

x-enVent – Guidelines for Annotating Events, Experiencers, Emotions and Appraisals

1 Concepts and Definitions

The annotation starts with the annotation of experiencers and assessment of their emotional state and cognitive appraisals. This is followed by marking the most salient event for that experiencer.

1.1 Experiencer

Definition 1 The **experiencer** is the person who is involved in/affected by the situation, and is aware of it.

Example 1

When I had been obviously unjustly treated and had no possibility of elucidating this. [WRITER]

Example 2

Wow, there is a rainbow. [WRITER]

Example 3

It was snowing and my daughter was building a snowman. [WRITER]

Example 4

It was snowing and Mary was building a snowman. [WRITER]

Example 5

John forgot Mary's keys. [WRITER]

Example 6

Laura and Enrica were happily refining the guidelines. [WRITER]

Example 7

Being alone at night in my basement. [WRITER]

Example 8

Laura and I were happily refining the guidelines. [WRITER]

Example 9

My friend Laura and I were happily refining the guidelines. [WRITER]

Example 10

My friend Laura, whom I've been knowing since long, and I were happily refining the guidelines. [WRITER]

Example 11

That smart friend of Giulia's, Elena, was happily refining the guidelines. [WRITER]

The experiencer¹ can be:

- the **writer**: sometimes, writers are directly referred to, for instance with personal pronouns (*I* – Example 1) and possessives (*my* – Example 3), but you can also assume that the experiencer is the writer whenever no other entity than the narrator/writer is mentioned (Example 2, 7); in both cases, please select the token WRITER.
- **other entities**: entities are always explicitly mentioned in the text (Example 3, 4, 5, and 6);
- **both** (e.g., Example 3).

Note that:

- different experiencers of the same event may feel different emotions (Example 5);
- experiencers are not always pro-active initiators, participants or contributors to the development of an event: they could be indirectly **affected** by it (Example 2, 3, 5);
- the difference between Example 3 and Example 4 lies in the perspective from which the emotion is felt. In the former, we recognize the writer as an experiencer (through the possessive *my*), in the latter, the experiencer is the entity mentioned in the text;
- try to include determiners, possessives, qualifiers and relative clauses (Example 3, 9, 10, 11).

1.2 Event Annotation

Definition 2 The **event** is the *occasion* or *happening* that is the most **salient** for the evaluation/appraisals of the experience.

Example 1

PersonX starts to yell at PersonY. [WRITER]

Example 2

Wow, there is a rainbow. [WRITER]

Example 3

When a car is overtaking another and I am forced to drive off the road. [WRITER]

Example 4

At the funeral of my grandma. [WRITER]

¹The experiencer definition comes from the “Emotion directed” frame in FrameNet https://framenet.icsi.berkeley.edu/fndrupal/index.php?q=frame_report&name=Annoyance

Example 5

They start to yell at the funeral of my grandma. [WRITER]

Note that multiple events may be mentioned (Example 3, *overtaking* and *forced to drive off*), however, there might one event that's the most relevant for the judgment of appraisals.

Tip: Ask yourself, *which is the event without which the emotion wouldn't have been triggered in the experiencer*.

Events realize in text mostly as verbal phrases. However, sometimes events can be expressed through noun phrases (such as *funeral* – Example 4).

Note:

- You may encounter not well-formed instances (Example 3, 4). In those cases it's possible that the event is evoked without a verb (Example 4). For such instances, mark the phrase that reveals the event that triggered the emotion/appraisals.
- the event as a whole may include the experiencers that are mentioned in the text. For instance, in Example 3 we do not mark the WRITER token, but we highlight *I* as the relevant pronoun that refers to such experiencer.
- **the event should include the predicate with its arguments:** if the verb is transitive, for instance, try to include the object (i.e. *there is* is not a complete event without *a rainbow* as in Example 2)
- different experiencers may be linked to different events.
- An example of multiple experiencers and multiple events:
The judge ignored the testimony of all those who had a similar experience; her decision offended people like me, who know this type of abuse [WRITER].
 - the highlighting refers to experiencers spans
 - note that we do not highlight *people like me*, since they are included in *all those who had a similar experience*.
 - we are having then 3 distinct experiencers
 - to evaluate the appraisals for *The judge*, the relevant event is *The judge ignored the testimony of all those who had a similar experience*. The next experiencer is *all those who had a similar experience*, and the most salient event for annotating their appraisals is the same as the for *The judge*. The last experiencer marked is the WRITER and the event that leads to the respective appraisals annotations is *her decision offended people like me*.

