

THE FUTURE SQUARE: New urbanity or another fallacy?

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Fernanda Paula

UNILAB

e-mail : fernandalinard@gmail.com

Lucy Donegan

UFRN

e-mail : lucydonegan@yahoo.com.br

Abstract

This paper approaches changes in uses that a refurbishment project may bring on a current public wasteland in Fortaleza, Ceará, Brazil. The 31st of March square is located by Praia do Futuro's coast, which has strong leisure uses. The square's current lack of uses may be attributed to public abandonment, to the neighbourhood absence of variable functions and to the area's small capillarity, dispersing pedestrian use. The square's on-going reform project will transform it into the "Future Square", predicting the instalment of sportive equipment. Does the project spatially stimulate better qualities of uses? What future might the project bring? Considering that spatial configuration may favour certain types of uses, this work studies the spatial implications of the Future Square project. The research investigates which uses may be established, if the spatial transformation of the area and surroundings incite greater urban vitality and "urbanity". Urbanity is considered a condition of public space that encourages people's encounter and results from the combination of elements that characterize a space able to create a rich field of diversity and co-presence. Urbanity is anchored on three dimensions: spatial, social and temporal. The spatial dimension is observable and measurable elements in space (built or designed). The social dimension concerns social diversity, different uses and people. Finally, the temporal dimension considers that the vitality should happen on different hours and days of the week. If nowadays the space configures a disperser of people, what changes may occur with the new square? The study uses the space syntax tools: visibility graph analysis (VGA) and axial maps. Findings show that the new square design assembles some dynamic conditions to promote new uses and a more permeable relation with the coastal stretch, which creates, or strengthens, urban vitality in the area. For this to really happen the project has to be implemented in its fullness, so that we may compare the expected performance with the social reality at hand.

Keywords: Urban Vitality, Urbanity, Public Space, 31st of March Square, Space Syntax.

Theme: Spatial Analysis and Architectural Theory

1. Introduction

One of the main leisure options in Fortaleza and one which attracts many tourists is the urban beach. *Praia do Futuro* is a coastal stretch dotted by beach huts¹. 31st March Square is located by the middle of the area. This public space has been long abandoned and is currently undergoing construction to transform it in a sportive pole: ‘The Future Square’.

Understanding that spatial configuration favours certain types of uses and of urban life, this paper analyses morphological patterns of the Future Square project, projects facilities, changes in accessibility with its surroundings, and possible social implications. We explore if this project favours urban vitality, understanding it as field of diverse uses, people, promoting tolerance, even courtesy, with differences. Is visual and physical accessibility distributed within the new square? How might people use this area? Does the square potentially represent a mean of access to surrounding areas?

This refurbishment makes us reflect in two issues: What is the role of a square located by the coast, next to an extensive coast-line dotted with beach huts? Can this project, if adequately maintained, enhance social life in an otherwise waste-land? How can we explore this potentiality by the spatial and built form of the new square’s project? And, mainly, will the square’s design favour public life?

Firstly, we present a short bibliographical review about space and uses in public space. Then the area is contextualized, followed by the new square accessibility analysis (by Space Syntax axial and visibility maps).

2. Between form and uses: how design may affect urban life

Jacobs (1992) related urban spaces spatial configuration with patterns of uses, summarizing conditions to obtain and maintain diversity and urban vitality in cities, such as: 1) varied primary uses, 2) short blocks, creating more paths; 3) mixture of buildings with different ages (so they might vary within their economic field); 4) high density of users in spaces.

Space syntax theory extensively relates urban form and society, whereas spatial configuration is viewed as a system with internal logic relating to social factors, creating morphological patterns (HILLIER & HANSON, 1984). Society is interpreted as a system of encounters and avoidance configured by permeability’s and barriers (HOLANDA, 2002). The spatial structure stimulates movement in certain locations, by promoting different levels of topological accessibility. The urban layout promotes patterns of encounter, through the configuration of potential fields of *co-presence* (HILLIER et. al. 1987), analysing the spatial and physical city as one intertwined (VAUGHAN, 2007).

Sun Alex (2008), Francis (1987), William Whyte (1988), as well as the more classical work of Sitte (1945) and Uwin (1909), interpret open public spaces as places where people meet each other. Classic studies about public spaces focused on medieval cities squares, as places where paths converge to, and where commerce and religion cohabited as people passed by. The cities squares were places of meeting, seeing, discussing, and where public life happened, therefore they were, essentially, places of urbanity.

