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Emotions in speech and interaction
A practical approach

1. Introduction

1.1 Analytic representation

This contribution develops a vision of emotion in discourse presented in Plantin 2011/2014; 2015a). Generally speaking, the data considered for such an analysis are extracted from the primary linguistic material, the flows of spoken or written language. The basic *unit of study* is the emotion *episode* (not the emotion *word* or emotion *sentence*).

A *representation* of data is a discourse about this data, making use of natural language supplemented by concepts coming from linguistics, including interaction and discourse analysis. Representations can be more or less *adequate*. A representation is *descriptively adequate* if it accounts for the data under consideration. State of the art methods and knowledge correctly applied to the data produce a descriptively adequate representation of this data. A theory-less description of the data is not an adequate description, but a mere paraphrase of the data. *Explanatory adequacy* is reached when the representation says something new to the specialist. It illuminates the data.

This paper is organized in three sections. Section 1 addresses the *emotion terms* issue, first through the more than two thousand years old tradition of *emotion lists*. It operates a kind of "lexical reduction", considering that all the terms (actually, all nouns) registered in such lists, be it by rhetoricians, moralists, theologians, philosophers, psychologists and linguists *are* emotion terms; agglomerated, these lists constitutes a substantial *dictionary* of emotion terms.

To check the global coherence of a list, or a dictionary of emotion terms, we will use a lexicographic method. This method is based upon the fact that, in monolingual dictionaries, the definition (or *a* definition) of a word w makes use of other words belonging to the w's lexico-semantic field. We will say that a word is *impacted* by another word when the latter is used in the definition (or sub-definition) of the former. This technique makes it possible to check and extend the lexico-semantic field of emotion terms by integrating the words semantically terms *impacted* by the word *emotion* and central emotion terms, such as *anger*, *fear* or *joy*.

Section 2 uses the state/ event opposition to define emotion as a complex on-going foreground experience of a variation of tension developing on a more stable background. This background corresponds to, 1) the individual character and moods of the experiencer, and 2) the mood socially associated to the event.

Two kinds of *emotion episodes* will be distinguished. *Primary* emotion episodes correspond to inchoative *emerging* emotions. This foundational emotion experience can be re-lived and re-elaborated during temporally discontinuous *secondary* emotion episodes.

In section 3, the basic structure of an emotion episode will be represented through *emotion frames*. The *basic* emotion frame allocates an *Emotion* to an *Experiencer*, in a *Situation*. The *extended* emotion frame integrates two more emotion roles, the *Allocator* and the *Orchestrator*.

1.2 Emotion as experience

Emotion is a complex experience originating in an event, perceived and evaluated as *relevant* by the experiencers. An event can be deemed relevant on very different grounds: its meaning for the experiencer depends upon her standards, her expectations, self-image, etc. (Scherer 1984/1993, p. 129; Scherer 1993/1984, p. 302). Facing a relevant event, to deal with what's going on, the experiencer's body, mind and soul are transformed. From the communicational point of view, these

transformations are manifested by an intense production of bodily natural an conventional signs, and a reorientation of the current experiencer's activities in order to immediately adapt to a transformed interactional and actional setting. Emotion is not seen as something that just happens to the experiencer, something s/he has to accept and adapt to, but as a cognitive-linguistic and physical resource, that is appealed to, co-produced and cooperatively managed according to the potentialities of the situation.

The emotion experience is currently synthesized as an individual feeling, described and elaborated in literature and arts. *Cognitive* experiences oriented to the *universal* are contrasted with *emotion* experiences, grounded in what is seen as unique *individual* identities, leading to an obvious but misleading opposition between *reason* as the norm and *emotion* as a deviation of this norm.

Emotion will be approached here as a linguistic and communicative phenomenon. An analogy may be helpful here. Grammarians distinguish between *time*, as a dimension of reality (German *Zeit*) and *tense* as a linguistic phenomenon (German *Tempus*). Likewise, we will distinguish emotion as a biological and physiological phenomenon and emotion as a communicative phenomenon. We postulate that the latter can be coherently and fruitfully approached in the general framework of discourse studies, just like tense and aspects are major chapters in grammatical studies.

