



VALUES IN COMPUTING

CHI2017 Workshop Sunday 7th May 2017



Maria Angela Ferrario, Christopher Frauenberger

Geraldine Fitzpatrick, Peter Purgathofer, Will Simm, Jon Whittle

Outline

09:00 Welcome and Introductions

10:00 Focus Session 1: Values Findings

11:00 – 11.15 Coffee Break

11:15 Focus Session 2: Values Ensembles

12:15 Quick Synopsis: Emerging Themes

12:30 – 14.00 Lunch Break

14:00 Focus Session 3: Values in Action

15.00 – 15.15 Coffee Break

15:15 Synopsis and Discussion

16:00 – 16.15 Break

16:15 The Denver Manifesto & Dissemination Plans

17:00 End

} long lunch => we went straight
to Synopsis & the Manifesto



Introductions!

(4 + 1 min)

- M. Brandão <=>
 - I. Johnson <=>
 - M. Van Mechelen <=>
 - S. Dodier-Lazaro <=>
 - A. Dix <=>
- B. Towne
G. Cockton
C. De Souza
C. Sas
Team VIC

Quote
Summary
Future work



VIC survey: emerging findings



Values Survey Findings (N=151)

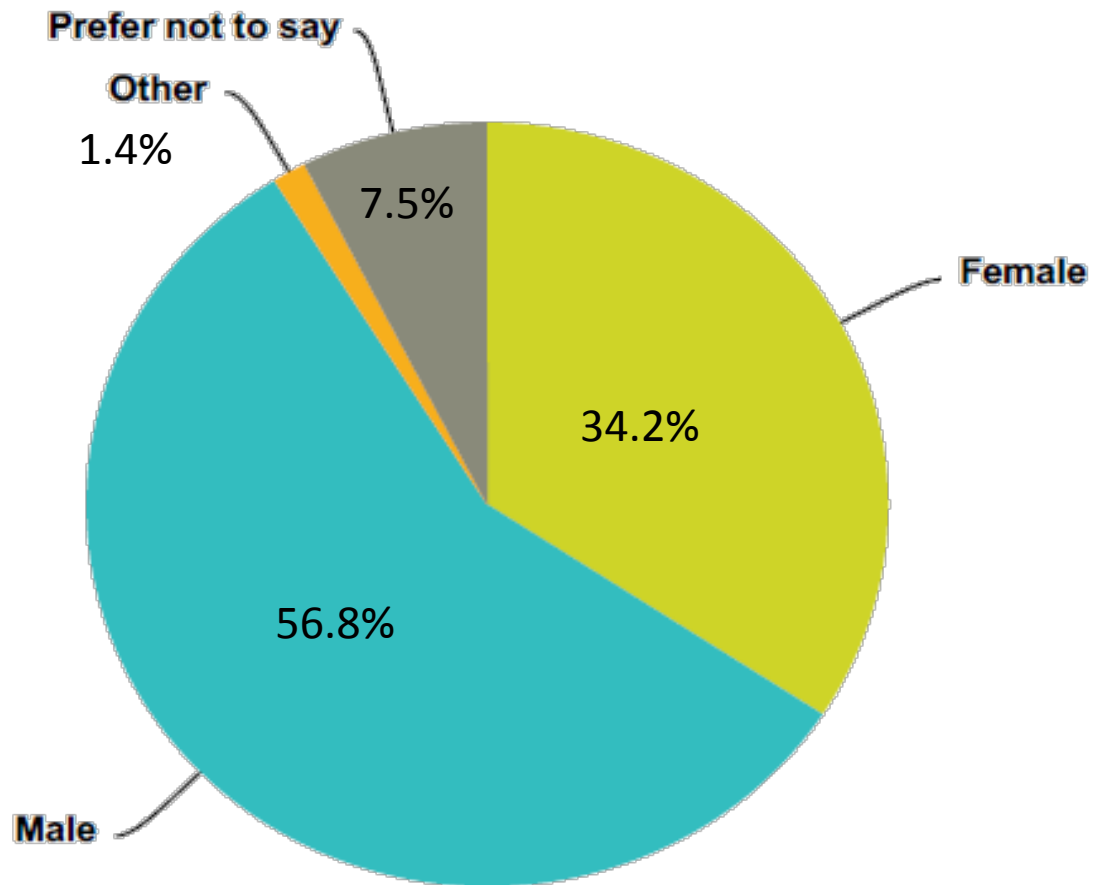
<http://www.valuesincomputing.org/survey/>

