

WATER AS ARCHITECTURE

Alessandro Comoli

Humans are strongly related to water and our bodies show a number of hydrostrategic attributes—both psychological and physiological—for interacting and getting involved with water. We value living near water, receive pleasure and even health benefits from viewing water scenes, and seek out water areas for recreation.



WaterFall Building Mekar Sari Fruit Garden, Indonesia

<http://www.flickrriver.com/photos/rohendy/sets/72157627527141893/>

QUOTES

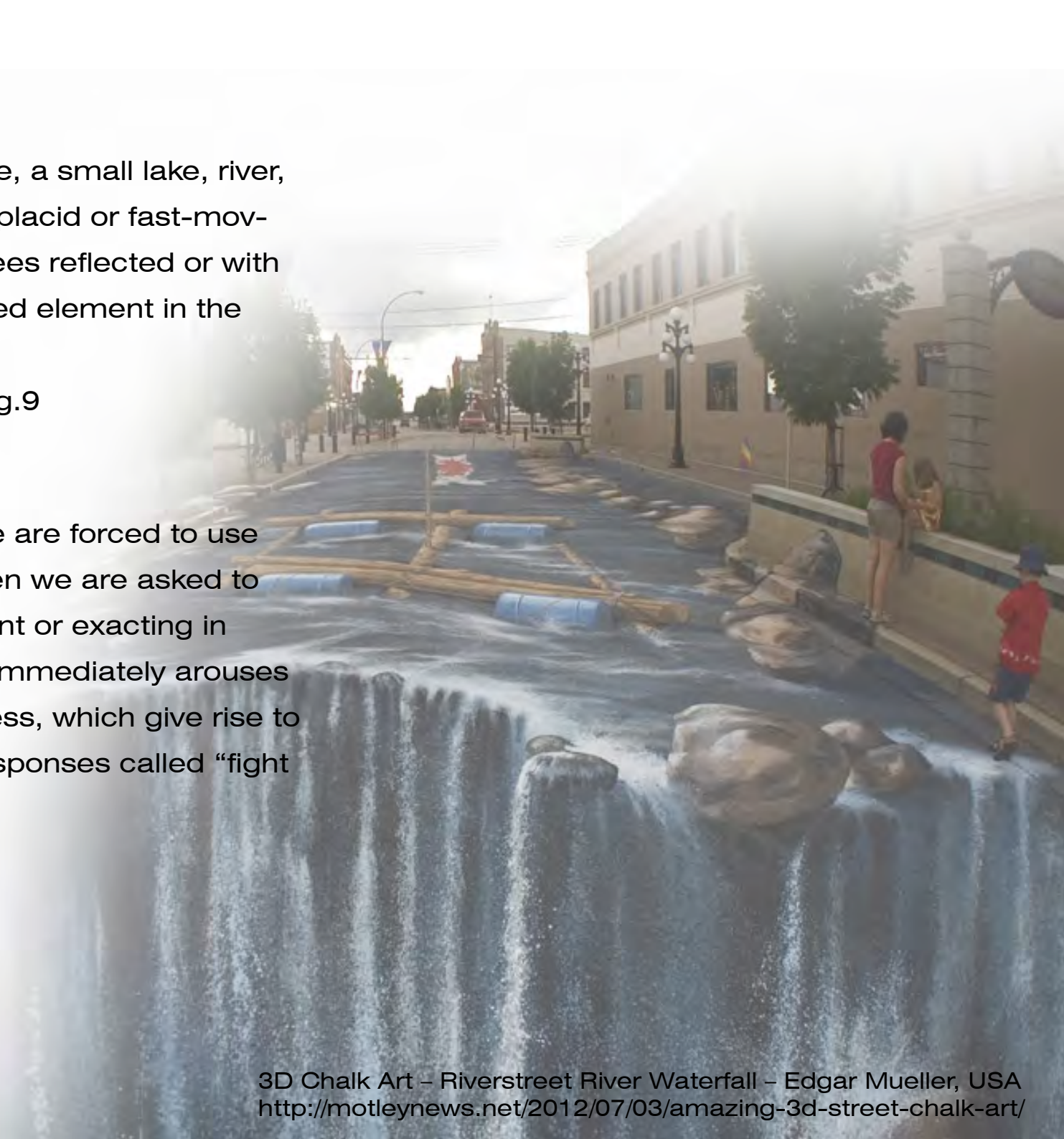
WATER AND ITS AESTHETIC QUALITIES

“It can be an ocean, a big lake, a small lake, river, stream, or pond; it might be placid or fast-moving, tranquil or falling, with trees reflected or with rapids. Water is a highly priced element in the landscape.”