Emotion will be studied as it is *signified* in speech and interactions. The verb *to signify* is used with both meanings, "signify something" and "signify to somebody". On the one hand, "*speech signifies emotion*"; this kind of talk supposes that emotion is structured and already there, independent of the language through which it will be circulated in the interaction.

On the other hand, "*the speaker signifies her emotion to his interaction partner*". With this less current meaning, *to signify*, takes as a subject not a word or a linguistic expression, but an individual, as exemplified in the following double example:

> The Speaker acquainted the House that he had, […] signified to sir George Pocock, knight, […] their Thanks for the many important services performed by him during the course of this war […] and that he had received the following answer:
> […] "Permit me, Sir, to return you my sincere thanks for the very obliging manner in which you have signified to me the sentiments of the House of Commons"
>
> Cobbett's Parliamentary History of England, A. D. 1768, col. 1281 [1]

A signifies *X* to *B* when *A* formally (finally and definitely) informs *B* of something (an intention, a decision, a will, a feeling). As a result, *B* cannot claim that s/he does not know about *X*.   The meaning is the same as *to notify*, "to tell someone officially about something" (MW, *Notify*)

> She signified her agreement by nodding by nodding her head (CED, *Nod*)
> Signify your agreement by signing the letter below (OTE, *Signify*)

1.3 Sartre: emotion is "an organized form of human existence"

To introduce his *Outlines of a theory of emotions* (1939) Jean-Paul Sartre uses some inspiring formulations that we would like to mention here, notwithstanding the fact that the *Outlines* are an essay in the phenomenology of emotions while we try to sketch a practical method to represent emotions episodes from a linguistic point of view. The key points characterizing Sartre's approach are the following ones

> For the phenomenologist, every human fact is, in essence, significant. If you remove its signification, you remove its nature as human fact. The task of a phenomenologist, therefore, will be to study the signification of emotion. (p. 15)

> That is, we shall affirm that [emotion] *is* strictly to the extent that it *signifies*. (p. 16).

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[1] https://books.google.fr/books?id=SDwNAQAAMAAJ&pg=PA1281&lpg=PA1281&dq=%22permit+me,+Sir,+to+return+you%22+Pocock&source=bl&ots=_x2rZtjlFa&sig=ACfU3U3BA7UGHwQxYT8etl9HoUe2rfnwwA&hl=en&sa=X&ved=2ahUKEwi5j6X81ZvjAhWk2eAKHYQOCjIQ6AEwAXoECAMQAQ#v=onepage&q=%22permit%20me%2C%20Sir%2C%20to%20return%20you%22%20Pocock&f=false

We know what the thing signified is from its origin: the emotion signifies, in its own way, the whole of consciousness or, if we put ourselves on the existential level, of human reality. It is not an accident because human reality is not an accumulation of facts. It expresses from a definite point of view the human synthetic totality in its entirety. And we need not understand by that that it is the effect of human reality. It is the human-reality itself in the form of "emotion." That being so, it is impossible to consider emotion as a psychophysiological disorder. It has its essence, its particular structures, its laws of appearing, and its signification. It cannot come to human reality from the outside. On the contrary, it is man who assumes his emotion, and consequently emotion is-an organized form of human existence. (p. 16-17)

2. Emotion terms

The easiest way to answer the question, "What is an emotion?" is to give a list of what is and was traditionally considered as lists of prototypical emotions. To day, the Ekman's lists of basic emotions are a common reference in psychology and beyond. Since Aristotle, such lists have been developed and structured by rhetoricians, moralists, theologians, philosophers, psychologists and linguists. We will consider each item mentioned in any such list as a good candidate to the status of emotion term. The last paragraph of this section proposes a lexicographic method to determine if a word can be considered as an emotion word or, more generally as having an orientation towards an emotion.

2.1 Lists of emotions (terms)

2.1.1 Rhetoric and ancient philosophy

The first systematic treatment of emotion in the Western world is to be found in Aristotle, in the *Nicomachean Ethics*, which deals with moral philosophy, and in the *Rhetoric*, which deals with public discourse openly intended to persuade an audience.