- **Open text** (Q3, Q5, Q6) analysis
- Crowd sourced
- Automated

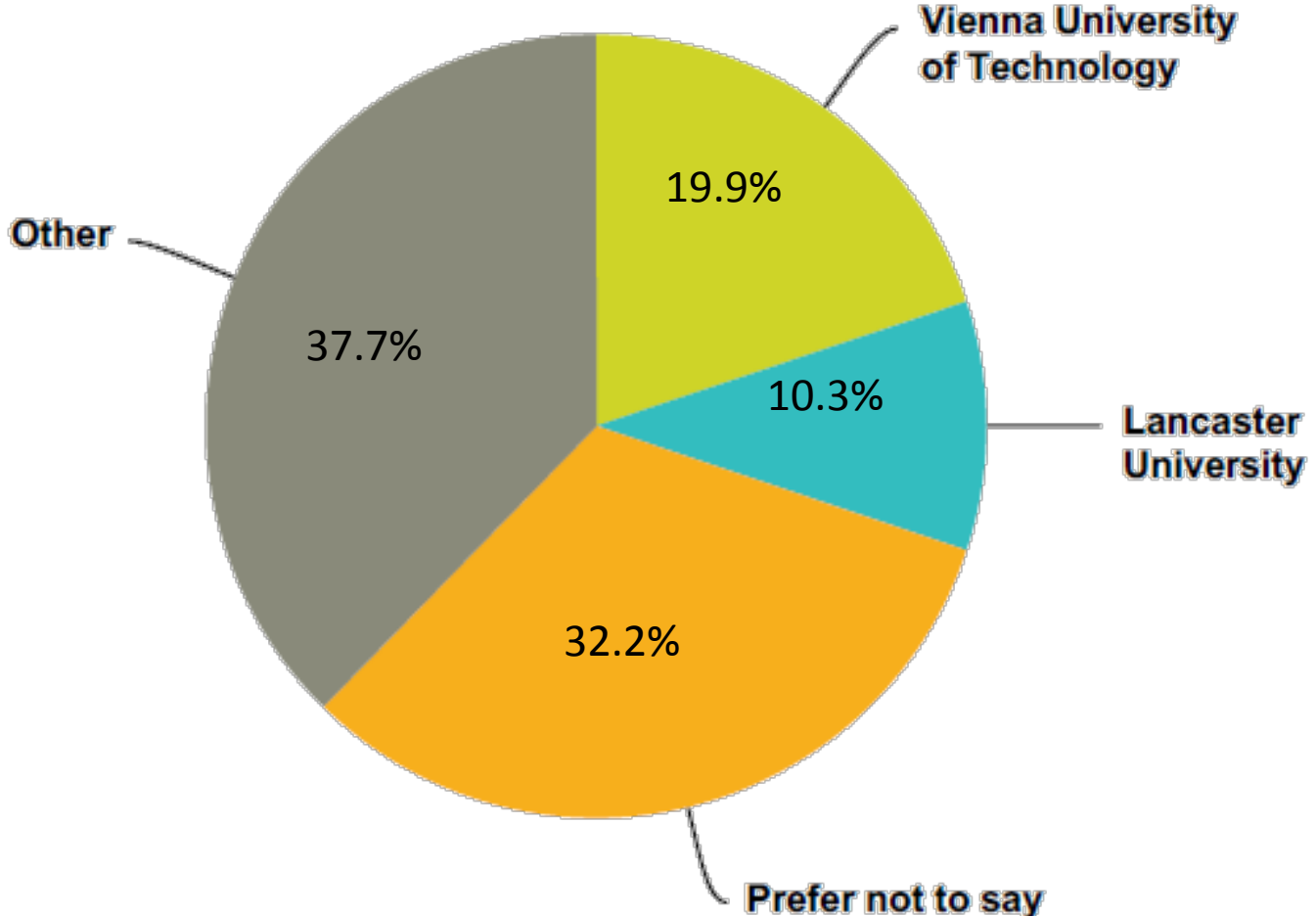
Tick Boxes (Q2, Q4)

