

Collected comments to draft spec report of 20 October 2008

Marc Schröder, 23 October 2008

Comments are about the document attached to <http://lists.w3.org/Archives/Public/public-xg-emotion/2008Oct/0007.html>

The following comments are summarised here:

Catherine: <http://lists.w3.org/Archives/Public/public-xg-emotion/2008Oct/0009.html>

Christian: <http://lists.w3.org/Archives/Public/public-xg-emotion/2008Oct/0011.html>

JC: <http://lists.w3.org/Archives/Public/public-xg-emotion/2008Oct/0012.html>

Ian: <http://lists.w3.org/Archives/Public/public-xg-emotion/2008Oct/0013.html>

Kostas: <http://lists.w3.org/Archives/Public/public-xg-emotion/2008Oct/0014.html>

Andy: (personal communication, 21 Oct.)

Core 1

DISCUSSION `<mood>` vs. `<emotion type="mood">` vs. `<affect type="mood">`

Catherine: I would prefer to use a generic word 'affect' with different types (emotion, mood, feeling, ...).

Christian: I am in favour of option 2. I agree that calling it "emotion" is irritating if it actually is a mood or affect, but then: novices don't know about these differences, and experts should know to deal with it. After all it is just a tag name. (email contains additional name proposals, `<state>` and `<ars>`)

JC: I vote for option 2 (cf below) with the keyword "affect". I think that it is important that we propose terms that are consistent with theories.

Ian: Agree with Christian, even our group is called "Emotion" and this format is for everyone so the tag should be the most easily understood. Lets also not forget that this has to be used around the world and most native english speakers dont know what "affect" means.

Core 2

DISCUSSION options for defining set of category names, including use of Qnames

Christian: I quite like the qnames version, it's shorter yet readable.

JC: I think that a repository of defined sets would be great. Would it be possible to host them on the humane portal? It might be useful to be able to specify an url so that researchers can upload their sets on their own web site.

JC: I prefer separate specifications of set and name in different attribute as it provides explicit specification of both terms. With the QNAMES option, it is not explicit that "everyday" is the name of the set.

Ian: We should have a repository, perhaps at W3? I like the Qnames idea, simple and tidy.

Core 3

DISCUSSION where to define unipolar vs. Bipolar status of individual scales

Catherine: Isn't it possible to retrieve from the dimension set specification if it is unipolar or bipolar?

Christian: I go with Catherine. This could be specified in the set description.

JC: It might be included in the name of the set: set="Arousal(bipolar)-and-Valence(bipolar)" or by an explicit spec of the min and max value set="Arousal(-1:1)-and-Valence(-1:1)"

Ian: I would suggest a "scale" attribute which could be used throughout the schema :

```
<arousal scale="unipolar" value="0.75" /> OR  
<dimensions scale="unipolar" set="emotionai">
```

Kostas: scale definitions should be available from the definition of the dimension set. However, in some cases there are multiple (and not necessarily equivalent) definitions, e.g. in the PAD model you can have continuous *and* sampled (condensed) values. Declaring the dimension set explicitly should suffice to resolve such ambiguities.

Core 4

Core 5

ISSUE defining the default set at suitable degree of abstraction

Catherine: Couldn't we use one default set of action tendencies and use mapping table to adapt the action tendencies to other entities (eg robot, virtual agent, ...)?

Ian: Abstraction is good, so is a hierarchy, I use a hierarchy so a top level is "Energy" (or use of energy) with food as a specific sub set.

Core 6

DISCUSSION whether and how complex emotions should be represented explicitly

Catherine: I find difficult to define the added value of having a tag 'complex emotion' without having a tag 'regulation'. That is we consider only one type of complex emotion, namely the superposition of several emotions. If it is so, we can express superposition of several emotions through the time information of each emotion.

Christian: (suggests to use an attribute 'complex=true/false', to simplify human or machine analysis of the data when looking e.g. for a certain emotion)

JC: Would it be possible to insert an ID attribute in the "emotion" (or "affect") tag so that they can be referred to in further specifications such as complex emotions? (lists an example)

Ian: I think everything should be part of a set (like dimensions) which can contain one or more elements. I think most of what we are doing is inherently complex and parallel and we should encourage that thinking perhaps?

Core 7

Core 8

(see Links 2)

Meta 1

DISCUSSION confidence for complex emotions (Core 6) and global metadata (Global 0)

Christian: I don't see a need for confidence for complex emotion. Each single emotion that complex emotion is made of should have a confidence value.

ISSUE representing method how confidence was determined

Christian: Could go in meta data on that study.

Meta 2

DISCUSSION medium and mode or only one attribute?

Catherine: from a 'generation' point of view, I do not see the need to differentiate 'medium' and 'attribute'.

Christian: (points out example where 'mode' stays the same but 'medium' is different: visual+body, infrared+body, wearable+body) Here we have always the same mode (body) but different media which might even yield different insights. What now? That's quite related to complex emotions. So do we need the modality attribute to differentiate the states detected at the same time from different modalities, even on the same mode? I don't like this but I don't see an alternative yet. Obviously this should be optional, since in a lot if not most of the cases only one modality will be used for one mode. (also suggests qnames could be used)

JC: I would include the medium attribute as an optional attribute of the modality tag. It would show compatibility efforts with EMMA.

