

European Social Survey Data

Maud Nalpas // Interview DAIN Studios, 11.02.18

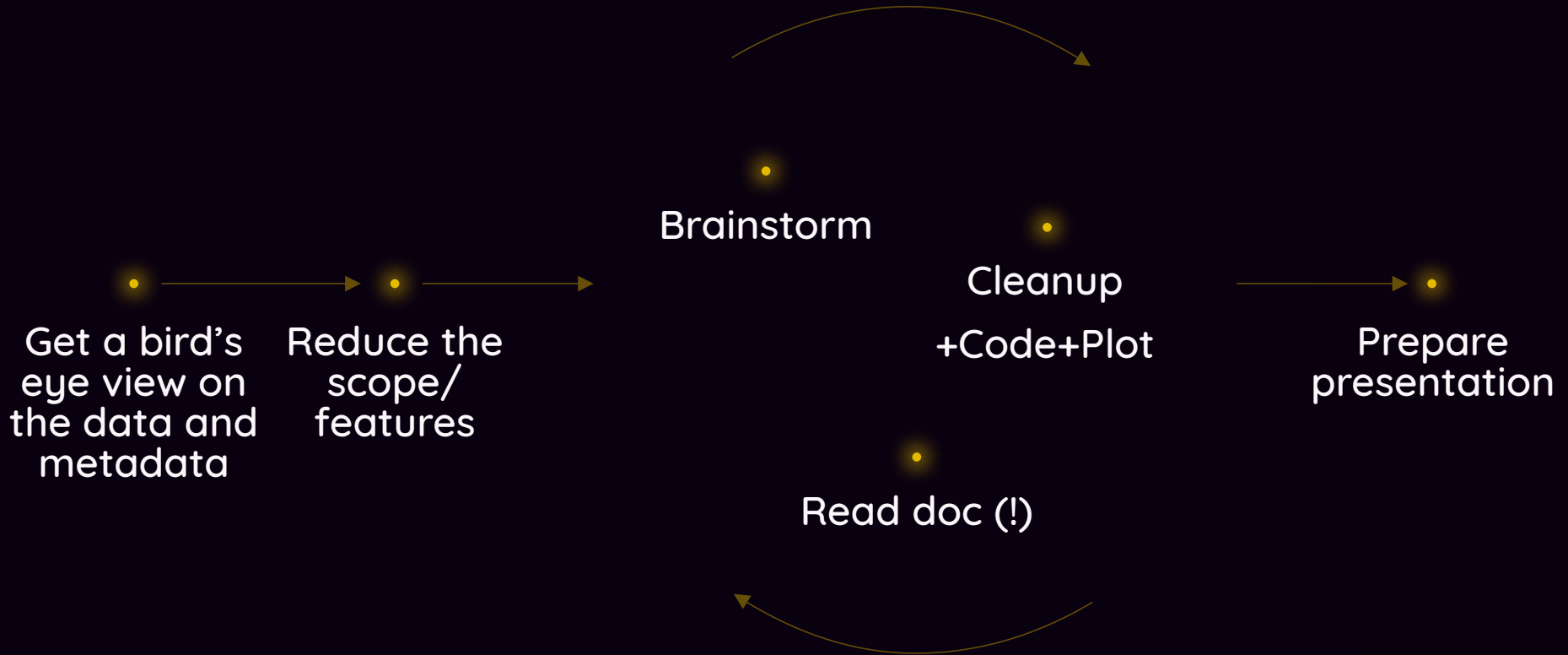
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1. Approach
 2. Data Analysis
 3. Retrospective
 4. Your questions

A large, stylized number '1' in a light gray color, positioned on the left side of the slide. The background features a dark purple and black geometric pattern of triangles and chevrons.