- Descriptive stats

I am...



From...





Summary

Q3 DO VALUES SHAPE TECH?

44 responses

- Importance and Influence of values in decision making processes
- Prioritization
- Examples(e.g.; i.e.)
- Reflexivity /Awareness (Lack of)

92% agree {53.6% very much, 38.4% somehow}

Q5 ORG's VALUES MATCH

37 responses

- Ranking, Prestige, Respect, Success
- Financial, Funding,

67.5% agree {9.9% very well, 57.6% somehow}

Q6 MOTIVATION TO PUBLISH

117 responses (*open text only*)

- Recognition / Community feedback
- Sharing / Mutual learning
- A career necessity / Sense of obligation.
- Ranking / Performance / Recognition

Open Text: First Cut

“Crowd”- Sourced*

- Q3: What and Why

Automated Analysis

- Q3, Q5, Q6 Word Frequencies; SemTags

** we asked the rest of workshop organisers to pick the quotes that they found most poignant and tell us why.*

Crowd-Sourced

1

*“Assumes belief in the possibility of a causal relation either way. There's no checkbox to say that you think the question itself is problematic conceptually. i.e., it's the ***wrong* question to be asking** - we can endlessly search for causes if we want to but that doesn't necessarily help us understand the ways in which people make sense of technology*

Because it raises a deeper question about **what question we should be asking** about this and if and how values-in-design & sense making-in-use relate to each other

2

*“My first response was **yes**. However, if we think about some of the actions of companies like Uber and the values they represent, compared to the values of the people who create those technologies then I wonder if the answer is **no**”*

Because it raises the questions of whose values count, influence etc ... here between the companies and the developers/employees... raises lots of possibilities for discussions about **relative power to influence/shape** etc.

Crowd-Sourced

3 “But *rarely knowingly so*, especially in technology design. Some other areas of design have more *self awareness, explicit* strategy and *critical reflection*

Because it points to the issue of there always being some shaping role but the issues of not being (*not being taught to be*) reflexive as s/w developers (lots of answers reflect this point)

4 “*Engineers are not taught* to be *reflexive* in understanding the context of their own worldviews and cultural hegemonies.”

Because this was one of the things we tried to achieve in the *software design studio* (cf. *Schon's reflective practitioner*). Very much relates to our ideas on values-based SE.

5 “Do the values that *designers at Uber* talk about *holding* at dinner parties align with those that drive the company they *work for*?”

Because again, this relates to our values-based SE work -- tracing values down from *organisational mission statement to lines of code*

Automated

- **Wmatrix** corpus analysis and comparison tool
- a web interface to the English **USAS** and **CLAWS** corpus annotation tools
 - standard corpus linguistic methodologies such as frequency lists and concordances
- USAS: U - **S**emantic **A**nalysis **S**ystem;
- CLAWS: Part-of-Speech (**POS**) tagger for English

