

1.7 Measuring basic human values

Session chair:

Shalom Schwartz; Hebrew University of Jerusalem, Israel

This session takes place on:

Thursday, July 21; 9:00 to 11:00
Thursday, July 21; 11:30 to 13:30
Thursday, July 21; 15:00 to 17:00

Presentations:

- Invited presentation: *The Structure And Implications Of Individuals' Value Systems* - Shalom Schwartz (Israel)

Contributed presentations:

- *Bringing Values Back In: A Multiple Group Comparison with 20 Countries Using the European Social Survey 2003* - Eldad Davidov, Peter Schmidt (Germany), Shalom Schwartz (Israel)
- *European Value Map: Generations And Countries* - Hans Bay (Denmark)
- *Structural Equivalence Of The Values Domain Across Cultures: Separating Sampling Fluctuations From Systematic, Meaningful Variation* - Johnny Fontaine (Belgium), Ype H. Poortinga (Netherlands), Luc Delbeke (Belgium), Shalom Schwartz (Israel)
- *The Measurement Of Value Preferences By Paired Comparisons* - Michaela Brocke, Wolfgang Bilsky (Germany)
- *A Two Dimensional Model For Presenting Values Measured With Schwartz' 21 Item Portrait Values Questionnaire* - Markku Verkasalo, Jari Lipsanen (Finland)
- *Value Orientations in Europe. One Kind of European Identity?* - Florian Pichler (Austria)
- *Organizing Diverse Sets Of Data With The Schwartz' Value Circle* - Micha Strack (Germany)
- *Social values: saltence and consensus in 10 European countries* - Alice Ramos, Jorge Vala, Henrique Duarte, Diniz Lopes (Portugal)
- *Attitudes and values of the Europeans: a gender perspective* - Anália Torres, Rui Brites, Rita Mendes, Tiago Lapa (Portugal)
- *Explorative And Confirmatory Factor Analysis In The Study Of Values* - Andu Rämmer (Estonia)

Thank you, Shalom, and not only for these outstanding session, but especially for your and Bilsky's discovering of the values circle that we all enjoy in our research.

In the following I would like to discuss four reasons, why the value circle seems to be capable to organize a variety of research: the reasons call: scaling, models, data and milieus.

Organizing diverse sets of data with the Schwartz' Value Circle

Micha Strack
University of Goettingen, Germany

Presented at the The First EASR Conference (European Association for Survey Research), July 18-22. 2005, Barcelona, Spain. Abstracts are available at: <http://sqp.nl/easr/programme/abstracts.pdf>

Scaling
Models
Data
Milieus

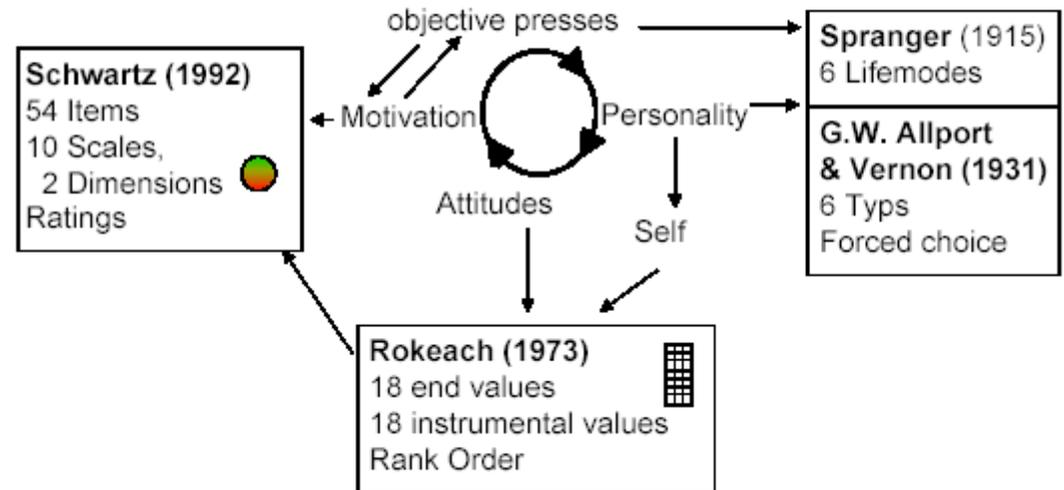
Scaling: In early measurements of values Spranger's types were prominent – but Types are categories, scaled mere nominal.

Rokeach started anew, his list of values was to be rank-ordered and gave ordinal scales - and therefore large tables and only nonparametric statistics.

