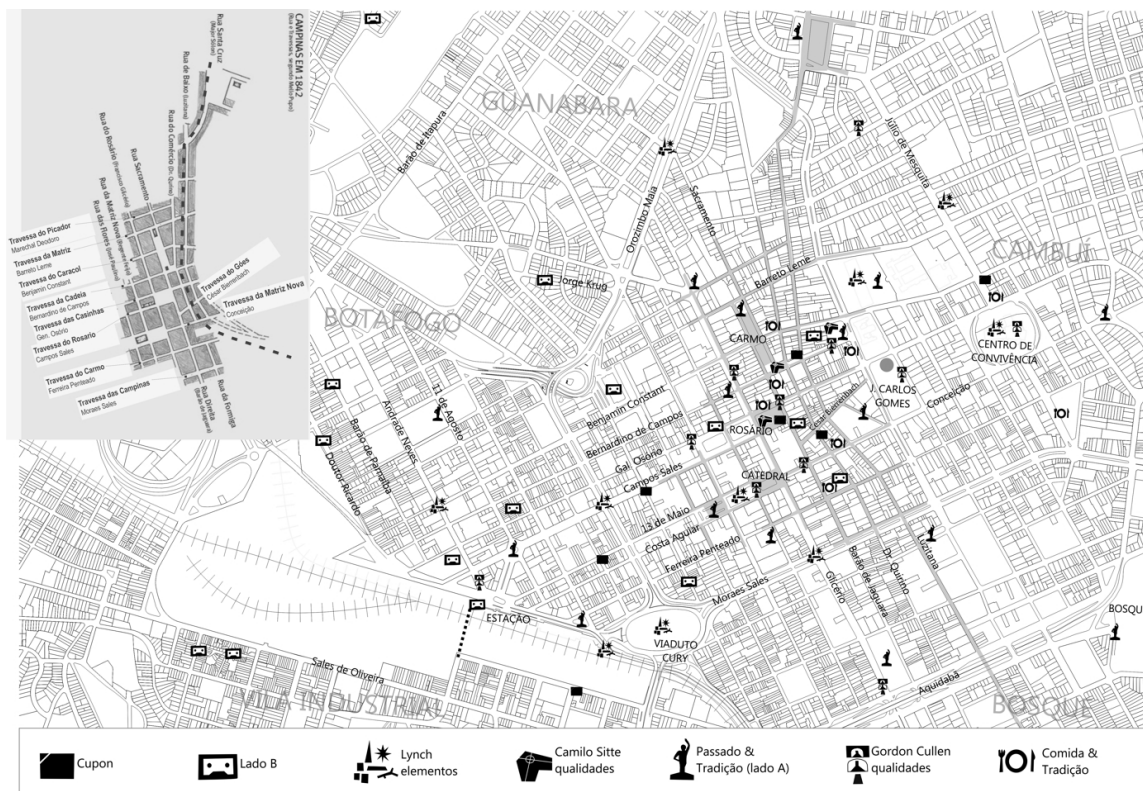
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**ABSTRACT:**

For architecture and urban studies learning processes, it is important that students acquire a diverse repertoire of knowledge and experience in the most diverse spaces of the city. Such diversity may be well covered once a complete range of old and new regions of a city is considered. In this context, Cullen's book "Townscape" is considered an architecture and city planning classic in its approach and seek of qualities and beauty of the urban fabric at pedestrian level. On the other hand, critics often argue that its approach is limited to very specific areas of a city or unsuitable to a contemporary urban context. This research aims to enlarge the perspectives of the concepts and "standards" proposed by Gordon Cullen by associating them with the concepts of the Environment / Behaviour / Neuroscience Paradigm (E/B/N), described by Zeisel [10]. Thus, the methodology here proposed articulates the 46 "place" qualities and the 32 "content" qualities as categorized by Cullen [3] with the E/B/N concepts, such as: Place [5-7;10]; Personalization [9;10]; Territory [10]; and Wayfinding [5; 10]. This articulation is structured as a perceptive game (gymkhana) [2] focused on introducing the students into activities addressed to analysis of spaces, environments and places in the historical center of the city of Campinas, Sao Paulo, Brazil. As results we highlight: a) an expressive contribution to reinforce the importance of the field activities (T5 and T6 spectrums/urban center and urban core [4] respectively) as a way to compensate for the new generations of students' lack of repertoire [8], often restricted to the landscape of non-central areas (T3 spectrum/sub-urban) in their daily lives [1;4]; b) a strong engagement of the students to experience the city's space reached from E/B/N paradigm contributions [10] to Cullen approaches [3], which provide them with a rich diversity of spatial, interpersonal and perceptual experiences of the contemporary urban landscape; and c) a new model of understanding for architecture and urban studies learning processes based on neuroscience knowledge and focused on renew standardised methods in this field.



**Figure 1.** Map of the 'gymkhana' performed at the city of Campinas, Sao Paulo, Brazil, and executed to the "Fundamentals of Urbanism" course, in the Bachelor's degree programme in Architecture and Urbanism, Unicamp University, in 2016. The icons indicate points where possible synergies between the E/B/N concepts and Cullen standards can occur.



**Figure 2.** Students of the Fundamentals of Urbanism" course is receiving the maps and directions of the gymkhana. The "start" was in the Carlos Gomes Square, in the city of Campinas, Sao Paulo, Brazil, 2017.

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