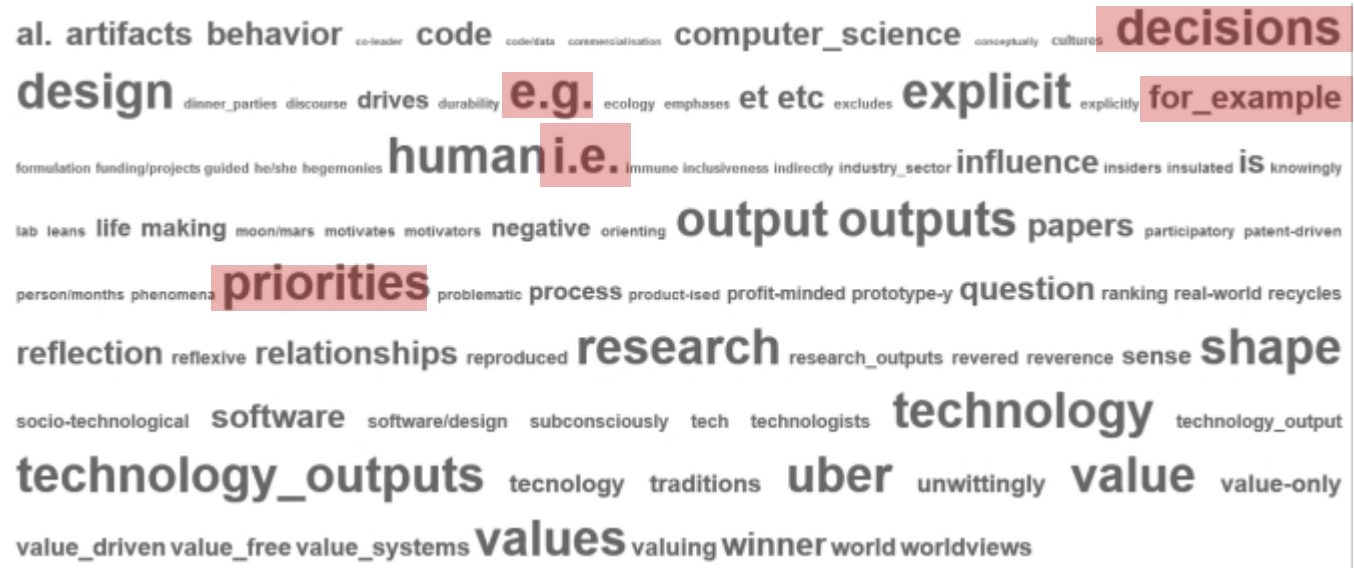
<http://ucrel.lancs.ac.uk/wmatrix/>



Q3: WF

Values Shape Tech vs Spoken English

“*i.e. socio-technological systems don't necessary remain static in their use*”
 “Yes , particularly the decisions about what kind of concepts to design and for what purposes”
 “Explicit strategy and critical reflection, e.g. design for *sustainability* , *diversity* , *inclusiveness*”