The multidimensional scaling (or smallest space Analysis) helped the research to get statistically acceptable: the Schwartz Values Circle is continuous, parametrical, and simple.

Scaling
Models
Data
Milieus

Scaling: from Types to Dimensions

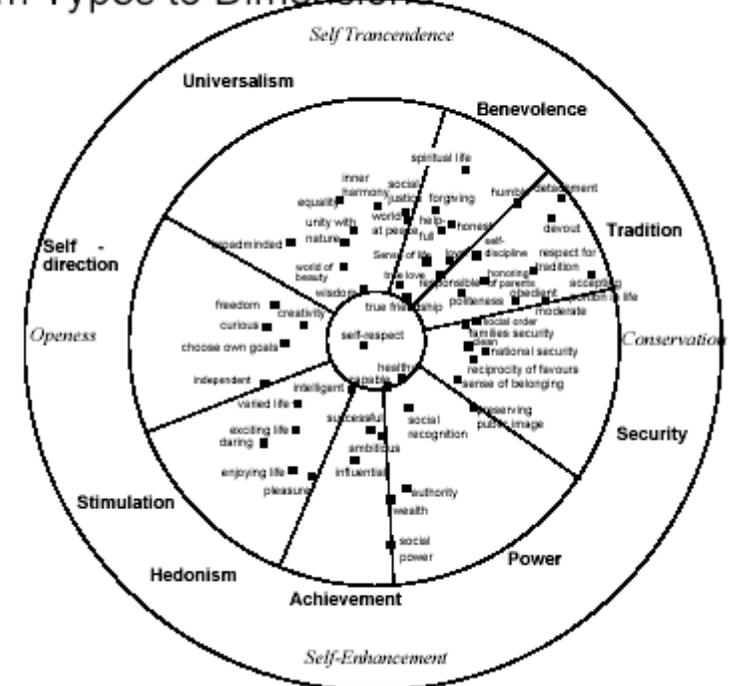


Why do I like the cycle so much? Not only while it allows me to compute parametrical statistics. Three other reasons add to my flow: The second reasons is the circle's compatibility with other content-models in the field of values.

Scaling
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Milieus

Scaling: from Types to Dimensions

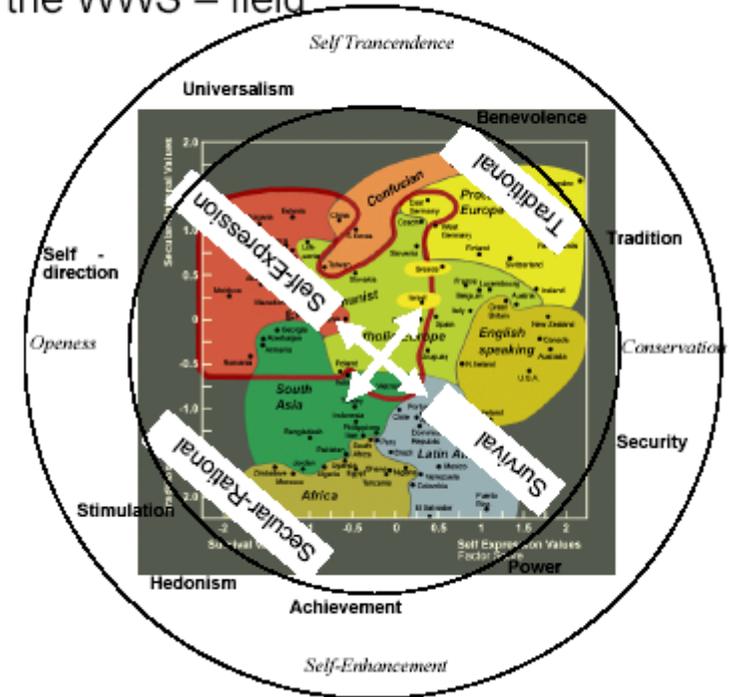
Schwartz (1992)
Universal
Semantics:
The Value Circle



For example, I propose, that Inglehardt's Intercultural map (see http://www.worldvaluessurvey.org/statistics/some_findings.html) may be turned – let's say 135 degrees to get the Schwartz-Cirlce. I wonder, if you (and if Inglehardt) can accept it.

