```
 CATPCA VARIABLES=IUSSANG_BIR IUSSOLI_BIR ORDNAT_RESREQ ORDNAT_RENREQ ORDNAT_LANREQ ORDNAT_A
  /ANALYSIS=IUSSANG_BIR(WEIGHT=1,LEVEL=SPORD,DEGREE=2,INKNOT=2) IUSSOLI_BIR(WEIGHT=1,LEVEL=S
LOSS_VOLREN(WEIGHT=1,LEVEL=SPORD,DEGREE=2,INKNOT=2) LOSS_RESABR(WEIGHT=1,LEVEL=SPORD,DEGREE=
  /DISCRETIZATION=IUSSANG_BIR(GROUPING,NCAT=7,DISTR=NORMAL) IUSSOLI_BIR(GROUPING,NCAT=7,DIST
LOSS_FORCIT(GROUPING,NCAT=7,DISTR=NORMAL)
  /MISSING=IUSSANG_BIR(PASSIVE,MODEIMPU) IUSSOLI_BIR(PASSIVE,MODEIMPU) ORDNAT_RESREQ(PASSIVE
  /DIMENSION=2
  /NORMALIZATION=VPRINCIPAL
  /MAXITER=100
  /CRITITER=.00001
  /PRINT=CORR DESCRIP(IUSSANG_BIR IUSSOLI_BIR ORDNAT_RESREQ ORDNAT_RENREQ ORDNAT_LANREQ ORDN
SPECNAT_CULAFF LOSS_VOLREN LOSS_RESABR LOSS_FORCIT) VAF
  /PLOT=BIPLOT(LOADING) (Countrylabel) (20) OBJECT (Countrylabel) (20)
  /SAVE=OBJECT.
```

CATPCA - Principal Components Analysis for Categorical Data

Notes

Output Created		**11-OCT-2015 15:00:11**
Comments		
Input	**Data**	**/Users/maarten/Dropbox/Publications/Journal articles/CEP/2013 special issue/Vink and Baubock_configurations /Data/Vink and Baubock_CEP 2013_data.sav**
	Active Dataset	**DataSet1**
	Filter	**<none>**
	Weight	**<none>**
	Split File	**<none>**
	N of Rows in Working Data File	**36**

Notes

Syntax	**CATPCA VARIABLES=IUSSANG_BI R IUSSOLI_BIR ORDNAT_RESREQ ORDNAT_RENREQ ORDNAT_LANREQ ORDNAT_ASSIREQ ORDNAT_ECOREQ SPECNAT_REACQ SPECNAT_CULAFF LOSS_VOLREN LOSS_RESABR LOSS_FORCIT Countrylabel /ANALYSIS=IUSSANG_BI R(WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) IUSSOLI_BIR(WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) ORDNAT_RESREQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) ORDNAT_RENREQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) ORDNAT_LANREQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) ORDNAT_ASSIREQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) ORDNAT_ECOREQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) SPECNAT_REACQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) SPECNAT_CULAFF (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) LOSS_VOLREN (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) LOSS_RESABR (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) LOSS_FORCIT (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) /DISCRETIZATION=IUSS ANG_BIR(GROUPING, NCAT=7, DISTR=NORMAL) IUSSOLI_BIR(GROUPING, NCAT=7, DISTR=NORMAL) ORDNAT_RESREQ (GROUPING,NCAT=7, DISTR=NORMAL) ORDNAT_RENREQ (GROUPING,NCAT=7, DISTR=NORMAL) ORDNAT_LANREQ (GROUPING,NCAT=7, DISTR=NORMAL) ORDNAT_ASSIREQ (GROUPING,NCAT=7, DISTR=NORMAL)

Notes

Resources	Processor Time	00:00:00.33
	Elapsed Time	00:00:01.00
Variables Created or Modified	OBSCO1_3	Object scores dimension 1
	OBSCO2_3	Object scores dimension 2

[DataSet1] /Users/maarten/Dropbox/Publications/Journal articles/CEP/2013 special issue/Vink and Baubock_configurations/Data/Vink and Baubock_CEP 2013_data.sav

Warnings

Variables IUSSOLI_BIR, ORDNAT_RENREQ, ORDNAT_LANREQ, ORDNAT_ASSIREQ, ORDNAT_ECOREQ, SPECNAT_REACQ, SPECNAT_CULAFF, LOSS_RESABR, LOSS_FORCIT were specified or implied to be grouped into a number of categories (NCAT) equal to or greater than the number of distinct values of the variables (NCAT is set to this number). For integer variables this implies that grouping has no effect, and for real and string variables that grouping results in ranking.

Credit

CATPCA
Version 1.1
by
Data Theory Scaling System Group (DTSS)
Faculty of Social and Behavioral Sciences
Leiden University, The Netherlands

Case Processing Summary

Valid Active Cases	36
Active Cases with Missing Values	0
Supplementary Cases	0
Total	36
Cases Used in Analysis	36

Descriptive Statistics

IUSSANG_BIR[a]

		Category after Discretization[c]	Frequency
Valid	1.38 - 1.63	1	2
	1.75	2	2
	1.82 - 1.85	3	3
	1.88	4	8
	1.94 - 2.00[b]	5	21
	Total		36

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

b. Mode.

c. Grouping (7 categories (empty categories are not displayed), normal).

IUSSOLI_BIR[a]

		Category after Discretization[c]	Frequency
Valid	1.00[b]	1	26
	1.50	2	6
	1.53	3	2
	1.75	4	2
	Total		36

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

b. Mode.

c. Grouping (4 categories, normal).

ORDNAT_RESREQ[a]

		Category after Discretization[c]	Frequency
Valid	1.00 - 1.12	1	2
	1.18 - 1.29[b]	2	9
	1.35 - 1.44	3	6
	1.56	4	2
	1.59 - 1.71	5	7
	1.74 - 1.88[b]	6	9
	2.00	7	1
	Total		36

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

b. Mode.

c. Grouping (7 categories, normal).

ORDNAT_RENREQ[a]

		Category after Discretization[c]	Frequency
Valid	1.00	1	4
	1.25	2	4
	1.50	3	7
	1.75	4	2
	2.00[b]	5	19
	Total		36

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

b. Mode.

c. Grouping (5 categories, normal).

ORDNAT_LANREQ[a]

		Category after Discretization[c]	Frequency
Valid	1.00	1	12
	1.25	2	3
	1.50[b]	3	15
	1.75	4	2
	2.00	5	4
	Total		36

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

b. Mode.

c. Grouping (5 categories, normal).

ORDNAT_ASSIREQ[a]

		Category after Discretization[c]	Frequency
Valid	1.00	1	6
	1.25	2	5
	1.50	3	1
	1.75	4	8
	2.00[b]	5	16
	Total		36

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

b. Mode.

c. Grouping (5 categories, normal).

ORDNAT_ECOREQ[a]

		Category after Discretization[c]	Frequency
Valid	1.00	1	7
	1.25	2	4
	1.50	3	3
	1.75	4	8
	2.00[b]	5	14
	Total		36

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

b. Mode.

c. Grouping (5 categories, normal).

SPECNAT_REACQ[a]

		Category after Discretization[c]	Frequency
Valid	1.06	1	3
	1.25	2	1
	1.38	3	4
	1.50	4	6
	1.69	5	5
	1.75[b]	6	12
	2.00	7	5
	Total		36

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

b. Mode.

c. Grouping (7 categories, normal).

SPECNAT_CULAFF[a]

		Category after Discretization[c]	Frequency
Valid	1.00[b]	1	19
	1.38	2	2
	1.50	3	1
	1.69	4	6
	1.75	5	6
	2.00	6	2
	Total		36

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

b. Mode.

c. Grouping (6 categories, normal).

LOSS_VOLREN[a]

		Category after Discretization[c]	Frequency
Valid	1.17	1	2
	1.25 - 1.33[b]	2	8
	1.50[b]	3	8
	1.58	4	3
	1.67 - 1.75	5	7
	1.83 - 2.00[b]	6	8
	Total		36

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

b. Mode.

c. Grouping (7 categories (empty categories are not displayed), normal).

