

# The Art of Living a Good Life

An Interactive Personalized Exhibition Experience that  
Reduces the Environmental Impacts of Different Lifestyles



Matthias Stucki & Petra Bättig

ZHAW Institute for Natural Resource Sciences

[matthias.stucki@zhaw.ch](mailto:matthias.stucki@zhaw.ch), [petra.baettig-frey@zhaw.ch](mailto:petra.baettig-frey@zhaw.ch)



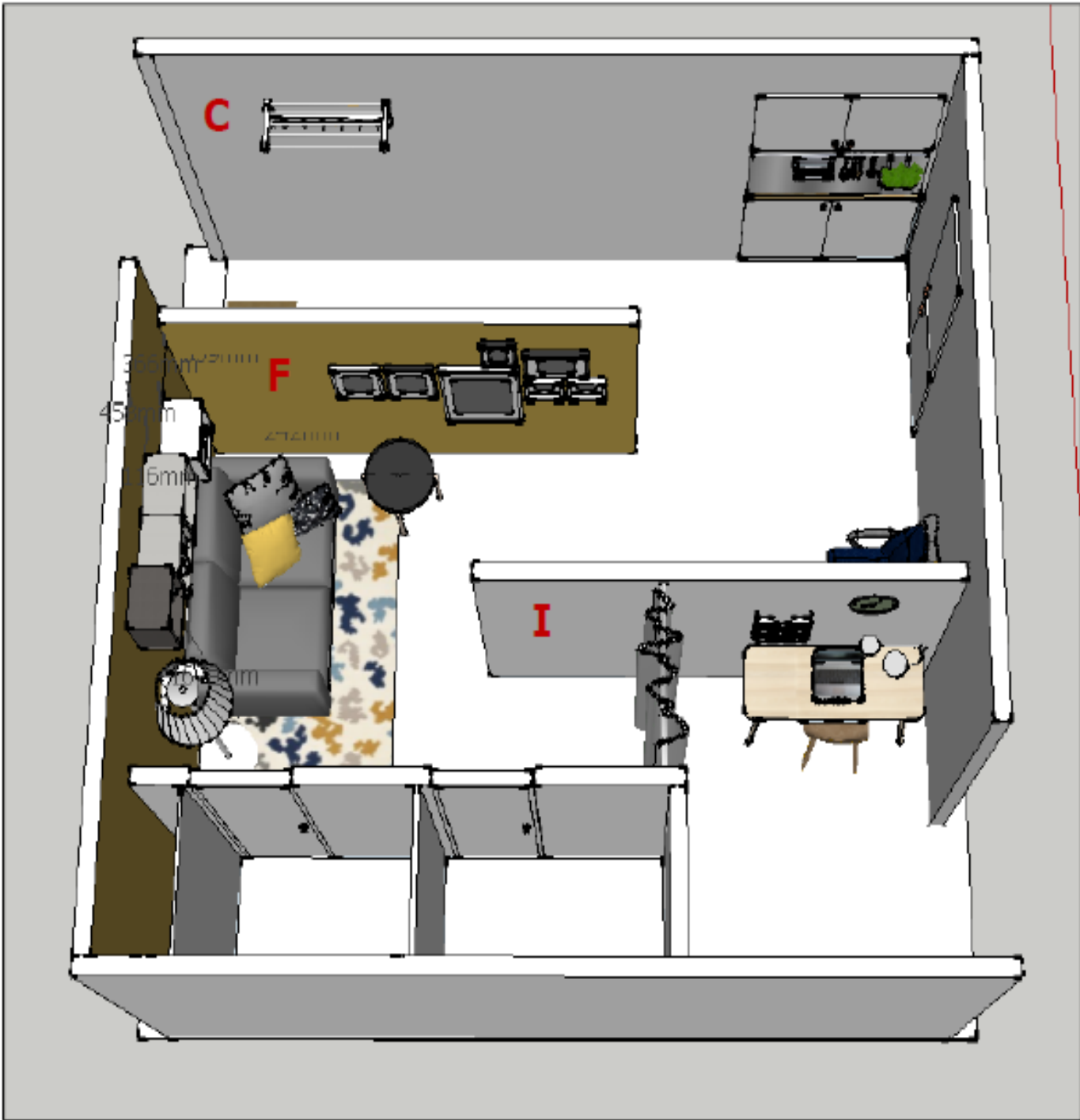
# Welcome to #misläbe



## Project goals

1. Promote **life cycle thinking** in public. Raise awareness about the environmental impact of everyday behaviour.
2. Propose **personalized** environmentally friendly action
3. Establish a **dialogue** between visitors and researchers.
4. Better understand the environmental impacts of **socio-economic profiles**

# Exhibiton



# Web app

Wie oft isst du eine Portion Fleisch?  
(Eine Portion entspricht z.B. einem  
Cervelat à 100g.)

nie

1 bis 3 Mal pro Woche

4 bis 6 Mal pro Woche

Täglich

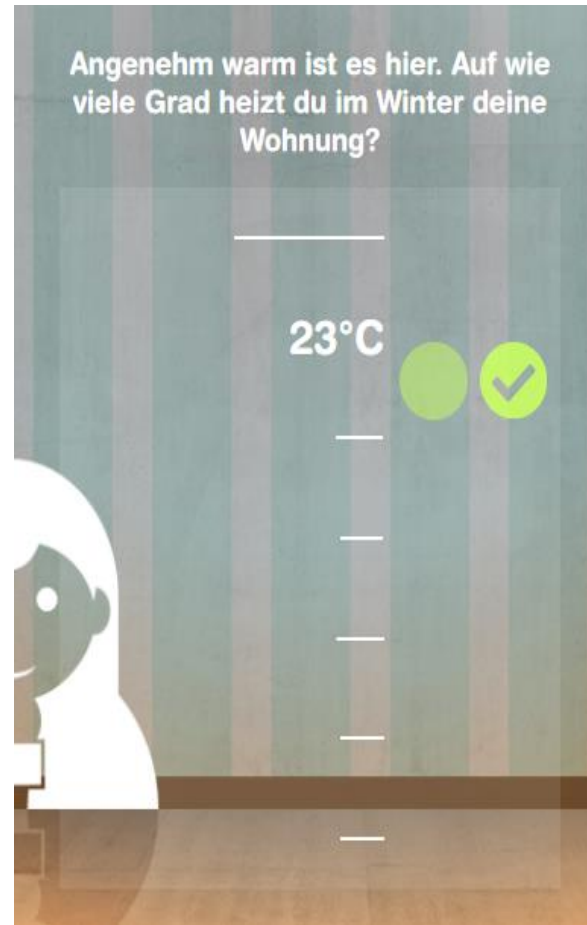
Zweimal pro Tag

Mehr als drei Mal pro Tag

A screenshot of a web application interface. At the top, there is a question in white text: "Wie oft isst du eine Portion Fleisch? (Eine Portion entspricht z.B. einem Cervelat à 100g.)". Below the question are six horizontal, rounded rectangular buttons in a light green color, each containing a different frequency option in black text. The options are: "nie", "1 bis 3 Mal pro Woche", "4 bis 6 Mal pro Woche", "Täglich", "Zweimal pro Tag", and "Mehr als drei Mal pro Tag". On the left side of the screen, a white silhouette of a person's head and shoulders is visible, looking towards the question.

Angenehm warm ist es hier. Auf wie  
viele Grad heizt du im Winter deine  
Wohnung?

23°C

A screenshot of a web application interface. At the top, there is a question in white text: "Angenehm warm ist es hier. Auf wie viele Grad heizt du im Winter deine Wohnung?". Below the question is a vertical temperature scale with several horizontal tick marks. The number "23°C" is displayed in white text next to the second tick mark from the top. To the right of the "23°C" text is a green circle with a white checkmark inside it. On the left side of the screen, a white silhouette of a person's head and shoulders is visible, looking towards the question.