In the *Nicomachean Ethics*, emotions ([πάθη]) are defined as one of the three "qualities which have their origin in the soul", i. e. "passions, capacities and habits"; the concept of emotion is always anchored in a specific vision of the human mind. Emotion is then given first, an extensional definition, by an enumeration of eleven basic emotions; and second, an intensional definition; as "[an] inclination accompanied by pleasure and pain":

> By passions I mean *desire*, *anger*, *fear*, *confidence*, *envy*, *joy*, *love*, *hatred*, *regret*, *emulation*, *pity*; in a word those feelings that are followed by pleasure or pain. (*Nic. Eth.*, Bk 2, 5; p. 41)

The *Rhetoric* lists thirteen basic rhetorical emotions, generally associated in pairs of opposites:

> Anger and slight (contempt, spite, and insolence); mildness.
> Love or friendship; hatred
> Fear; boldness or confidence.
> Shame and shamelessness
> Favour or benevolence.
> Pity; virtuous indignation.
> Envy; emulation (after Freese, *Analysis,* in Rhetoric, xxxvii – xxxviii)

In the *Tusculan disputations*, Cicero considers four "capital" emotions, *grief*, *joy*, *fear*, *lust* and their derived species:

> *Grief* is attended with *enviousness* […] *emulation*, *detraction* [i.e. *jealousy*], *pity*, *vexation*, *mourning*, *tribulation*, *sorrow*, *lamentation*, *solicitude*, *disquiet of mind*, *pain*, *despair*, and many other similar feelings […].
> Under *fear* are comprehended *sloth*, *shame*, *terror*, *cowardice*, *dread*, *fainting*, *confusion*, *alarm*, *astonishment*.
> In *pleasure* they [the Stoics] comprehend *malevolence* — that is, pleased at another's misfortune — *delight*, *boastfulness*, and the *like*.
> To *lust* they associate *anger*, *fury*, *hatred*, *enmity*, *discord*, *wants*, *regret*, *desire*, and other feelings of that kind.

> Cicero, *Tusculan Disputations*, Bk 4, § 7 – 8.

2.1.2 Theology: emotions as sins

The traditional list of deadly sins enumerates *pride*, *envy*, *wrath*, *sloth*, *greed*, *gluttony*, *lust*. Four of these sins correspond to emotions: *wrath*; *pride*, as *vanity*; *envy*, or *jealousy*; *acedia* has been replaced by *sloth* a kind of sadness or postprandial depression. Three are *passions for*, that is to say, addictive active desire for more: *greed*, desire of for money; lust, "intense or unbridled sexual desire" (M-W); *gluttony*, addiction to food and drink.

The system "capital - derivative sins" has a hypothetico-deductive aspect, formally analogous to the treatment that philosophers reserve to *primitive* passions (Descartes) or *direct* passions (Hume).

2.1.3 Classical philosophy

In §53-67 of his treatise on *The Passions of the Soul* (1649), Descartes considers that the *principal* emotions are:

> Wonder
> Esteem (with generosity or pride), and contempt (with humility or abjectness)
> Veneration and scorn
> Love and hatred
> Desire -12
> Hope, anxiety, jealousy, confidence and despair
> Indecision, courage, boldness, emulation, shrinking reluctance, and terror
> Remorse -24
> Joy and sadness
> Derision, envy, pity
> Self-satisfaction and repentance
> Approval and gratitude
> Distaste, regret and lightheartedness 36

Among these 36 passions, 6 are *basic* and 30 *composed* passions: "there are only six basic passions […] *wonder*, *love*, *hatred*, *desire*, *joy*, *sadness*. All the others are either composed from some of these six or they are species of them" (§69)

In *A Treatise on Human nature* (1739), Hume distinguishes between *direct* and *indirect* passions.

