A Social Learning Perspective on the Restructuring of Oud-Charlois
“The bricks and mortar approach to solving social problems is dangerous because it wastes scarce resources, raises community expectations, and results in disillusionment and alienation”

Cafferty, 1979, p. 508
PROBLEM NEIGHBOURHOODS?
Or problems *in* neighbourhoods
NEIGHBOURHOOD EFFECTS
Poor neighbourhoods make people poorer
ITS CAUSE: SOCIAL LEARNING
Especially where children are concerned
NEIGHBOURHOOD MATTERS
And so does the school environment
OSG HUGO DE GROOT

“Superschool” in Oud-Charlois
“How can spatial design interventions aimed at facilitating the social learning experiences of children and adolescents support the restructuring of Oud-Charlois?”
Main Research Question
How can spatial design interventions aimed at facilitating the social learning experiences of children and adolescents support the restructuring of Oud-Charlois?

Spatial Dimension - Social Dimension
How can spatial characteristics facilitate the social learning processes?

Designing for Children and Adolescents
How do children and adolescents experience and use their environment?

Restructuring Oud-Charlois
What are the social and spatial characteristics of Oud-Charlois and how do its residents use their neighbourhood?

Literature Studies: On Social Learning, Neighbourhood Effects & Spatial Determinants

Literature Study: Children’s Experiences
Observational Research: OSG Hugo de Groot

Location Analysis: Spatial & Social Situation
On-Site Research: Observations & Interviews

Results: List of mechanisms underlaying social learning and their spatial determinants

Result: List of criteria the environment of children from different ages must meet

Result: Diagnosis of the spatial and social situation of Oud-Charlois and its developments

Development of “Socio Learning Environments” patterns based on the list of mechanics and spatial determinants. These elements apply to the neighbourhood scale and will be used to create spatial interventions for Oud-Charlois (can be regarded as masterplan).

Development of “Children’s Environments” patterns based on the previous list of spatial criteria. These elements apply to the smaller scale of public spaces and will be used to create design interventions for places within the masterplan (can be regarded as urban plan).

The developed Social Learning Environments, as well as the Children’s Environments patterns will be applied to the case of Oud-Charlois to address its current socio-spatial problems. Different options will generated and evaluated on the two different scale levels.

Answering of Main Research Question

Evaluation & Reflection

Design Proposal
Social Contagion
People with a network outside the neighbourhood are less prone to neighbourhood effects; spatial layout of routine activities.

Collective Socialization
Isolated neighbourhoods adopt deviant social norms as dominant, increasingly the occurrence of deviant behaviour.

Social Cohesion & Control
Neighbourhoods close to areas with more affluence and high in close, exchange and control have more collective efficacy.

Social Networks
If enough people from the same background live close by, they stop socializing with others.

Competition
A neighbourhood that is too heterogeneous lacks interaction and social binding.

Relative Deprivation
Continuous confrontation with one’s own disadvantage causes negative effects.
Social Learning ENVIRONMENTS

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Neighbourhood (Inter)Connections

Neighbourhood Orientation

Conditions of Public Spaces
Type of public spaces in neighbourhood. How are these spaces used and by whom. Opportunities for social interactions.

Social & Typological Distributions
Distributions of neighbourhood demography. Distribution of housing typologies.

Available Facilities & Resources
Fit between population & available facilities. (Im)Proper use of public spaces.

Extend of Social Mixing
Similar to Social Networks: Distributions housing & demographics.
CHILDREN’S NEEDS

Social

Social Science

Primitive Space
Perceived by children in the first sensorimotor stage of development, it is the space of physical action and sensory experience.

Perceptual Space
Perceived by children in the second pre-operational stage of development, it is the space of sensory imagery and imagination.

Existential Space
Perceived by children in the third, concrete operational stage of development, it is the space of impressions and context.

Cognitive Space
Perceived by children early in the formal operational stage of development, it is the space of perspectives and representation.

Abstract Space
Perceived by children and adults in the later formal operational stage of development, it is the space of abstract concepts and relations.
Children’s ENvironments

Social Science  →  Urbanism

**Social**

**Spatial**

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**0-2: “Sensory” Space**
Children in these ages require spaces to meet basic needs (physiological and safety), allowing them to see and feel the world.