# Three areas of data gathering

- Environmental behaviour
  - Nutrition
  - Mobility
  - Housing
- Environmental attitude
- Socio-economic profile



# LCA simplified survey

- 21 questions about **personal consumption** in the area of nutrition, mobility and housing
- Inventory modelling for **Swiss conditions**
- Life cycle impact assessment with the **Ecological Scarcity Method 2013**
- Aggregation to a **single score**  
→ environmental footprint



# Meet Marisa...

- 21 years old, living in a small town in central Switzerland
- Part time work in an NGO before studying environmental sciences
- Mother: nurse; father: high school teacher
- Hobbies: gardening, hiking
- Favorite holidays: Camping in Slovenia



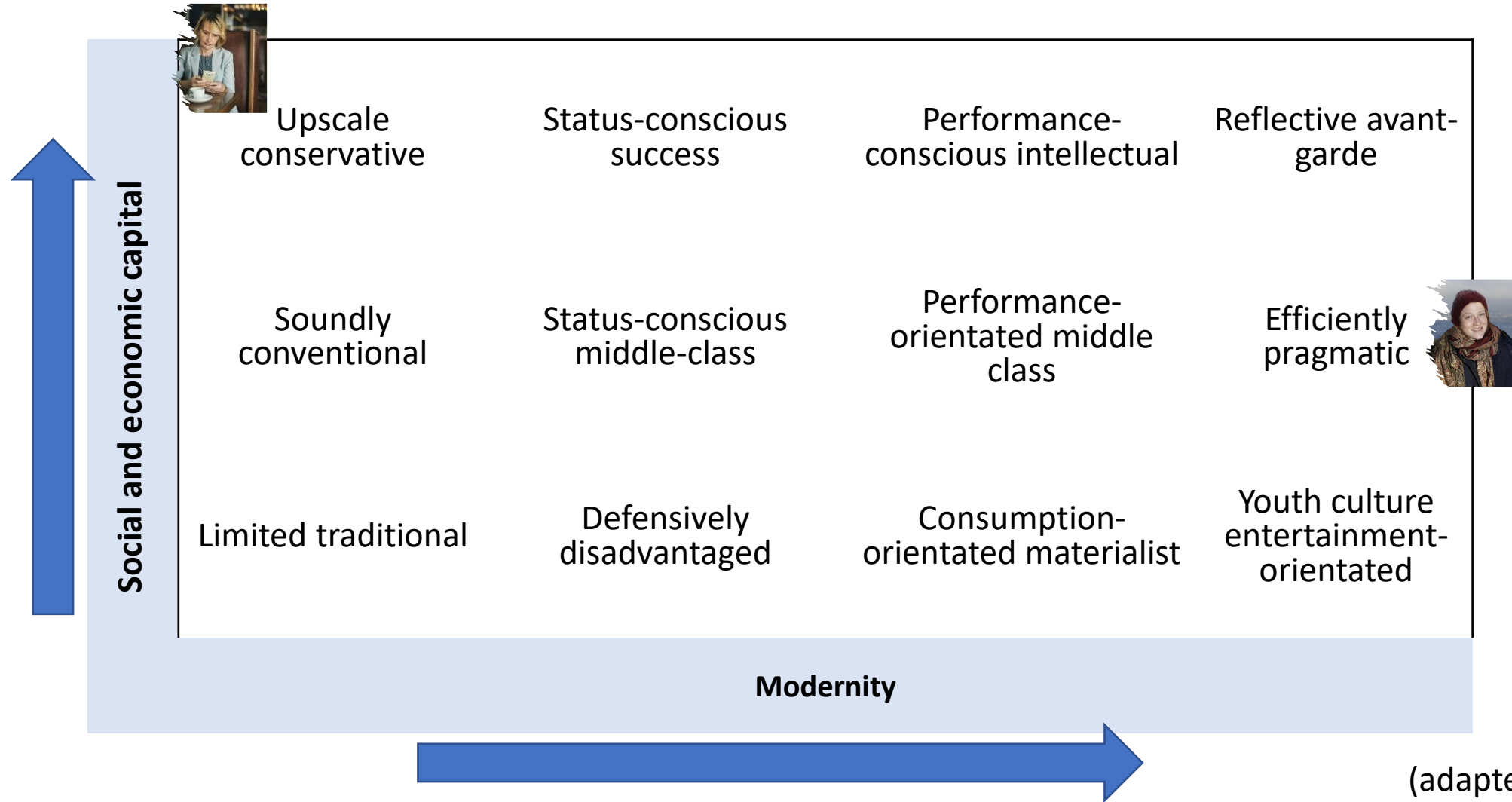
## ...and Christine

- 58 years old, living in suburbs of Zurich, married, three adult children
- Job: CEO of small coaching company, consultant, charity work
- Hobbies: travelling, grand children
- Favorite series: The Queens Gambit
- Favorite holidays: educational trips to South America, short trips to their holiday apartment close to Lugano





# Socio-economic profile

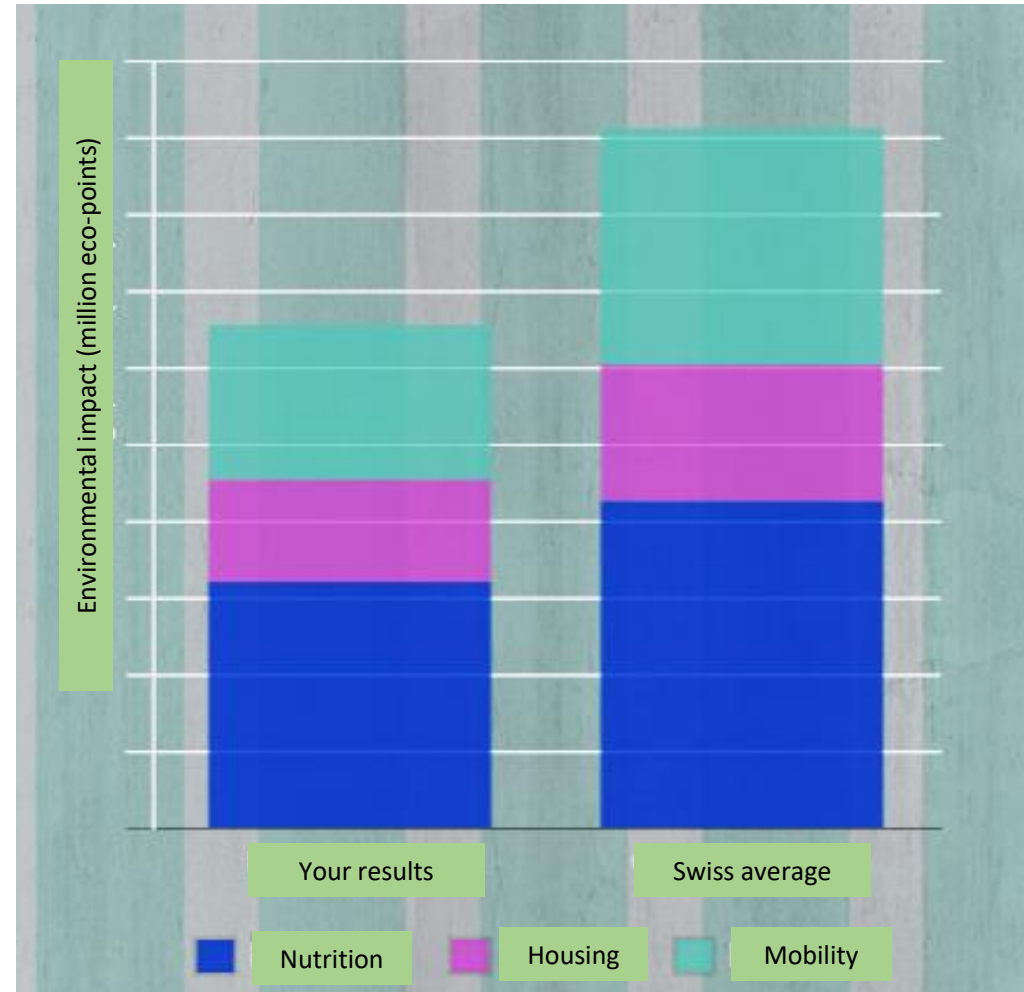


(adapted from Stelzer & Heyse, 2016).

