Tutorial suggestion for 2016 meetings: Sensometrics and eurosense

using the r-package sensR for the planning and analysis of similarity and discrimination data

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Abstract:

We will introduce the main features of the sensR package. The sensR package provides the following:

* Statistical tests of sensory discrimation and similarity data
* Power and sample size computations for discrimination and similarity tests
* Thurstonian analyses via d-prime estimation
* Improved confidence intervals via profile likelihood methods
* Linking "one sample at a time" Thurstonian analysis to more generic statistical
* analysis (regression and anova)
* Tools for analysing replicated discrimination data
* Comparing multiple d-primes

At the moment data from the following test protocols are supported by the sensR (and the supporting ordinal) package: Duo-Trio, Triangle, Tetrad, 2-AFC, 3-AFC, A-not A, Same-Different, 2-AC, A-not A w. Sureness.

Plan:

1. Planning and analysing “basic protocol” data.
2. Handling replicated data
3. A few perspectives towards Thurstonian Generalised Linear Model analysis
4. Hands-on working with examples

**References**Christensen, R. H. B. & P. B. Brockhoff (2015). sensR - An R-package for sensory discrimination. R package version 1.4-6. [http://www.cran.r-project.org/package=sensR/](http://www.cran.r-project.org/package%3DsensR/)

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