Urbanity can be understood as the condition a public space gives in favouring people’s encounters,

¹ Beach huts (*barracas de praia*) are bars and restaurants by the sea. In *Praia do Futuro* they achieve high levels of development. Although they have common elements (main buildings by the sidewalk and huts by the sand), they conform a heterogeneous group (DONEGAN, 2011).

combining elements which characterize a space capable of creating a rich field of diversity and co-presence. Paula (2010) characterises urbanity in three dimensions: spatial, social and temporal. The spatial dimension of urbanity regards concrete elements which can be observed and measured in space (constructed or designed). The spatial configuration may favour or not people's movement. Urbanity's spatial dimension comprehends global factors, such as the location within the city's urban grid, as well as local factors, as the public spaces design, the characteristics and land uses of its surrounding. Mello (2008) suggested that the main global aspect that influences urbanity's performance is the place's degree of centrality, whereas many local aspects may favour this performance, such as constitutedness, physical and visual access, surroundings domain, etc. The social domain concerns social diversity. A place of urbanity must have intense use and attract people of diverse socio-economical profiles, interests, ages and experiences, and perform different activities. Finally, the temporal dimension considers that uses must be spread throughout different times and different days, and seasons. Other factors that might influence the space's uses are magnets or attractors, elements that, despite a possible unprivileged location in the system, attract uses to places (MEDEIROS, 2006). Examples of magnets are commercial poles, harbours, touristic areas or places with relevant landscape and natural attributes.

While the social and temporal dimensions cannot be measured in an imaginary scenario, spatial factors may allow us to speculate about possible uses, through the analysis of potential fields of co-presence and encounters, as well as the existence, maintenance and location of different types of attractors.

Space syntax works with measurable categories' of space. In this paper we focus on two traditional means of analysis: (a) Linear, which abstracts open spaces into axes, focusing spaces of movement, and is processed creating axial maps, reading topological accessibility; (b) Convex, which focuses on places of rest and of meetings. Degrees of visual accessibility are calculated by VGA (Visibility Graph Analysis). Both analysis interpret systems hierarchies' and translate them visually into a chromatic scale, with more integrated spaces in red and more segregated spaces in blue.

We explore the potentiality of changes that a project might bring into an otherwise abandoned area of the city, considering it is implemented and maintained as the approved project.

3. Understanding the problem – The 31st of March Square and *Praia do Futuro*.

Praia do Futuro neighbourhood is located at Fortaleza's east, and is one of the city's main leisure areas (figure 1). It has a less dense occupation than the city's active centre (neighbourhoods *Centro* and *Aldeota*). However it is accessible to this centre by three main avenues: - *José Saboia* (through neighbourhoods *Meireles* and *Mucuripe*) – *Renato Braga* (through neighbourhoods *Papicu*, *Varjota* and *Dunas*), and Santos Dumont Avenue (through *Aldeota*). The main distribution of local traffic happens through *Av. Dioguinho*, parallel to *Zezé Diogo* and the coastline.