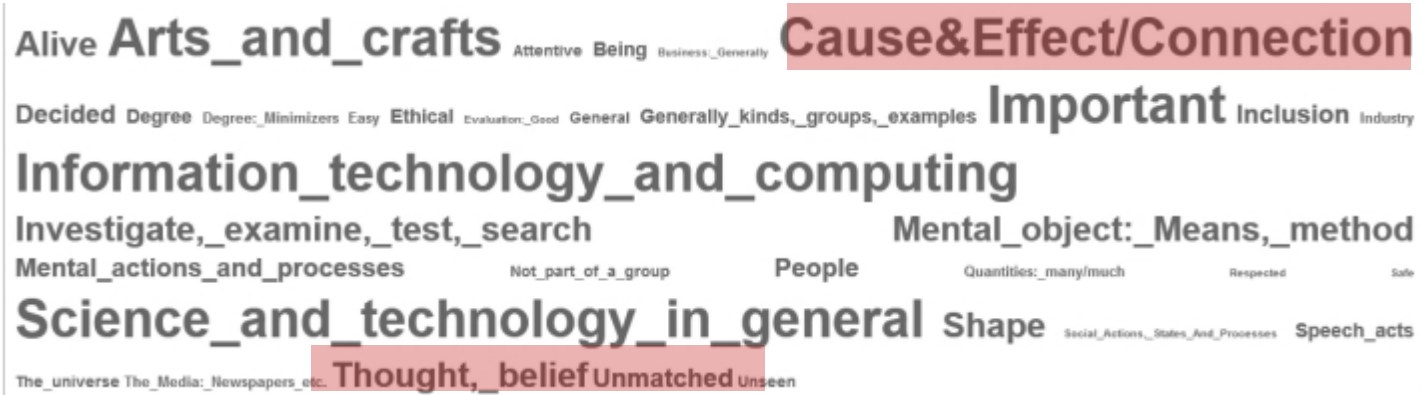
Q3: ST

Values Shape Tech vs Spoken English

“Engineers are not taught to be reflexive in understanding the context of their own worldviews and cultural hegemonies”

“Even one has values i.e. , reasons and priorities for what catches their interest”

“Values influence the problems we choose to address , how we address them , and where”





Q6: WF

Motivation to Publish vs Spoken English

(sorted on log-likelihood (LL) value threshold = 6.35; freq = 5)

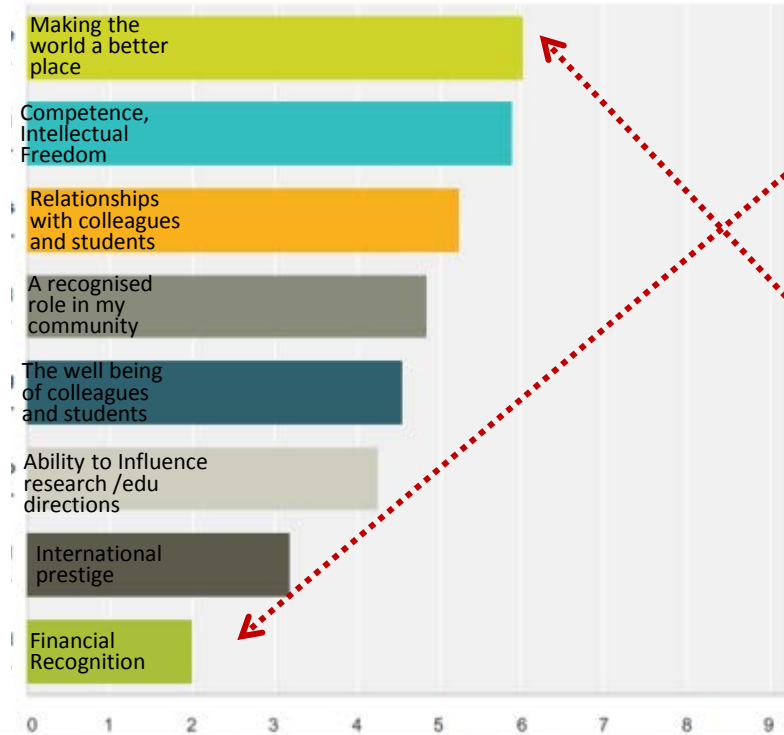
“Recognition , but not simply for prestige but for discussing my ideas”

“Being part of the conversation , sharing my knowledge , getting recognition , not losing my job”.