LOSS_RESABR[a]

		Category after Discretization[c]	Frequency
Valid	1.31	1	1
	1.38	2	6
	1.44	3	1
	1.63	4	3
	1.75	5	1
	1.88	6	1
	2.00[b]	7	23
	Total		36

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

b. Mode.

c. Grouping (7 categories, normal).

LOSS_FORCIT[a]

		Category after Discretization[c]	Frequency
Valid	1.00	1	6
	1.25	2	3
	1.31	3	2
	1.38	4	1
	1.50	5	1
	2.00[b]	6	23
	Total		36

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

b. Mode.

c. Grouping (6 categories, normal).

Iteration History

Iteration Number	Variance Accounted For		Loss		
	Total	Increase	Total	Centroid Coordinates	Restriction of Centroid to Vector Coordinates
0[a]	5.357402	.000005	18.642598	16.595937	2.046661
1	6.005704	.648301	17.994296	16.457788	1.536508
2	6.091607	.085903	17.908393	16.397963	1.510430
3	6.128119	.036511	17.871881	16.372592	1.499290
4	6.146239	.018120	17.853761	16.357473	1.496289
5	6.157936	.011697	17.842064	16.349482	1.492582
6	6.165367	.007431	17.834633	16.344692	1.489940
7	6.166557	.001190	17.833443	16.343835	1.489608
8	6.167183	.000626	17.832817	16.344223	1.488594
9	6.167695	.000513	17.832305	16.344608	1.487697
10	6.168127	.000432	17.831873	16.344949	1.486924
11	6.168494	.000367	17.831506	16.345251	1.486255
12	6.168808	.000313	17.831192	16.345498	1.485694
13	6.169075	.000267	17.830925	16.345698	1.485227
14	6.169303	.000228	17.830697	16.345860	1.484837
15	6.169497	.000194	17.830503	16.345992	1.484511
16	6.169559	.000062	17.830441	16.346101	1.484340
17	6.169576	.000017	17.830424	16.345715	1.484710
18[b]	6.169585	.000010	17.830415	16.345504	1.484911

a. Iteration 0 displays the statistics of the solution with all variables, except variables with optimal scaling level Multiple Nominal, treated as numerical.

b. The iteration process stopped because the convergence test value was reached.

Model Summary

Dimension	Cronbach's Alpha	Variance Accounted For	
		Total (Eigenvalue)	% of Variance
1	.798	3.730	31.085
2	.644	2.439	20.328
Total	.914[a]	6.170	51.413

a. Total Cronbach's Alpha is based on the total Eigenvalue.

Quantifications

Table

IUSSANG_BIR[a]

Category	Frequency	Quantification	Centroid Coordinates		Vector Coordinates	
			Dimension		Dimension	
			1	2	1	2
1.38 - 1.63	2	-3.034	.012	-1.711	-.208	-2.031
1.75	2	-2.192	.093	-1.804	-.151	-1.467
1.82 - 1.85	3	-.755	-.747	-.975	-.052	-.505
1.88	8	.187	-.063	.617	.013	.125
1.94 - 2.00	21	.534	.121	.239	.037	.358

Variable Principal Normalization.

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

IUSSOLI_BIR[a]

Category	Frequency	Quantification	Centroid Coordinates		Vector Coordinates	
			Dimension		Dimension	
			1	2	1	2
1.00	26	-.540	-.318	.011	-.322	-.040
1.50	6	.670	.336	-.283	.399	.050
1.53	2	2.136	1.597	.062	1.272	.159
1.75	2	2.881	1.528	.642	1.716	.214

Variable Principal Normalization.

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

ORDNAT_RESREQ[a]

Category	Frequency	Quantification	Centroid Coordinates		Vector Coordinates	
			Dimension		Dimension	
			1	2	1	2
1.00 - 1.12	2	-.822	-.598	-.281	-.602	.237
1.18 - 1.29	9	-.822	-.489	.373	-.602	.237
1.35 - 1.44	6	-.804	-.910	.290	-.589	.232
1.56	2	-.521	.219	-.191	-.381	.150
1.59 - 1.71	7	.101	.063	.035	.074	-.029
1.74 - 1.88	9	1.212	.853	-.402	.888	-.350
2.00	1	3.294	2.504	-.769	2.413	-.951

Variable Principal Normalization.

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

ORDNAT_RENREQ[a]

Category	Frequency	Quantification	Centroid Coordinates		Vector Coordinates	
			Dimension		Dimension	
			1	2	1	2
1.00	4	-2.266	-1.547	.023	-1.538	-.104
1.25	4	-.717	-.490	-.234	-.487	-.033
1.50	7	-.390	-.203	-.370	-.265	-.018
1.75	2	-.281	-.372	1.187	-.191	-.013
2.00	19	.801	.543	.056	.544	.037

Variable Principal Normalization.

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

ORDNAT_LANREQ[a]

Category	Frequency	Quantification	Centroid Coordinates		Vector Coordinates	
			Dimension		Dimension	
			1	2	1	2
1.00	12	-1.158	-.886	-.162	-.890	-.127
1.25	3	-.201	-.054	-.668	-.154	-.022
1.50	15	.306	.196	.294	.235	.034
1.75	2	.824	.705	-.368	.634	.091
2.00	4	2.064	1.609	.068	1.587	.227

Variable Principal Normalization.

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

ORDNAT_ASSIREQ[a]

Category	Frequency	Quantification	Centroid Coordinates		Vector Coordinates	
			Dimension		Dimension	
			1	2	1	2
1.00	6	-2.110	-.729	-1.387	-.825	-1.328
1.25	5	-.385	-.500	-.035	-.150	-.242
1.50	1	.349	.758	.018	.136	.219
1.75	8	.593	-.039	.755	.232	.373
2.00	16	.593	.402	.153	.232	.373

Variable Principal Normalization.

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

ORDNAT_ECOREQ[a]

Category	Frequency	Quantification	Centroid Coordinates		Vector Coordinates	
			Dimension		Dimension	
			1	2	1	2
1.00	7	-.798	-.489	-.664	-.613	.107
1.25	4	-.798	-.559	.615	-.613	.107
1.50	3	-.798	-.891	.584	-.613	.107
1.75	8	-.798	-.645	.348	-.613	.107
2.00	14	1.254	.964	-.168	.964	-.168

Variable Principal Normalization.

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

SPECNAT_REACQ[a]

Category	Frequency	Quantification	Centroid Coordinates		Vector Coordinates	
			Dimension		Dimension	
			1	2	1	2
1.06	3	-3.252	-1.483	-1.908	-1.511	-1.885
1.25	1	-.689	-.319	-.400	-.320	-.399
1.38	4	.056	-.039	.107	.026	.033
1.50	6	.281	-.198	.384	.130	.163
1.69	5	.383	-.069	.440	.178	.222
1.75	12	.389	.261	.302	.181	.226
2.00	5	.389	.665	-.487	.181	.226

Variable Principal Normalization.

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

SPECNAT_CULAFF[a]

Category	Frequency	Quantification	Centroid Coordinates		Vector Coordinates	
			Dimension		Dimension	
			1	2	1	2
1.00	19	-.779	.135	-.377	.067	-.472
1.38	2	-.644	-.558	-1.503	.055	-.390
1.50	1	-.225	-1.588	-.446	.019	-.137
1.69	6	.523	.259	.479	-.045	.317
1.75	6	1.540	.082	.989	-.132	.933
2.00	2	1.966	-.952	.907	-.169	1.192

Variable Principal Normalization.