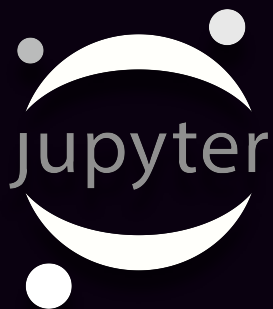
APPROACH

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WORKFLOW



TOOLS



seaborn



Notebook: <http://157.230.25.18:8888/notebooks/dain.ipynb>



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ANALYSIS

/ 4

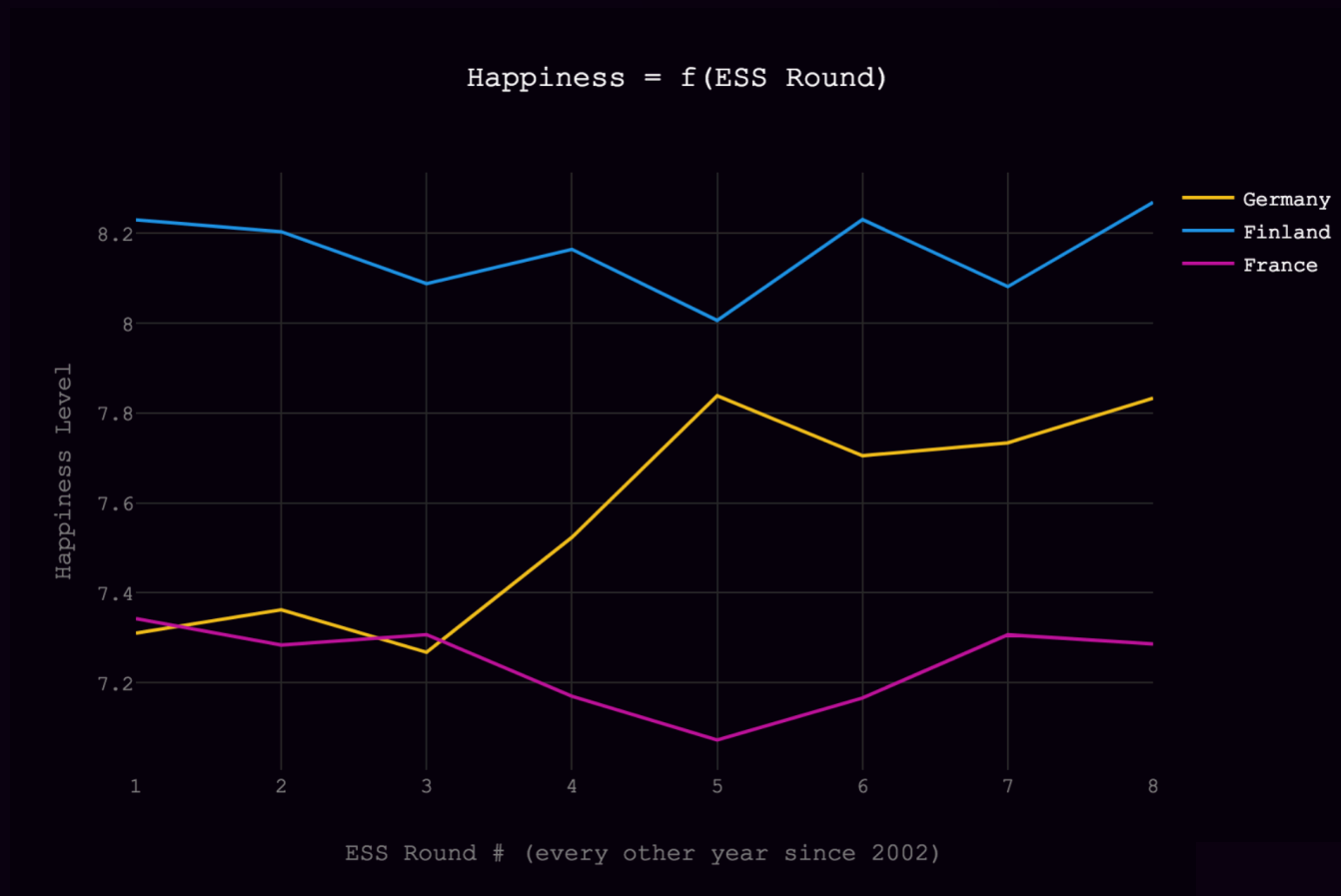
SCOPE

3 countries (DE, FI, FRE)