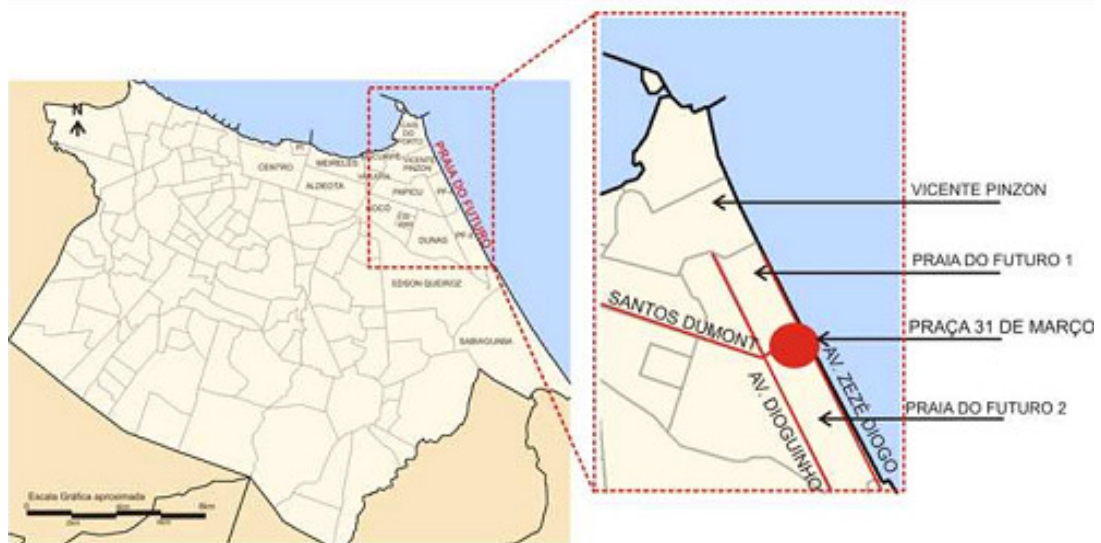


Figure 1 Fortaleza and Praia do Futuro's location.

The area's six kilometres coastline and beach huts are intensely used, accessible through Zezé Diogo and its sidewalk. 31st March Square is located in Praia do Futuro middle area, marking the abrupt end of Av. Santos Dumont. For more than ten years there were kiosks, trees, benches and sand courts in the square, but were abandoned and the square constituted a large wasteland (GONÇALVES, 27 oct. 2009). The area was paved when the *Cirque du Soleil* presented itself there in 2009 and, although the company provided resources for refurbishment, no actions were taken (Figure 2). The square has been without functions for a long time, presenting itself as a large deserted block in Praia do Futuro's centre and an obstacle to reach the beach.

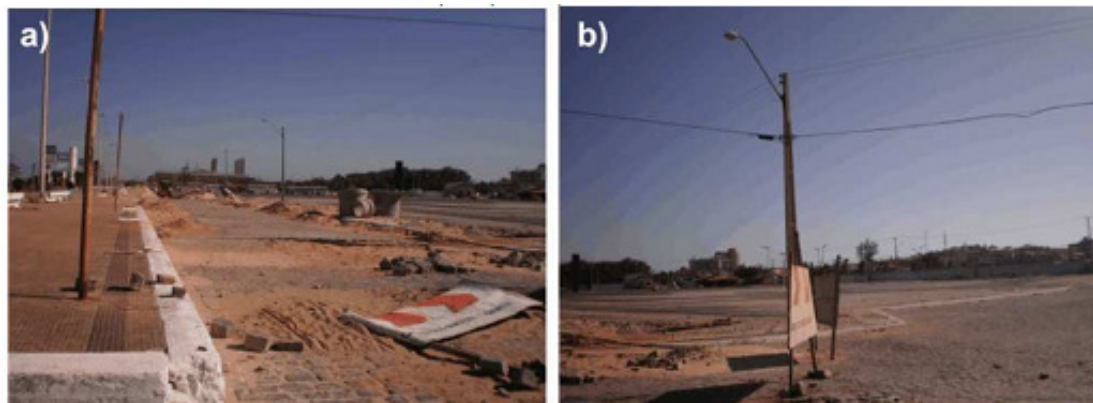


Figure 2 Images of 31st March Square in 2009.

This abandoned wasteland, albeit in Praia do Futuro's relatively accessible urban grid (Figures 3 and 4), seems to have provoked a detachment of people and to affect use patterns at the close-by beach stretch. 31st March Square was interpreted as a dividing stretch between more developed sub-groups of beach huts: to its north and south the buildings are larger and have more elaborate facilities than those close to this stretch, which present a sparse use (DONEGAN, 2011).

According to aspects appointed by Jacobs (1992), this shows an unsuccessful local spatial performance, with an absence of functions and attractions to overcome the large square.

Will the new square overcome this situation? Can it function as an attractor to use? Will uses communicate with those at the beach? Or might it altogether be another fallacy? This study develops itself in rehearsing the projects scenarios.