# Personalized Footprint



Matthias is shaping the world of tomorrow - actively and environmentally aware. Impressive!



# Personalized recommendations

- **Christine**

- Upscale-conservative
- not environmentally aware
- High environmental impacts



*«The sun shines for all of us – it might pay off to produce electricity with it! A solar panel on your roof or balcony is also an investment in the environment. Get advice from a specialist.*

- **Marisa**

- Efficiently pragmatic
- Environmentally aware
- Low environmental impacts

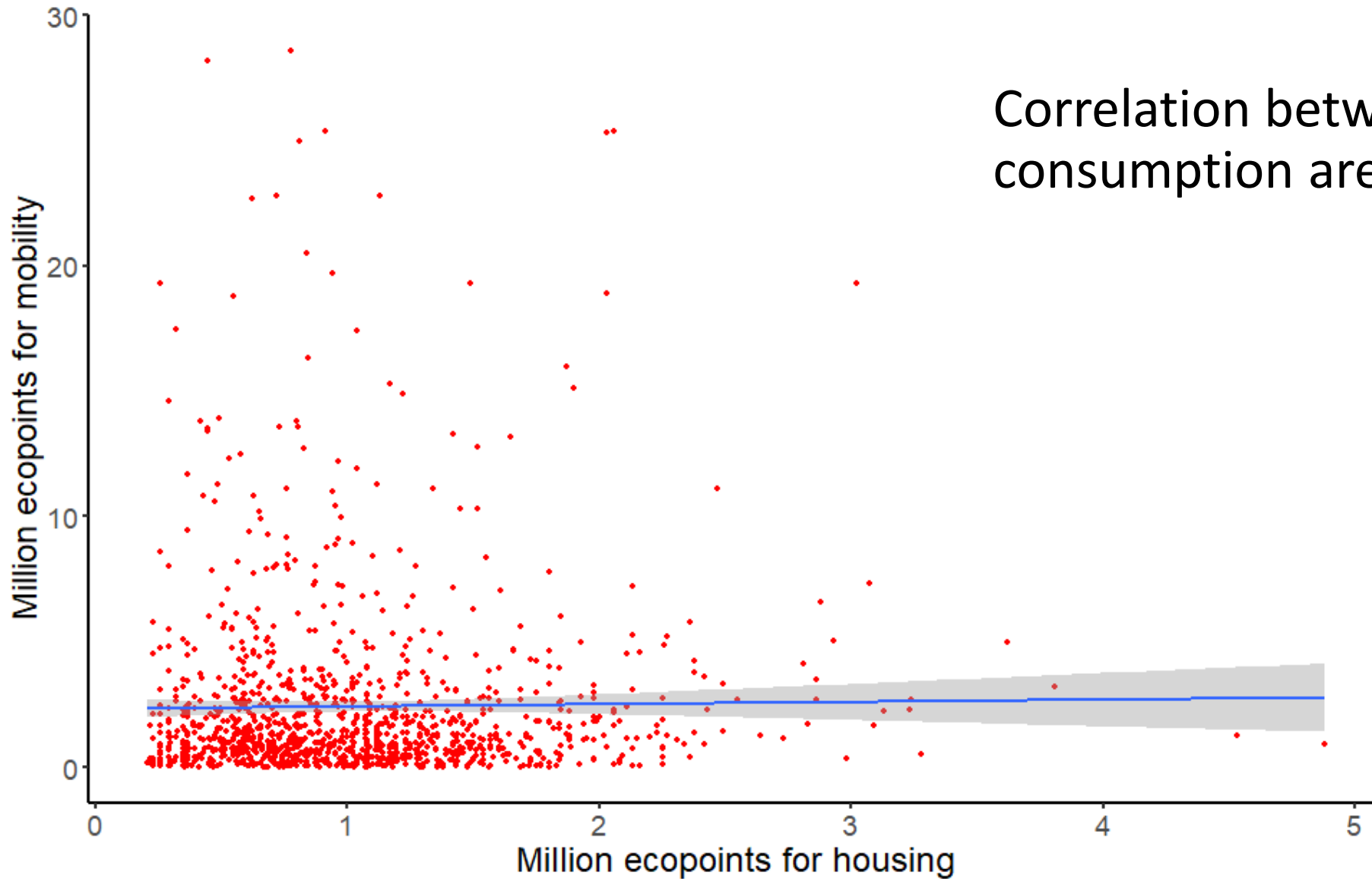


*“Who wants to look like everyone else... Why not go shopping second hand instead of fast fashion? You'll find cool clothes that no one else has - and at very affordable prices.*

# Overview and evaluation

- **2'987** physical **Visitors** (2018-2019) (plus >500 online)
- Environmental footprint is typically dominated by **nutrition**, followed by mobility and housing.
- **88%** of visitors found the analysis interesting
- 46% learned «surprising facts»
- The analysis made 52% «rethink their personal consumption habits»
- And **50%** were motivated to change some of their habits