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

LOSS_VOLREN[a]

Category	Frequency	Quantification	Centroid Coordinates Dimension 1	Centroid Coordinates Dimension 2	Vector Coordinates Dimension 1	Vector Coordinates Dimension 2
1.17	2	-.779	.051	.841	-.421	.429
1.25 - 1.33	8	-.768	-.282	.526	-.415	.423
1.50	8	-.700	-.637	.259	-.378	.385
1.58	3	-.454	.090	.219	-.245	.250
1.67 - 1.75	7	.053	-.156	-.153	.029	-.029
1.83 - 2.00	8	1.786	1.009	-.943	.965	-.983

Variable Principal Normalization.

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

LOSS_RESABR[a]

Category	Frequency	Quantification	Centroid Coordinates Dimension 1	Centroid Coordinates Dimension 2	Vector Coordinates Dimension 1	Vector Coordinates Dimension 2
1.31	1	-1.569	.176	-.408	.693	-.921
1.38	6	-1.569	.913	-.706	.693	-.921
1.44	1	-1.547	1.224	-1.684	.683	-.908
1.63	3	-1.218	.005	-1.173	.538	-.715
1.75	1	-.496	.279	-.284	.219	-.291
1.88	1	.393	-.332	1.164	-.173	.231
2.00	23	.708	-.297	.390	-.313	.416

Variable Principal Normalization.

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

LOSS_FORCIT[a]

Category	Frequency	Quantification	Centroid Coordinates Dimension 1	Centroid Coordinates Dimension 2	Vector Coordinates Dimension 1	Vector Coordinates Dimension 2
1.00	6	-1.903	-1.100	-.665	-1.090	-.667
1.25	3	-.892	-.253	-.283	-.511	-.313
1.31	2	-.746	-.914	-.832	-.427	-.262
1.38	1	-.337	-.332	1.164	-.193	-.118
1.50	1	.369	1.744	.608	.212	.130
2.00	23	.676	.338	.206	.387	.237

Variable Principal Normalization.

a. Optimal Scaling Level: Spline Ordinal (Degree 2, Interior Knots 2).

Variance Accounted For

	Centroid Coordinates			Total (Vector Coordinates)		
	Dimension			Dimension		
	1	2	Mean	1	2	Total
IUSSANG_BIR	.056	.540	.298	.005	.448	.453
IUSSOLI_BIR	.363	.037	.200	.355	.006	.360
ORDNAT_RESREQ	.577	.112	.345	.536	.083	.620
ORDNAT_RENREQ	.464	.113	.288	.461	.002	.463
ORDNAT_LANREQ	.593	.090	.342	.591	.012	.603
ORDNAT_ASSIREQ	.211	.458	.335	.153	.396	.549
ORDNAT_ECOREQ	.601	.194	.397	.591	.018	.609
SPECNAT_REACQ	.278	.424	.351	.216	.336	.552
SPECNAT_CULAFF	.160	.453	.306	.007	.368	.375
LOSS_VOLREN	.340	.322	.331	.292	.303	.595
LOSS_RESABR	.243	.418	.331	.195	.344	.539
LOSS_FORCIT	.414	.194	.304	.328	.123	.451
Active Total	4.300	3.355	3.827	3.730	2.439	6.170
% of Variance	35.833	27.954	31.894	31.085	20.328	51.413

Correlations Original Variables

	IUSSANG_BIR	IUSSOLI_BIR	ORDNAT_RESREQ	ORDNAT_RENREQ	ORDNAT_LANREQ	ORDNAT_ASSIREQ
IUSSANG_BIR	1.000	.157	.101	-.070	.199	.277
IUSSOLI_BIR	.157	1.000	.320	.334	.374	.060
ORDNAT_RESREQ	.101	.320	1.000	.255	.461	.125
ORDNAT_RENREQ	-.070	.334	.255	1.000	.311	.273
ORDNAT_LANREQ	.199	.374	.461	.311	1.000	.425
ORDNAT_ASSIREQ	.277	.060	.125	.273	.425	1.000
ORDNAT_ECOREQ	.340	.322	.446	.061	.501	.410
SPECNAT_REACQ	.283	.366	.087	.213	.388	.077
SPECNAT_CULAFF	.271	.278	-.051	-.100	.005	-.037
LOSS_VOLREN	-.198	.248	.480	.193	.153	-.248
LOSS_RESABR	.258	-.157	-.427	-.287	-.229	-.083
LOSS_FORCIT	.063	.175	.164	.626	.272	.402
Dimension	1	2	3	4	5	6
Eigenvalue	3.350	2.007	1.465	1.319	.872	.754

Correlations Original Variables

	ORDNAT_ECOREQ	SPECNAT_REACQ	SPECNAT_CULAFF	LOSS_VOLREN	LOSS_RESABR	LOSS_FORCIT
IUSSANG_BIR	.340	.283	.271	-.198	.258	.063
IUSSOLI_BIR	.322	.366	.278	.248	-.157	.175
ORDNAT_RESREQ	.446	.087	-.051	.480	-.427	.164
ORDNAT_RENREQ	.061	.213	-.100	.193	-.287	.626
ORDNAT_LANREQ	.501	.388	.005	.153	-.229	.272
ORDNAT_ASSIREQ	.410	.077	-.037	-.248	-.083	.402
ORDNAT_ECOREQ	1.000	.292	-.108	.181	-.162	.075
SPECNAT_REACQ	.292	1.000	.148	.084	-.054	.384
SPECNAT_CULAFF	-.108	.148	1.000	-.292	.305	-.020
LOSS_VOLREN	.181	.084	-.292	1.000	-.212	.059
LOSS_RESABR	-.162	-.054	.305	-.212	1.000	-.011
LOSS_FORCIT	.075	.384	-.020	.059	-.011	1.000
Dimension	7	8	9	10	11	12
Eigenvalue	.569	.532	.406	.294	.264	.167

Correlations Transformed Variables

	IUSSANG_BIR	IUSSOLI_BIR	ORDNAT_RESREQ	ORDNAT_RENREQ	ORDNAT_LANREQ	ORDNAT_ASSIREQ
IUSSANG_BIR	1.000	.128	.000	-.086	.169	.331
IUSSOLI_BIR	.128	1.000	.389	.316	.397	.065
ORDNAT_RESREQ	.000	.389	1.000	.330	.533	.029
ORDNAT_RENREQ	-.086	.316	.330	1.000	.354	.337
ORDNAT_LANREQ	.169	.397	.533	.354	1.000	.379
ORDNAT_ASSIREQ	.331	.065	.029	.337	.379	1.000
ORDNAT_ECOREQ	.028	.471	.503	.281	.675	.249
SPECNAT_REACQ	.342	.202	.163	.314	.290	.418
SPECNAT_CULAFF	.291	.282	-.154	-.145	.018	.128
LOSS_VOLREN	-.239	.337	.495	.262	.289	-.176
LOSS_RESABR	.350	-.131	-.502	-.326	-.207	.157
LOSS_FORCIT	.067	.202	.276	.639	.302	.445
Dimension	1	2	3	4	5	6
Eigenvalue	3.730	2.439	1.385	.967	.732	.651

Correlations Transformed Variables

	ORDNAT_ECOREQ	SPECNAT_REACQ	SPECNAT_CULAFF	LOSS_VOLREN	LOSS_RESABR	LOSS_FORCIT
IUSSANG_BIR	.028	.342	.291	-.239	.350	.067
IUSSOLI_BIR	.471	.202	.282	.337	-.131	.202
ORDNAT_RESREQ	.503	.163	-.154	.495	-.502	.276
ORDNAT_RENREQ	.281	.314	-.145	.262	-.326	.639
ORDNAT_LANREQ	.675	.290	.018	.289	-.207	.302
ORDNAT_ASSIREQ	.249	.418	.128	-.176	.157	.445
ORDNAT_ECOREQ	1.000	.273	-.127	.521	-.322	.139
SPECNAT_REACQ	.273	1.000	.249	-.065	.026	.461
SPECNAT_CULAFF	-.127	.249	1.000	-.313	.325	.034
LOSS_VOLREN	.521	-.065	-.313	1.000	-.320	.104
LOSS_RESABR	-.322	.026	.325	-.320	1.000	-.050
LOSS_FORCIT	.139	.461	.034	.104	-.050	1.000
Dimension	7	8	9	10	11	12
Eigenvalue	.564	.476	.341	.300	.236	.179