Scaling
Models
Data
Milieus

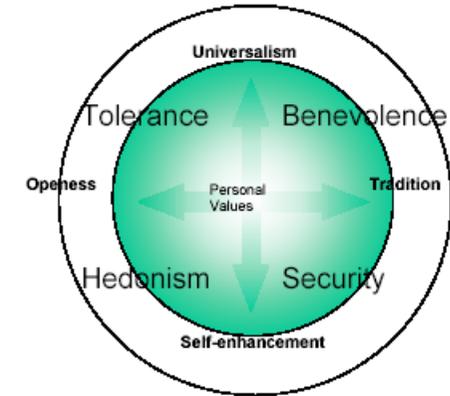
The SVC & the WWS – field



These is my simplification of the Schwartz-Value-Circle.

Scaling
Models
Data
Milieus

The SVC



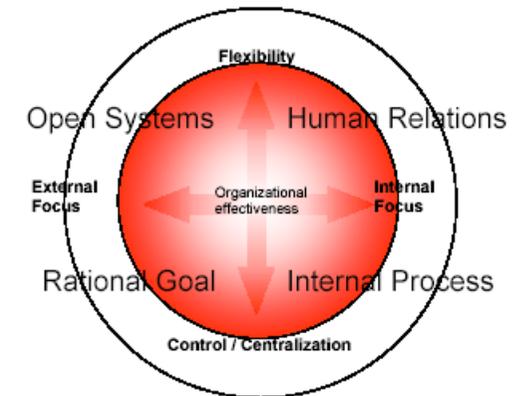
In organizational theory, Quinn and Cameron developed a circle they called Competing Values Model,..... which was also based on empirical results of an multidimensional scaling of organizational effectiveness criteria, conducted in 1983.

I mirrored the horizontal axes.

Perhaps you may agree, that this circle for organizational cultures, leadership and management success offers a nice fit to the personal values Schwartz-Circle.

Scaling
Models
Data
Milieus

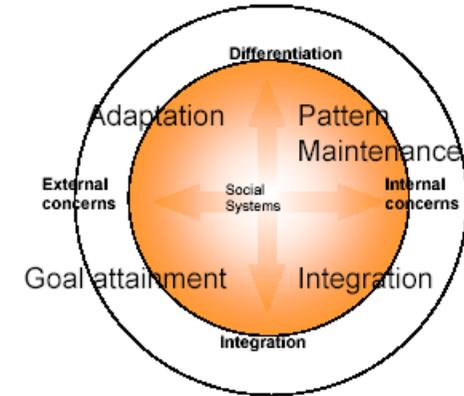
The SVC & the Competing Values Model CVM
Cameron & Quinn 1999; Quinn 1988



As Quinn reminds himself of Parsons, we can draw Parsons model of dilemmatic functions, social systems in general ought to fulfill to survive in that circular – form, too.

Scaling
Models
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Milieus

The SVC & the Functions of Social Systems
Parsons 1951

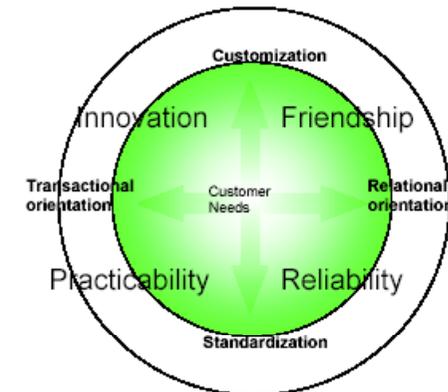


At least, I adapt the models communality for marketing questions concerning the values of customer orientation.

That integrating power on the level of content model theories was my second reason. My third reason is going back to the data.

Scaling
Models
Data
Milieus

The SVC & a Customer Orientation Circle
Strack et al 2004



Data.

Factor analysis is a very common method, Why not computing the axis with the explorative factor analysis?

Markku Verkasalo & Jari Lipsamen on this conference have done heard very the same (not exactly, they extracted three factors from the raw data, chucked out the first and rotated the other two).

This data I got from my German colleague Manfred Schmitt; the eigenvalues show – as in all other raw data I will present in these section - the big first eigenvalue, which in importance-ratings usually is mere acquiescence! (response style).

If I subtract each subjects mean-level from each single answer, I get ipsated scores (or: centred scores, as Shalom Schwartz called them).

Scaling
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The SVC is confirmed by factor analysis

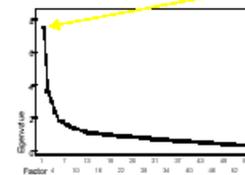
Schwartz-Value-Survey

58 Values

Ratings [-1, 7], raw scores

Sample: 535 Teachers & Students
(Schmitt et al 1999)

eigenvalues Scree: acquiescence



Ipsated scores thereafter give eigenvalues which show - according to the Scree-Test - an impressive elbow - the base to extract two factors. The loadings plot, which plots the correlation of the ipsated items with their own factors, shows the picture so well known.

