

Ancillary Materials supporting *Personal Values and Political Opinions*

These ancillary materials are available upon request from the author. The first section presents a series of correlational analyses between the two dimensions of human values and various demographic characteristics. The second section presents a multi-dimensional scaling analysis of the European Social Survey (ESS) survey items used to assess human values, the Human Values Inventory (HVI).

Correlates of Human Values

Table A1 displays both the zero-order and partial correlations of each value dimension with several demographic characteristics and a left-right identification scale. The primary entries are overall correlations across western Europe, while beneath each are the correlations of smallest and largest magnitude across the countries.

The partial correlations for openness vs. conformity tend to be more consistent in direction and magnitude across western Europe than benevolence vs. power. Most consistent are the relationships between openness vs. conformity with age and formal education. As citizens age, on average, they become more oriented toward conformity, tradition, and security values. The strongest relationship appears in Germany ($r=.40$, $p<.00$) with the weakest in Portugal ($r=.21$, $p<.00$). In contrast, as individuals attain greater formal education, they become more oriented toward self-direction and stimulation values, with the weakest relationships observed in Finland ($r=-.12$, $p<.00$) and strongest in Austria ($r=-.27$, $p<.00$). Openness values are weakly correlated with increasing income, although this relationship is not robust to controls. There is little or no apparent relationship between openness vs. conformity values with gender and an ethnic minority status.

For benevolence vs. power, the direction of the correlations varies somewhat across western Europe. Benevolence vs. power values are generally uncorrelated with a citizen's educational attainment, although a faint relationship is observed in Spain ($r=-.13$, $p<.05$), Greece ($r=-.14$, $p<.05$), and Portugal ($r=-.14$, $p<.05$), where higher educational attainment is associated with a stronger orientation toward benevolence and universalism. Across most of western Europe, as individuals become older they tend to be more oriented toward universalism and benevolence values, with the exception of Spain ($r=.04$, $p=.29$); a flimsy negative relationship remains in Austria ($r=-.08$, $p<.05$) and Greece ($r=-.06$, $p<.05$).

Benevolence vs. power values are generally uncorrelated with income. For gender, however, women are slightly more likely than men to be motivated by benevolence and universalism, with the strongest correlation found in Finland ($r=-.30$, $p<.05$) and Sweden ($r=-.26$, $p<.05$).

Table A1. Correlates of Human Values across Western Europe

	Zero-Order Correlations		Partial Correlations	
	openness vs. conformity (OCC)	benevolence vs. power (STSE)	openness vs. conformity (OCC)	benevolence vs. power (STSE)
<i>Demographics:</i>				
Age	.39** (.30**, .51**)	-.20** (-.32**, .01)	.30** (.21**, .40**)	-.17** (.04, -.27**)
Education	-.30** (-.40**, -.14**)	.01 (-.11**, .14**)	-.18** (-.27**, -.12**)	-.05** (-.14**, .08**)
Income	-.24** (-.28**, -.09**)	.06** (-.05, .18**)	-.09** (-.09**, .01)	.02* (-.01, .10**)
Ethnic minority	.00 (-.03, .05)	.02** (-.02, .07**)	.02** (-.01, .06*)	.01 (-.06*, .05*)
Female	-.18** (-.32**, -.08**)	-.32** (-.32**, -.09**)	.06** (-.01, .13**)	-.18** (-.30*, -.04)
<i>Predisposition:</i>				
Left-Right	.13** (.00, .22**)	.12** (-.03, .22**)	.13** (-.01, .21**)	.15** (.01, .23**)

Note: Entries for each row category are the overall correlation across western Europe and the correlation range across countries (minimum to maximum) in parentheses. Values are scaled toward the direction of Conservation and Self-Enhancement. The partial correlations control for all other row and human value characteristics. * $p < .05$; ** $p < .01$ (two-tailed tests).

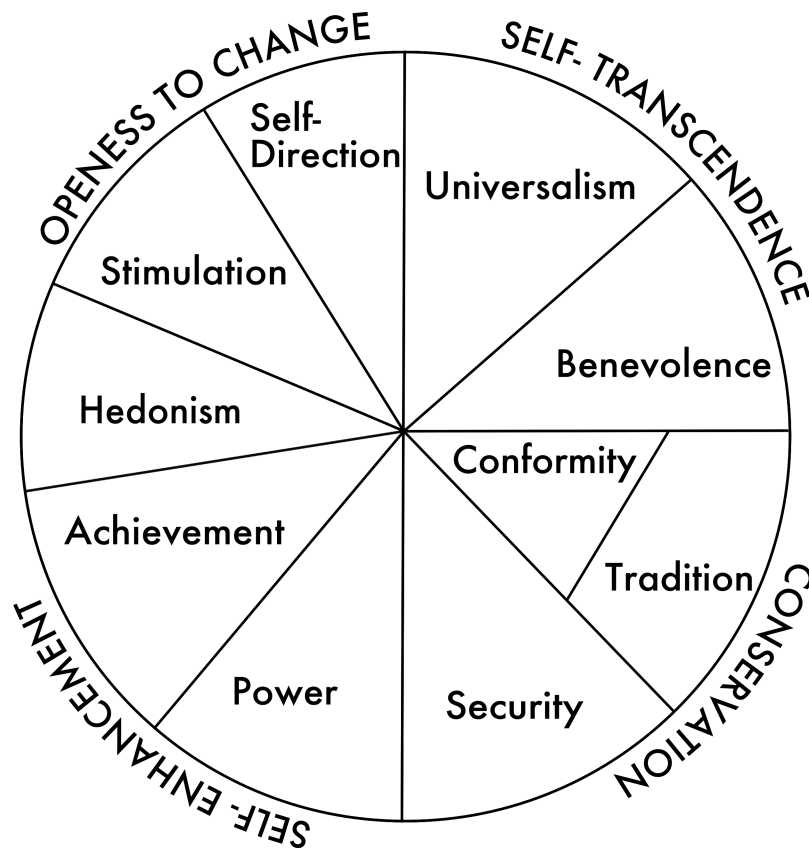
Source: Author's own analysis. Data from European Social Survey 2002-2003.

Theoretical Structure

For the purpose of comparing the theoretical structure to the MDS results, Figure E.1 illustrates the arrangement of the value types within a two-dimensional space. Value types proximate to each other are most logically and practically compatible, such as Universalism and Benevolence, while those on opposite ends of the circle are least so, such as Self-Direction and Conformity. This arrangement forms the two dimensional structure of Openness to Change vs. Conservation and Self-transcendence vs. Self-enhancement. (The hedonism value type does not relate distinctly to this two-dimensional structure. See Schwartz 1992.) If the empirically observed relationships between the survey items of the HVI within each country are consistent with this

theoretical structure, then the MDS projection of the items onto a two-dimensional space should show that a) survey items intended to assess the same value type form a distinct cluster within the space, and b) these clusters are located around the space in an order that matches the arrangement of the value types in Figure E.1.

Figure E.1. Theoretical Structure of Human Value Types in Two Motivational Dimensions



Source: Schwartz (1992).

Two-Dimensional Scaling Results

Figures E.2 to E.16 present the two-dimensional scaling of the HVI, by country across western Europe. Figures E.17 and E.18 present the scaling results for the 2004 and 2005 samples. Each of the points corresponding to survey items are labeled with indicative phrases, such as "obedient" and "behave properly" for the Conformity value type. To clarify the meaning of these phrases, tables E.1 and E.2 list each of the phrases and corresponding statements from the HVI. The points within the space that comprise the value type are connected with an ovular shape, and labeled with the corresponding value type.

As an exemplar, consider the case of Austria in figure E.2. The fit of the HVI through the two dimensional space conforms fairly well to the theoretical structure.¹ Most of the survey items tapping the same underlying value type are located within distinct clusters, though there are some surprising example, such as "follow tradition" and "humble, modest" for the Tradition value type, which span across the Conformity and Security value types. Still, the distribution of the clusters items for each value type throughout the space generally reflect the theoretical order of the value types around the two dimensions. Thus, the upper left quadrant of figure E.2 contains the Power and Achievement value types next to the Stimulation and Self-Direction value types in the upper right quadrant. Below these two, in the lower right quadrant, are Benevolence and Universalism, followed by Tradition, Conformity, and Security to the left. Across the fourteen other countries, the fit of the HVI to the two-dimensional structure is much the same; the reader can compare the figures in E.2 to E.16 with the theoretical structure in E.1.