Happiness

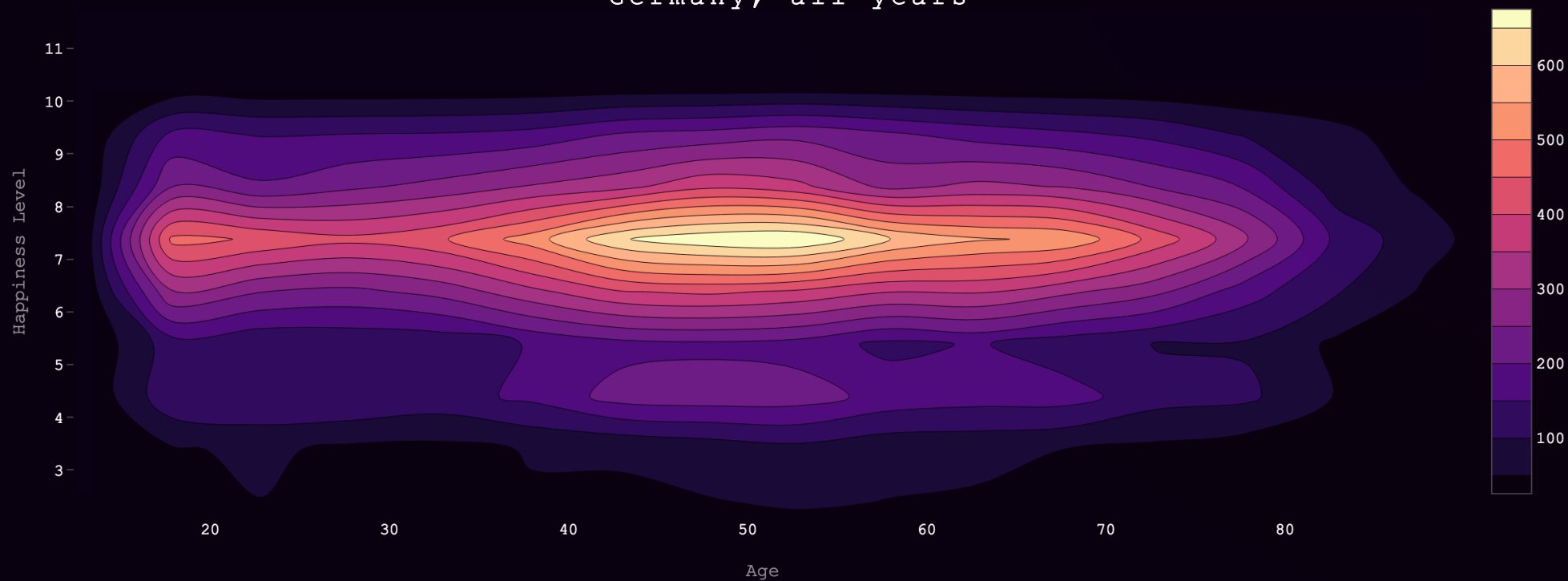
Human Values

BY COUNTRY



DISTRIBUTION

Age/Happiness 2D Histogram
Germany, all years



CORRELATION?