1.3 Emotion

Definition 3 In this project, we conceptualize an **emotion** as one from the following:

- ① joy
- ② sadness
- ③ anger
- ④ fear
- ⑤ hope
- ⑥ surprise
- ⑦ disgust
- ⑧ shame
- ⑨ guilt
- ⑩ trust

Note that an event does not necessarily elicit an emotion. In that case use the label *no emotion*.

Emotions may be explicitly expressed by a specific word or phrase (*I am **disgusted!** Bleark!*; *I was **petrified** when I saw the snake*) or may just be evoked (*He was young when he **died***).

Note on shame vs. guilt

- guilt is felt in situations where one judges their own behaviour and thinks it could have been different
- shame tends to be felt in situations where one judges their own stable personal characteristics
- another way to distinguish between these two emotions is to consider the actions triggered by shame versus guilt; for instance: when I'm ashamed I'd run away and when I feel guilt I'd apologize.

1.4 Appraisal Dimensions

Definition 4 Emotions emerge through the appraisal (evaluation) of events along many dimensions. In this study, such dimensions are:

- ① suddenness (*the event was sudden or abrupt*)
- ② familiarity (*the event was familiar to the experiencer*)
- ③ pleasantness (*the event was pleasant for the experiencer*)
- ④ understand (*the experiencer understood what was happening*)
- ⑤ goal-relevance (*the event was important or relevant for experiencer's goals*)
- ⑥ self-responsibility (*the event was caused by experiencer's own behaviour*)
- ⑦ other-responsibility (*the event was caused by somebody else's behaviour*)
- ⑧ situational-responsibility (*the event was caused by chance or special circumstances*)
- ⑨ effort (*the situation required the experiencer a great deal of energy*)
- ⑩ exert (*the experiencer felt they needed to exert themselves to handle the event*)
- ⑪ attend (*the experiencer had to pay attention to the situation*)
- ⑫ consider (*the experiencer wanted to consider the situation*)
- ⑬ outcome-probability (*the experiencer could anticipate the consequences of the event*)
- ⑭ expectation-discrepancy (*the experiencer did not expect that the event would occur*)
- ⑮ goal-conduciveness (*the event itself was positive or it had positive consequences for the experiencer (i.e. helping them reaching their goals)*)
- ⑯ urgency (*the event required an immediate response from the experiencer*)
- ⑰ self-control (*the experiencer had the capacity to affect the event*)
- ⑱ other-control (*someone or something other than the experiencer was influencing what was going on*)
- ⑲ situational-control (*the situation was the result of outside influences of which nobody had control*)
- ⑳ adjustment-check (*the experiencer anticipated that they could live with the consequences of the event*)
- ㉑ internal-check (*the event clashed with the experiencer's ideals and standards*)
- ㉒ external-check (*the event violated laws or social norms*)