Kostas: I think that the distinction between medium and mode is useful for a wide range of contexts. For instance, consider an example where one expert annotates a video based on facial expressions (mode) only, and at a later stage annotates based on gestures (same medium/visual, different mode) From the synthesis side, you may want to illustrate expressivity based on the <emotion> tag on a talking head, in which you can render facial expressions but not gestures; thus it would be useful to differentiate.

DISCUSSION how to represent multiple modalities

(Option 1: separate <modality> tags; Option 2: list of values in a single tag)

JC: I prefer the first version which is more explicit and makes easier later references to specified modalities.

Links 1

DISCUSSION whether links must have semantics or not

Ian: Links without semantics in an XML format seems odd, that seems more like presentation unless the semantics are implicit from the structure and tags of the XML.

Links 2

DISCUSSION if absolute time is a requirement

(there is a comment from Catherine but she used the term 'absolute' to mean something different; it is sorted below under „anchor“)

JC: absolute time should be

Ian: Absolute timing seems like an edge case. How about having a separate absolute time tag that specifies a absolute start point then all other timings are relative (to that absolute). This would be like absolute and relative coordinates.

DISCUSSION which time format to use: EMMA, SMIL, both?

Christian: one could think of having time sets as well which specify the format and unit of the timing information. Usage could be e.g.

```
<time set="absMillies" start="45" end="110"/>
```

```
<time set="absOnHoldDecay" on="45" hold="54" decay="66" end="120"/>
```

```
<time set="relOnHoldDecay" on="02" hold="44" decay="84" end="123"/>
```

```
<time set="absHumanReadable" start="00:00:45" end="00:01:50"/>
```

and so on.

JC: relative format should be possible both in EMMA and SMIL format

Ian: Standard format timing, machine readable. Prefer the SMIL format.

DISCUSSION where to indicate timing, exactly – separate <timing> element? Where can it occur?

JC: timing specification should be optional

DISCUSSION Should timing have a substructure, e.g. for onset, hold, decay?

Catherine: (some models go beyond the trapezoid shape of onset-apex-offset (examples in her email), but most current ECA implementations would be fine with this.)

Christian: Personally I'm fine with onset-hold-decay.

Ian: Agree with Catherine, I am currently using "attack, sustain, decay" timing values in my work so having a start point and a duration for those would be required (end point is then redundant).

DISCUSSION anchor attribute

Catherine: (says both absolute and relative time are needed, but uses the word „absolute time“ to indicate numerical time since the beginning of a file; we have previously called this „relative time“. In addition, points out the need to refer to an „event“ to specify time relative to this event.) Is this what Felix meant with „anchor“?

Christian: (agrees with Catherine)

Ian: Timing may not require an anchor (it could be used to drive an external system)

DISCUSSION indicate time in samples?

Kostas: samples in a video file are usually associated with the original or digitized format (PAL and NTSC use different frame per second counts). If you also consider web camera videos which can be captured at arbitrary rates, the situation becomes even more complex. imho, this is too-system centric.

Links 3

DISCUSSION closed or open set of semantic roles?

Christian: I also think it is important to be able to specify the context, as well as semantic role. But I don't think this has to be mandatory. Semantic roles: Wasn't it Jean-Claude who mentioned that the emotion of the observer is of interest, too? I'm not that much involved in annotation but I think sophisticated anno tools also check for the annotators state? Or was that just a "should"? Having the option to also provide a set would be good I think.

Ian: If there is a generally agreed upon set of semantic roles we can fix to that set.

DISCUSSION relation between „uri“ attribute and Links 1

Ian: The uri is ambiguous here and does sound like links 1, one of these could be removed.

Global 0

DISCUSSION how to represent global metadata – key-value pairs or arbitrary sub-elements?

Catherine: It seems quite difficult to define values for variables that could be set of any type of values. The scope of these variables is really large. The option 2 seems to allow for the description of a such broad field.

Christian: I go with Catherine (option 2)

JC: I prefer option 1 as it is simpler.

Ian: Go with the HTML format perhaps as it is so well known?

Scales

DISCUSSION on verbal vs. abstract discrete scales

Ian: Abstract is good but difficult to use, I would tend to favor positive/negative verbal scales

Kostas: I would go for abstract scales, based on the comment provided in the spec.

Other comments

Andy: I favour numerical scales over descriptive scales.

Andy: If we're going to specify a range than it should exaggerated behaviour should still sit within these ranges, otherwise it will be difficult to test for valid values.

JC: We might want to add in the basic modality set physiological.

Ian: Core 4: Is there a less specific, more easily understood word than "appraisals"? It seems very Scherer specific whereas "dimensions" is a very general term. Core 5: Again, "action-tendencies" seems very specific to one model rather than general? I would suggest just "actions" but maybe that is too general, thoughts?

Ian: Core 7 - I am less convinced that there should be a separate intensity tag. It does not seem intuitive that intensity is not tied to an element but is on its own?