-Kaplan and Kaplan, 1989, pg.9

“In artificial environments, we are forced to use our cognition and logic...When we are asked to do something new, unpleasant or exacting in purely artificial settings, this immediately arouses feelings of insecurity and stress, which give rise to a number of physiological responses called “fight and flight reactions” .”w

-Ottosson, 2007, pg.16

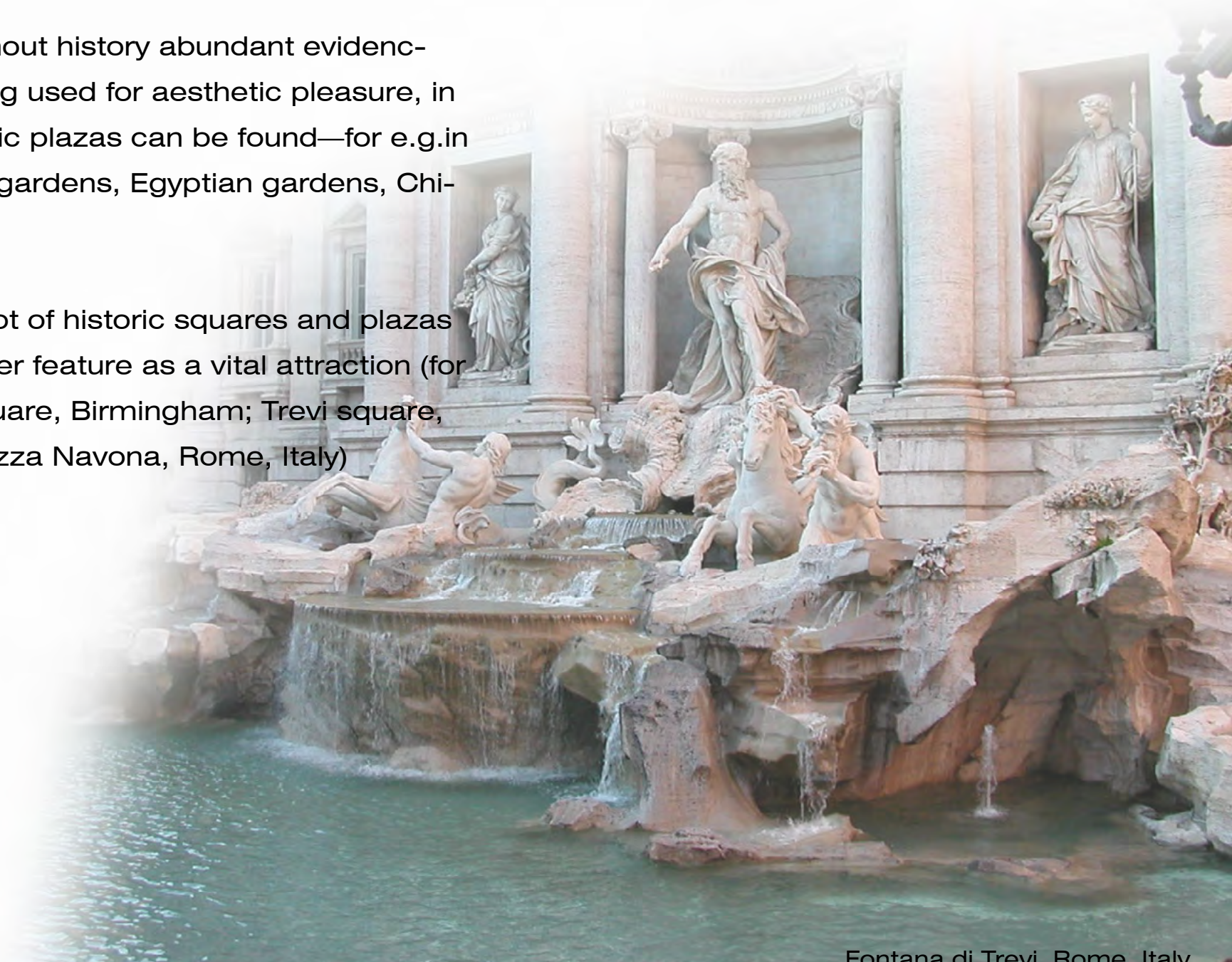


HISTORY

WATER AND ITS AESTHETIC QUALITIES

Looking throughout history abundant evidences of water being used for aesthetic pleasure, in gardens or public plazas can be found—for e.g. in Mesopotamian gardens, Egyptian gardens, Chinese gardens.

Furthermore a lot of historic squares and plazas consist of a water feature as a vital attraction (for e.g. Victoria Square, Birmingham; Trevi square, Rome, Italy; Piazza Navona, Rome, Italy)



VIEW OF WATER

WATER AND ITS AESTHETIC QUALITIES

The view of water in the built environment is highly valuable. In the housing market, the closer you are to the water the higher the selling prices get.

Bourassa et al. (2003) conducted an analysis of the impact of a view on 5,000 residential properties in Auckland, New Zealand. They found that wide views of water add an average of 59% to the value of a waterfront property.



Many literatures (Ulrich, 1983; Kaplan and Kaplan, 1989; Nasar and Li, 2004; Berto, 2005; Nordh et al., 2009; Völker and Kistemann, 2011) and studies of landscape preferences show that water is one of the most pivotal elements for preference ratings, and also, in general, highly positive for both tranquillity and restorative potential.



Princeton Park monmouth junction, USA
http://www.okeanosgroup.com/new_gallery/2/show_NJ



Adventures in Positive Psychology
<http://blogs.psychcentral.com/positive-psychology/>