¹Of course, it is worth noting that there is room for improvement in fit, given that some survey items form more distinct clusters of value types than others. And there is slight variation in the order of the value types around the space across the countries. Whether these differences are due strictly to inherent inadequacies of the HVI is not entirely clear, given the usual problems of cross-national survey research. Beyond the uncertainties of survey instrument translation, there is a confounding influence of slightly varying differences in survey mode administration of the HVI. The HVI was administered as part of a supplementary module to the core European Social Survey. The survey mode for the HVI varied across western Europe, depending on the University survey research group responsible for its implementation. In four countries (Austria, Belgium, Denmark, and Switzerland), the HVI was administered by the interviewer through oral instructions, consistent with the core survey. In other countries (Germany, Great Britain, Greece, The Netherlands), the HVI was mostly completed on paper by the respondent during the interview. Other countries used some combination of these procedures including the administration of the HVI as a supplementary mail survey.

Table E.1. Statement Fragments and Indicative Phrases of the Human Values Inventory, Openness to Change versus Conservation Dimension

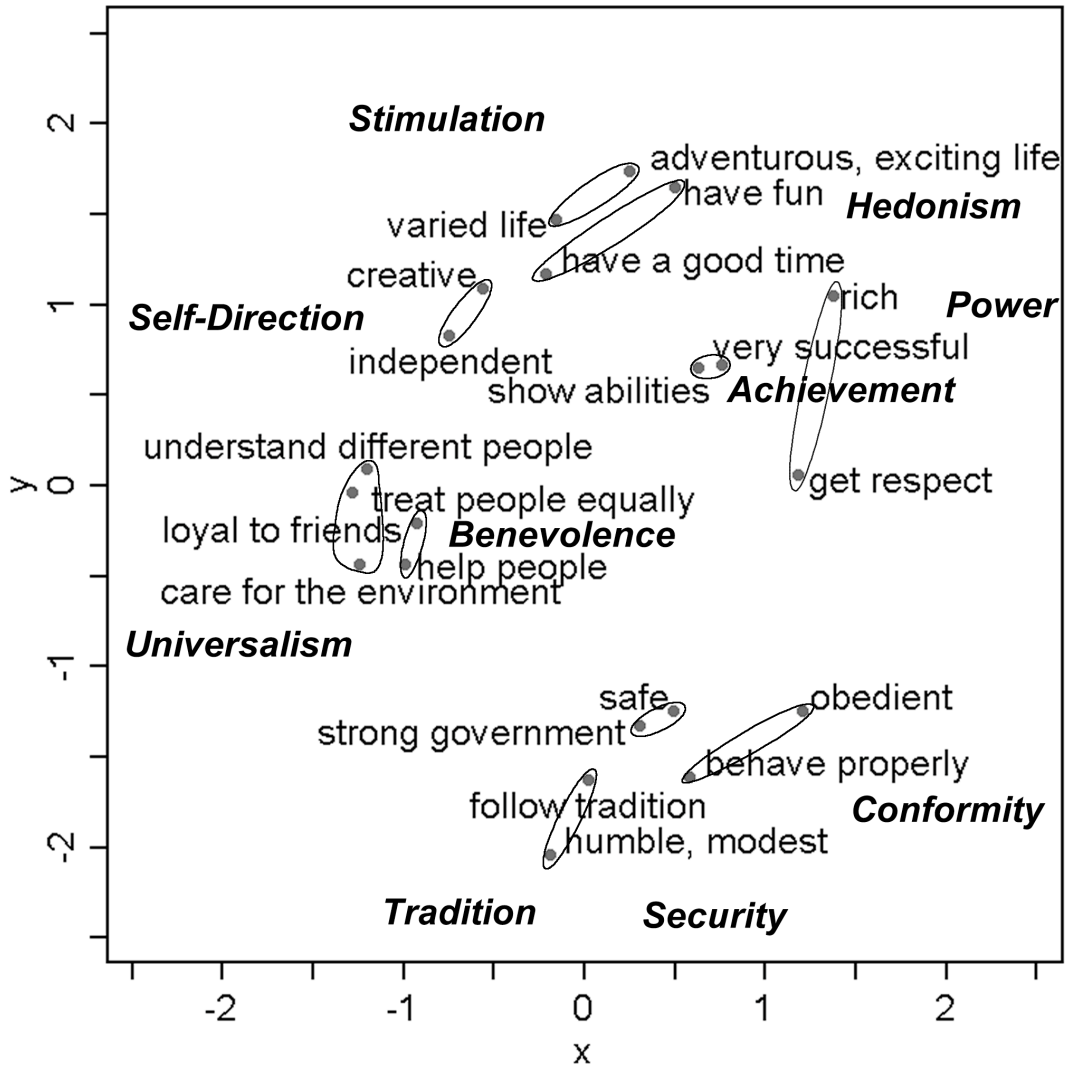
<i>Statement Fragments</i>	<i>Phrases</i>	<i>Value Type</i>
<p>1. Thinking up new ideas and being creative...to do things in ...own original way</p> <p>2. ...to make his own decisions...to be free and not depend on others</p>	<p>"creative"</p> <p>"independent"</p>	Self-Direction
<p>1. ...looks for adventures and likes to take risks. ...wants to have an exciting life</p> <p>2. ...likes surprises and is always looking for new things to do...thinks it is important to do lots of different things in life</p>	<p>"adventurous, exciting life"</p> <p>"varied life"</p>	Stimulation
<p>1. ...people should do what they're told... people should follow rules at all times, even when no-one is watching</p> <p>2. ...always to behave properly...to avoid doing anything people would say is wrong</p>	<p>"obedient"</p> <p>"behave properly"</p>	Conformity
<p>1. ...to be humble and modest...not to draw attention to...self</p> <p>2. Tradition is important...tries to follow the customs handed down by...religion or...family.</p>	<p>"humble, modest"</p> <p>"follow tradition"</p>	Tradition
<p>1. ...to live in secure surroundings. He [she] avoids anything that might endanger his [her] safety.</p> <p>2. ...the government ensures...safety against all threats...wants the state to be strong so it can defend its citizens.</p>	<p>"safe"</p> <p>"strong government"</p>	Security

Note: Phrases are used as symbol markers in the multi-dimensional scaling analysis

Table E.2. Statement Fragments and Indicative Phrases of the Human Values Inventory, Self-Transcendence to Self-Enhancement Dimension

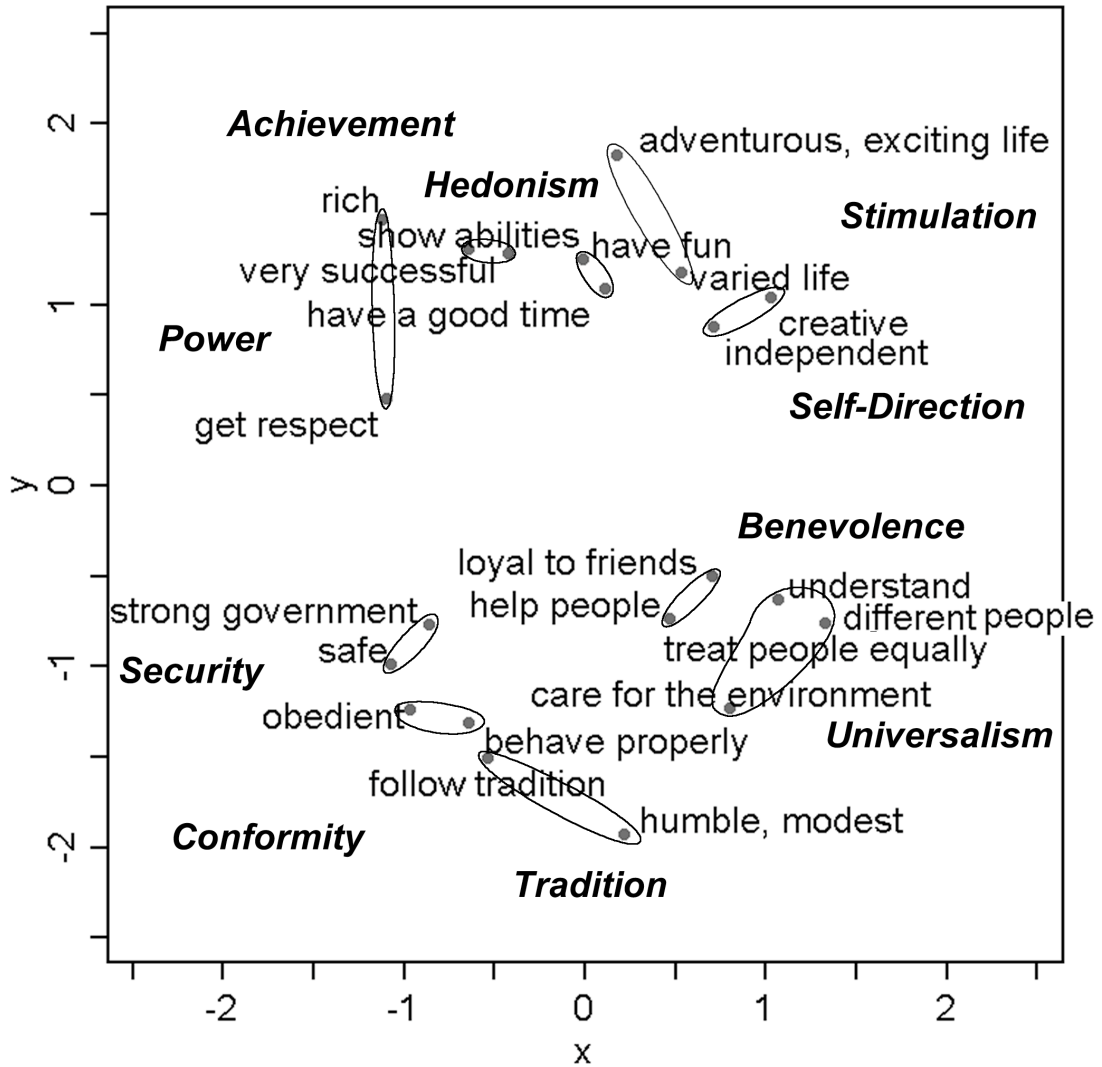
<i>Statement Fragments</i>	<i>Phrases</i>	<i>Value Type</i>
1. ...every person in the world should be treated equally....everyone should have equal opportunities in life 2. ...to listen to people who are different from him ...Even when...disagrees with them,...still wants to understand them 3. ...people should care for nature. Looking after the environment is important	"treat people equally" "understand different people" "care for the environment"	Universalism
1. ...to help the people around him [her]. ...wants to care for their well-being 2. ...to be loyal to his friends. ...to devote...self to people close....	"help people" "loyal to friends"	Benevolence
1. ...to be rich....wants to have a lot of money and expensive things 2. ...to get respect from others...wants people to do what he [she] says	"rich" "get respect"	Power
1....to show his abilities...wants people to admire what he [she] does. 2. Being very successful...hopes people will recognize...achievements.	"show abilities" "very successful"	Achievement
Note: Phrases are used as symbol markers in the multi-dimensional scaling analysis		