> By '*direct passions*' I mean ones that arise immediately from good or evil, from pain or pleasure. By '*indirect passions*' I mean ones that have the same sources as the others but only when those sources are combined with other qualities. […]
> I can only say that under the '*indirect passions*' I include *pride*, *humility*, *ambition*, *vanity*, *love*, *hatred*, *envy*, *pity*, *malice*, *generosity*, along with passions that depend on those. Under the '*direct passions*' I include *desire*, *aversion*, *grief*, *joy*, *hope*, *fear*, *despair*, and *security*. (Bk. II. Of the Passions; p. 110-111)

2.1.4 Psychology

According to Ekman, basic emotions are universal and biologically grounded (Ekman, Sorenson, Friesen, 1969). Ekman's short list of universal basic emotions includes is restricted to five emotions:

> *fear, anger, disgust, sadness, enjoyment* (1993, p. 384),

Enjoyment is the only positive emotion. In a later publication the lists of positive and negative emotions are rebalanced as follows:

> *fear, anger, disgust, sadness, contempt*, all negative emotions [...] *amusement, pride in achievement, satisfaction, relief and contentment*, all positive emotions (Ekman 1999, p. 45)

A second list adds "*excitement*, [...] *sensory pleasure*" to positive emotions, and "*embarrassment* [...] *shame*" to negative ones (*ibid.* p. 55). *Enjoyment* is not mentioned in this second list; one can assume that it has been specified as *amusement, pride in achievement, satisfaction, contentment*. The following resulting list enumerates 15 basic emotions. Emotions coming from the 1993 list are in small capital letters; *enjoyment* is maintained; *pride in achievement* is expanded to *pride* in general, and *sensory pleasure* to *pleasure*.

FEAR,	ENJOYMENT	satisfaction
ANGER,	contempt,	relief
DISGUST,	amusement	contentment,
SADNESS,	pride	excitement

4

| pleasure | embarrassment | shame |

2.1.5 Linguistics

Many different lists of emotions nouns in different languages are to be found in linguistics. For French, Galati & Sini propose a list of 143 emotion terms. These terms were selected from the dictionary, by native French speakers (unconnected to the research project), on the basis of three criteria:

> "A) Terms must refer to internal and mental conditions; B) they must involve a transient mental state; C) they must relate to affective aspects, although they may also refer to the cognition, behavior, or physiological and expressive changes that accompany the emotions" (2000, p. 79).

This list is given as an example; for other languages, such lists are certainly easy to find.

abasourdissement	crainte	ennui	mépris
abattement	crève-coeur	enthousiasme	nervosité
accablement	déception	épatement	oppression
admiration	déchaînement	épouvante	paix
affliction	déchirement	étonnement	panique
affolement	déconvenue	étonnement	peine
affres	découragement	euphorie	peur
agacement	dédain	exaltation	plaisir
agitation	dégoût	exaspération	prostration
ahurissement	délectation	excitation	quiétude
aise	délire	extase	rage
alarme	démoralisation	exultation	ravissement
allégresse	dépit	frayeur	réjouissance
amusement	déplaisir	frustration	répulsion
anéantissement	dépression	fureur	satisfaction
angoisse	désappointement	furie	sérénité
anxiété	désarroi	gaieté	souffrance
apaisement	désenchantement	gène	soulagement
appréhension	désespoir	griserie	spleen
arrachement	désolation	hargne	stupéfaction
attendrissement	détente	hébétement	stupeur
autosatisfaction	détresse	hilarité	surexcitation
aversion	douleur	horreur	surprise
béatitude	ébahissement	humiliation	tension
bien-être	éblouissement	indignation	terreur
bonheur	écoeurement	inquiétude	tourment
cafard	effarement	insatisfaction	trac
calme	effondrement	irritation	tranquillité
chagrin	effroi	ivresse	transe
chiffonnement	égarement	joie	tremblement
colère	emballement	jubilation	triomphe
consolation	embarras	langueur	tristesse
consternation	émerveillement	lassitude	trouble
contentement	enchantement	liesse	vague à l'âme
contrariété	énervement	malaise	vertige
courroux	engouement	mécontentement	
		mélancolie	

2.1.6 Extensions of the lists

From a morpho-semantic perspective, an emotion noun must be considered as a *lemma* conventionally chosen to refer to a *lexeme*, that is the set of words 1) morphologically related; 2) having the same meaning. For example, *accablement* [dejection] represents *accabler* [to overwhelm], *accablement*, *accablé* [overwhelmed, dejected] and *accablant* [overwhelming].

From a semantic perspective, all the synonyms and antonyms of an emotion term must be considered as emotion terms.