Objects

Object Scores

Countrylabel	Dimension 1	Dimension 2	IUSSANG_BIR	IUSSOLI_BIR	ORDNAT_RESREQ	ORDNAT_RENREQ	ORDNAT_LANREQ
AT	-1.200	-1.738	1.38 - 1.63	1.00	1.18 - 1.29	1.50	1.25
BE	2.504	-.769	1.94 - 2.00	1.53	2.00	2.00	2.00
BG	-1.066	1.242	1.94 - 2.00	1.00	1.35 - 1.44	1.00	1.00
CH	-.522	-1.267	1.75	1.00	1.00 - 1.12	2.00	1.00
CY	.837	-.161	1.94 - 2.00	1.00	1.59 - 1.71	2.00	1.50
CZ	-.362	.164	1.88	1.00	1.35 - 1.44	1.50	1.50
DE	-.629	.074	1.82 - 1.85	1.50	1.59 - 1.71	1.50	1.00
DK	-1.292	-2.598	1.82 - 1.85	1.00	1.35 - 1.44	1.25	1.00
EE	-1.957	-1.388	1.94 - 2.00	1.00	1.59 - 1.71	1.00	1.00
ES	-.332	1.164	1.94 - 2.00	1.50	1.18 - 1.29	1.75	1.50
FI	.208	-.309	1.88	1.00	1.74 - 1.88	2.00	1.00
FR	.279	-.284	1.94 - 2.00	1.50	1.74 - 1.88	2.00	1.25
UK	1.234	-.327	1.94 - 2.00	1.50	1.74 - 1.88	2.00	1.75
GR	.690	.893	1.88	1.53	1.18 - 1.29	2.00	1.50
HR	.479	.550	1.94 - 2.00	1.00	1.74 - 1.88	1.25	1.50
HU	-.327	1.128	1.88	1.00	1.18 - 1.29	2.00	1.50
IE	1.744	.608	1.94 - 2.00	1.75	1.74 - 1.88	2.00	2.00
IS	-.319	-.400	1.82 - 1.85	1.00	1.56	2.00	1.00
IT	-.043	.512	1.88	1.00	1.18 - 1.29	2.00	1.50
LT	-1.588	-.446	1.94 - 2.00	1.00	1.18 - 1.29	1.00	1.00
LU	.758	.018	1.94 - 2.00	1.50	1.56	2.00	1.25
LV	-1.577	.686	1.94 - 2.00	1.00	1.35 - 1.44	1.00	1.00
MD	-.675	.705	1.94 - 2.00	1.00	1.00 - 1.12	1.50	1.00
ME	-.716	.459	1.94 - 2.00	1.00	1.18 - 1.29	1.25	1.50
MK	-.429	.653	1.88	1.00	1.18 - 1.29	1.25	1.50
MT	1.224	-1.684	1.38 - 1.63	1.00	1.74 - 1.88	2.00	1.50
NL	.707	-2.341	1.75	1.50	1.74 - 1.88	1.50	1.50
NO	.176	-.408	1.94 - 2.00	1.00	1.59 - 1.71	1.50	1.75
PO	-.412	1.209	1.88	1.00	1.35 - 1.44	1.75	1.50
PT	1.312	.676	1.94 - 2.00	1.75	1.59 - 1.71	2.00	1.50
RO	.144	.497	1.94 - 2.00	1.00	1.59 - 1.71	2.00	1.50
RS	.562	.955	1.94 - 2.00	1.00	1.59 - 1.71	1.50	2.00
SE	1.627	-.520	1.94 - 2.00	1.00	1.74 - 1.88	2.00	2.00
SK	-.752	1.034	1.94 - 2.00	1.00	1.35 - 1.44	2.00	1.00
SL	-.460	.728	1.94 - 2.00	1.00	1.18 - 1.29	2.00	1.00
TR	.175	.684	1.88	1.00	1.74 - 1.88	2.00	1.50

Object Scores

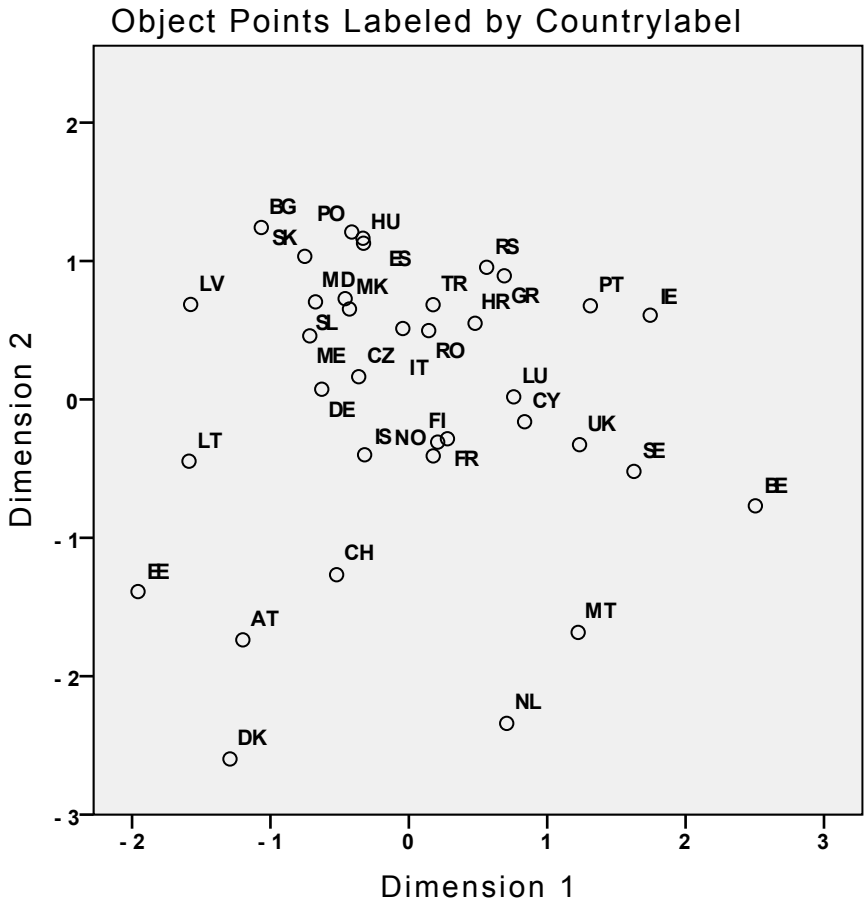
Countrylabel	ORDNAT_ASSIREQ	ORDNAT_ECOREQ	SPECNAT_REACQ	SPECNAT_CULAFF	LOSS_VOLREN	LOSS_RESABR
AT	1.25	1.00	1.06	1.00	1.67 - 1.75	2.00
BE	2.00	2.00	2.00	1.00	1.83 - 2.00	1.38
BG	2.00	1.25	1.69	1.75	1.25 - 1.33	2.00
CH	1.00	1.00	1.75	1.00	1.25 - 1.33	1.38
CY	2.00	2.00	1.75	1.00	1.67 - 1.75	1.38
CZ	2.00	2.00	1.50	1.00	1.25 - 1.33	2.00
DE	1.25	1.25	1.75	1.69	1.58	2.00
DK	1.00	1.00	1.06	1.38	1.83 - 2.00	1.63
EE	1.00	1.75	1.06	1.00	1.50	2.00
ES	1.75	1.50	1.75	1.75	1.25 - 1.33	1.88
FI	2.00	1.75	1.38	1.00	1.58	1.38
FR	1.00	1.00	1.69	1.69	1.67 - 1.75	1.75
UK	1.25	2.00	1.75	1.00	1.83 - 2.00	2.00
GR	1.75	2.00	1.50	1.69	1.58	2.00
HR	1.75	2.00	1.75	1.69	1.67 - 1.75	2.00
HU	1.25	1.00	1.75	2.00	1.25 - 1.33	2.00
IE	2.00	2.00	2.00	1.75	1.25 - 1.33	1.38
IS	2.00	1.00	1.25	1.00	1.50	1.63
IT	1.75	1.00	2.00	1.00	1.67 - 1.75	2.00
LT	1.00	1.50	2.00	1.50	1.67 - 1.75	2.00
LU	1.50	2.00	1.69	1.00	1.83 - 2.00	2.00
LV	1.25	1.75	1.50	2.00	1.50	2.00
MD	1.75	1.75	1.75	1.00	1.25 - 1.33	2.00
ME	2.00	1.25	1.38	1.00	1.25 - 1.33	2.00
MK	2.00	1.75	1.75	1.00	1.50	2.00
MT	2.00	2.00	1.50	1.00	1.83 - 2.00	1.44
NL	1.00	2.00	2.00	1.00	1.83 - 2.00	1.38
NO	2.00	2.00	1.38	1.38	1.50	1.31
PO	2.00	1.75	1.50	1.75	1.50	2.00
PT	2.00	2.00	1.75	1.75	1.83 - 2.00	2.00
RO	1.75	1.75	1.69	1.00	1.67 - 1.75	2.00
RS	2.00	2.00	1.75	1.69	1.17	2.00
SE	2.00	2.00	1.75	1.00	1.83 - 2.00	1.63
SK	1.75	1.50	1.50	1.75	1.50	2.00
SL	2.00	1.75	1.69	1.00	1.17	2.00
TR	1.75	1.25	1.38	1.69	1.50	2.00