Figure E.2. Human Values Inventory in Two Dimensions, Austria



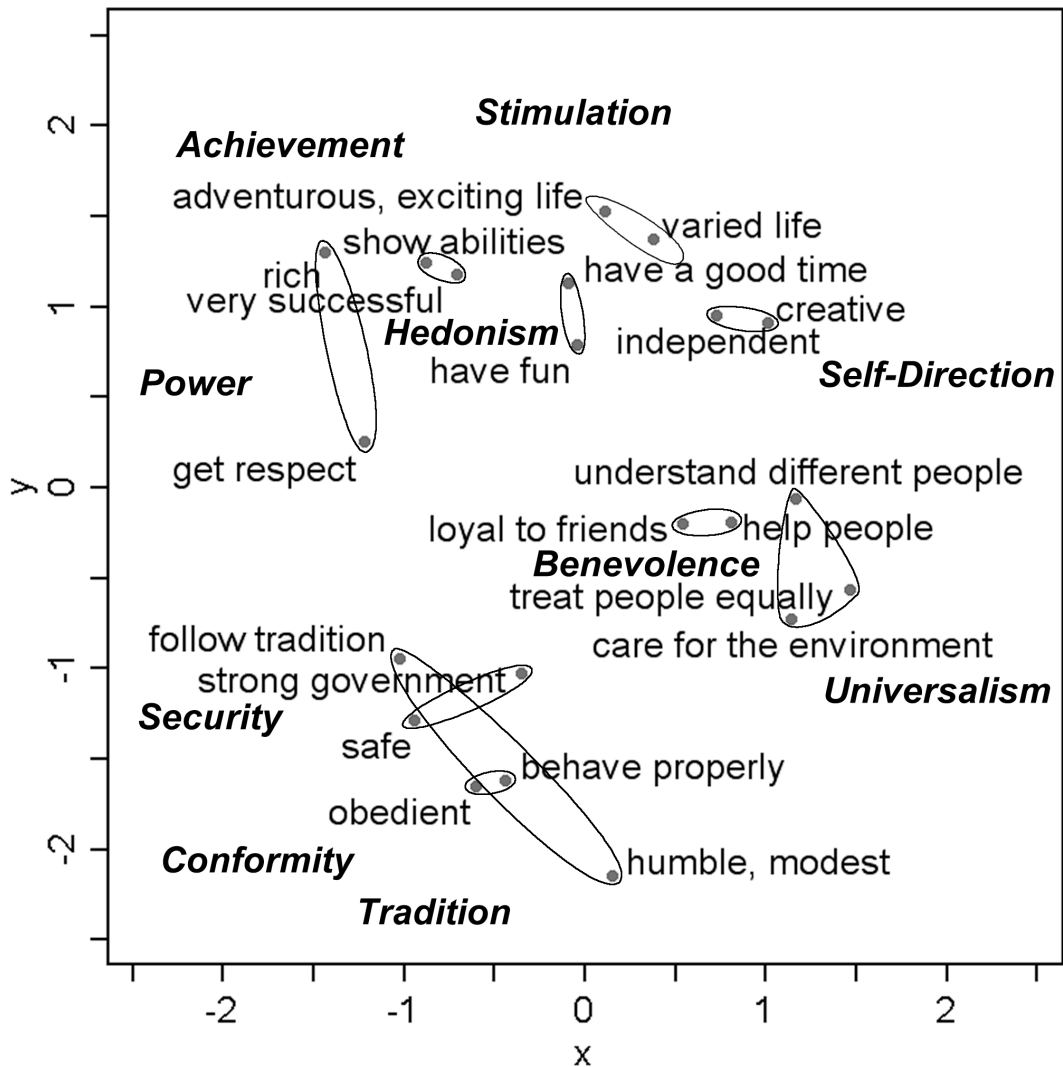
Note: Author's own multi-dimensional scaling analysis.

Figure E.3. Human Values Inventory in Two Dimensions, Belgium



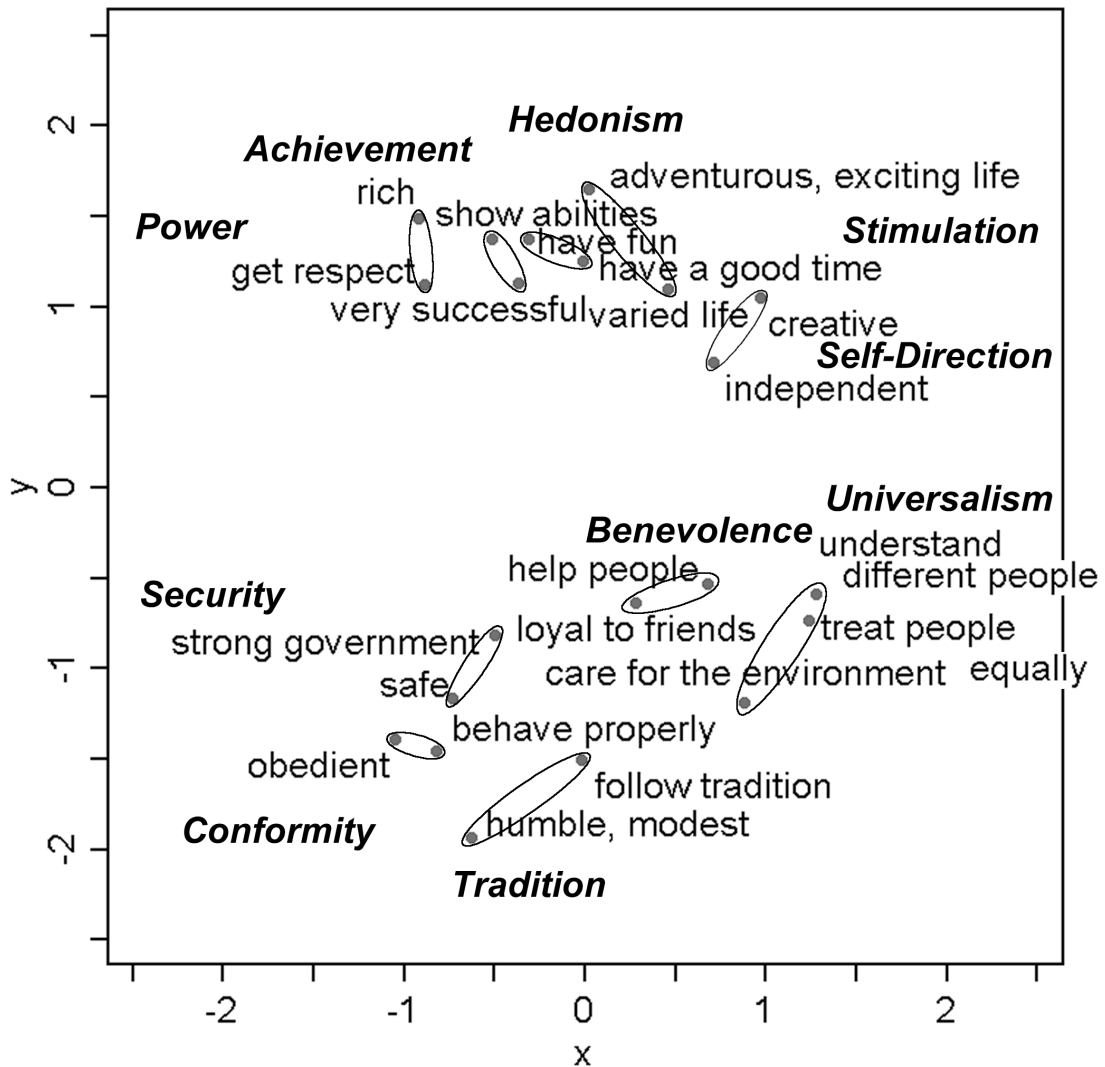
Note: Author's own multi-dimensional scaling analysis.

