

# Sustainable Interventions workshop in Jakarta

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In the summer of 2005, students of the TU Delft Faculty of Architecture organised a workshop in Jakarta, bringing together Indonesian and Dutch students. There was enthusiastic response to the workshop initiative at Universitas Perlita Harapan and Universitas Indonesia.

The workshop was not only intended as an architectural challenge, but also as a voyage of discovery regarding the differences and similarities between Indonesian and Dutch design and analysis methods. The ways in which the design assignments are approached are very different in the two countries. The participants were able to learn about one another's language, culture, customs, history and ways of approaching a design assignment.

A common ground was found in 'Kota', an area in Jakarta, Indonesia, which grew out of Batavia, a trade centre established by the Dutch East India Company in the 17<sup>th</sup> century. Kota is largely preserved, but its situation is troubled by such problems as traffic congestion, abandoned buildings, poverty and serious street and water pollution. The subject of the 14-day workshop was to propose a plan to improve the current situation in Kota through sustainable interventions. Sustainability played a key role during the workshop. Therefore not only design aspects, but also socio-geographic, environmental and political aspects of the situation in Kota had to be taken into account during the workshop.

The workshop started off with two days of lectures by the Indonesian tutors and a representative from Perkumpulan Kotaku, the local residents association. During these lectures the background to and Indonesian perspective on Kota were elaborated. The two Dutch tutors, Pauline van Roosmalen and Marco Heijliggers, lectured respectively on concepts of conservation and workshop methodology. The days were concluded with excursions in and around Kota to evaluate the preliminary analyses and modify them on the basis of the new insights. Next, the students worked for eight days in six mixed groups on sustainable solutions for the problems in Kota. To validate the proposals, these were presented halfway through the workshop to Perkumpulan Kotaku. Furthermore, the vice-governor of Jakarta and the supervising architect for the development of Kota, commissioned by Perkumpulan Kotaku, gave guest lectures on the perspectives on and plans for Kota.

The differences in working methods and culture were huge. But most students were united by the ideas of the workshop. It was possible to see the working methods and behaviour of the participants changing in order to reach common ground, bringing out the best from all concerned. The aim of giving students from the Netherlands and Indonesia an idea of the history, conventions, problems and perspectives of one another's cultures was well received.

Each group worked on one subject in order to realise partial solutions for the area. Consultation between the various groups has been very important in the design process and for the final results: the findings and ideas could be bundled to form the basis for a single masterplan that was presented to local government officials and other interested parties.

The influence of the architecture, urban development and town planning on Kota was researched and this research was then used to do an integrated proposal for improvement. This proposal was drawn up by analysis and design on the basis of six key subjects: economy, livability, traffic, sustainability, water & green and cultural heritage. In order to enhance the coherence between the group proposals, interaction between the groups was stimulated so as to present an integrated sustainable proposal.

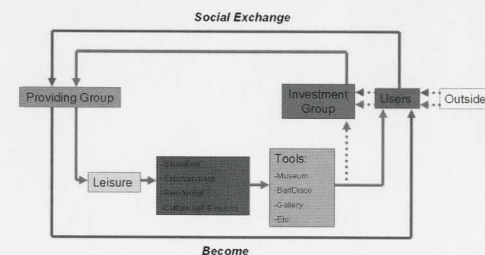
## *Economy*

The purpose is to realise a sustainable economic system for the poorer members of the local population in the centre of Jakarta. In the analysis, we looked at the relationship between the formal and informal economies in Kota, and the way in which products or services are exchanged. We concluded that the formal economy (legal tradesmen and businesses) and informal economy (illegal tradesmen and businesses) will always attract one another, even if the merchandise and the customers for the two sectors are the same.

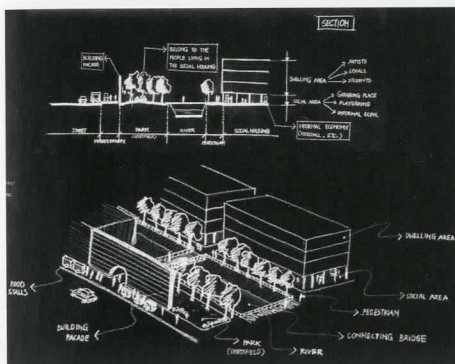
An exchange between various social levels, which is not usual in Indonesia, can be stimulated by combining aspects that rich and poor have in common with the character and functions of Kota:



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1  
Indonesian and Dutch students worked in mixed groups during the workshop.