2.2 Dissemination of emotion in the lexicon

In monolingual dictionaries, words are defined by other words belonging to the same language. Under this condition, the lexicographer provides the best possible definition of an input word, by means of a heterogeneous set of discourses based upon 1) the *etymology* of the word; 2) its *synonyms*

and antonyms; 3) a core segment, the *definition itself*, sometimes with some Aristotelian flavors of common genre, crucial differences and specific characters; 4) typical associations are given *examples* invented or taken in corpora of cultivated or ordinary language.

A word *m* corresponding to a dictionary entry can thus be found in the discourse defining other entries *a*, *b*, *c*… especially in the core section of their definition; the words *a*, *b*, *c*… are, so to say, "contaminated" by *m*. This simple phenomenon characterizes what we will call the *dissemination* of the word *m* in the lexicon of a language.

We postulate that the "lexicographic commitment" taken by the dictionary vis-à-vis the word **m** is valid not only for the entry **m**, but for all uses of **m** in the definition of other words. We suppose that 1) **m** is carefully *defined*, and 2) is carefully *used* in the definition of other words. So, monolingual dictionaries give both an *explicit* definition of a word **m** under the corresponding entry, and an implicit definition of **m** in all entries using this word in their definition. Definition works both ways: the entry terms **a**, **b**, **c…** (defined terms) contributes to the definition of the terms used in their definitions.

These principles can be used to check if a given term has an emotional orientation, or to look for the set of words sharing the same basic emotional orientation, for example on the basis of lists of primary emotion terms, *fear*, *anger*, *shame*… including *emotion* itself. For detailed studies on the dissemination of emotion words, see PLANTIN Christian 2015c. (on Italian data); 2016 (on French data); 2017 (id.); forthcoming (on Spanish data).

Example : Lists of words impacted by *colère*, "anger" in French.

The following list of words impacted by *colère*, "anger", has been established from two French dictionaries, the *Petit Robert de la Langue Française* (PR) and the *Trésor de la langue française informatisé*. 170 lexemes are impacted by *anger* (46 lexemes are impacted in both dictionaries; plus 81 lexemes specifically impacted in the *Trésor de la Langue française*; plus 43 lexemes specifically impacted by in the *Petit Robert*). The 46 lexemes impacted by both dictionaries are the following ones:

ab irato	décharger	fulminant,	monter
atrabilaire	dépit,	fulmination, fulminer	mot
bouillir, bouillon,	écume, écumer	fumer, fumasse	mouton
bouillonner	emporté,	fureur, furibond,	moutarde
boule	emportement,	furie, furieux	noir,
caprice	emporter	gond	rage, rageur
colère, coléré,colérer,	enragé, enrager	gronder	rogne, rogner,
coléreux, colérique,	exciter, surexciter	humeur	rognonner
décolérer	expiation	indignation	rouge
connaître	fâché, fâcher	ire, irascible	saint
couroucé, courroucer	feulement, feuler	irritabilité, irritable,	scène
cran	flamme	irritant, irritation,	tempêter
crise	fléau	irrité, irriter	tonnant, tonner,
damnation, damné,	frein	malédiction	tonnerre
damner		maudire, maudit	venin

The conclusion is that emotion really affects the lexicon much beyond one or two dozens of words.

3. Emerging emotion

3.1 Emerging / persisting emotion

To emerge has two distinct meanings.

— *To emerge₁* means "to come into being, to rise and become manifest" (MW, *Emerge*). *To emerge₁* is inchoative, "becoming manifest as the result of an actual bottom-up movement"; it refers to the beginning of the *process* which will lead to *emerge₂*.

— *To emerge₂* means "to rise from, or as if from, an enveloping fluid; come out into view", (*id*). *To emerge₂* is resultative, "salient against a background" (*emerged lands*).

Emerging₁ emotions are emotion *in statu nascendi*, as they first appear and develop in the flow of language in action and interaction.

Persisting emotions are *emerged₂* emotion, developing beyond their emerging₁ sequence. Evoked, shared, narrated emotions are persisting emotions, well known to their experiencer. They could be called *re-emotions*: recalled, remembered, and re-lived re-enacted.