Figure E.4. Human Values Inventory in Two Dimensions, Denmark



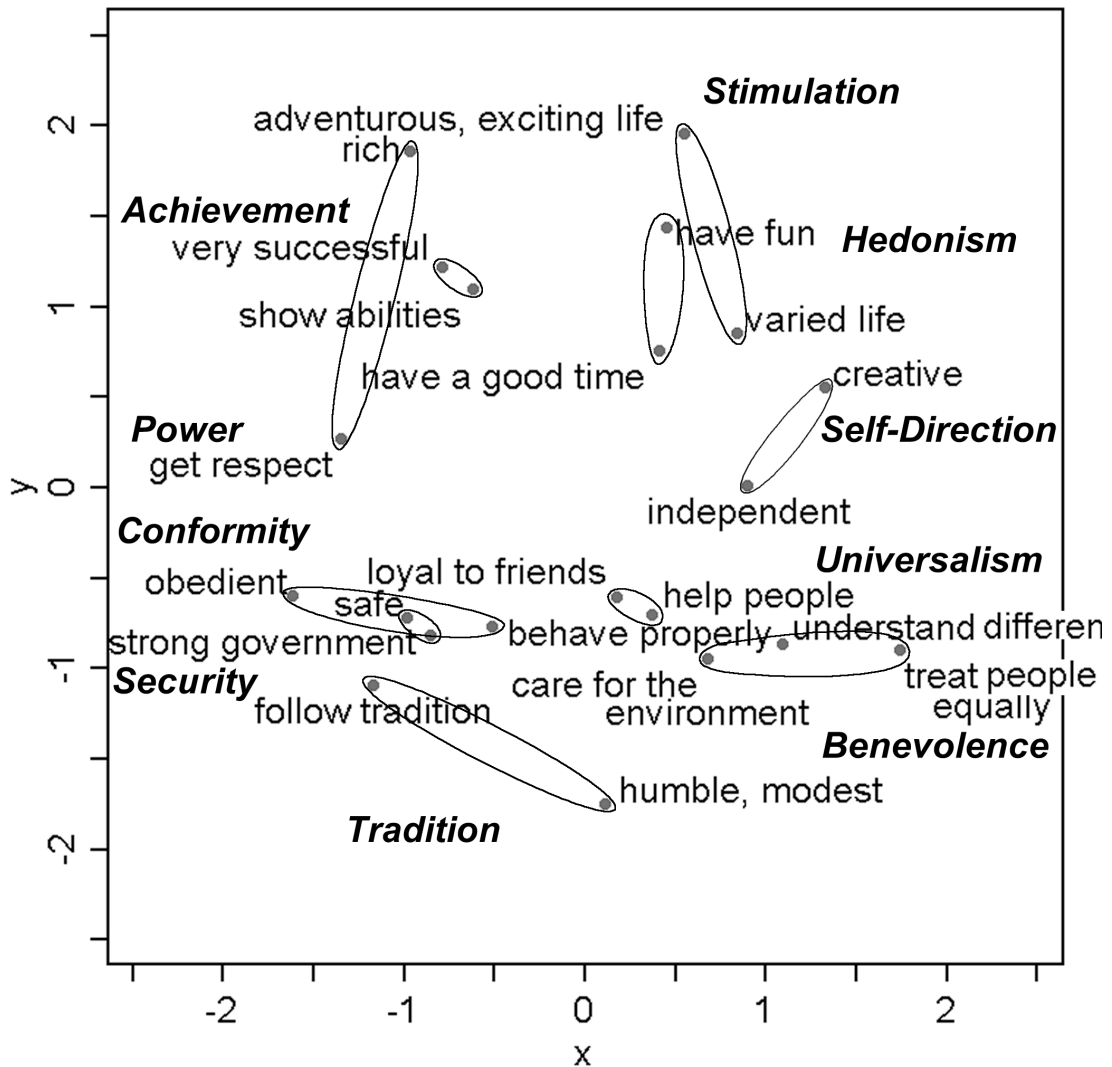
Note: Author's own multi-dimensional scaling analysis.

Figure E.5. Human Values Inventory in Two Dimensions, Finland



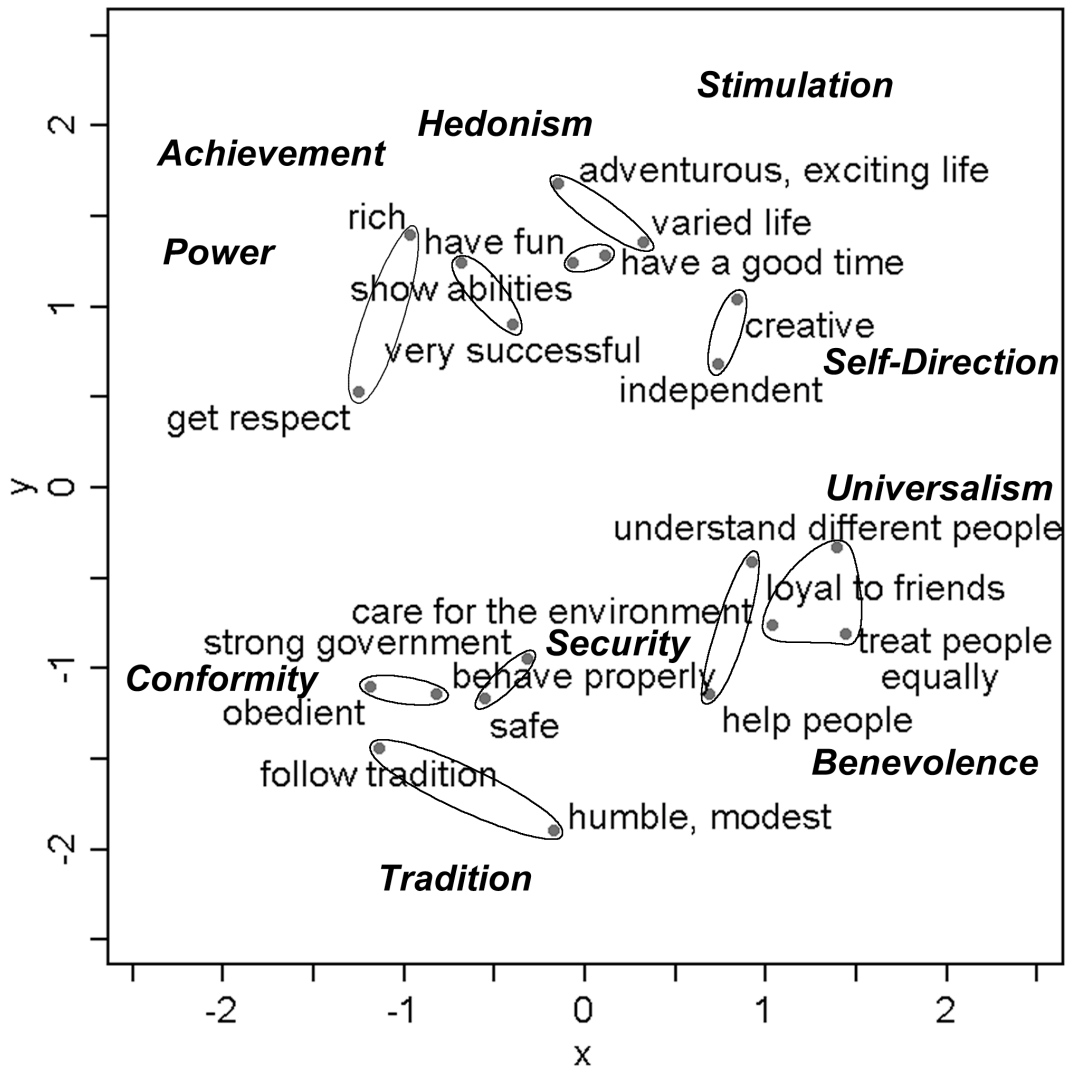
Note: Author's own multi-dimensional scaling analysis.