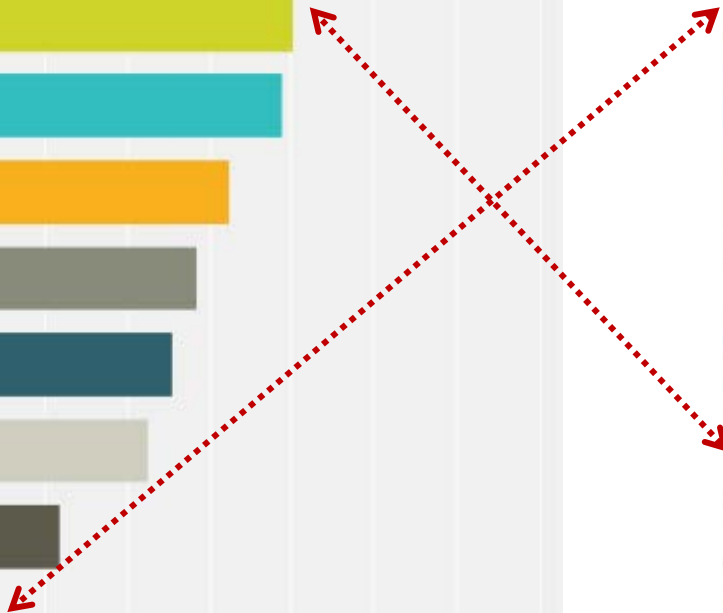
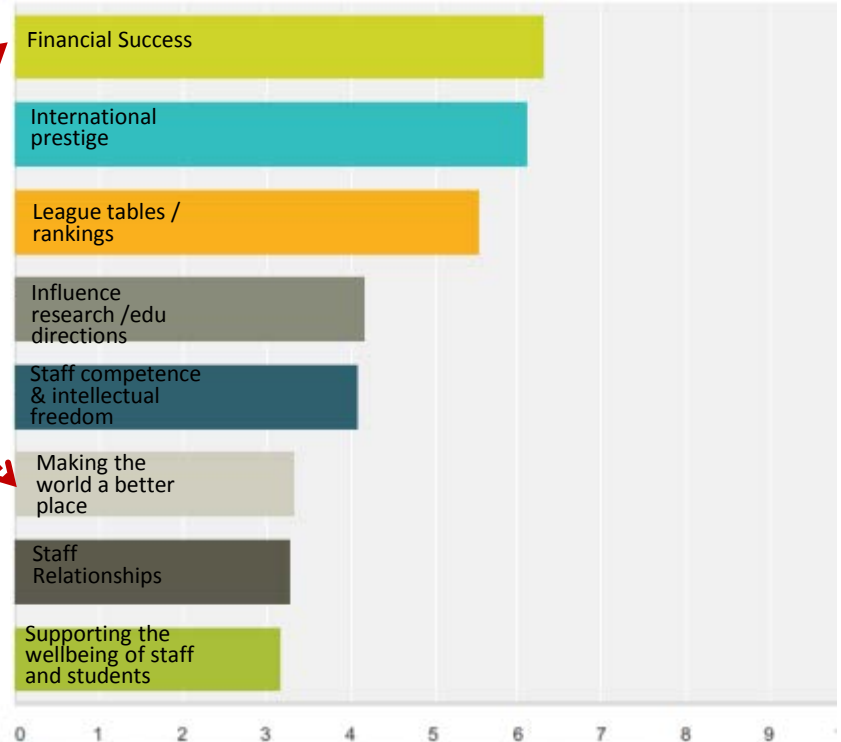
's also am and as **audience** but by career **colleagues** **community**
 conferences do **feedback** **field** for from get getting help ideas
 impact improve in_order_to international it job knowledge learn make means meet
 meeting more **my** of other others part people **publish** **recognition**
research results **share sharing** students system that their there they **to**
 used value we what with **work** world **you**