Advantage of factor analysis over the SSA ore other MDS procedures is: Factor scores are saved automatically.

Scaling
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Milieus

The SVC is confirmed by factor analysis

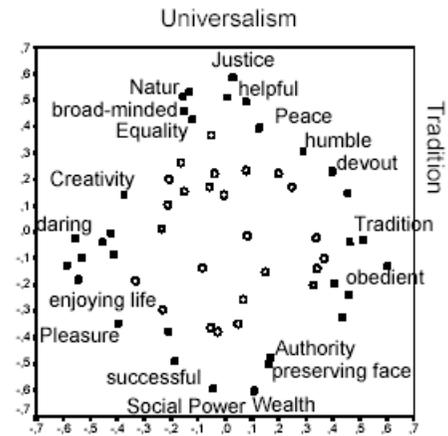
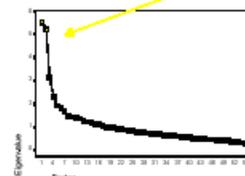
Schwartz-Value-Survey

58 Values

Ratings [-1, 7], ipsated.

Sample: 535 Teachers & Students
(Schmitt et al 1999)

eigenvalues Scree 2. Factors!



Factorizing the 10 scales – of course after the elimination of the acquiescence – also leads to the circle, we all are acquainted with.

Besides, I make experiments with colors, I wonder, if you'll like this.

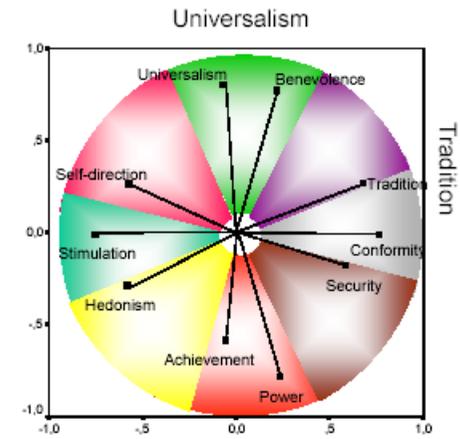
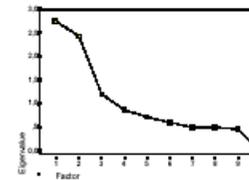
Scaling
Models
Data
Milieus

The SVC is confirmed by factor analysis

Schwartz-Value-Survey

10 Scales
mean ratings, ipsated
Sample: **535** Teachers & Students
(Schmitt et al 1999)

eigenvalues Scree 2. Factors!



Meeting the EASR Conference's interest in the ESS, I - quickie - made a factor loading plot of Schwartz PVQ from the first round of the ESS v5.1.

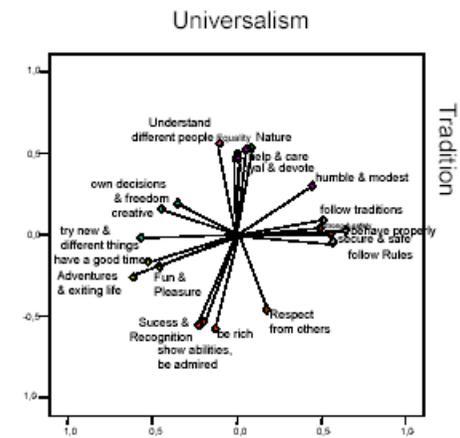
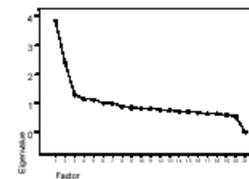
Scaling
Models
Data
Milieus

The SVC is confirmed by factor analysis

Schwartz Portrait Value Q.

21 Self-descriptions
Ratings [1, 6], ipsated.
ESS-Sample: **37748** Europeans
no weighting, total variance

eigenvalues Scree 2. Factors

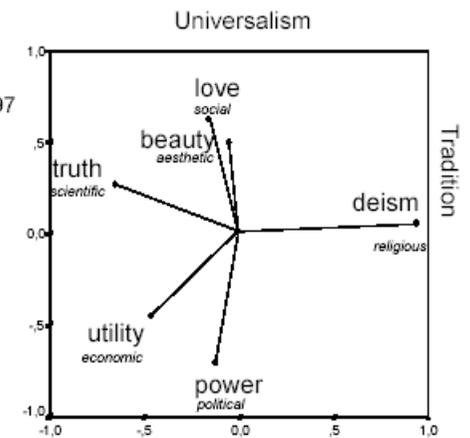
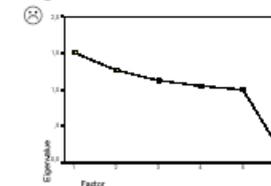


With these procedure I extract and save the circles axis in a diversity of values data:
 First, the funniest data I have, are some of the Spranger-Types: You find the Truth, the Beauty and the Good!
 My German college Lantermann from Kassel gave me that data, the Eigenvalues are dissatisfying, but the items content is a classic one.