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*Economy:* Centre model for social exchange.

3  
Design sketches for Kali Besar, the main axis of the Kota area.

4  
*Livability:* Kampung safari, *kampungs* as part of the commercial centre.



Living (residential construction), Education (artistic disciplines, liveability, social subjects) and Leisure (formal and informal catering). These themes are reflected in the centre model, where locals can develop to become service providers to the user group, and if successful they can become investors.

*Liveability*

The theme of liveability was primarily seen in terms of safety, hygiene, social facilities and involvement. The liveability of an area is also determined by the extent to which residents can identify with the area and take responsibility for it.

Many poor people live in the polluted, crowded and traffic congested Kota, often illegally. These people live in the *kampungs*. The *kampung* is a separate world where the lowest classes live. *Kampungs* house a tight-knit group of people and provide high levels of social control and safety. General facilities are shared, the building density is high and roads are unpaved.

The northern part of Kota is close to an infrastructure hub, which yields it high potential for commercial development. It is also very likely that the government will implement this in the future. In that case, the *kampungs* will be demolished, as they are illegal and do not generate any profit. By making *kampungs* part of the commercial centre, linking them to a mall, we want to guarantee their future existence and improve their liveability. Furthermore, we use the huge amount of waste generated in the area as a starting point for new commerce, as a current trend is to recycle products and make trendy gadgets and clothing from them.

*Traffic*

The current situation in Kota with all its traffic jams with their noise and pollution, is preventing Kota from being an important cultural or tourist area. Organising the traffic flows is therefore an important precondition to making the Kota area a pleasant neighbourhood. This organisation will take place on two levels: firstly keeping through traffic out of Kota, and secondly organising local traffic.

To keep traffic out of Kota, a ring road is proposed that yields an alternative for the heavy goods traffic which passes through Kota and separates slow from fast traffic.

Traffic inside the Kota area is organised along the main road, Kali Besar; the other streets in Kota are accessed via this road. North-south movement in the area is in one direction only, the east-west roads are two-way, making it easy to circle round and get back to Kali Besar. Because the biggest traffic flow would be led outside Kota, the new road will take up little space. The area thus freed can then be used for public space, such as a park or a playground, and create a pleasant atmosphere in Kota.

*Sustainability*

As a combination of Dutch and Indonesian interpretations, sustainability means preserving and improving life for people, the environment and the area in question. It can be divided into three aims:

- Social* – involving the inhabitants in the design process so that they feel they belong to the area;
- Environmental* – considering all flows through the area, these being water, energy, material and waste;
- Spatial* – designing attractive and functional buildings so that people use them and they last for a long time.

Based on analyses of the conditions of water, energy, material and waste in Kota we divided the area into four zones, classified by environmental conditions, demography and commerce & industry. Specific solutions were designed for key areas of each zone.

*Water and greenspace*

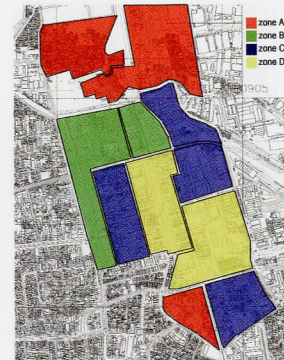
The water in the canals and rivers of Djakarta is heavily polluted by household waste and the direct discharge of sewage and drainage water. Waterways in and around Kota regularly flood during the rainy season as the capacity of the canals is drastically reduced by the huge volume of waste and by buildings on the banks and dams.

Many waterways are well located near areas which could operate as public spaces. To make use of the waterways for this potential public space, they must be dredged, cleaned and kept clean. Additionally, building along the banks must be halted and a suitable wastewater removal system installed. This, and the construction of an overflow basin for excess water and a second bypass river, will reduce the amount of flooding.

In combination with the renovation of the waterways, there is a major potential for radical improvement of the public space in Kota, so that Kota becomes attractive again for both local residents and the inhabitants of the rest of Djakarta. The proposed method is to combine logistic



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