Figure E.6. Human Values Inventory in Two Dimensions, France



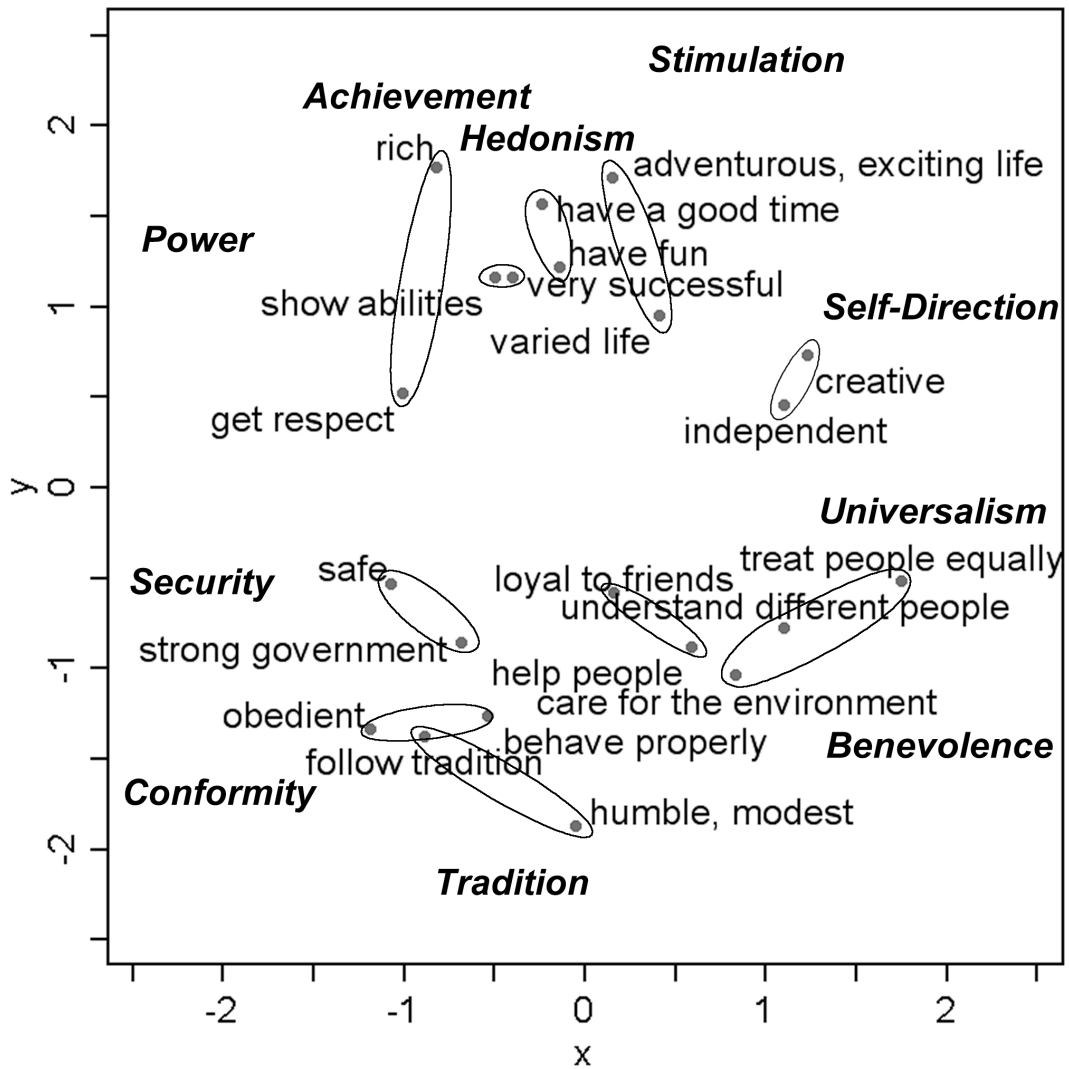
Note: Author's own multi-dimensional scaling analysis.

Figure E.7. Human Values Inventory in Two Dimensions, Germany



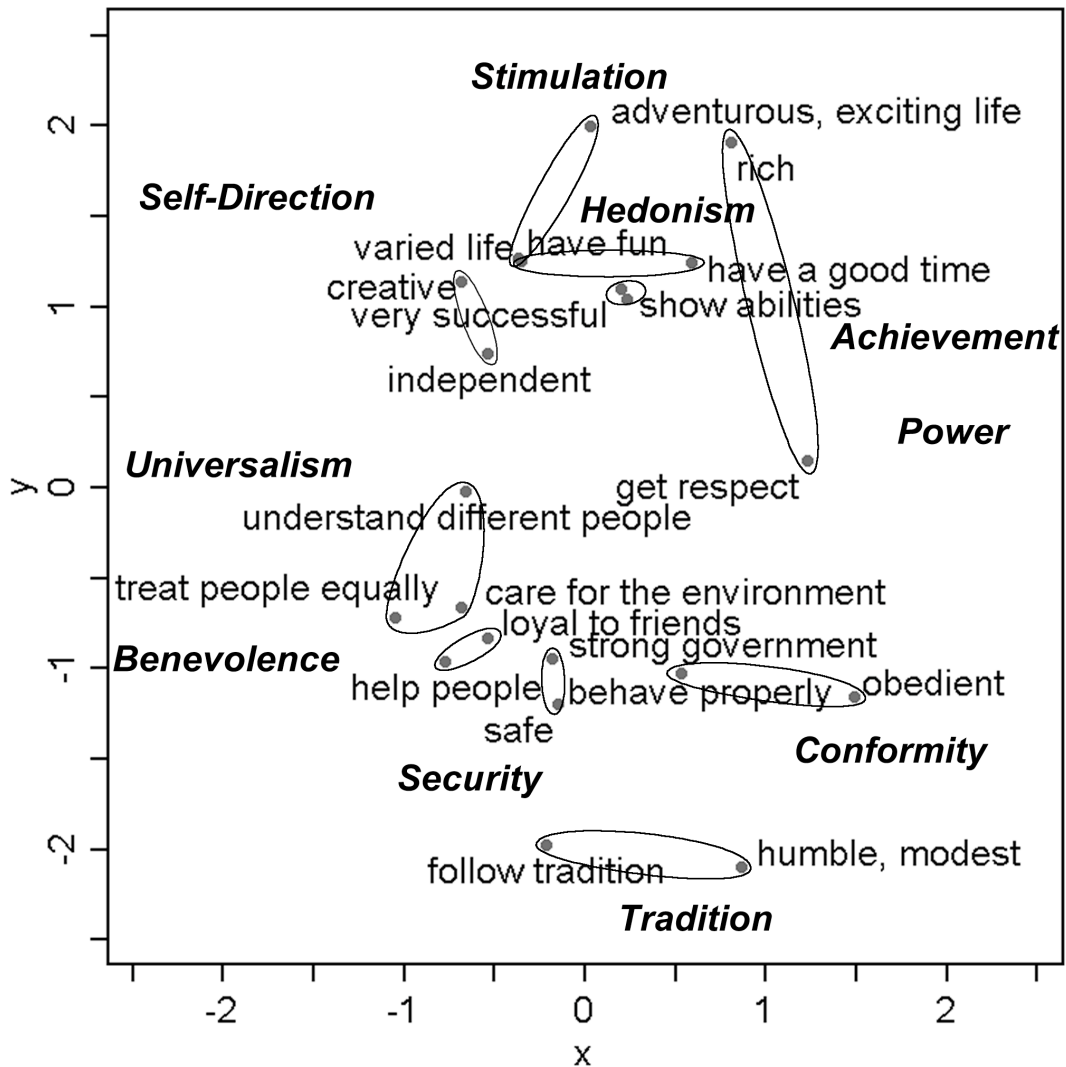
Note: Author's own multi-dimensional scaling analysis.

