TESTACCORD Databank

EMOTION data set : presentation

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Introduction

TESTACCORD.EMOTION is a data set of *TestAccord*, a data bank of various annotation sets dedicated to the experimental study of data reliability and inter-coders agreement in the framework of Natural Language Processing.

TESTACCORD.EMOTION addresses the annotation of emotion annotation on a child corpus of fairy tale. More precisely, it concerns the subjective annotation of the emotional valence and intensity of every sentence of a fairy tale. This document presents into details the data set.

TestAccord.Emotion : annotated corpus

This data set results from the annotation of a French speaking fairy tales. The selected texts correspond to French modern fairy tales (Vassallo, 2004; Vanderheyden, 1995) which present the interest of being quite confidential. This guarantees that the coders discover the text during the annotation task. The corpus contains 230 sentences. We asked 27 subjects to attribute independently an emotional value to every sentence through a 5-items scale of values (sse table just below).

Coding value	Meaning	Valence	Intensity
-2	strongly negative	negative	Strong
-1	moderately negative	negative	Moderate
0	no emotion	neutral	None
1	moderately positive	positive	Moderate
2	strongly positive	positive	Strong

This affective scale encompasses both *valence* and *intensity* dimensions. It enables to compare without methodological bias an annotation with 3 coding categories (*valence*: negative, positive, neutral) and the original 5-categories (*valence+intensity*) annotation. The annotation guide only gave the coders the coding value and its associated meaning.

The subjects (12 men / 15 women) were adult people (average age: 30.8 years), since a preliminary pilot experiment showed that children meet difficulties to handle a 5-values emotional scale. Anyway, the aim of this experiment is to assess reliability measures and not children annotations. All the coders have a superior level of education (at least, high-school diploma), they did not know each other and worked separately during the annotation task. Only four of them had a prior experience in corpus annotation.

The annotation was conducted as follows: the coders were not trained but were given precise annotation guidelines providing some explanations and examples on the emotional values they had to use. The coders achieve the annotation once, without any restriction on time. They had to rely on their own judgment, without considering any additional information. Sentences were given in a random order to investigate an out-of-context perception of emotion.

We conducted a second experiment where the order of the presented sentences was those of the original fairy tale, in order to study the influence of the discourse context. As a result, two different annotation are found in this data set.

The criterion of data significance – at least five chance agreements per category – proposed by (Krippendorff, 2004) is greatly satisfied for the valence annotation (3 coding categories). It is approached on the complete annotation where we can assure 4 chance agreements per category.

TestAccord.Emotion : distributed data

The data set is distributed as an Calc Open Office file (TESTACCORD_EMOTION.ods). Two sets of test data are actually distributed, which correspond to two different sheets:

- Hors contexte   annotations on the sentences in a random ordrer
- Contexte   annotations with sentence order respecting the story

Every sheet is made of 28 columns and 137 lines. Each line corresponds to a specific sentence which is presented in first column. The next 27 columns are corresponds to the coders' annotations.

The annotations are respecting the 5-classes annotation scheme. You can translate it directly to a valence annotation (3-classes) by merging the -2 and -1 classes into a negative category as well as the 1 and 2 classes in a positive one.

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You are kindly asked to credit us by means of one of the following references:

- Le Tallec M., Villaneau J., Antoine J.-Y., Duhaut D. (2011) Affective Interaction with a Companion Robot for vulnerable Children: a Linguistically based Model for Emotion Detection Proc. *LTC'2001, Language Technology Conference*, Poznan, Poland. 445-450

References

- Krippendorff K. (2004). *Content Analysis: an Introduction to its Methodology*. Chapter 11. Sage: Thousand Oaks, CA

- Vassallo R-M.(2004) *Comment le Grand Nord découvrit l'été*. Flammarion, Paris, France.

- Vanderheyden K. (1995) *Le Noel des animaux de la montagne*. Fairy tale available on : http://www.momes.net/histoiresillustrees/contesdemontagne/noelanimaux.html