Are citizens interested in their lit cities?
A series of urban lighting impressions

Daria Casciani (daria.casciani@polimi.it)
Design Department - Laboratorio Luce - Politecnico di Milano
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URBAN LIGHTING DIY?

URBAN LIGHTING SEEN BY CITIZEN
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THE PROBLEM

energy efficiency, reduction of C02 emissions and public costs without forgetting that public lighting is for people
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Three part approach to lighting sustainability:

SOCIAL
ENVIRONMENTAL
ECONOMIC
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ENVIRONMENTAL
lighting sustainability

FOCUS ON TECHNICAL AND QUANTITATIVE PERFORMANCES IN TERMS OF ENERGY EFFICIENCY
AND LIGHTING POLLUTION: GLARE, SKY GLOW, LIGHT TRESPASS
(P.R.I.C.; UNI EN 13201 - May 2004; UNI 11248 – October 2007)
ECONOMIC
lighting sustainability

LIGHTING COMPANIES AND PUBLIC ADMINISTRATION FOCUS ON ENERGY AND COST SAVINGS.

SPENDING REVIEW AND BUDGET CUTS: DARKNESS ERA
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SOCIAL
lighting sustainability

HUMAN ORIENTED LIGHTING PERFORMANCES IN ORDER TO IMPROVE THE EXPERIENCE AND
Brandi & Geissmar-Brandi, 2007; Raynham & Gardner, 2001; Raynham, 2007; LUCI, 2012-2013)
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THE INQUIRY

social layer of the perceived night-time image of the city

- evolution in public opinion
- evaluations of lighting actions
- education and participation
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Half of the city is in the darkness...#blackout #milano
pic.twitter.com/qNCn9RDAcE
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Cuts in the new budget for the spending review? @giulianopisapia
pic.twitter.com/X3mMhpP0Dp
“For me, it is a beautiful show, once in a while, the authenticity of the night. I went out in the street to enjoy a moment of freedom from the lighting pollution and, back home, I have also seen few stars over the buildings. Rare commodity for our city...”

http://bit.ly/18TaXo0
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THE QUESTION

what do people think about urban lighting?

is it possible to include citizens in urban public lighting decisions?

What kind of tools can be used to integrate the social perspective dimension into urban lighting planning?
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SOCIAL DIMENSION INTO URBAN LIGHTING

- mapping the urban nightlife
- mapping the perceived luminous urban atmosphere
- contributing to social participation and engagement
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PEDESTRIAN ZONES

Via Paolo Sarpi
Corso Sempione
Corso Como
Corso Garibaldi
Castello Sforzesco
Via Dante
Duomo
Corso Vittorio Emanuele
Colonne di San Lorenzo
Navigli
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ACTIVITY ANALYSIS

INTEGRATION
ACCESSIBILITY
VISIBILITY

Space Syntax
(Bill Hillier)

High Integration

Low Integration
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HOW IT WORKS
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http://www.seety.altervista.org
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Read

It is an inquiry about the night-time experience of the city. The aim is to understand what is your perception about the nocturnal atmosphere of a city to explore. The atmosphere is the quality of the space, its distinctive character and it is made by external elements, such as light, or internal sensation and personal feelings.

It is a virtual explorative journey through images of lit cities. Let’s imagine to be inside these lit nocturnal spaces, to walk on the street, to take a rest on the squares, to explore passages and alleys observing the luminous atmosphere where you are immersed in: which thoughts, sensations, impressions come to your mind?

There are not right or wrong answers but just your impressions about the luminous atmosphere. You can leave the journey when you want or keep on going in your ideally lit city. Finally, thanks for your precious contribution to the research about the relationship between man-light-city. The results of the surveyed and analyzed data will be clusterized and statistically treated and shown at [http://danacasciani.wordpress.com](http://danacasciani.wordpress.com)
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ATMOSPHERE

“Atmosphere is defined as the affective evaluation of the environment. An atmosphere can change people’s affective state. However, since a person’s affective state is also influenced by many non-environmental factors, methods to measure mood and emotions are less useful to determine the effect of the environment on people’s experience.”