Scaling
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Milieus

The SVC is confirmed by factor analysis

Life modes **Spranger 1915**
 (Allport & Vernon 1931)
 Short-form: Lantermann et al. 1997
 6 Ratings [1,3], ipsated
 Sample: 494 guests of the
 Exhibiton 'Body Worlds'
 1997 Mannheim, Germany
 eigenvalues Scree no elbow



My German Colleague Manfred Schmitt gave me data of his survey on "Justice as a inner-German-Problem", pointing out our re-unification problems.
 They measure 13 values by a rank-ordering-procedure.
 From a statistical point of view, rank orders gave a bad data quality, the eigenvalues do reflect this.

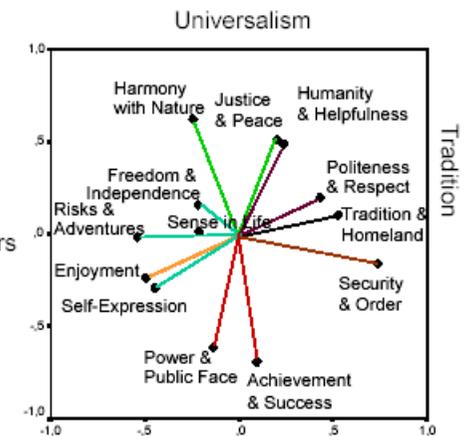
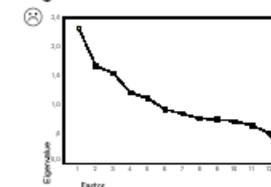
However, I was surprised, how well these items loadings fit our circle, anyway!

Scaling
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The SVC is confirmed by factor analysis

GIP - Survey,
 Schmitt et al. 1997
 13 Values, Rank-order!
 Sample: 1743 Germans

eigenvalues Scree: 1/3. Factors



Going back to the large survey data. I reanalyze the so called Schell-Youth Study, a representative Sample of German Youth, aged between 15 and 24, surveyed in the Millennium Year.

The primary researchers asked for the importance of 48 topics. After ipsatation, the loadings match the segments - as I clustered them by color, here. Security is expressed by job orientation. Self expression is intermixed with hedonism, the latter comprises fun, money and beauty. Religion was not mentioned).

However, it seems that the Schwartz' value Circle emerges - the model therefore organizes value data from other researchers, too.

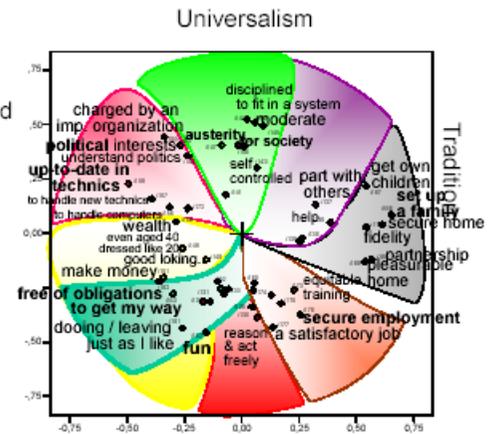
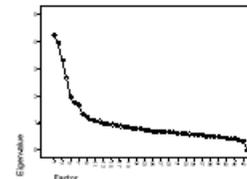
Scaling
Models
Data
Milieus

The SVC is confirmed by factor analysis

SHELL- Youth Study 2000

48 topics, ratings [1,5], ipsated
Sample: 4546 adolescents
15-24 years

eigenvalues Scree: 2. factors



Two years later, Klaus Hurrelmann conducted the Shell Youth Study, starting with 12 years old children.

He asked for 24 Values. If isated, they also covariate nicely around the circle. As most respondents were young, partnership, friends and an own family here is a topic of self direction.

