

D3b

Proposal for methods toolbox

The “toolbox” aims at providing the HUMAINE community with a set of standard tools. Those tools include measurements instruments, methods and models that are commonly referred to by the research community.

It does not intend to be an exhaustive list; rather it should remain focused on the fundamental working models that are specifically adapted to the aims of the network and the concerns that are expressed in its framework.

As specified in the Technical Annex, the toolbox will be made available to the broad public who access the portal.

For each of the tools available, descriptions, comments, examples, and articles, will be made available via a section of the portal. For the tools that require it, the download process will include an open-license agreement act by which each user agree to provide the community with feedback information, such as results and comments. This explicit agreement is made in accordance with the ethic policy that has been agreed upon within the community.

Similarly, we propose to set up a two-step uploading process that would allow to “certify” some of the tools that are made available. First, anyone will be able to update a wiki section of the portal with tools they recommend. Then, following a reviewing-like process, users that wish to certify their tools will be able to submit a form stating relevant publications, results and comments. Tools that have not proved to be reliable will not be certified.

Finally, we propose to set up a search engine that would allow users to browse through the available tools and to search for relevant through this evolving database.

Find hereafter a non-exhaustive list of the tools that we think could be relevant for such enterprise.

Should you have questions, comments, suggestions, feel free to write to
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Geneva Appraisal Questionnaire

Synopsis: The Geneva Appraisal Questionnaire (GAQ) can be used to assess, as much as is possible through recall and verbal report, the results of an individual's appraisal process in the case of a specific emotional episode (as based on Scherer's Component Process Model of Emotion). The files available for download contain the current English, French, and German versions (and information on usage).

GAQ English version: http://www.unige.ch/fapse/emotion/resmaterial/GAQ_English.pdf

GAQ French version: http://www.unige.ch/fapse/emotion/resmaterial/GAQ_Fran%E7ais.pdf

GAQ Deutsch version: http://www.unige.ch/fapse/emotion/resmaterial/GAQ_Deutsch.pdf

Geneva Emotion Analyst

Synopsis: This expert system, based on Klaus Scherer's Component Process Model asks the participant a number of questions about an emotional experience he or she has had recently and then tries to diagnose the nature of the emotional state on the basis of theoretical predictions.

<http://www.unige.ch/fapse/emotion/demo/TestAnalyst/GERG/apache/htdocs/index.php>

Scherer, K. R. (1993). Studying the emotion-antecedent appraisal process: An expert system approach. *Cognition and Emotion*, 7, 325-355.

Code for the Classification of Emotion Antecedent Situations and Responses

Synopsis: This PDF file reproduces a code to categorize emotion-antecedent situations according to some of their salient features as well as to categorize responses. The coding system has been developed by a group of international researchers for the purpose of a cross-cultural study. Further information is provided on the cover sheet of the file.

<http://www.unige.ch/fapse/emotion/resmaterial/CodeAppB.pdf>

List of Affect and Emotion Terms in 5 languages

Synopsis: One of the problems in intercultural research is the correct translation of the affect or emotion terms used. Since many of these terms have somewhat different denotational and connotational meaning in different languages, there is no satisfactory solution to the problem. The following list of affect descriptors in five Indo-European languages is a byproduct of the research activities of a team of psychologists from many different countries that ran a series of intercultural questionnaire studies, involving free responses of emotional experiences. No claim is made for the exhaustiveness of the list or for the affect status of specific terms. Opinions may also vary on whether a particular term in a particular language is the best possible rendering of the meaning of the terms in the other languages. In fact, in revising the list it became clear that it was impossible to find labels with exactly equivalent meanings across all languages – in many cases a choice needed to be made as to which language was to serve as reference. Most importantly, while there is obviously much overlap in the meanings, in some languages, especially in French and Italian, many essentially "correct" translations also have very strong additional connotations, being normally disambiguated by the context. Therefore this list should not be seen as definitive but rather as a convenient starting point for the elaboration of more sophisticated multilingual dictionaries of affective meaning. Indeed, the discussion about the similarities and differences in meaning of these terms across languages may call into question the

very idea of a small number of universal basic emotions, at least with respect to the conceptualization of emotion in language.