RESEARCH 1

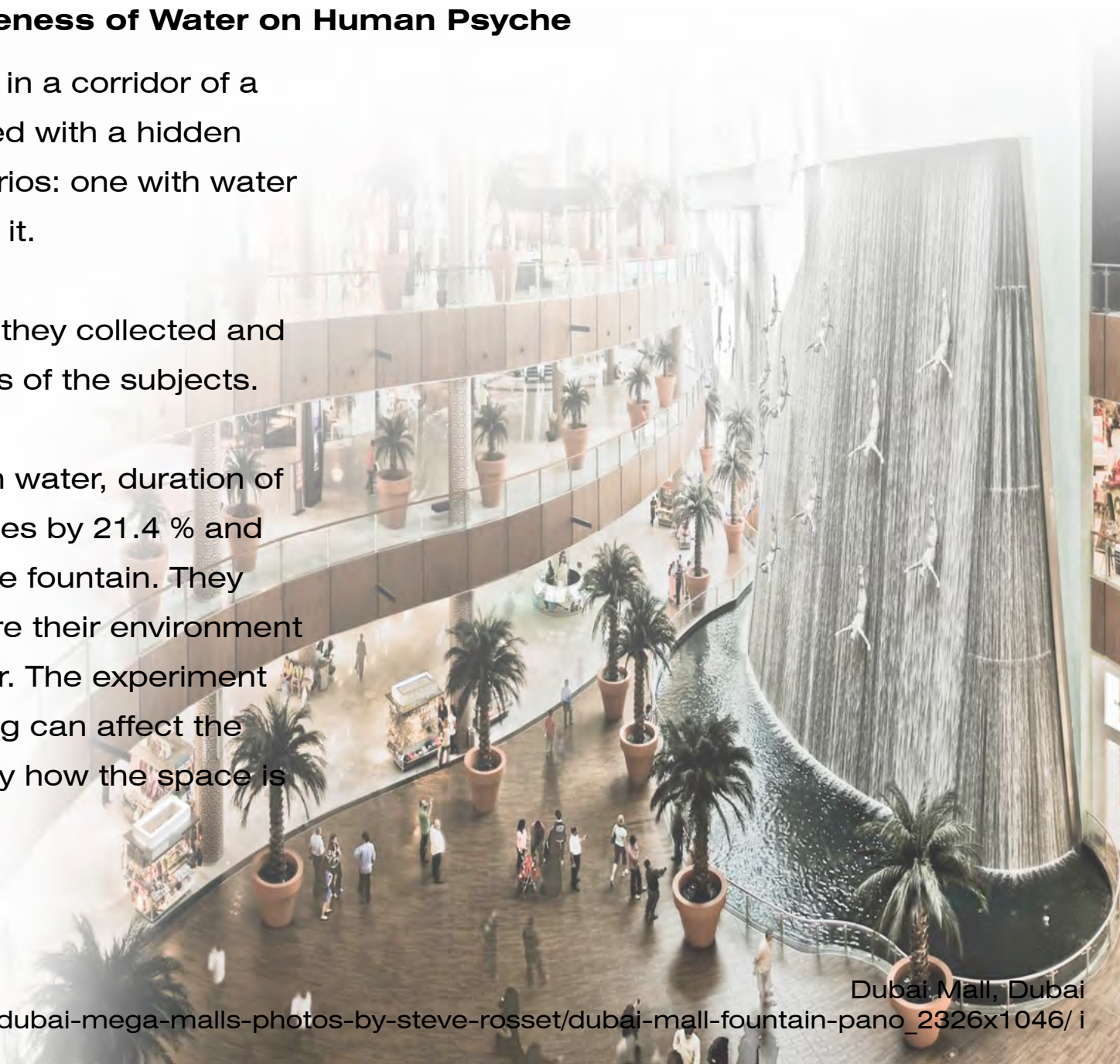
WATER AND ITS PSYCHOLOGICAL QUALITIES

Ruso & Atzwanger_Effectiveness of Water on Human Psyche

A water fountain was installed in a corridor of a shopping mall and it was filmed with a hidden camera in two different scenarios: one with water running, the other one without it.

In the course of three months they collected and analyzed behavioral responses of the subjects.

When the fountain is filled with water, duration of stay of the passers-by increases by 21.4 % and they prefer to stay closer to the fountain. They also were more likely to explore their environment and to interact with each other. The experiment indicates that water in a setting can affect the behavioral pattern and the way how the space is used.



Dubai Mall, Dubai

RESEARCH 2

Prajal Pradhan _Role of Water or Water Features in Fostering Psychological Restoration in Urban Environments.

The research took place in Malmö (Sweden) and Kathmandu (Nepal) in public places with different water features during weekends.

Is presence of people denser towards the closer proximity of the water feature?

What are the major activities of the visitors?

Do the users look relaxed or happy?

How long do people usually stay?

Are people usually in a group or alone?

Does certain age group or gender seem particularly fond of water?

Does presence of fishes in the water makes a difference?

Does animistic quality of water effects the ambience of overall environment?

RESEARCH 2

Common Aspects of Sweden and Nepal

People like to stay closer to water in general but especially if sitting opportunities (furniture, plinth on the edge of water and grass).

They like to rest and relax, or chat. Socially unacceptable behaviors or activities were never observed.

Time people spent on the sites usually varied from 15 minutes to more than 90 minutes.

People attracted more towards water if fish in it, especially children.

Sound and motion of water even more appealing.

Uncommon Aspects Sweden

Presence of old and mid 20s' people

Nepal

Presence of teenagers and families



Canal in Malmö, Sweden
<http://buildingoursustainablefuture.blogspot.se/2012/09/european-village-in-bo01.html>



Garden of Dreams, Kathmandu, Nepal
<http://holeinthedonut.com/2012/07/04/kathmandu-thamel-garden-of-dreams/>