# Footprint results

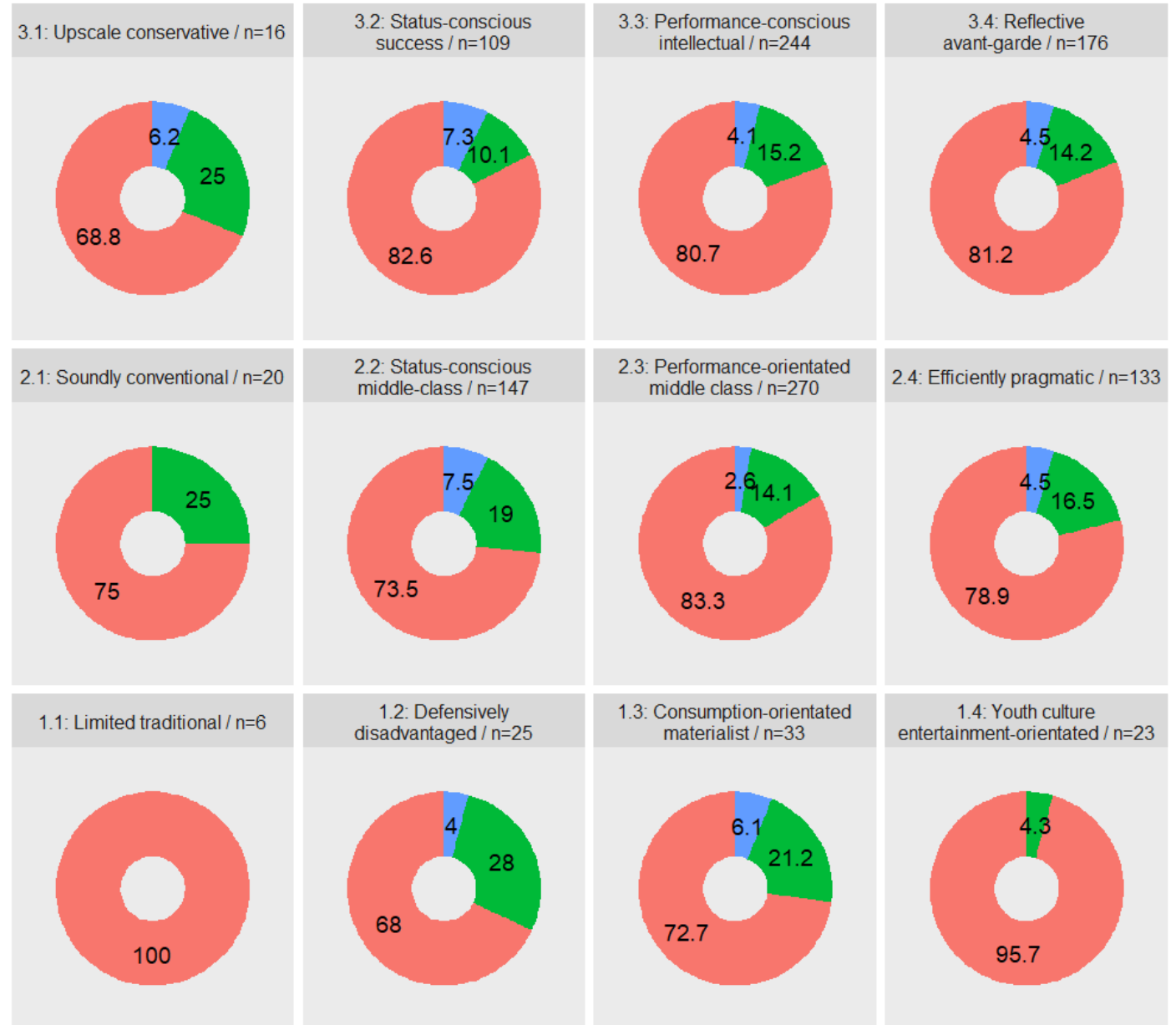


Correlation between  
consumption areas is weak

# Footprint results

- Vegetarians and vegans in (almost) all socioeconomic profiles
- Surprisingly, vegans had a higher environmental footprint than vegetarians, since the env. benefits of the vegan diet were overcompensated with increased air travel.

Diet type in % 1: omnivore 2: vegetarian 3: vegan



# Footprint results



1. Visitors with an environmental attitude have a 18% lower environmental footprint compared to those without
2. The env. footprint of women is 11% lower than the one of men
3. The impacts tend to increase with increasing social and economic capital and increasing modernity
4. However, the socio-economic profile cannot sufficiently explain the environmental impacts of visitors.

# Conclusion

1. A **personalized exhibition** is an interesting **approach** to make people aware of LCA and their personal impact on the environment - and gather data.
2. Environmental impact tends to increase with **social and economic capital and modernity** in lifestyle
3. In order to generate positive impact, life cycle thinking needs be combined with **communication and social sciences**.



# Marisas grandmother Esther has the lowest environmental footprint

A traditional conservative, seldom traveling abroad with low meat consumption and a simple lifestyle.



## Life Cycle Assessment @ ZHAW

Matthias Stucki



Visit our exhibiton in  
Wädenswil or online.  