Object Scores

Countrylabel	LOSS_FORCIT
AT	1.31
BE	2.00
BG	2.00
CH	2.00
CY	2.00
CZ	1.00
DE	1.31
DK	1.00
EE	1.00
ES	1.38
FI	2.00
FR	2.00
UK	2.00
GR	2.00
HR	2.00
HU	2.00
IE	1.50
IS	2.00
IT	2.00
LT	1.00
LU	2.00
LV	1.00
MD	2.00
ME	1.25
MK	2.00
MT	2.00
NL	1.25
NO	1.00
PO	2.00
PT	2.00
RO	2.00
RS	2.00
SE	2.00
SK	1.25
SL	2.00
TR	2.00

Variable Principal Normalization.

Object Points Labeled by



Variable Principal Normalization.

Component Loadings

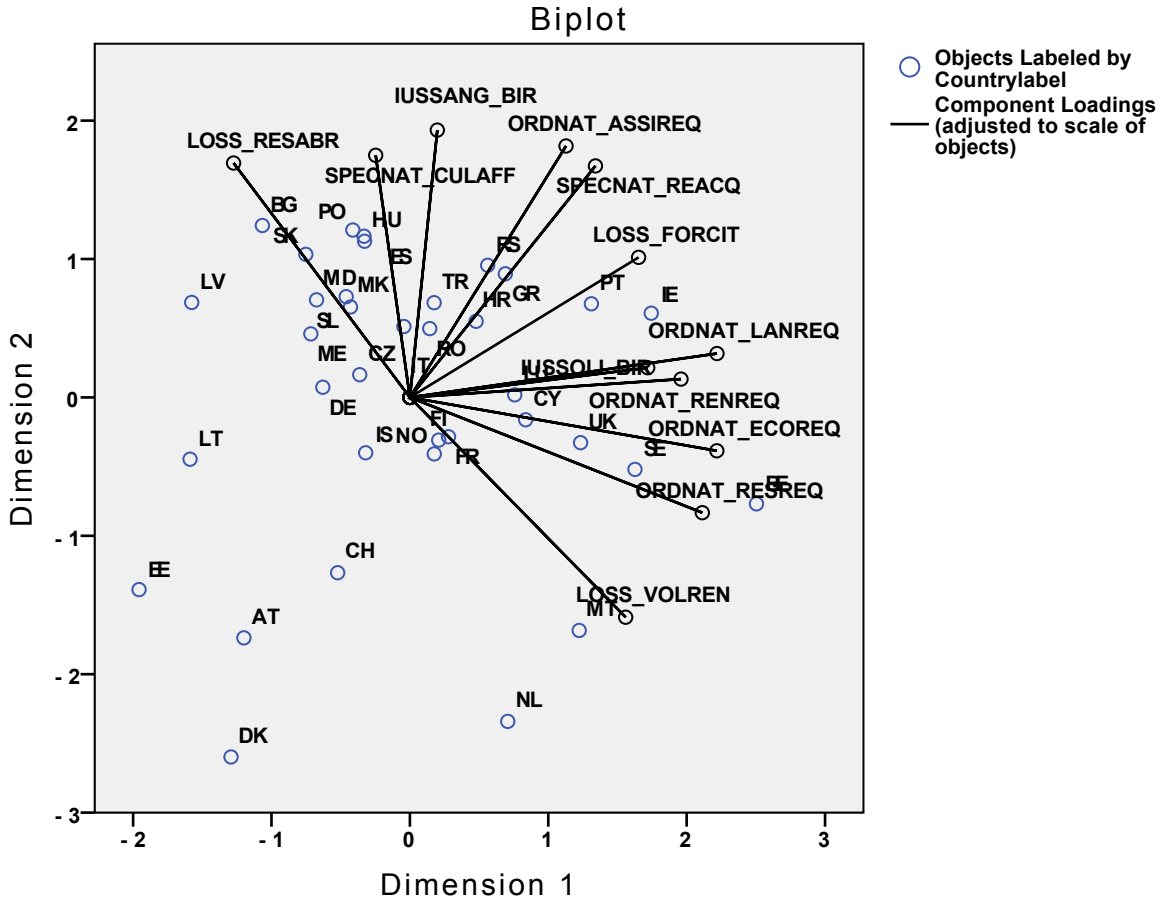
Component Loadings

	Dimension	
	1	2
IUSSANG_BIR	.069	.669
IUSSOLI_BIR	.596	.074
ORDNAT_RESREQ	.732	-.289
ORDNAT_RENREQ	.679	.046
ORDNAT_LANREQ	.769	.110
ORDNAT_ASSIREQ	.391	.630
ORDNAT_ECOREQ	.769	-.134
SPECNAT_REACQ	.465	.580
SPECNAT_CULAFF	-.086	.606
LOSS_VOLREN	.540	-.550
LOSS_RESABR	-.441	.587
LOSS_FORCIT	.573	.351

Variable Principal Normalization.

Biplot Component Loadings and Objects

Objects Labeled by



Variable Principal Normalization.

```
 CATPCA VARIABLES=IUSSANG_BIR IUSSOLI_BIR ORDNAT_RESREQ ORDNAT_RENREQ ORDNAT_LANREQ ORDNAT_A
  /ANALYSIS=IUSSANG_BIR(WEIGHT=1,LEVEL=SPORD,DEGREE=2,INKNOT=2) IUSSOLI_BIR(WEIGHT=1,LEVEL=S
LOSS_VOLREN(WEIGHT=1,LEVEL=SPORD,DEGREE=2,INKNOT=2) LOSS_RESABR(WEIGHT=1,LEVEL=SPORD,DEGREE=
  /DISCRETIZATION=IUSSANG_BIR(GROUPING,NCAT=7,DISTR=NORMAL) IUSSOLI_BIR(GROUPING,NCAT=7,DIST
LOSS_FORCIT(GROUPING,NCAT=7,DISTR=NORMAL)
  /MISSING=IUSSANG_BIR(PASSIVE,MODEIMPU) IUSSOLI_BIR(PASSIVE,MODEIMPU) ORDNAT_RESREQ(PASSIVE
  /DIMENSION=1
  /NORMALIZATION=VPRINCIPAL
  /MAXITER=100
  /CRITITER=.00001
  /PRINT=LOADING
  /PLOT=BIPLOT(LOADING) (Countrylabel) (20) OBJECT (Countrylabel) (20)
  /SAVE=OBJECT.
```