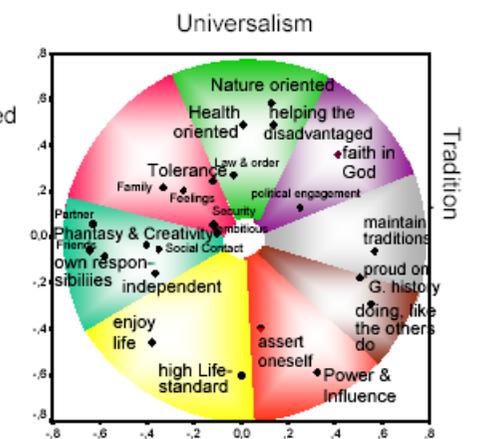
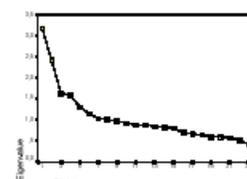
Scaling
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The SVC is confirmed by factor analysis

SHELL- Youth Study 2002

Hurrelmann et al., ZA Köln
24 Values, ratings [1,7], ipsated
Sample: 2515 adolescent
12-25 years

eigenvalues Scree: 2. factors



Going back to the adults, the ALLBUS, an acronym of: German general Citizenship-Survey, which is done all two years by the ZUMA – in English: the Centre for Survey Research and Methodology (Cologne).

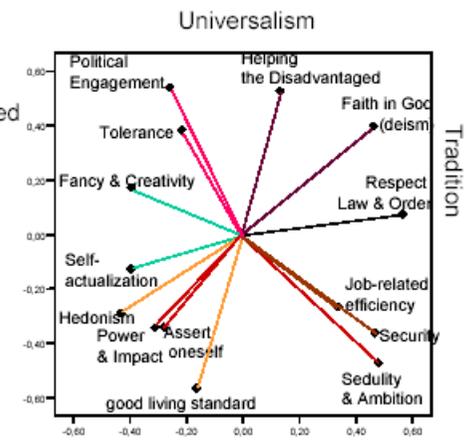
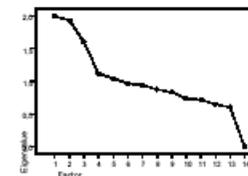
- They, in 2002, asked for the importance of 14 values.
I propose to give them our circular structure.

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The SVC is confirmed by factor analysis

ALLBUS 2002
ZUMA, Cologne
14 Values, ratings [1-7], ipsated
Sample: 2820 repr. Germans

eigenvalues Scree: 2. factors



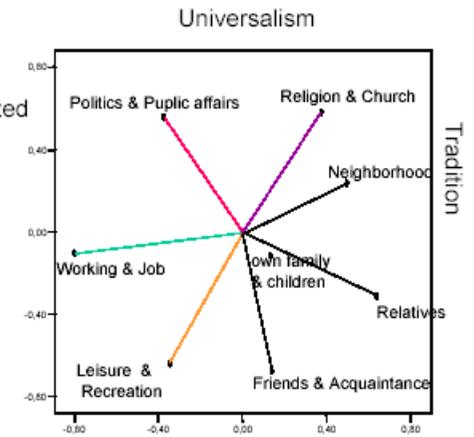
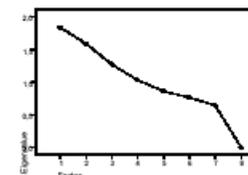
The ALLBUS in 2000 and in 2004 did not include values, but in 1998 (and in some older surveys) – at least – the importance ratings of 8 life domains were included, perhaps they may be interpreted as values, too. - as it is shown here by factor analysis of ipsated scores: we got a near satisfying circle.

Scaling
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The SVC is confirmed by factor analysis

ALLBUS 1998
ZUMA, Cologne
8 Domains, ratings [1-7], ipsated
Sample: 3178 repr. Germans

eigenvalues Scree: 2. factors



In my own questionnaire, I selected 28 values from the Schwartz-Value-Survey 1992, from the factors loading plot I've shown in the beginning (page 7).

I paired competing items from the circles out-most positions, and combined 14 bipolars.

So subjects had to choose, which value they prefer, let's say between equality and authority, on a bipolar 5 point scale. That's rather similar to Brocke & Bilskys approach (but shorter, as it already rely on the circle).

Afterwards, factor analysis gave these – I think satisfying – circle, which shows itself very robust.