Figure E.8. Human Values Inventory in Two Dimensions, Great Britain



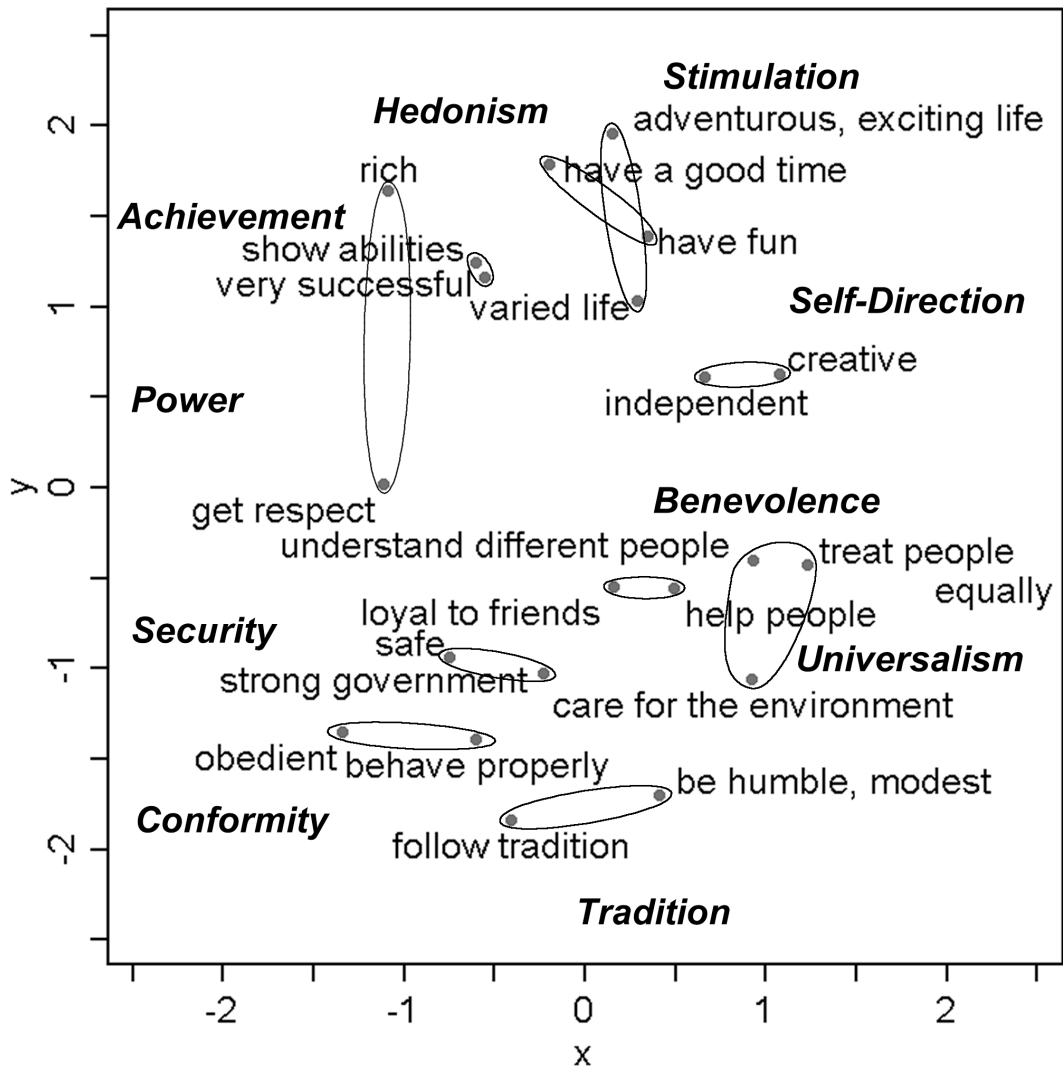
Note: Author's own multi-dimensional scaling analysis.

Figure E.9. Human Values Inventory in Two Dimensions, Greece



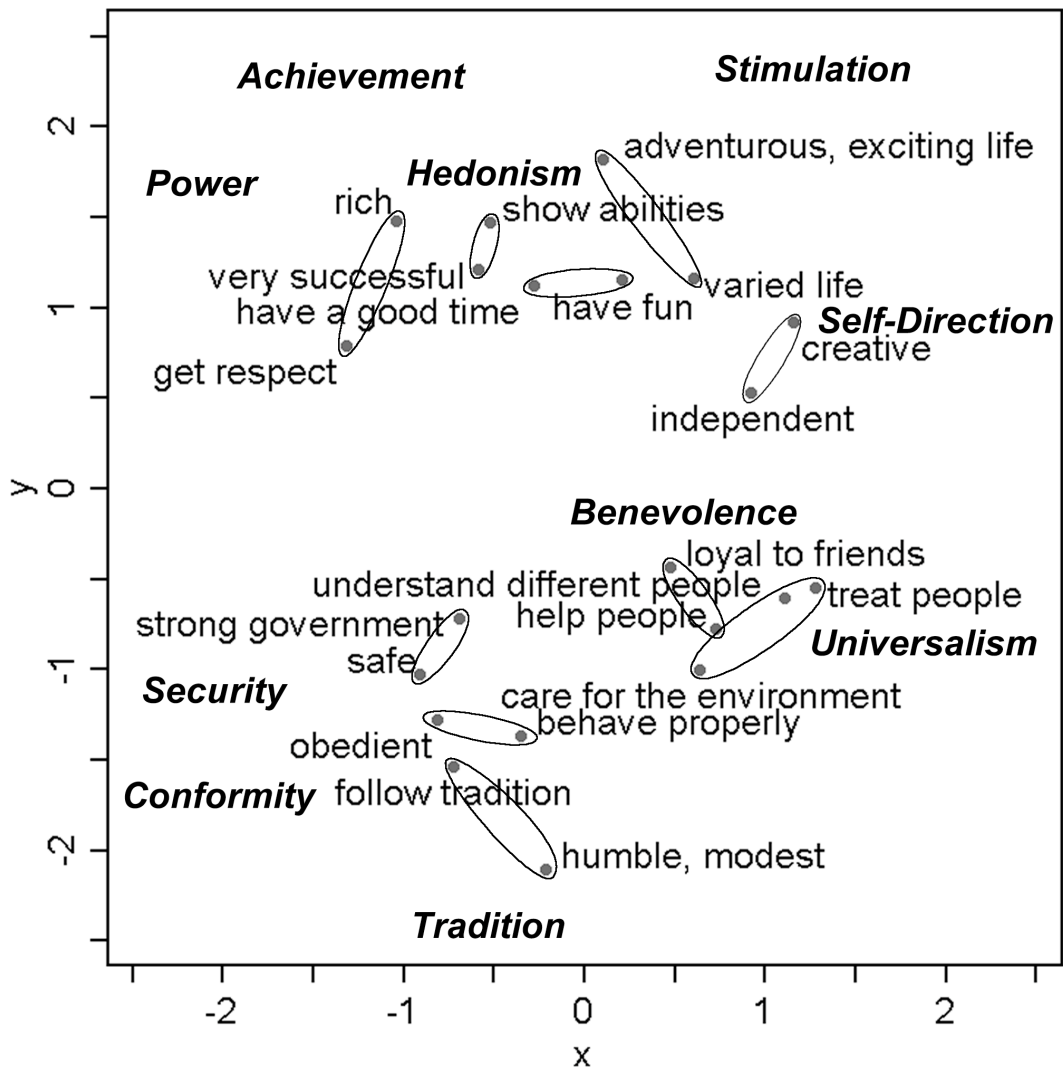
Note: Author's own multi-dimensional scaling analysis.