CATPCA - Principal Components Analysis for Categorical Data

Notes

Output Created		11-OCT-2015 15:01:40
Comments		
Input	Data	/Users/maarten/Dropbox/Publications/Journal articles/CEP/2013 special issue/Vink and Baubock_configurations /Data/Vink and Baubock_CEP 2013_data.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	36

Notes

Syntax	**CATPCA VARIABLES=IUSSANG_BI R IUSSOLI_BIR ORDNAT_RESREQ ORDNAT_RENREQ ORDNAT_LANREQ ORDNAT_ASSIREQ ORDNAT_ECOREQ SPECNAT_REACQ SPECNAT_CULAFF LOSS_VOLREN LOSS_RESABR LOSS_FORCIT Countrylabel /ANALYSIS=IUSSANG_BI R(WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) IUSSOLI_BIR(WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) ORDNAT_RESREQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) ORDNAT_RENREQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) ORDNAT_LANREQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) ORDNAT_ASSIREQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) ORDNAT_ECOREQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) SPECNAT_REACQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) SPECNAT_CULAFF (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) LOSS_VOLREN (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) LOSS_RESABR (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) LOSS_FORCIT (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) /DISCRETIZATION=IUSS ANG_BIR(GROUPING, NCAT=7, DISTR=NORMAL) IUSSOLI_BIR(GROUPING, NCAT=7, DISTR=NORMAL) ORDNAT_RESREQ (GROUPING,NCAT=7, DISTR=NORMAL) ORDNAT_RENREQ (GROUPING,NCAT=7, DISTR=NORMAL) ORDNAT_LANREQ (GROUPING,NCAT=7, DISTR=NORMAL) ORDNAT_ASSIREQ (GROUPING,NCAT=7, DISTR=NORMAL)

Notes

Resources	Processor Time	00:00:00.27
	Elapsed Time	00:00:00.00
Variables Created or Modified	OBSCO1_4	Object scores dimension 1

[DataSet1] /Users/maarten/Dropbox/Publications/Journal articles/CEP/2013 special issue/Vink and Baubock_configurations/Data/Vink and Baubock_CEP 2013_data.sav

Warnings

Variables IUSSOLI_BIR, ORDNAT_RENREQ, ORDNAT_LANREQ, ORDNAT_ASSIREQ, ORDNAT_ECOREQ, SPECNAT_REACQ, SPECNAT_CULAFF, LOSS_RESABR, LOSS_FORCIT were specified or implied to be grouped into a number of categories (NCAT) equal to or greater than the number of distinct values of the variables (NCAT is set to this number). For integer variables this implies that grouping has no effect, and for real and string variables that grouping results in ranking.

Credit

CATPCA
Version 1.1
by
Data Theory Scaling System Group (DTSS)
Faculty of Social and Behavioral Sciences
Leiden University, The Netherlands

Case Processing Summary

Valid Active Cases	36
Active Cases with Missing Values	0
Supplementary Cases	0
Total	36
Cases Used in Analysis	36

Iteration History

	Variance Accounted For		Loss		
Iteration Number	Total	Increase	Total	Centroid Coordinates	Restriction of Centroid to Vector Coordinates
0[a]	3.350085	.000007	8.649915	7.812678	.837237
25[b]	3.992161	.000009	8.007839	7.627044	.380795

a. Iteration 0 displays the statistics of the solution with all variables, except variables with optimal scaling level Multiple Nominal, treated as numerical.

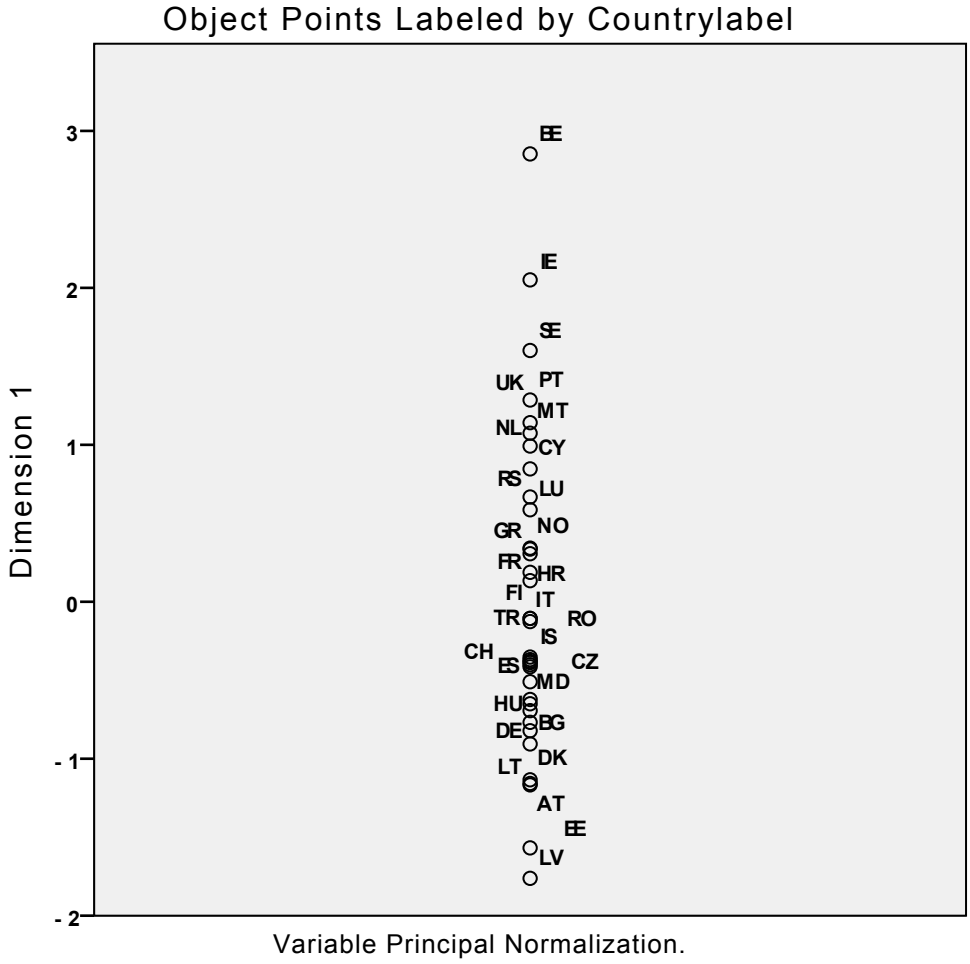
b. The iteration process stopped because the convergence test value was reached.

Model Summary

		Variance Accounted For	
Dimension	Cronbach's Alpha	Total (Eigenvalue)	% of Variance
1	.818	3.992	33.268
Total	.818	3.992	33.268

