

Light and social sustainability



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Thanks to!

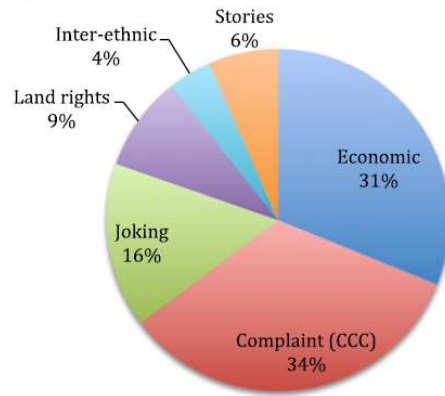


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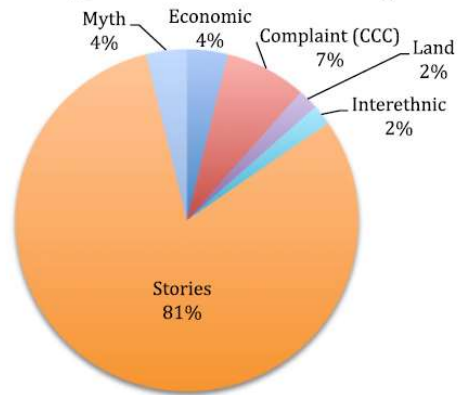
Long time ago



Topics of day conversations (n=122)



Topics of night conversations (n=52)



Wiessner et al.,



Lower blood pressure,
Lynn (2014)

Brain: increase alpha
waves, Tamakoshi et
al., (2011)



But the light that
nurtures also
pollutes



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Today more
technical
inventions



How (can) we create light scenes for social sustainability with the new technologies we have access to?

What is social sustainability?



ECONOMICS

Production & Resourcing
Exchange & Transfer
Accounting & Regulation
Consumption & Use
Labour & Welfare
Technology & Infrastructure
Wealth & Distribution

ECOLOGY

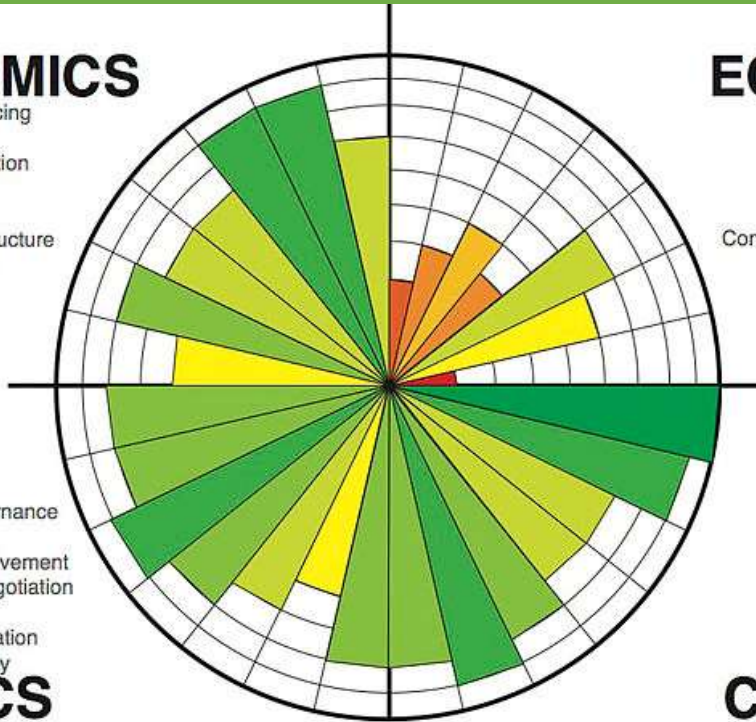
Materials & Energy
Water & Air
Flora & Fauna
Habitat & Food
Place & Space
Constructions & Settlements
Emission & Waste

Organization & Governance
Law & Justice
Communication & Movement
Representation & Negotiation
Security & Accord
Dialogue & Reconciliation
Ethics & Accountability

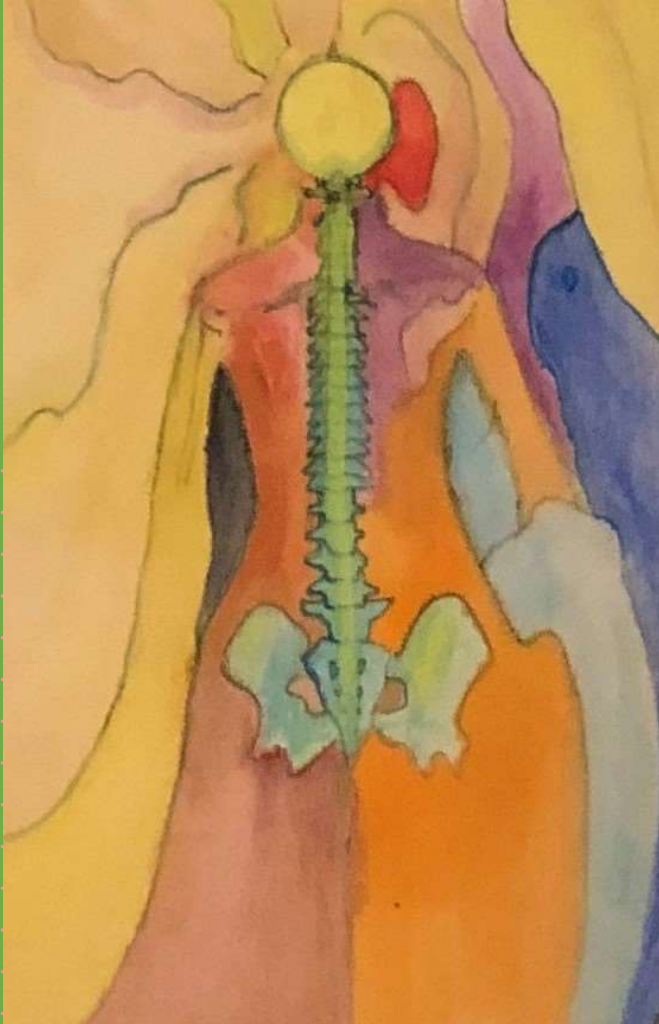
POLITICS

Engagement & Identity
Recreation & Creativity
Memory & Projection
Belief & Meaning
Gender & Generations
Enquiry & Learning
Health & Wellbeing

CULTURE



CIRCLES OF SUSTAINABILITY



The example
Migraine friendly
lights?

Burden of migraine

Neurological disease

Headache

Nausea

Oversensitivity to stimuli, e.g., light

Burden of migraine

- 14 % increasing

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Burden of migraine

- 14 % ökande
- 1,4 miljon in Sweden

Burden of migraine

- 14 % increasing
- 1,4 million in Sweden.
- 50.000-240.000 SEK/patient

Burden of migraine

- 14 % increasing
- 1,4 million in Sweden.
- 50.000-240.000 SEK/patient
- In EU, 50 billion per year.

Burden of migraine

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- 14 % increasing
- 1,4 million in Sweden.
- 50.000-240.000 SEK/patient
- In EU27, 50 billioner per år
- Common sick leave reason for younger women

Light sensitivity

>90%

About 1,3 milj i Sverige

Lack of treatment

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Can you do
something with
light to ease for
people with
migraine?

- Acute pain relief(Nir, et al., 2018, Nosedá et al., 2016)
- Preventative pain relief (Martin et al., 2021)
- Pathway from eyes to thalamus in brain?

Prestudy



Ryberg/Wallin, 2023



Wallin, 2023