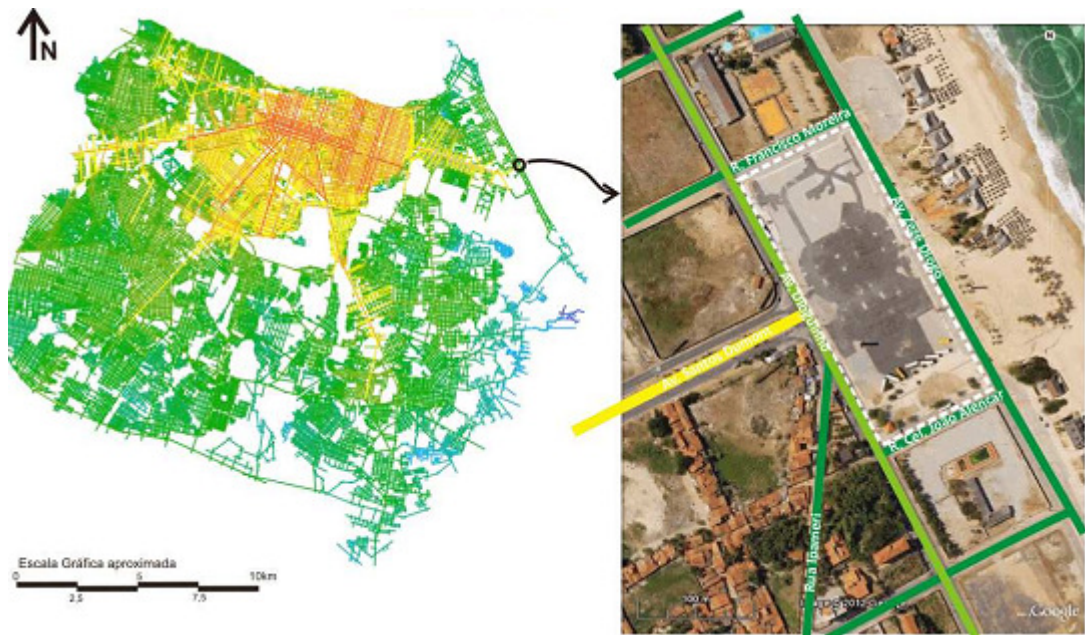


Figure 3 Fortaleza's integration Rn and 31st March Square.

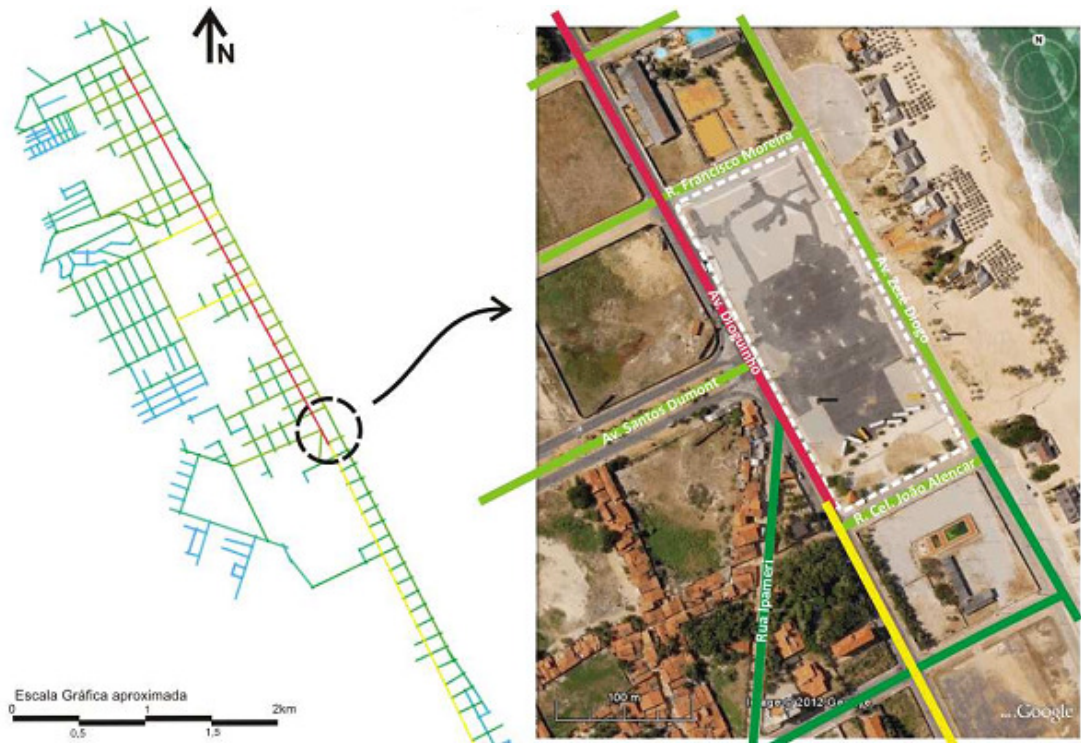


Figure 4 Praia do Futuro's integration Rn and 31st March Square.