Objects

Object Points Labeled by



Component Loadings

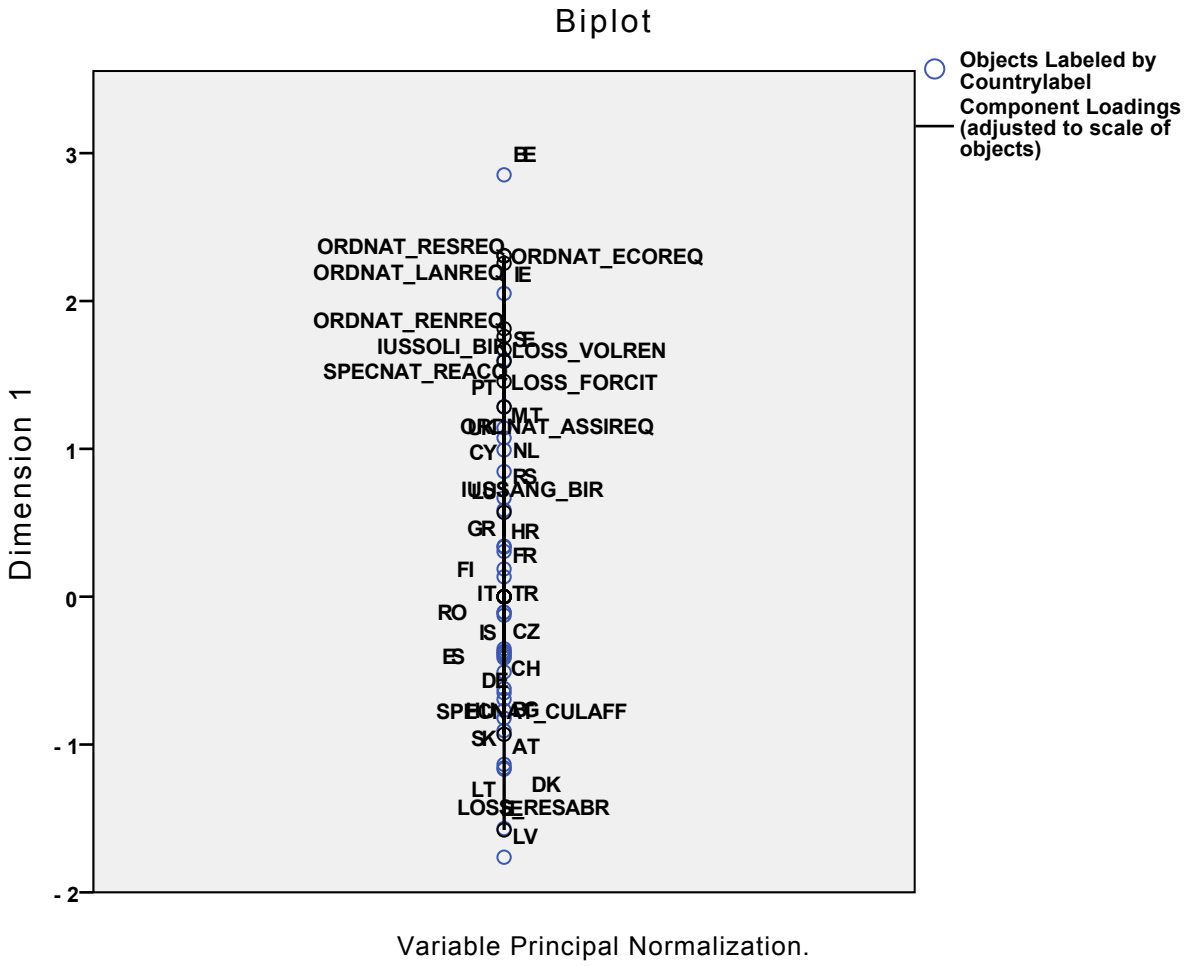
Component Loadings

	Dimension
	1
IUSSANG_BIR	.193
IUSSOLI_BIR	.613
ORDNAT_RESREQ	.763
ORDNAT_RENREQ	.595
ORDNAT_LANREQ	.779
ORDNAT_ASSIREQ	.434
ORDNAT_ECOREQ	.781
SPECNAT_REACQ	.538
SPECNAT_CULAFF	-.315
LOSS_VOLREN	.565
LOSS_RESABR	-.534
LOSS_FORCIT	.493

Variable Principal Normalization.

