ASSIGNMENT 7: INTERNAL UNFOLDING OF WINTER OLYMPIC SPORTS

This assignment will use the preference rating data for the Olympic winter sports stimuli. NOTE – you may run this assignment in SPSS, using PREFSCAL, or in R using smacofRect.

1. Use SPSS to read in the preference data ("Olympic_MASTER_preference_2018.txt"), posted in this session (see below). NOTE: to read in a character-string variable, use the (A#) format specification in the DATA LIST statement.

```
TITLE read in Winter Olympic sports data.
COMMENT the data are ratings: 9=most preferred, 1=least preferred.
DATA LIST FREE
 /1 subj (A4)  biathlon  bobsled  downhill  figure  hockey  icedance
luge  skiJump  slalom  snowbrd  speedSkt  XctySki.
BEGIN DATA
<data goes here, columns separated by spaces or tabs>
END DATA.
```

2. Run internal unfolding analyses using PREFSCAL, as follows. First, run analyses in 2 dimensions, using all four combinations of assumptions: (interval, matrix-conditional), (interval, row-conditional), (ordinal, matrix-conditional), (ordinal, row-conditional). [NOTE: you control these assumptions with the CONDITION and TRANSFORMATION subcommands of PREFSCAL.] Based on interpretability, which combination of assumptions seems to work best?

3. Using the best assumptions from Step 2, run the unfolding analysis in 1,2,3,4,5 dimensions. Based on a plot of normalized raw stress, which dimensionality seems best?

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subj	biathlon	bobsled	downhill	figure	hockey	icedance	luge	skiJump	slalom	snowbrd	speedSkt	XctySki
AG	2	5	6	7	6	5	6	8	8	9	7	1
S72	2	2	2	8	2	8	2	7	3	8	4	1
JEC	5	6	8	7	5	7	6	7	7	6	6	5
JA2	5	9	8	6	2	6	9	9	6	9	7	6
LAF	4	4	9	2	7	2	3	7	9	8	5	4
ML	2	4	8	9	9	7	4	8	7	7	8	2
SLI	8	7	9	9	5	9	7	8	9	6	6	8
NYV	3	3	3	9	9	9	3	8	2	9	2	2
SWH	1	5	2	9	7	8	1	6	1	1	9	1
XW	2	6	5	5	9	6	6	6	4	7	7	2
ZH	2	3	7	8	7	8	1	2	1	2	8	2
CX	1	3	2	5	1	1	3	2	2	1	3	1
DL	1	2	3	4	3	5	2	6	3	1	2	1
PL	3	5	9	9	9	7	4	4	8	9	8	3
TC	2	2	2	9	6	8	1	3	2	3	8	2
kar4	2	8	7	5	8	5	7	6	2	8	8	2
HDH	1	1	1	8	3	8	1	1	1	1	3	2
PCO	1	5	5	9	9	9	1	5	1	5	9	1
923	1	2	6	9	2	7	3	9	2	9	8	2

602	2	2	3	6	2	5	1	3	2	3	9	2
777	9	9	9	7	5	7	9	9	5	9	7	5
yw	2	3	9	8	2	7	5	7	5	8	9	2
YY	2	1	2	9	5	9	1	5	2	2	7	1
XY	5	5	8	9	6	9	5	8	5	6	9	5