**2-7: “Discovery” Space**
Children in these ages require space to meet all deficiency needs, so they can start to discover the world safely and comfortably.

**7-11: “Explorative” Space**
Children in these ages require space to meet “growth” needs, allowing them to search for new knowledge and perceptions.

**11-16: “Self-Actualizing” Space**
Children in these ages require space to meet “being” needs, allowing them to express themselves and discover who they are.

**16+: “Mini-Adult” Space**
Children after the age of 16 can be considered “mini-adults”, they require the same type of spaces they do to continue to develop.
A PATTERN LANGUAGE
Alexander (1977)

4 AGRICULTURAL VALLEYS*

. . . this pattern helps maintain the independent regions (1) by making regions more self-sufficient agriculturally; and it will create city-country zones (2) almost automatically by preserving agricultural land in urban areas. But just exactly which land ought to be preserved, and which land built upon?

* * *

The land which is best for agriculture happens to be best for building too. But it is limited—and once destroyed, it cannot be regained for centuries.

In the last few years, suburban growth has been spreading over all land, agricultural or not. It eats up this limited resource and, worse still, destroys the possibility of farming close to cities once and for all. But we know, from the arguments of city-country zones (2), that it is important to have open farmland near the places where people live. Since the arable land which can be used for farming lies mainly in the valleys, it is essential that the valley floors within our urban regions be left untouched and kept for farming.

The most complete study of this problem that we know, comes from Ian McHarg (Design With Nature, New York: Natural History Press, 1969). In his "Plan for the Valley" (Wallace-McHarg Associates, Philadelphia, 1965), he shows how urban development can be diverted to the hillsides and plateaus, leaving the valleys clear. The pattern is supported, also, by the fact that there are several possible practical approaches to the task of implementation (McHarg, pp. 79-93).

Therefore:

Preserve all agricultural valleys as farmland and protect this land from any development which would destroy or lock up the unique fertility of the soil. Even when valleys

TOWNS
are not cultivated now, protect them: keep them for farms and parks and wilds.

hills for building

* * *

Keep town and city development along the hillsides and hill-sides—city-country zones (2). And in the valleys, treat the ownership of the land as a form of stewardship, embracing basic ecological responsibilities—you countryside (2). . . .

Pattern no 4
Alexander (1977, pp. 26-28)
A COMPLEX LANGUAGE
Salingaros (2000)
Creating an open and outwardly oriented neighbourhood morphology will benefit disadvantaged neighbourhoods by integrating it into the morphology of adjacent, non-disadvantaged, areas, which decreases its isolation.

Context - Contact with peers or other residents and users of a disadvantaged neighbourhood can negatively impact individual’s behaviours, attitudes and aspirations.

Problem - Local social norms are generally conveyed through neighbourhood role models and other social pressures. Negative role models are abundantly present in disadvantaged neighbourhoods, whereas positive role models are not. This increases the likelihood that youth will adopt these deviant local norms and start to display the same negative behaviours, attitudes and aspirations (e.g. teenage pregnancy, academic disinterest and lack of labor force participation).

Solution - By transforming disadvantaged neighbourhoods in open, outwardly oriented contexts, the social isolation of that neighbourhood will diminish. A more diverse social structure can be created by improving the visual links between neighbourhoods and their typology and physical form (Shibu, 2010). In achieving this, it will be important to pay attention to the design of the urban open spaces, most importantly the streets (Thompson, 2002). Moreover, recent research shows that choosing to either adhere to or contradict existing homogeneities and regularities such as architectural elements or urban block patterns to be effective urban design tools in stimulating urban tourism (Gospodini, 2001).
It is important to incorporate elements of risk in the environments of young people, irrelevant of their age or gender and the type of space.

**ELEMENTS OF RISK**

- **Discovering**
- **Exploring**
- **Individual Adventures**
- **Parental Supervision**
- **Natural Environments**
- **Artificial Environments**

**Context** - It is important to provide children with an environment that engages and challenges them to discover all it has to offer, alone or with peers or caregivers, in a way that allows them to feel accomplished about their actions.

**Forces** - The opportunity to engage in activities that are challenging and even offer an element of risk is a vital element of children’s development and, furthermore, engages them in the most active types of play, both physically and cognitively.