RESEARCH 2

WATER AND ITS PSYCHOLOGICAL QUALITIES

Most Preferred Environment Sweden



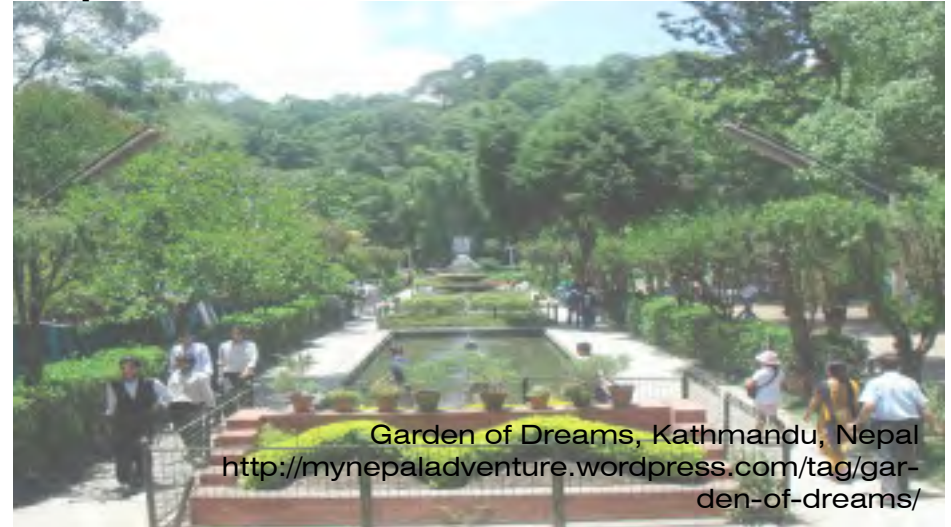
Canal in Malmö, Sweden
<http://www.dreamstime.com/stock-image-canals-malm-city-sweden-image31593821>

Least Preferred Environment Sweden



Malmö, Sweden
<http://www.shutterstock.com/pic-33823441/stock-photo-fountain-in-malmo-park-sweden.html>

Nepal



Garden of Dreams, Kathmandu, Nepal
<http://mynepaladventure.wordpress.com/tag/garden-of-dreams/>

Nepal



Kathmandu, Nepal
<http://www.everestuncensored.org/tag/pimbal-pokhari/>

Pros_Natural Cooling System

Water ponds and pools are natural cooling systems that can be utilized to our advantage in the built environment.



Broadway w, New York, USA
http://www.oceanosgroup.com/new_gallery/2/show

Cons_Humidity

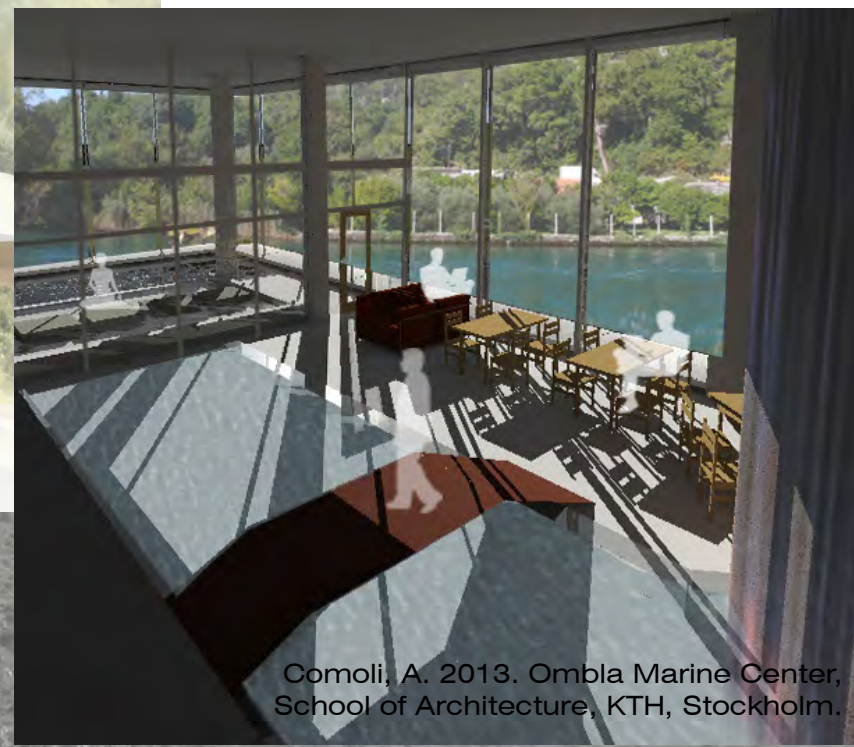
Humidity is an unpleasant factor which makes the air of the environment thicker.



Swamp House, Alabama, USA
<http://www.sounds-like-me.com/blogs/deathvalley-girl/page/2/>



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