Happiness correlation matrix (Pearson), Germany, all years

```
In [4]: #####  
# CORRELATION: HAPPINESS VS OTHER FEATURES  
#####
```

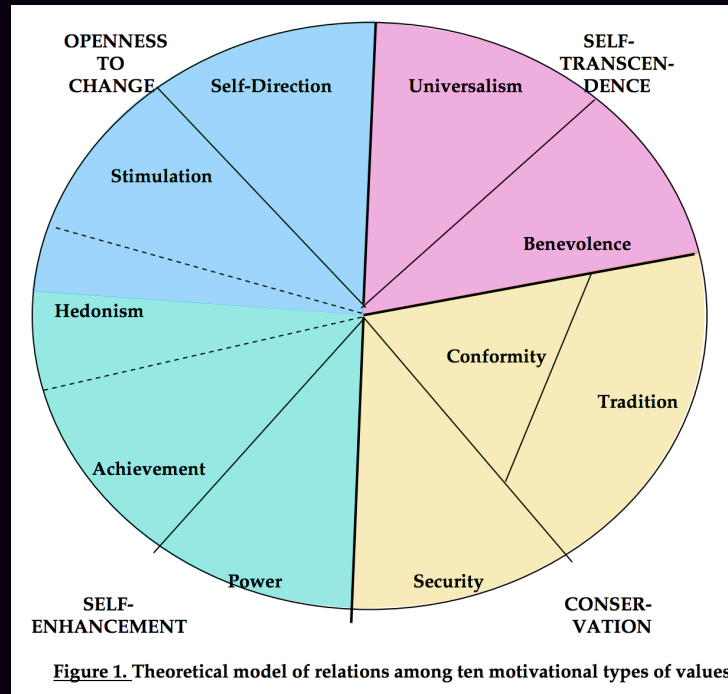
```
corr_happiness_others = dfs_by_country["DE"][["agea", "happy", "scimeet", "health",  
                                              "hlthhmp", "hhmmb", "gndr",  
                                              "partner", "chldhhe",  
                                              "edulvia", "eduyrs", "wkhtot"]].corr();  
corr_happiness_others.style.background_gradient()
```

Out[4]:

	agea	happy	scimeet	health	hlthhmp	hhmmb	gndr	partner	chldhhe	edulvia	eduyrs	wkhtot
agea	1	0.0727557	-0.0637979	0.215246	0.0376862	-0.0626363	0.119653	0.0910806	0.362676	0.415491	0.422205	0.155835
happy	0.0727557	1	0.0161843	-0.132306	-0.165053	-0.0651531	-0.104348	-0.0101929	-0.0826181	0.0680646	0.208943	0.247223
scimeet	-0.0637979	0.0161843	1	0.346475	0.490439	0.394681	-0.178938	0.466212	-0.00519208	-0.0387233	-0.0873788	0.179148
health	0.215246	-0.132306	0.346475	1	0.322816	0.395769	-0.098202	0.241456	-0.07424	-0.030447	-0.128491	-0.219033
hlthhmp	0.0376862	-0.165053	0.490439	0.322816	1	0.627939	-0.219469	0.598444	-0.113807	0.0244814	-0.0538317	0.222877
hhmmb	-0.0626363	-0.0651531	0.394681	0.395769	0.627939	1	-0.144946	0.588543	-0.0285502	-0.0209122	-0.0663936	0.0607902
gndr	0.119653	-0.104348	-0.178938	-0.098202	-0.219469	-0.144946	1	-0.0793455	0.232133	0.10709	0.0921518	0.0190307
partner	0.0910806	-0.0101929	0.466212	0.241456	0.598444	0.588543	-0.0793455	1	0.0148036	-0.0887801	0.0715956	0.331215
chldhhe	0.362676	-0.0826181	-0.00519208	-0.07424	-0.113807	-0.0285502	0.232133	0.0148036	1	0.11033	0.0625817	0.0604511
edulvia	0.415491	0.0680646	-0.0387233	-0.030447	0.0244814	-0.0209122	0.10709	-0.0887801	0.11033	1	0.317931	0.105378
eduyrs	0.422205	0.208943	-0.0873788	-0.128491	-0.0538317	-0.0663936	0.0921518	0.0715956	0.0625817	0.317931	1	0.329402
wkhtot	0.155835	0.247223	0.179148	-0.219033	0.222877	0.0607902	0.0190307	0.331215	0.0604511	0.105378	0.329402	1