**Clarification** - An extensively documented theme in the literature on the developmental effects of children’s play is the benefit of risk and risk-taking (Gleave, 2008). The ability to engage in challenging and risk-taking play is reasoned to provide children with important abilities to cope with the unpredictable nature of our world in adulthood (Gill, 2007). Furthermore, risk-taking is considered to benefit the development of confidence and an “I can do”-attitude (Dweck, 2000), as well as other desirable personality traits such as creativity (Ball, 2002). Some researchers even claim that shielding children from challenge and risk is “deliberately disabling and ethically unacceptable” (Hughes, 2001, p.53).

It is therefore important to incorporate elements of risk in the environments of young people, irrelevant of their age and gender or the type of space (Jones, 1997; Acar, 2003; Steampfli, 2009). This can be done through the inclusion of natural elements (Shackell et al., 2008), which offer a greater variety of relatively safe risk-taking opportunities (e.g. climbing a tree, sliding down a hill). It should be mentioned however that it is necessary to provide a balance between opportunities for risk and keeping children reasonably safe from harm (Mooncock, 1998). This can be done by designing environments to mitigate the effects of risk-taken gone awry through, for instance, materialization (e.g. soft grass, sand, or even water beneath climbing structures).
ROTTERDAM

618,109 inhabitants
317,855 households

102,271 children up to 15 years
92,347 households with children
**CHARLOIS**

- 64,488 inhabitants
- 33,812 households
- 11,576 children up to 15 years
- 9,843 households with children

**OUD-CHARLOIS**

- 13,094 inhabitants
- 6,701 households
- 2,378 children up to 15 years
- 2,011 households with children
NETWORK ANALYSIS
Where do people go and how do they move?
SOCIAL & SPATIAL ANALYSIS
Which people live here and in what conditions?
OBSERVATIONAL ANALYSIS
How do people use the public spaces?
CONCLUSIONS
Problems, Qualities & Opportunities
AND HOW DO THEY PERCEIVE THEIR NEIGHBOURHOOD?
Groep 5: Ages 7-8
Photo Workshop
Groep 5: Ages 7-8
Design Workshop
Klas 2: Ages 13 & 14
Photo Workshop
Groep 5: Ages 7-8
Design Workshop
SOCIAL LEARNING ENVIRONMENTS
Applying the patterns to generate a vision

Incorporated Patterns:

07  Open Space Network
10  Mixed Neighbourhood
14  Communal Spaces
SOCIAL LEARNING ENVIRONMENTS
Applying the patterns to generate a vision
ONE RECOGNIZEABLE NETWORK

“Fun” Eye-Catching Elements

Physical “trail” in the sidewalks

Glow-In-The-Dark Road Paint
CONNECTING SCHOOL & NEIGHBOURHOOD

1. Skate park with green character
2. Quiet grass areas with flowers
3. Sunken "theater" for gatherings
SKETCH 3D
Principles behind visualization
CONNECTING SCHOOL & NEIGHBOURHOOD

- 02 11
- 07 15
- 03
- 08
- 11

Exploring
Nature
Elements of Risk

Structure sketches
ATTRACTIVE BLUE-GREEN CONNECTION & DESTINATION

Enclosed path for children to explore

Added biodiversity to create natural banks

Wooden walkway with subtle edges
TREET PROFILES
SKETCH 3D
Principles behind visualization
NEIGHBOURHOOD HUB FOR SMALL CHILDREN AND THEIR PARENTS

Structure sketches

Discovering

Materials

Parental Supervision

LOOMSTEYNWEG
NEIGHBOURHOOD HUB FOR SMALL CHILDREN AND THEIR PARENTS

Earth beds with plants and flowers

Safe yet attractive materialization

Opportunities for parents to sit closeby
SKETCH 3D
Principles behind visualization
Facility Hub Supporting the Development of Teens

- Graffiti wall to be painting by teenagers
- Community garden as parent-child space
- Water elements in schoolyard for play
STREET PROFILES
Facility Hub Supporting the Development of Teens

Rope bridges as path for the children

Outdoor workshop to build and create

Maintaining harbour character
“How can spatial design interventions aimed at facilitating the social learning experiences of children and adolescents support the restructuring of Oud-Charlois?”
REFLECTION
Proces, Product & Pattern Language
Architecture & Urbanism Master Students
Pattern Workshop