Values Ranking

Personal

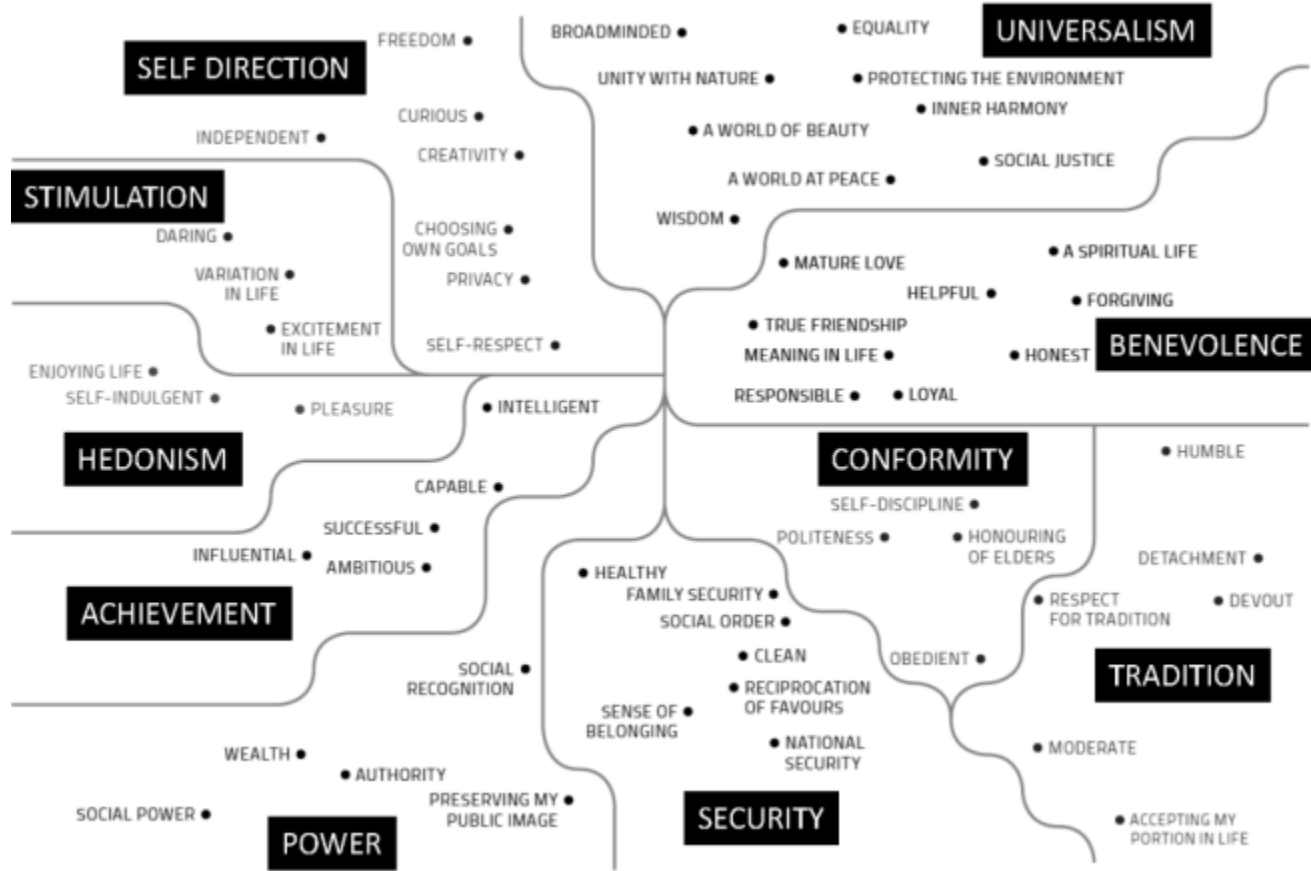


Institution





Values Structures {Schwartz '92}



Discussion points

- Burning questions / observations
- Data sharing for different data visualisations / analysis / approaches

{BREAK}



Values Ensembles



Education

Respect

Care for others

lost sight of goals
(means we made)