1.5 Examples and more notes on the appraisal dimensions

- novelty check through *suddenness* and *familiarity*
 - *a sudden decision, a sudden storm* are examples of events that should be rated high (≥ 3) in suddenness
 - *passing the exam* would be rated *low* in suddenness since it was an event that the experiencer expected.
 - *I saw an elephant crossing the street* would be low (≤ 2) in familiarity even though you are familiar with the concept of elephant, because typically in Germany you don't see them strolling around.
 - *my grandmother died* is also low in familiarity, even though one might be familiar with death, the specific situation described here (the dying of the grandmother) happens only once
 - *I passed the exam* would be rated higher in familiarity by a good student who always passes exams.
 - *My dog welcomed me when I arrived home from work* would be rated very high in familiarity (≥ 4)
- intrinsic *pleasantness* check
 - *seeing a close friend after a long period of time, passing an exam, building a snowman, watching the sunset* are events that would be rated high (≥ 3) on pleasantness
 - *losing someone, becoming sick* would be rated as low (≤ 2) in pleasantness
- *goal relevance* check: When rating goal relevance you could think of how the situation affects the experiencers in satisfying their needs/goals. If the needs/goals are physiological or related to their *safety* (threatens their livelihood), then the situation will be rated with high (≥ 4) goal relevance. When the needs of the experiencer are concerned with *self-esteem* or *belongingness* the situation will be rated moderately ($= 3$) in goal relevance and lastly, when the situation deals with self-actualization needs it should be rated with low (≤ 2).
 - *being followed by a bear while hiking* would be rated with high (≥ 3) goal relevance (it's relevant since it *threatens one's survival*)
 - *someone changing the radio program the experiencer was listening to* would be rated with low (≤ 2) goal relevance (it's still a relevant situation since this limits *self-fulfillment needs*)
- *responsibility* (self, other, situational): "determine who or what caused it" (the event);
 - *I'm driving through a storm* would be rated high on situational-responsibility and on self-responsibility
 - *I was called on my phone by my mom* would be rated high on other-responsibility and low on self-responsibility
 - *I drove home during the holidays* would be rated high in self-responsibility
- *outcome probability* check

- *funeral of a close person, birth of own child, graduations* are example of events that would be rated *high* on outcome probability check
- *meeting a bear into the woods, a drop in the stock market, entering a surgical room as a patient* would be rather *low* on outcome probability check
- *discrepancy from expectation* In most cases, we have expectations as to what kinds of events we expect at certain points in a goal-plan-action sequence, either because of our own behavior or because of our prior knowledge of the evolution of certain events. Thus, specific outcomes of an event can be more or less congruent or discrepant with what we expected at this point in time.
 - *winning the lottery* would be rated high (≥ 3) on discrepancy from expectation
 - *attending my favorite language class* would be rated low (≤ 2) in discrepancy from expectation
- *goal conduciveness check*: "the more directly that the outcomes of an event facilitate or help goal attainment and the closer they propel the organism toward reaching a goal, the higher the conduciveness of an event"
 - *I was hiding from the bear, they went to their favorite restaurant* would be examples of event rated high (≥ 3) for the goal conduciveness check
 - *John forgot Mary's keys* would be an example of an event rated low (≤ 2) on goal conduciveness check
- *urgency check*: "Adaptive action in response to an event is particularly urgent when high priority goals/needs are endangered, and the organism has to resort to fight or flight. Urgency is also likely to increase when delaying a response will make matters worse. Urgency is evaluated on a continuous scale: the more important the goals/needs and the greater the time pressure, the more urgent the action becomes. Urgency depends not only on the relevance of an event for an organism's goal/need, but also on temporal constraints."
 - *I got hit by a car while biking home* would be an example of an event rated high (≥ 4) for the urgency check
 - *We're admiring the sunset* would be rated low (≤ 3)

More fine-grained examples:

- *We're admiring the sunset*: urgency = 1
- *A nurse is taking care of a patient with a minor flu*: urgency = 2
- *I forgot our anniversary / I witnessed a verbal fight on the street*: urgency = 3
- *I hear a fire alarm*: urgency = 4
- *I was about to crash into a car with my motorcycle*: urgency = 5
- *control check* (self, other, situational): "an act of nature is something for which no control attempt can possibly succeed. In other cases, more or less control might be possible, for example, in the case of critical phases during which events can still be influenced." Notes (16.04):
 - for situational-control you don't need to identify the source of control (i.e., the "outside influences");