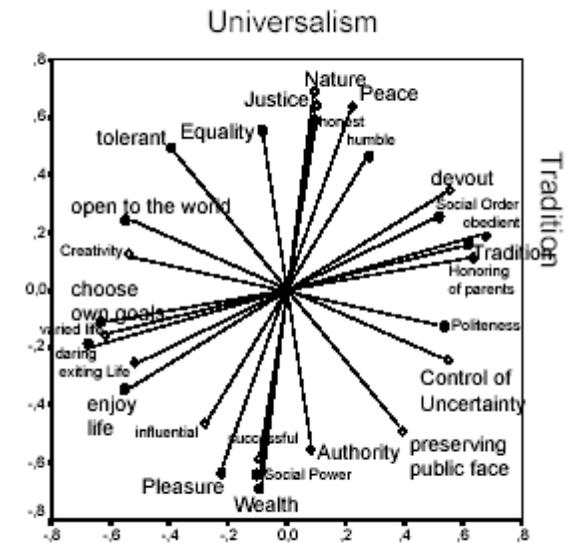
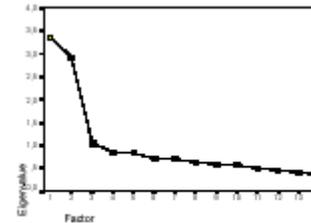
Scaling
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The SVC is confirmed by factor analysis

Own questionnaire

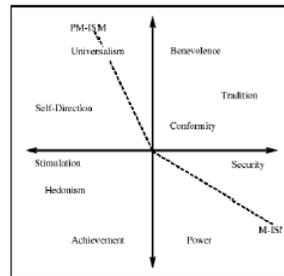
14 Bipolar- Values
Sample: N=739

eigenvalues Scree: 2. factor!



In sake of the time I want to continue with my fourth reason for the Schwartz - Circle, which is the following:
 If the circle is confirmed by explorative factor analysis in diverse sets of survey data, why not reanalyzing these surveys?
 For example, you might know, that Wilson recently published the Inglehardt's Materialism/Postmaterialism measure in a newly assessed student sample.

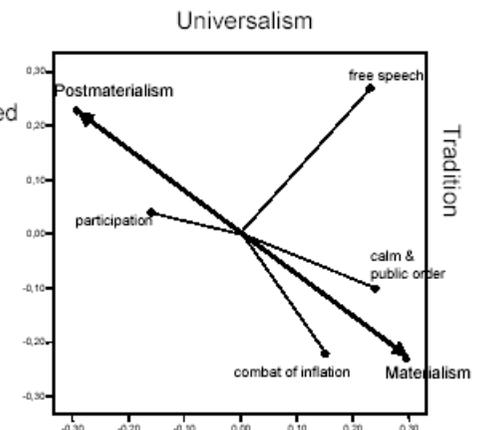
Wilson 2004, JSocPsy 145



Scaling
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The SVC & the Inglehardt Postmaterialism-Index

ALLBUS 2002
 ZUMA, Cologne
 14 Values, ratings [1-7], ipsated
 Sample: 2820 repr. Germans
 Correlations



In the German ALLBUS – Survey from 2002 – I've already shown you its value assessment (page 11) – the Inglehardt- Postmaterialism scores can be simply correlated with the circles axis.

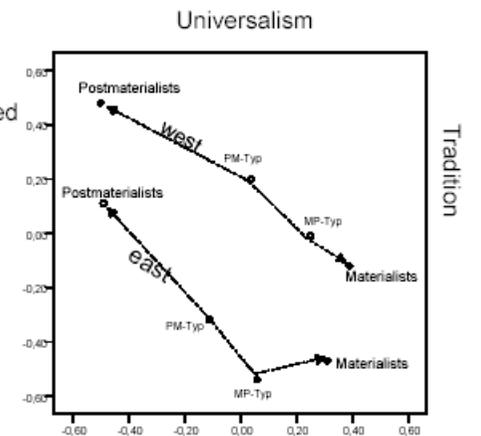
In the upper Figure on the right you have the correlations..... of course, still Correlations of mere values.

And here you have the means of the Ingelhardt Types. I differentiate respondents from the west and the east of Germany: West Germans prefer self-transcendence, the east's show themselves more self-centred. As the axis are from factor analysis with a mean of zero and a standard deviation of one, you can read the difference between east and west as an effect of middle size according to the Cohen's conventions (we use in psychology).

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The SVC & the Inglehardt Postmaterialism-Index

ALLBUS 2002
 ZUMA, Cologne
 14 Values, ratings [1-7], ipsated
 Sample: 2820 repr. Germans
 Means



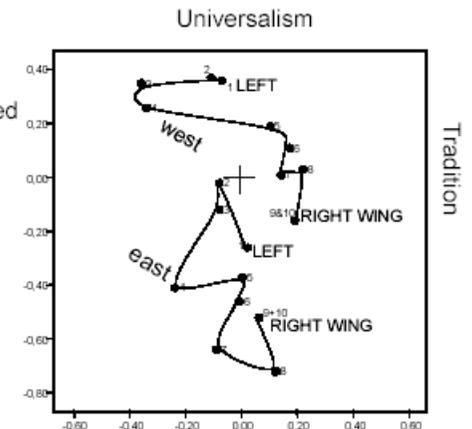
Values predict political behaviour – these is the famous left-to-right-wing self placement scale. I plot each answers groups mean.