honesty

Stress
is
toxic
to
relationships

Integrity

life vs work
I don't understand
the question



Bistro Vendôme

4.2 ★★★★★ · 110 reviews · \$\$

French Restaurant

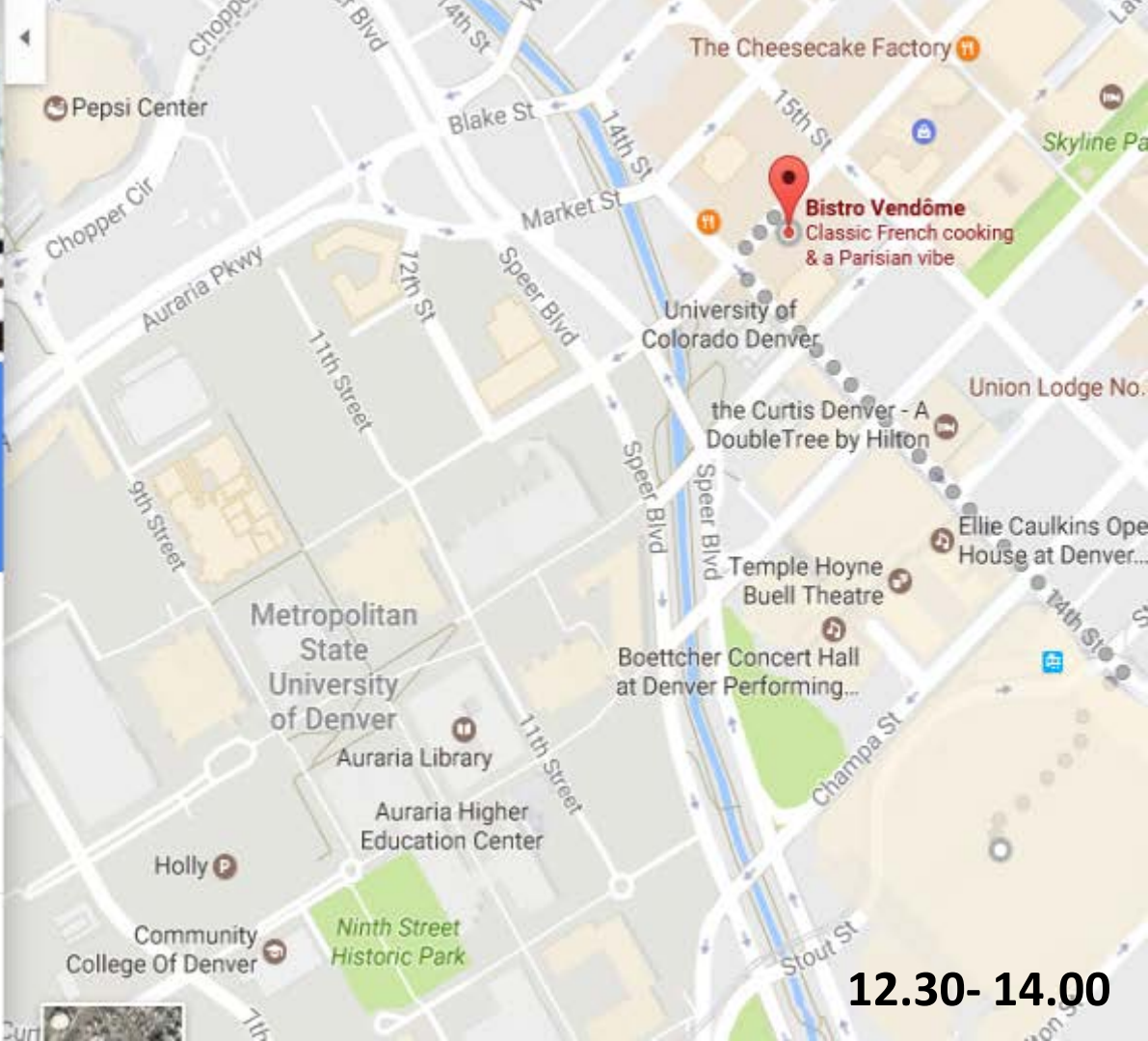
Directions

SAVE NEARBY SEND TO YOUR PHONE SHARE

Traditional Left Bank-style cafe with a garden crafting slightly modern twists on French standards. - Google

1420 Larimer St, Denver, CO 80202

Located in: Larimer Square



12.30- 14.00

Denver Manifesto & Next

15:15 – 16:00 Synopsis & Discussion

Denver Manifesto First draft

16.00 – 16.15 Break

16:15 – 17:00 [The Denver Manifesto](#) & Dissemination