Same for values: no obvious correlation

HUMAN VALUES

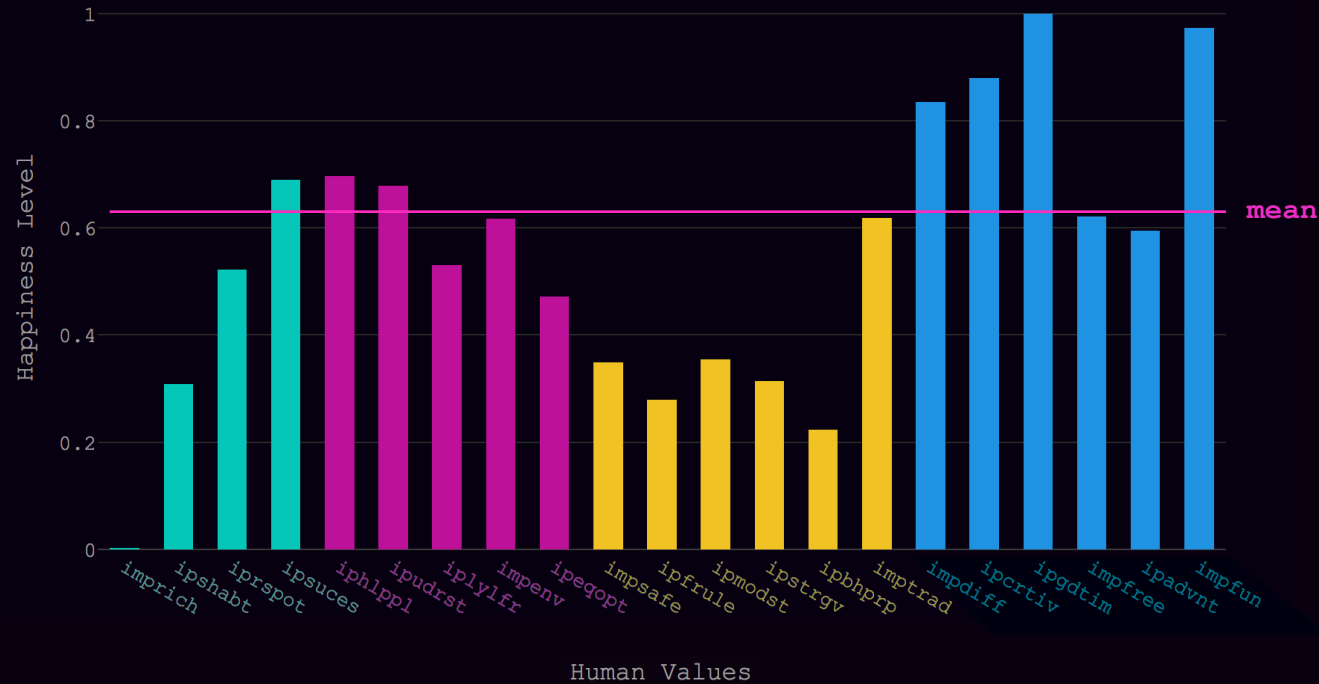


Source: http://www.europeansocialsurvey.org/docs/methodology/core_ess_questionnaire/ESS_core_questionnaire_human_values.pdf

HUMAN VALUES

Happiness Level = $f(\text{Human Values})$, normalized (min/max)

Germany, all years



Be rich /
admired /
respected /
successful

Help / Understand
others, be loyal,
everyone is
treated equally,
care for nature

Be safe, behave,
follow the
traditions/rules,
be modest, strong
government

Have fun, seek
pleasure and
adventures, feel
free, be
creative, try new
things



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RETROSPECTIVE

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IMPROVEMENTS

Violin charts

Weights

T-test mean

No linear correlation for happiness vs X

=> Multivariate Analysis?

No linear correlation for happiness vs X

=> ML methods (Non-linear)

EXPLORATION IDEAS

Happiness vs values: value combinations

By country

Correlations across values



4

YOUR QUESTIONS

/ 4



THANK YOU
DANKE
KIITOS

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