Figure E.10. Human Values Inventory in Two Dimensions, Ireland



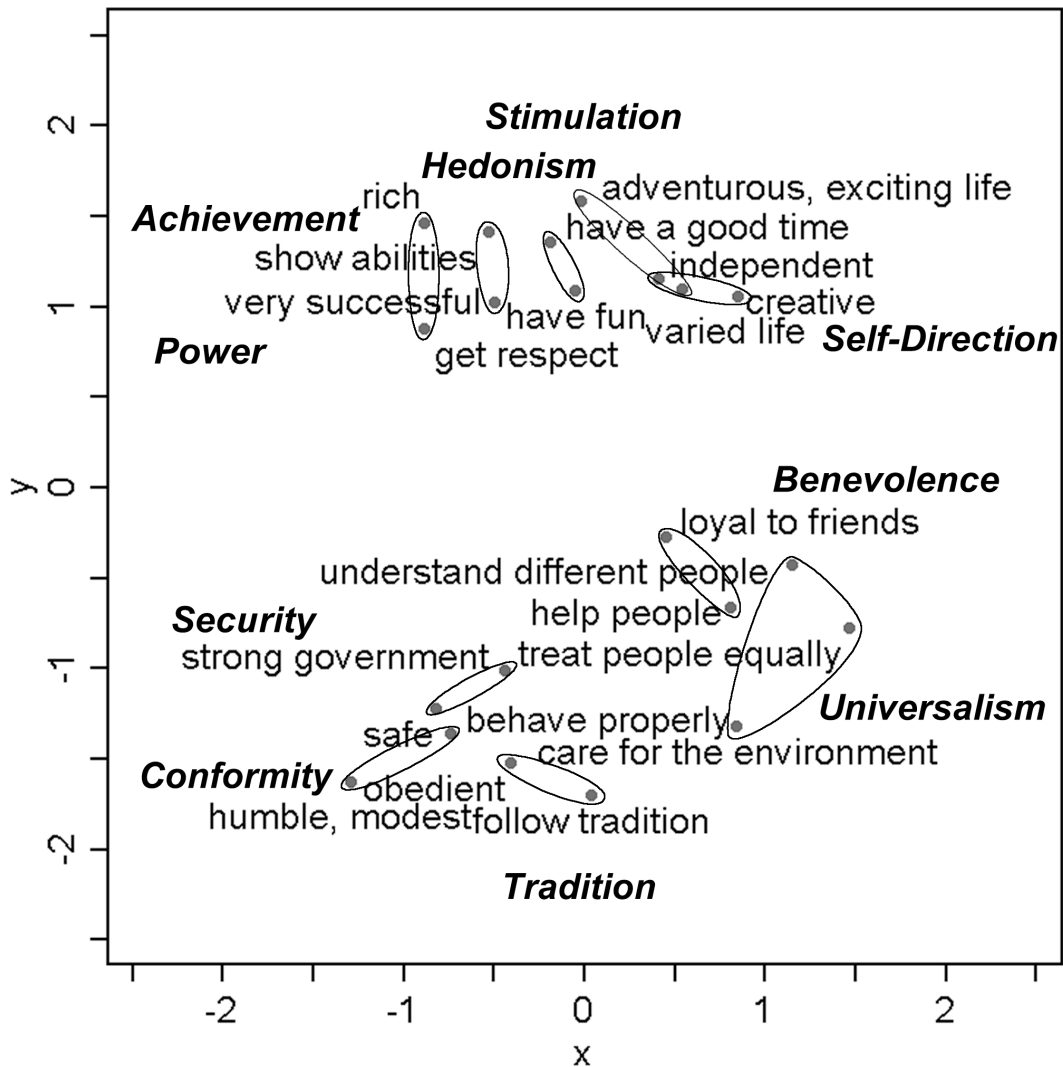
Note: Author's own multi-dimensional scaling analysis.

Figure E.11. Human Values Inventory in Two Dimensions, The Netherlands



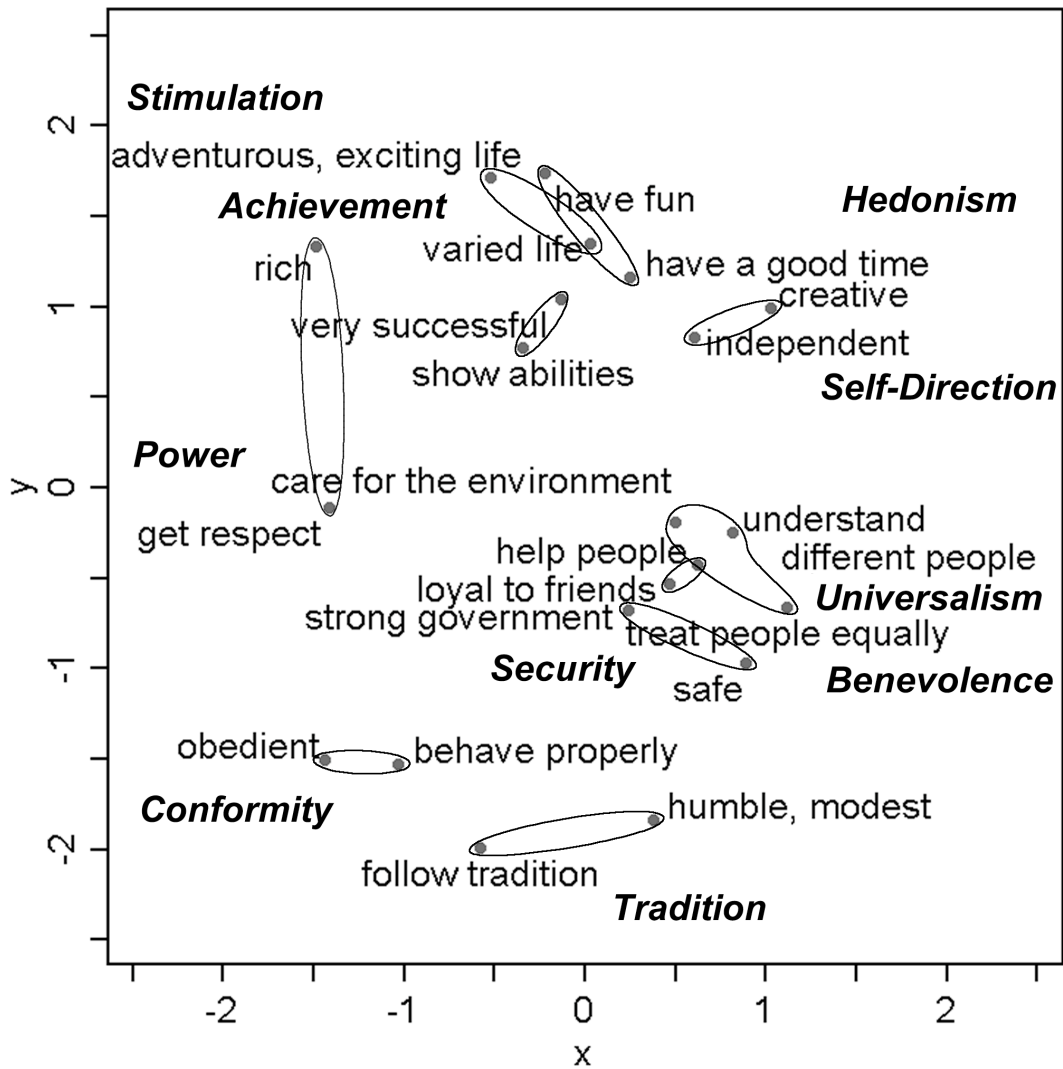
Note: Author's own multi-dimensional scaling analysis.

Figure E.12. Human Values Inventory in Two Dimensions, Norway



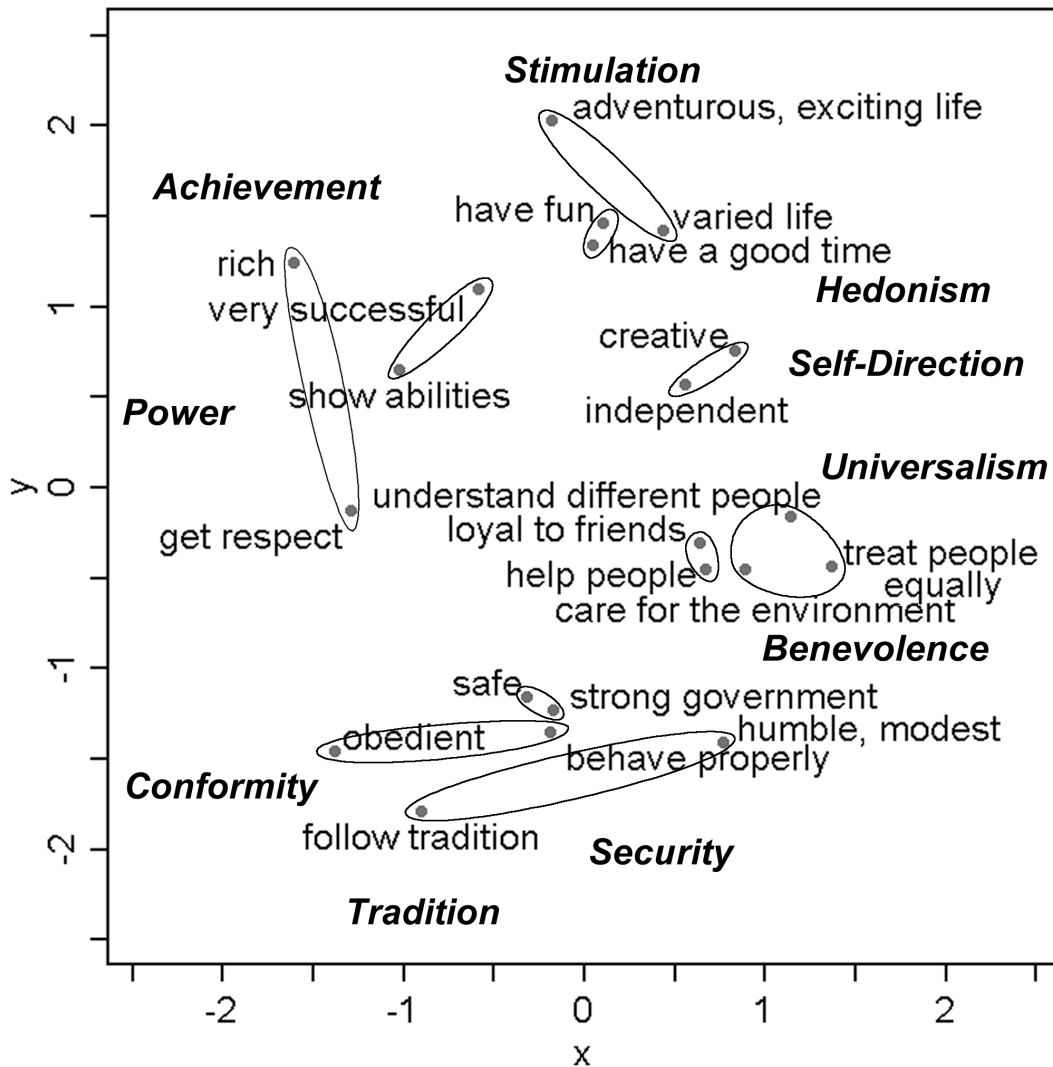
Note: Author's own multi-dimensional scaling analysis.