Ingrid Vogel
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Printed by "Seety"

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EXPLORE

“Mitate”
literally, to see anew,
to see with new eyes
is a way of expression which
gives freshness and element of surprise,
and gives people intriguing experience.”

Leni Schwendinger
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RESULTS - REMAP

appraising the level to which lighting contributed to a positive experience of the city at night
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83 participants
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83 participants
36 YEARS OLD AVE.
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MOST SELECTED ZONES

NAVIGLIO MARTESANA

NAVIGLIO GRANDE
NAVIGLIO PAVESE
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MOST SELECTED ZONES

NAVIGLIO MARTESANA
NAVIGLIO GRANDE
NAVIGLIO PAVESE
SFORZESCO CASTEL
NAVIGLI

PLDC
PROFESSIONAL LIGHTING DESIGN CONFERENCE
2013
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MOST SELECTED ZONES

NAVIGLIO MARTESANA

SFORZESCO CASTEL

SAN LORENZO

NAVIGLIO GRANDE

NAVIGLIO PAVESE

Bar chart indicating the selection of zones.
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MOST SELECTED ZONES

NAVIGLIO MARTESANA
SFORZESCO CASTEL
SAN LORENZO
SEMPIONE PARK
RINASCENTE DUOMO

NAVIGLIO GRANDE
NAVIGLIO PAVESE
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"the eyes on the street"

Jane Jacobs

HIGH SOCIABILITY

Focusing on the luminous atmosphere, judge it if appears...

pleasant interesting mysterious sociable cozy lively unsafe tense

unpleasant monotonous expected unsociable uncomfortable lifeless safe relaxed

bright uniform warm dim not uniform cold
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Focusing on the luminous atmosphere, judge it if appears...

pleasant
interesting
mysterious
sociable
cozy
lively
unsafe
tense

unpleasant
monotonous
expected
unsociable
uncomfortable
lifeless
safe
relaxed

bright
uniform
warm

dim
not uniform
cold
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LIGHTNESS
LIVELINESS AND EXPOSURE

“exposed”
“sense of curiosity”
“perception of safety”

DARKNESS
CONGREGATION AND INTIMACY

“hidden”
“peaceful and convivial intimate situation”
“calming effect”
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- dim
- not uniform
- cold
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LIGHTNESS - DARKNESS

“polluted and excessive”
“consumption and waste”
“cheerfulness, entertainment, playfulness”
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**RELAX - COMFORT - COSINESS**

“meditation and contemplation”
“surprise and curiosity”
“beauty of the reflections”
“reminds me of impressionists paintings”

“mysterious”
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Read > Explore >

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Excessive (91) Rigid (91) Powert (91) Misterioso (87) troppe sorgenti luminose e temperature colore differenti, disordinate (103)
Too long way, do not want to go there (147)
Il riflesso sull'acqua non è un'esperienza comune a Milano quindi da privilegiare e valorizzare per la sua carica misteriosa e attrattiva (152)
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YELLOW LIGHTING OR WARM CCT

“warming up the space”
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ORANGE - BLUE JUXTAPOSITION

warm and cold feelings
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- warm

- dim
- not uniform
- cold

This is a place to sit for a while and "hide" yourself from the crowd (148) Interaction with the crowd start again here (148)
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COLOURED LIGHTING

“A disorderly feeling”
“messy and artificial”
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RESULTS - RECAP

people are getting more interested in their cities’ lighting as it is found to be beneficial
RESULTS - RECAP

night-time experience and access of the city is dependent on several factors where lighting is critical but not exclusive
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RESULTS - RECAP

lighting variables noted for “relaxed, peaceful, comfortable and welcoming” urban spaces are the colour tonality of lighting and luminance contrast
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RESULTS - RECAP

Several stereotype like “more lighting = more safety” and “no coloured lighting on ancient buildings” are deeply elaborated
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RESULTS - RECAP

digital based platforms could really become effective in allowing the community to express its views toward an inclusive lighting masterplan of the city
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MORE PEOPLE AND OTHER CITIES
CREATING
SOCIAL LIGHTING MAP
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References

Ferguson S. J.(2002). Mapping the social landscape, MaGraw Hill.