Macro-emotions are persisting emotions; the span of life of micro-emotions is limited to their emerging sequence.

3.2 Emerging emotions: Two cases

(1) *Shut your face* [cala a boca]

Example taken from Vieira Barbosa M., 2008. **Dav** is a pupil; **T**, the teacher (female). **T** is trying to have her pupils (around 6 years old) sit in a circle. David is fighting with another pupil. **T** holds David's arm.

1 Dav let go of me/

2 T I'll let you go\ but sit down

3 Dav shut your face\ I don't want to talk with you anymore

4 T no /(..) I don't want to start shouting with you (*low voice*) but this is not possible\ this is not possible (...) I leave you, but he'll sit down wherever he wants ok *Dav*\ you can sit down wherever you want (.) but I guarantee him the same thing the same right ta/ (...) I can't let you attack the other children\ this can't happen\ they are small and you are bigger *Dav*/ I don't like when somebody treats you badly, but all the same I don't like when you treat the other children badly\

5 Dav I don't want to know\

6 T so, that's fine, but he will sit down wherever he wants, I don't want to discuss this with you anymore \ (...) *(The teacher is silent for almost 50 seconds, she takes a deep breath then talks to the other children)* well:: look, so we had lunch and *Car* called us to take pictures of the birds: hm by the way since we are talking about little birds do you remember that we went to play in the park and we saw peacocks and capybara

The frontiers of the emotion episode are clear-cut. The left frontier is determined by the occurrence of the insulting expression "*shut your face*", which interrupts the current action, organizing the classroom space. The right frontier of the episode is marked by the teacher's s long silence, followed by the resumption of the planned teaching activity. During the emotion episode, the teacher controls her emotional interaction with Dav and the other pupils by focusing on values and deontological rules attached to her profession.

(2) *oh shit/ nothing for mom* [ah merde, ya rien pour maman]

Example taken from the Clapi database, corpus "Casual conversations – Visit", by Véronique Traverso[2] Transcription slightly modified. Interaction between four participants (two couples); **M** and **X** unexpectedly visit **C** and **Y**, a younger couple. **M** is **C**'s mother.

C: It's great// that you came//

M: we thought well =

C: =this is a nice surprise [

M: [we were somehow ahead of time (.) let's go (.) and say hello (.) a long time we didn't see you//

C: let's have an aperitif //

M. eh?

C: let's have an aperitif (.) can you bring the pastis (.)

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[2] Data Base CLAPI of Spoken French Conversations, http://clapi.icar.cnrs.fr/

ah shit we have nothing for mom
M   oh it doesn't matter (.) [just bring me water water,
C: [schweppes
M: water
C: schewppes
M   no water
C: gin would you [
M   [water (.) please (.) you'll make me happy
C: because we don't ((noises)) have drinks for ladies
M   well all the better
      ((silence))
C   so//
S   what's up//
M   oh now your machine works
C   I- yes, that's it (.) the power plug had burnt

Here also, the frontiers of the emotion episode are clear-cut. The events develop according to the French variant of the script "having an unexpected pleasant visit", first, welcoming expressions, expressing mutual satisfaction, followed by the sequence "let's have a drink!" This routine development is interrupted by **C** exclamation "*a shit, we have nothing for mom*", opening an emotion sequence; "having nothing for mom" could be considered as face threatening by M (mom). During this sequence, **M** minimizes the issue and negotiates her drink with **C**. **C** jokes, and the interaction evolves to another topic (Plantin 2015b)

3.3 The emotion syndrome

4.1. Dimensions of the emotion experience
From an individual point of view, psychologists characterize emotion as *syndrome*, that is a *complex* phenomena, articulating several components (after Scherer, 1984, p. 99):
- A psychological, subjective and conscious component.
- A neurophysiological component, involving bodily transformations, both internal and external, consciously or unconsciously affecting the experiencer.
- A behavioral component, having two facets: a transformation of the qualities of the voice, facial expressions, gestures and bodily postures of the experiencer (Voice – Mimic – Posture – Gesture, VMPG sub-component); and a modification of his/her current action.
- An appraisal, or cognitive component, linking the emotion to a given environment.