<http://www.unige.ch/fapse/emotion/resmaterial/FiveLangAffectTerms.pdf>

Scherer, K. R., Wallbott, H. G., & Summerfield, A. B. (Eds). (1986). *Experiencing emotion : A cross-cultural study*. Cambridge : Cambridge University Press.

ISEAR Databank

Synopsis: Over a period of many years during the 1990s, a large group of psychologists all over the world collected data in the ISEAR project, directed by Klaus R. Scherer and Harald Wallbott. Student respondents, both psychologists and non-psychologists, were asked to report situations in which they had experienced all of 7 major emotions (joy, fear, anger, sadness, disgust, shame, and guilt). In each case, the questions covered the way they had appraised the situation and how they reacted. The final data set thus contained reports on seven emotions each by close to 3000 respondents in 37 countries on all 5 continents.

<http://www.unige.ch/fapse/emotion/databanks/isear.html>

ANVIL – The video annotation research tool

Synopsis: Anvil is a free video annotation tool, used at research institutes world-wide (see the Anvil User Web). It offers frame-accurate, hierarchical multi-layered annotation driven by user-defined annotation schemes. The intuitive annotation board shows color-coded elements on multiple tracks in time-alignment. Special features are cross-level links, non-temporal objects and a project tool for managing multiple annotations. Originally developed for Gesture Research, Anvil has also proved suitable for research in Human-Computer Interaction, Linguistics, Ethology, Anthropology, Psychotherapy, Embodied Agents, Computer Animation and many other fields.

Anvil can import data from the widely used, public domain phonetic tools PRAAT and XWaves which allow precise and comfortable speech transcription. Anvil can display waveform and pitch contour. Anvil's data files are XML-based. Special ASCII output can be used for import in statistical toolkits like SPSS. The Anvil system is written in Java and should run on Windows, Macintosh and Unix (Solaris/Linux) computers.

<http://www.dfki.de/~kipp/anvil/>

Michael Kipp (2001) Anvil - A Generic Annotation Tool for Multimodal Dialogue. In: *Proceedings of the 7th European Conference on Speech Communication and Technology*, Aalborg, pp. 1367-1370.

Rating Test

Synopsis: This software allows scientists to carry out listening tests without having to write code. Instead, all settings can be written into an XML-based configuration file.

<http://ratingtest.sourceforge.net/>

Soon to be added ..

Geneva Affect Label Coder

Synopsis: Emotion psychologists increasingly ask the participants in their studies to describe their feelings and emotions in their own words, using a verbal emotion label or a brief expression. While this information is rich and ecologically valid, it is difficult to use in quantitative statistical analyses. Therefore, most researchers will want to classify the free responses into a limited number of emotion categories. However, this often raises two issues: 1) how many and which emotion categories to use, and 2) how to perform reliable, objective coding of the free responses. GALC proposes a pragmatic solution. It attempts to recognize 36 affective states commonly distinguished by words in natural languages and parses the database for these terms and their synonyms. All classes and the synonyms used are based on thesauri for English, French, and German. For a more detailed discussion of the development of GALC, see Scherer, K.R. (2002). GALC: A simple parser to categorize free descriptions of affective state into natural language categories.

The emotional wheel

Synopsis: Built and tested in Geneva, the 'Emotion Wheel' was devised as a tool for the verbal report of emotions. It includes 16 emotion categories disposed in a circle. The 16 categories are ordered according to their postulated position in a 2 dimensional space. The two underlying dimensions are the level of perceived control in the situation that generates the emotion (horizontal dimension) and the positive/negative (pleasant/unpleasant) quality of the situation and of the resulting feeling (vertical dimension).

SALAS – Developed by QUB in Belfast

Feeltrace – Developed by QUB in Belfast