4. The Future Square Project.

This project is contemporary to other projects in Fortaleza, such as: Ceara's Aquarium, implementation of the subway, *Beira-Mar's* beach sidewalk reformation and world coup constructions. These are large-scale projects to improve Fortaleza's touristic image, focusing mainly on leisure facilities (MOSCOSO, 2010), and are mainly public-private partnerships, viewed as image-making projects to make cities more competitive (Arantes et al, 2009).

The 31st March Square reform project will rename it as "The Future Square", and is part of a larger intervention project for *Praia do Futuro*, which includes reforming its sidewalks, public illumination, etc. The order of service was given on the 23rd of March, 2011, as the first work financed jointly with PRODETUR (Regional Program for Tourism Development). A statement of the mayor that implemented the beginning of the project (Luizianne Lins) described the action:

We are effectively making a work that answers tourist's demands. However, this will be significantly of interest and linked affectively to the city resident, and will count with areas for sports and entertainment, as well as places for events" (REFORMA, 24 mar. 2010)

The licensed project was of the local architecture office 'Architectus' and the construction is still happening. The program includes (Figure 5): sports courts; - Gymnastic and stretching equipment; - sand football courts (and temporary events); - Skate park; - Physiotherapy area; - Beach-volleyball courts; - Playground; - Kiosks; - bowers for plants; Military Police, Fire-fighter and Life-guards Buildings; - Tourist Support Centre; - Cooper and bicycle track (560m); Regional Bureau Building.

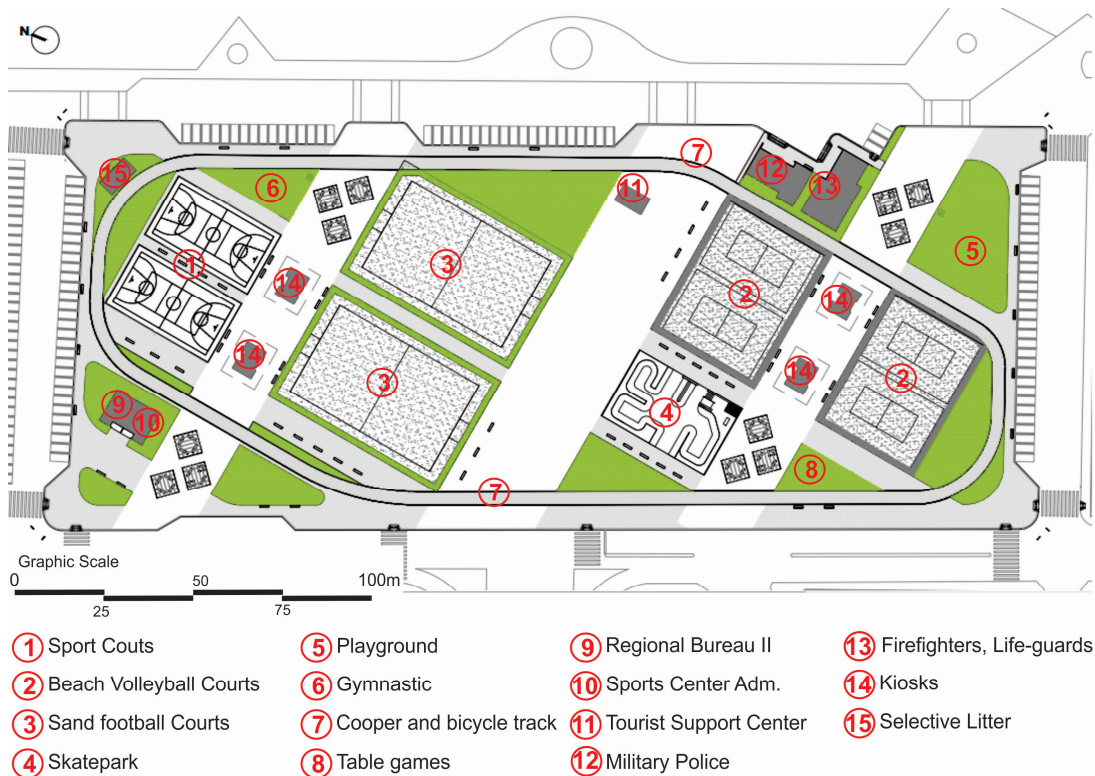


Figure 5 Facilities and design of "The Future Square".