That is, emotions are complex phenomenon, including a vision of the surrounding circumstances as specially relevant and arousing; pleasant or unpleasant conscious states of mind; bodily productions; forms of behavior and action departing from the script of the current action.

"Positive" vs "negative" emotions — Emotions are evaluated as pleasant / unpleasant; positive emotions are opposed to negative ones. *Joy* is said to be a typical positive emotion from the point of view of the individual. Nonetheless, from a social point of view all depends of the reason why the experiencer is joyful; a criminal sadist can be proud of and exhilarated by the sufferings of her victims; history is full of such cases.
Sadnesss is said to be a typical negative emotion from the point of view of the individual; nonetheless, people can be sad and enjoy their depression.
So agnosticism is in order when evaluating emotions as pleasant / unpleasant. When evaluating the quality of an emotion experience, the last word should be left to the experiencers-participants' evaluations, which are not necessarily convergent.

4.2 Semantic structure of emotion terms

The component analysis can be adapted to the analysis of the semantic content of emotion words (1987)

> Mental conditions always have either a significant Cognitive component or a significant Affective component, and sometimes both. In addition, some have a significant Behavioral component. It may be that truly psychological conditions generally implicate all of these facets to some degree. However, many of the words in the affective lexicon, while of course having affective overtones, do not have affect at a significant part of their referential meaning (Ortony, Clore & Foss 1987, p. 351).

> When, for example, we claim that "proud" has an affect as a significant component, we do not mean to deny that it has a cognitive component and (possibly) even a behavioral one (id., p. 352).

It follows that the semantic content of an emotion word can be analyzed along these three emotional dimensions (1987, p. 352); note that two focuses are granted to cooperative and optimistic.

component ▶ word ▼	Focus on affect	Focus on cognition	Focus on behavior
proud	+		
confused		+	
cooperative		+	+
glad	+		
optimistic	+	+	

We will use a slightly modified version of this table. The "behavior" component will be taken as referring to the actions of the experiencer, and the VMPG sphere will be introduced as the fourth component of the table. It corresponds to the fact that emotion is an embodied experience. This component is decisive for characterizing a word as an emotion term.

Second, different graduated weights attributed to the different components will be graduated, according to a one-three stars (for example) hierarchy.

|	Focus on affect	Focus on cognition	Focus on action	Focus on VMPG
proud	+			++
confused		+	++	
cooperative		+	+++	
glad	++			++
optimistic	+	+		

3.4 Emotion as a wave

In Section 1, emotion as an interactive phenomenon was defined as what is referred to 1) by a term E registered in a list of emotions; or 2) by a semantical derivative E' of such a term (synonym, antonym of E) or 3) by a term E'' impacted by E or E'.

From an internal and interactional point of view, emotion can be characterized as a phasic phenomenon. In medicine, a phenomenon is called phasic when it develops rapidly and strongly

to a stimulus, but quickly adapts, and has a short period of excitation (After MW Medical Dictionary, *Phasic*).

Emerging emotions can be considered as phasic phenomena, consisting in a variation of arousal, followed by its resumption. The emotion episode can roughly represented as a foreground *phasic* fluctuation against a background *stable* line. The background line corresponds to the routine degree of excitation of the experiencer, engaged in such and such action, in given circumstances.

Figure 1
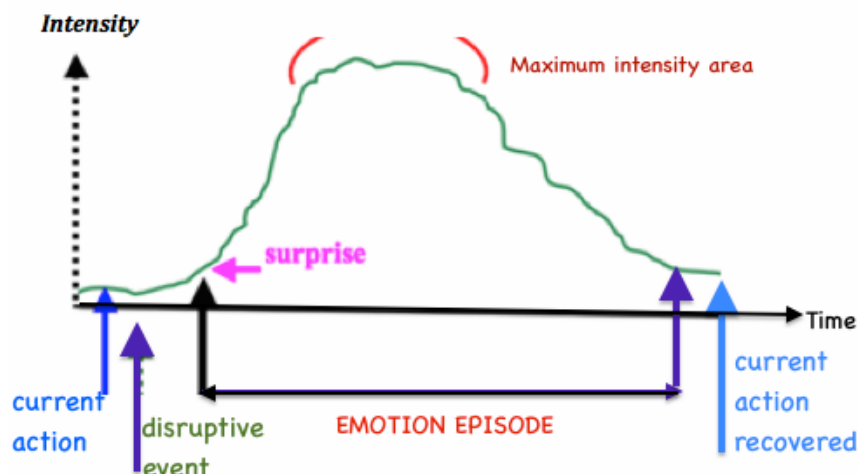
The concept of emotion episode as a wave is an empirically adequate representation and a useful practical tool. It is especially well adapted to the case of micro-emotions in interaction, as manifested by interjections, see supra.