[home.ausstellung-mislaebe.ch/](http://home.ausstellung-mislaebe.ch/)

## Sustainability communication @ ZHAW

Petra Bättig



Follow me:



ZHAW Zurich University of Applied Sciences  
Institute of Natural Resource Sciences  
Grüntal, Postfach, CH-8820 Wädenswil

Tel.: +41 58 934 57 19

E-Mail: [matthias.stucki@zhaw.ch](mailto:matthias.stucki@zhaw.ch)

Internet: [www.zhaw.ch/iunr/lca](http://www.zhaw.ch/iunr/lca)

ZHAW Zurich University of Applied Sciences  
Institute of Natural Resource Sciences  
Grüntal, Postfach, CH-8820 Wädenswil

Tel.: +41 58 934 58 17

E-Mail: [petra.baettig-frey@zhaw.ch](mailto:petra.baettig-frey@zhaw.ch)

Internet: [www.iunr.zhaw.ch](http://www.iunr.zhaw.ch)

# Acknowledgement

Supported by the Swiss National Science Foundation (SNSF) within the framework of the Agora scheme. Grant-N° CRAGP2\_178679.



FONDS NATIONAL SUISSE  
SCHWEIZERISCHER NATIONALFONDS  
FONDO NAZIONALE SVIZZERO  
SWISS NATIONAL SCIENCE FOUNDATION

# References

Frischknecht, R., Büsser Knöpfel, S., Flury, K., Stucki, M., & Ahmadi, M. (2013). Swiss Eco-Factors 2013 according to the Ecological Scarcity Method. Methodological fundamentals and their application in Switzerland. Federal Office for the Environment FOEN.

Gunnar Otte. (2005). Entwicklung und Test einer integrativen Typologie der Lebensführung für die Bundesrepublik Deutschland. Zeitschrift für Soziologie, 34(6), 442–467.

Stelzer, M., & Heyse, M. (2016). Die Lebensführungstypologie: Milieudiagnose (v2).