5. Exploring possible socio-spatial performances

The Future Square gathers diverse functions and equipment. The services there may attend to diverse people (ages and interests) and activities, such as practicing different sports, taking children to playgrounds, and simply sitting and relaxing. Its long-term success depends also on the maintenance of these areas by the public administration, especially considering the strong corrosive sea air in this area.

The new design creates different visual accessibility levels (Figure 6). This hierarchy favours diverse uses, as the square can be seen almost to its full extents from its edges, and, more to the centre, we find more intimate and reserved spaces, which might favour different uses. Although these spaces exist, they don't seem to impair the visual accessibility of the square as a whole. If people were unable to fully visualize the square, they wouldn't feel invited to enter and use it.

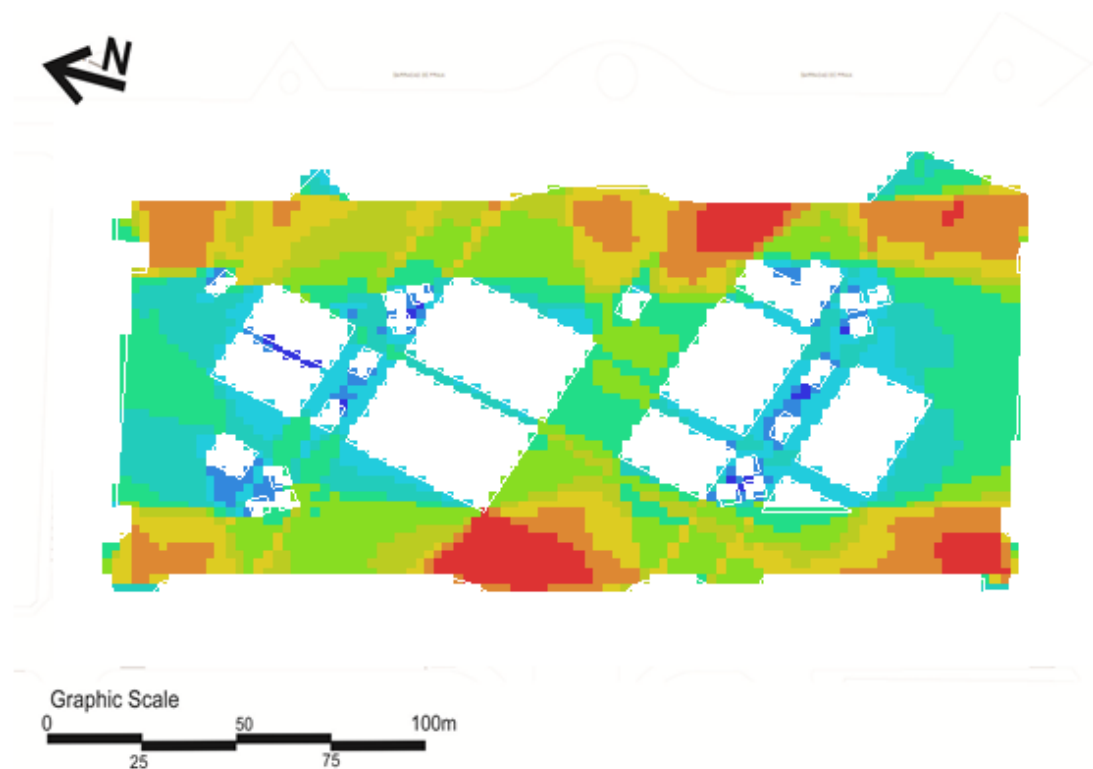


Figure 6 The Future Square visual integration analysis.