Right wings prefer security, left wings prefer universalism. But, due to the large difference of west and east Germany, lefts from the east matches the right wings from the west.

Scaling
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The SVC & the left-to-right self-placement

ALLBUS 2002
ZUMA, Cologne
14 Values, ratings [1-7], ipsated
Sample: 2820 repr. Germans
Means



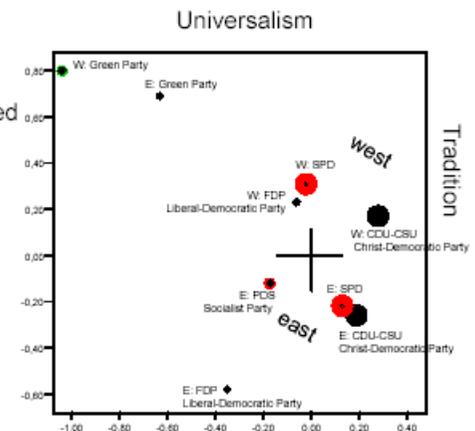
Values predict political behaviour – in two month (September 2005) we have to vote in Germany, these here is the election-question three years ago:
I omit small parties voted by less than 15 respondents.

Although most respondents from east Germany located in the lower part of the circle, the ecological or green Party, still engaged in our actual government, is strongly determined by values in both parts of Germany. The difference of the two big parties is small in the West, and – as values are concerned – irrelevant in the East.

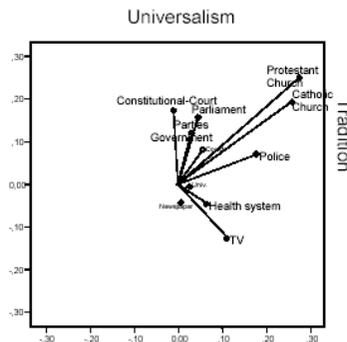
Scaling
Models
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Milieus

The SVC & voting behavior

ALLBUS 2002
ZUMA, Cologne
14 Values, ratings [1-7], ipsated
Sample: 2820 repr. Germans
Means



People with egoistic values didn't vote at all, as they mistrust the political system. Here I correlate trust in institutions.



As these section mentioned milieus, we can correlate attitudes, leisure behaviour, music or TV habits and more. (but these variables were not included in the ALLBUS 2002 I selected for today). Switching from consequences two explanatory variables: the self-placement of social class.

And a more objective indicator. I differentiate the amount of income in quintiles, but you have to note, that the to upper quintiles - with more than 2.500 euro per month - are more frequent in the west, the lower quintiles are more frequent in the east. So in Germany all together, money and class correlates with the security-tolerance diagonal.

Two give a full model of the predictors of values in Germany, - lets say the interaction of income and age is relevant here – is out of the scope of this talk. Here I only want to demonstrate my reasoning chain, that is: due to the factor analytic procedure We can use the circle to describe causes and consequences, using correlations and groups means in pictures, which together merges to milieus.

Thank you, for your attention.

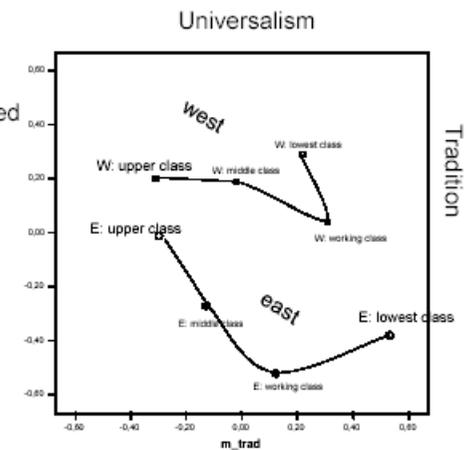
mstrack@uni-goettingen.de

Scaling
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The SVC & social class (self placement)

ALLBUS 2002
ZUMA, Cologne
14 Values, ratings [1-7], ipsated
Sample: 2820 repr. Germans

Means



Scaling
Models
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The SVC & money (household-income)

ALLBUS 2002
ZUMA, Cologne
14 Values, ratings [1-7], ipsated
Sample: 2820 repr. Germans

Means