Figure E.13. Human Values Inventory in Two Dimensions, Portugal



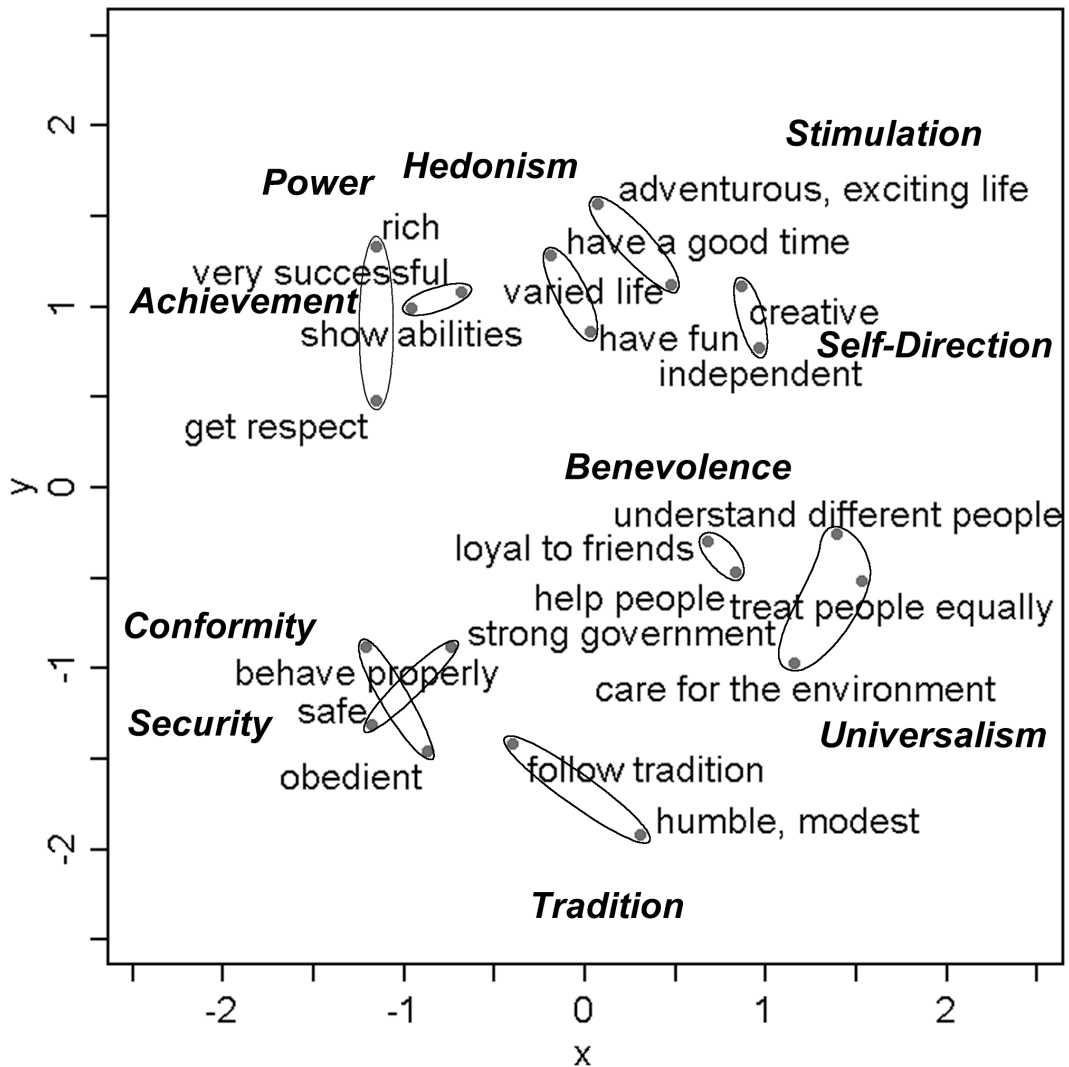
Note: Author's own multi-dimensional scaling analysis.

Figure E.14. Human Values Inventory in Two Dimensions, Spain



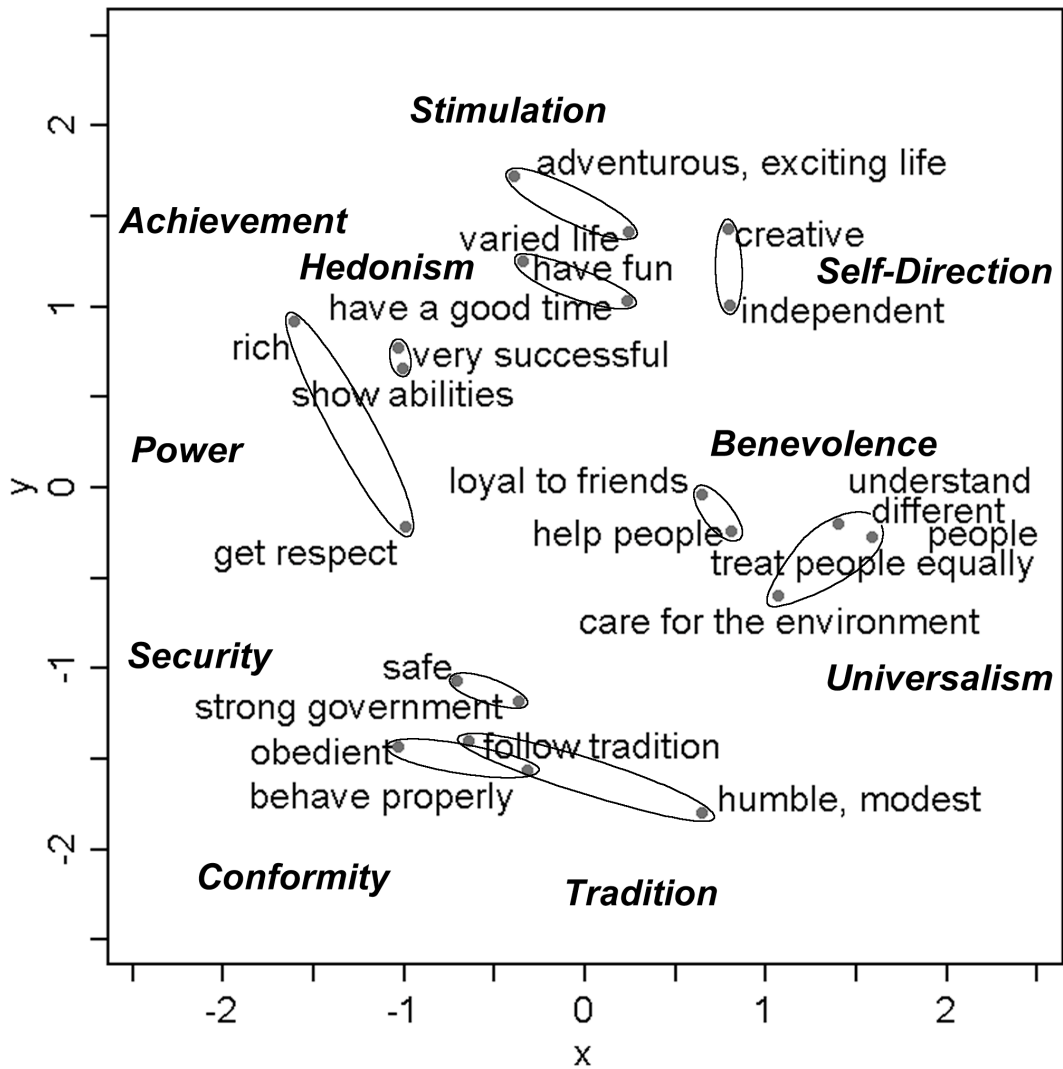
Note: Author's own multi-dimensional scaling analysis.

Figure E.15. Human Values Inventory in Two Dimensions, Sweden



Note: Author's own multi-dimensional scaling analysis.

Figure E.16. Human Values Inventory in Two Dimensions, Switzerland



Note: Author's own multi-dimensional scaling analysis.