When analysing the square's axis accessibility levels, we identify a strong hierarchy (Figure 7). Some areas concentrate more accessible axes and some concentrate less accessible axes. The visual and axial maps converge to similar potentials. Considering global spatial properties, the system of barriers and permeability's created reinforces the importance of the west portion of the square, were it encounters *Dioguinho*, so this continues to be the main integration path, running north to south along the west border of the square.

However, we also notice a significance of paths that cross the square from west to east. This change in potential accessibility crossing the square indicates a stronger integration between the integrated path that runs along *Dioguinho* and *Zezé Diogo's* sidewalk and the beach, at the other side of the square. We notice that the more integrated axes are also visually integrates places, indicating that the more shallow areas are also the more visible, indicating a great potential for movement.

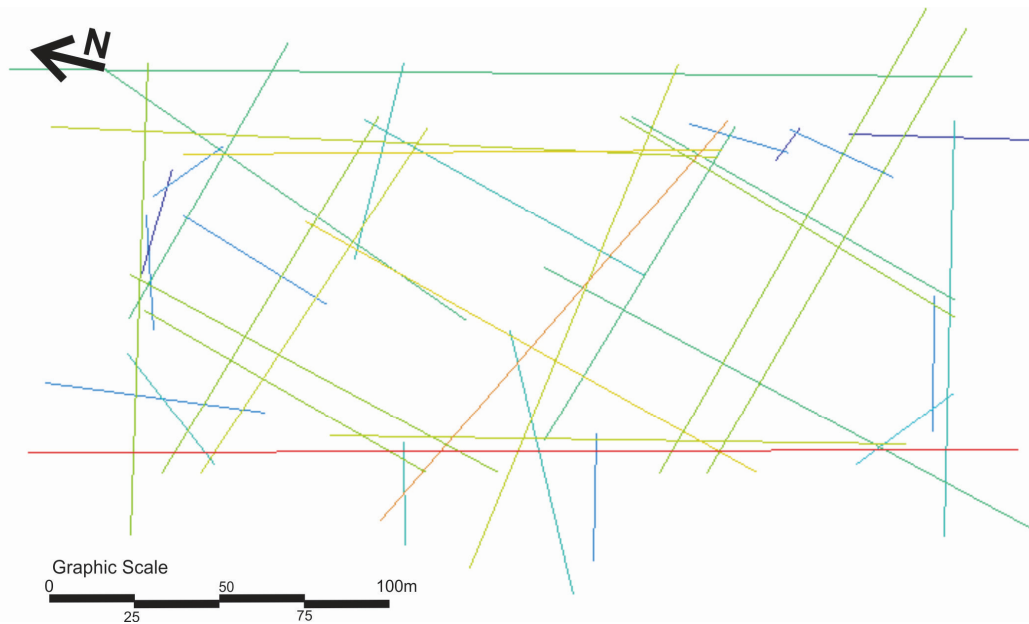


Figure 7 The square's axes of movement, showing local integration levels (R3).

The main attractors (sportive courts), are located in the Northeast portion of the square, which is the least integrated space, physically and visually. In general, the location of facilities attracts movement and pedestrian flow to least accessible areas (extremes North-east and South-east), encouraging movement throughout the square, and visualizing surrounding areas.

Thus, spatial and built characteristics of the project indicate that the square might present: (i) diverse uses; (ii) high levels of visual accessibility from the most integrated paths; (iii) movement through the square, from the most accessible spot to *Zezé Diogo's* sidewalk and beach. The new design seems not only to stimulate a more intense use of the square, as well as to create a connection between itself and the sea, favouring the place's urban life.

6. Which Future Square?

It is worth mentioning that, as this study is based on something to be built, we can't be sure that it will be built faithfully to the design. Moreover, the maintenance of a place is also mentioned in literature as a factor of urban life quality, and cannot be presently measured. So this speculation forecasts a continuity to compare the actual public life in the square.

If one of *Praia do Futuro's* hindrance has been the abandonment of one of its most privileged location, the *Future Square* seems to bring new life into the area. There are clues indicating more connections between the Public Square and street with the beach, mixing uses and users between them, favouring more dynamic sceneries. If the square impeded access to Fortaleza's beach, the *Future Square* seems to create a pleasant and attractive path. If this happens, only time will tell, and certainly it will be worthwhile watching.

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