- for self-control the experiencer had the capacity to willingly (consciously, on purpose) change the outcome of the event;
- self-control, other-control, situational-control aren't mutually exclusive.
- self-control (*the experiencer had the capacity to affect the event*)
 - *I have to study for my exam* is an example for where self-control should be rated high.
 - *My grandmother died* would be rated high for situational-control, since no one can do anything to change the outcome of this event
 - *I helped my sister to study for her exam* would be rated high both for self-control and other-control
 - *My parents abandoned me when I was a 5 year old* would be rated high on other-control
 - *I forgot to setup the alarm* would be rated high for self-responsibility, low for self-control and high for situational-control.
- adjustment capacity check
 - *My quick-tempered daughter was unhappy when her sister was born* would be rated as medium-low in adjustment capacity check (≤ 3)
 - *Bran Stark realized he was paralyzed* would be rated as low (< 3)
 - *The Queen took a well-deserved bath* would be rated as high (≥ 4)
- internal standards check: "This check evaluates the extent to which an action falls short of or exceeds internal standards, such as one's personal self-ideal (desirable attributes) or an internalized moral code (obligatory conduct)."
 - *she was treated unjustly, someone broke into my apartment* would be examples of events rated high (≥ 3) on the internal standards check
 - *she bought a new beautiful pair of socks, she graduated* would be examples of events rated low on the internal standards check (≤ 2)
- external standards check: "Social organization in groups implies shared values and rules (norms) concerning status hierarchies, prerogatives, desirable outcomes, and acceptable and unacceptable behaviors." You can also think here in terms of fairness and legitimacy.
 - *They insulted their parents publicly* would be rated high (≥ 3) on the external standards check
 - *She was admiring the sunset* would be rated low ($= 1$)

Note that all quotes are from the book *Components of emotional meaning*, Chapter 1 (written by Scherer).

2 Summary of the recommended annotation procedure

We ask you to do the annotations in the order shown below:

0: Filter out non events

- Does the presented text contain an event? If yes, continue, else move to the next unit.

1: Span annotations

1. Annotate the span(s) corresponding to the **experiencer(s)**.

Note: one span should be contiguous; experiencer(s) spans and salient event(s) spans can overlap.

2: Emotion and appraisals dimensions

1. For each **experiencer** annotate the emotion they felt as a feature of the marked span. On the Annotation Panel, choose the **emotion** they felt.
2. Put yourself in the shoes of the experiencer. For each event rate **appraisal** on the scale from 1 to 5. To do so, have a look at the list of appraisals in Section 1.4.

3: Salient event annotation

1. Annotate the event (as a span) that triggered your judgment of the emotion and appraisals for each of the experiencer annotated.
2. Draw the relation from this salient event to the experiencer span.

3 Guide to the annotation process

The annotation will be carried in multiple phases. We focus now on the first phase only.

3.1 Phase 1

To start annotating open the new document (teaching_batch_2.tsv). The format differs slightly from what we've had in the first batch; each annotation instance starts with [ID:number], followed by the text of the instance. At the end of the instance there is only the placeholder token for the experiencer (narrator, writer, implicit): [WRITER].

Please follow the steps:

1. Carefully read the instance. Focus on the text of the instance. Does the instance contain a mention of an event? If not, stop the annotation of this example here and move to the next sentence.
2. Select the Layer Experiencer from the Annotation Panel. Annotate the span(s) corresponding to the **experiencer(s)**. Note that one experiencer may feel no emotion.
3. For each **experiencer**:
 - (a) Annotate the **emotion**: by clicking on the **emotion** drop-down menu and selecting the emotion from the list of available tags. The tag *no emotion* can be used for those experiencers that were involved in the situation but not emotionally affected by it.
 - (b) Annotate the **appraisals**: for each of the **appraisals** listed in the Annotation panel click on the respective drop-down menu and select the appropriate value on the scale from 1 to 5 on how much you agree with the item relevant for that respective appraisal. 1 means *Not at all* and 5 means *Extremely*.

Now you're done with annotating the experiencer(s), the emotion they felt together with their assumed evaluation of appraisals.

4. Think about the situation you are presented with in this instance. It may consist of one event or a chain of events that lead to the whole situation. Switch to the Event Layer and mark the one portion of the text (ideally the one event) without which the emotion (or appraisals) wouldn't have been realised in the experiencer (or would have differed).
5. Now, in the same annotation layer (Event) *set* the relation from the event span(s) to its experiencers. To do so, go to the feature Link to experiencer, click *add* and then click on the relevant experiencer to the event. There is no need to annotate the relation you just created.
6. Now you're done!

4 Other considerations and exceptions

- It can happen that the same experiencer is mentioned multiple times. Mark only the first occurrence of that experiencer.
- Keep track of difficult instances (i.e. write them down in document)