Biplot Component Loadings and Objects

Objects Labeled by



Variable Principal Normalization.

```
 CATPCA VARIABLES=IUSSANG_BIR IUSSOLI_BIR ORDNAT_RESREQ ORDNAT_RENREQ ORDNAT_LANREQ ORDNAT_A
  /ANALYSIS=IUSSANG_BIR(WEIGHT=1,LEVEL=SPORD,DEGREE=2,INKNOT=2) IUSSOLI_BIR(WEIGHT=1,LEVEL=S
LOSS_VOLREN(WEIGHT=1,LEVEL=SPORD,DEGREE=2,INKNOT=2) LOSS_RESABR(WEIGHT=1,LEVEL=SPORD,DEGREE=
  /DISCRETIZATION=IUSSANG_BIR(GROUPING,NCAT=7,DISTR=NORMAL) IUSSOLI_BIR(GROUPING,NCAT=7,DIST
LOSS_FORCIT(GROUPING,NCAT=7,DISTR=NORMAL)
  /MISSING=IUSSANG_BIR(PASSIVE,MODEIMPU) IUSSOLI_BIR(PASSIVE,MODEIMPU) ORDNAT_RESREQ(PASSIVE
  /DIMENSION=3
  /NORMALIZATION=VPRINCIPAL
  /MAXITER=100
  /CRITITER=.00001
  /PRINT=LOADING
  /PLOT=BIPLOT(LOADING) (Countrylabel) (20) OBJECT (Countrylabel) (20)
  /SAVE=OBJECT.
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CATPCA - Principal Components Analysis for Categorical Data

Notes

Output Created		11-OCT-2015 15:02:08
Comments		
Input	Data	/Users/maarten/Dropbox/Publications/Journal articles/CEP/2013 special issue/Vink and Baubock_configurations/Data/Vink and Baubock_CEP 2013_data.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	36

Notes

Syntax	**CATPCA VARIABLES=IUSSANG_BI R IUSSOLI_BIR ORDNAT_RESREQ ORDNAT_RENREQ ORDNAT_LANREQ ORDNAT_ASSIREQ ORDNAT_ECOREQ SPECNAT_REACQ SPECNAT_CULAFF LOSS_VOLREN LOSS_RESABR LOSS_FORCIT Countrylabel /ANALYSIS=IUSSANG_BI R(WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) IUSSOLI_BIR(WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) ORDNAT_RESREQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) ORDNAT_RENREQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) ORDNAT_LANREQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) ORDNAT_ASSIREQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) ORDNAT_ECOREQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) SPECNAT_REACQ (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) SPECNAT_CULAFF (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) LOSS_VOLREN (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) LOSS_RESABR (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) LOSS_FORCIT (WEIGHT=1, LEVEL=SPORD, DEGREE=2,INKNOT=2) /DISCRETIZATION=IUSS ANG_BIR(GROUPING, NCAT=7, DISTR=NORMAL) IUSSOLI_BIR(GROUPING, NCAT=7, DISTR=NORMAL) ORDNAT_RESREQ (GROUPING,NCAT=7, DISTR=NORMAL) ORDNAT_RENREQ (GROUPING,NCAT=7, DISTR=NORMAL) ORDNAT_LANREQ (GROUPING,NCAT=7, DISTR=NORMAL) ORDNAT_ASSIREQ (GROUPING,NCAT=7, DISTR=NORMAL)

Notes

Resources	Processor Time	00:00:00.30
	Elapsed Time	00:00:01.00
Variables Created or Modified	OBSCO1_5	Object scores dimension 1
	OBSCO2_5	Object scores dimension 2
	OBSCO3_5	Object scores dimension 3

[DataSet1] /Users/maarten/Dropbox/Publications/Journal articles/CEP/2013 special issue/Vink and Baubock_configurations/Data/Vink and Baubock_CEP 2013_data.sav

Warnings

Variables lUSSOLI_BIR, ORDNAT_RENREQ, ORDNAT_LANREQ, ORDNAT_ASSIREQ, ORDNAT_ECOREQ, SPECNAT_REACQ, SPECNAT_CULAFF, LOSS_RESABR, LOSS_FORCIT were specified or implied to be grouped into a number of categories (NCAT) equal to or greater than the number of distinct values of the variables (NCAT is set to this number). For integer variables this implies that grouping has no effect, and for real and string variables that grouping results in ranking.

To obtain scatterplots of pairs of dimensions in stead of a matrix scatterplot you can use the NDIM keyword with the PLOT subcommand: NDIM(d1,d2) produces scatterplots of dimension d1 plotted against all higher dimensions up to d2.

Credit

CATPCA
Version 1.1
by
Data Theory Scaling System Group (DTSS)
Faculty of Social and Behavioral Sciences
Leiden University, The Netherlands

Case Processing Summary

Valid Active Cases	36
Active Cases with Missing Values	0
Supplementary Cases	0
Total	36
Cases Used in Analysis	36

Iteration History

	Variance Accounted For		Loss		
Iteration Number	Total	Increase	Total	Centroid Coordinates	Restriction of Centroid to Vector Coordinates
0[a]	6.788625	.005783	29.211375	26.179039	3.032337
46[b]	7.617906	.000010	28.382094	25.839237	2.542858

a. Iteration 0 displays the statistics of the solution with all variables, except variables with optimal scaling level Multiple Nominal, treated as numerical.

b. The iteration process stopped because the convergence test value was reached.

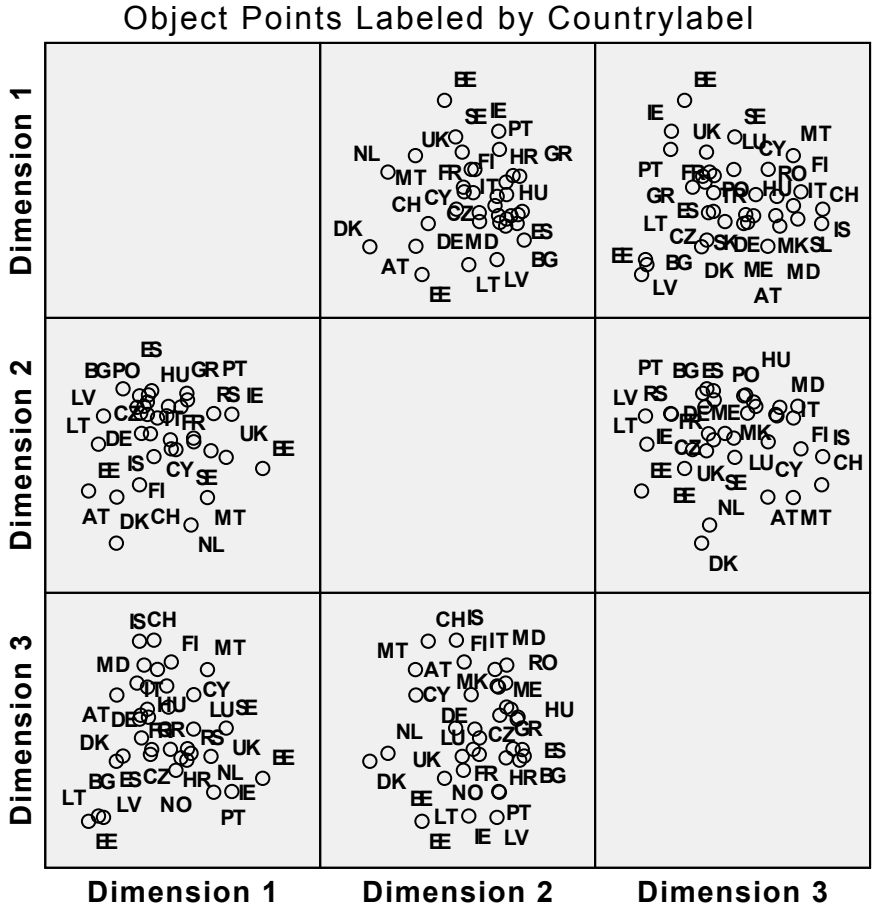
Model Summary

Dimension	Cronbach's Alpha	Variance Accounted For	
		Total (Eigenvalue)	% of Variance
1	.797	3.711	30.924
2	.635	2.395	19.958
3	.369	1.512	12.601
Total	.948[a]	7.618	63.483

a. Total Cronbach's Alpha is based on the total Eigenvalue.

Objects

Object Points Labeled by



Variable Principal Normalization.

Component Loadings

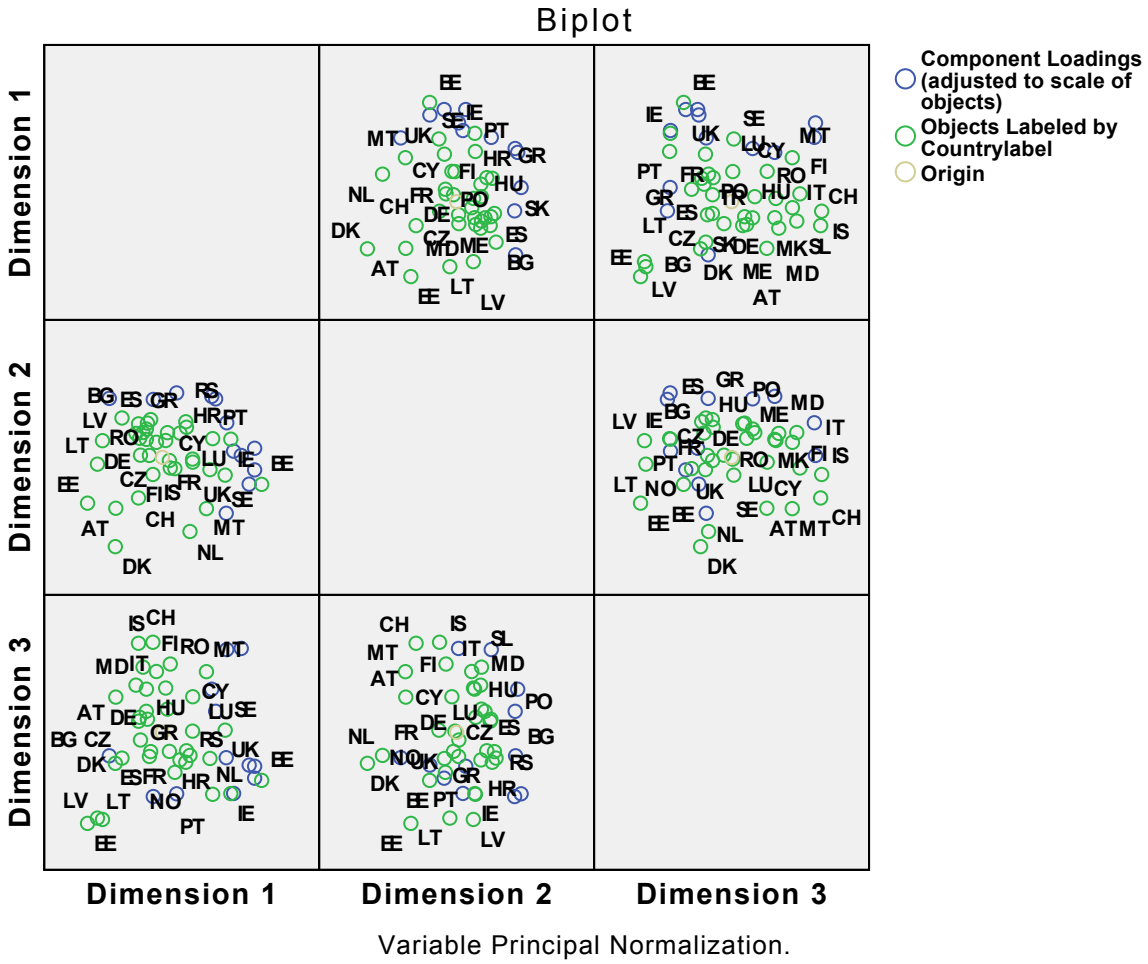
Component Loadings

	Dimension		
	1	2	3
IUSSANG_BIR	.119	.651	-.414
IUSSOLI_BIR	.599	.063	-.411
ORDNAT_RESREQ	.730	-.270	-.221
ORDNAT_RENREQ	.663	.019	.565
ORDNAT_LANREQ	.776	.092	-.228
ORDNAT_ASSIREQ	.415	.617	.291
ORDNAT_ECOREQ	.776	-.126	-.309
SPECNAT_REACQ	.448	.591	.142
SPECNAT_CULAFF	-.077	.586	-.432
LOSS_VOLREN	.537	-.564	-.171
LOSS_RESABR	-.447	.596	-.158
LOSS_FORCIT	.541	.350	.558

Variable Principal Normalization.

Biplot Component Loadings and Objects

Objects Labeled by



Variable Principal Normalization.