Nonetheless, such a representation can be criticized. The underlying vision of psychic life can be challenged as implying that the "normal state of composure", the routine mode of action, is an-emotional, and that emotion departs from regular ordinary life. It *misleadingly suggests* that emotion is something abnormal, a "disease of the soul", opposed to the healthy course of mental life.

Moreover, such a representation seems to imply that there is symmetry between the first emotional phase (emergence of emotion) and the second one (control of emotion), in other words, that, after the emotion peak, the routine mode of feeling and action is recovered as it was before. This not true for life-changing emotion experiences.

Emotional life as a succession of waves

Everyday interactional life should not be represented a long lasting quiet an-emotional state disturbed by some rare and well characterized emotions, but as a series of successive, continuous and coordinated emotional impulsions.

In interactions, the combination of interactional events such as *overlappings*, *voice intensity*, *low/fast speech flow etc.* can be taken as criteria characterizing the emotional moments. This paves the way for an automatic detection of emotion episodes in interactions.

The resulting wavy line combining small emotions to greater ones represents the "emotional trip" taken by the experiencers as a succession of tense / relaxed (up / down) episodes (Quignard & al., 2016):
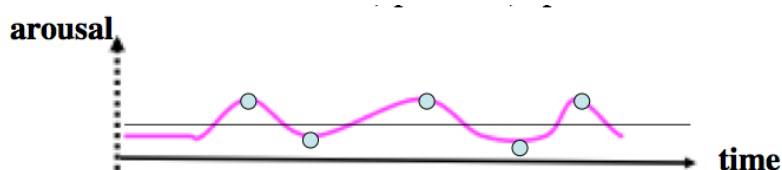
Figure 2

Figure (1) represents emotions as a curve, emerging from a non-emotional straight line. This straight line can be taken as representing the routine attitudes expected in a given group, during a given activity.

Figure (2) does not postulate such straight line. Nonetheless, a medium tension line can be determined by clipping the salient moments. The difference with figure 1 is that the line does not represent any non-emotional state but the medium level of tension in a coordinated succession of events.

3.5 Emotive / emotional communication

An *emotive* topic is a topic that can provoke strong emotions, while an *emotional* person feels and expresses strong feelings. In line with this use, *emotional* communication is defined as:

> a type of spontaneous, unintentional leakage or bursting out of emotion in speech. (Caffi & Janney; 1994, p. 348).

while *emotive* communication is

> the intentional strategic signaling of affective information in speech and writing […] in order to influence partner's interpretation of situations and reach different goals". (*id.*)

When used to oppose two kinds of communication, the emotive / emotional distinction presupposes that in *emotional* typical communication the signaling of emotion is intention-free, pure and sincere emotion, while typical *emotive* communication is emotion-free and intentional and manipulative. In other words, what comes out of the VMPG sphere is considered in the case of emotional communication, as natural signs (pure spontaneous, non intentional productions), while, in the case of *emotive* communication, the VMPG productions are considered as semiotic signs, intentionally produced.

The problem is that the best way for a speaker to induce an emotion in the other participants (emotive communication) is to use the mechanism of empathy and strongly express her emotion, that is, to mimic emotional communication, and we can all be very good at mimicking emotions. The discussion is actually about true vs. manipulative uses of emotion in communication, and, if the issue makes sense, the distinction is useless for ordinary participants; practically the qualification is based upon the participants intuitions, that is their empathetic capacities regarding their interactional partner.

So, we'll try to abstain from using these adjective, when their implications are unwanted. For example we won't speak of words having an *emotional / emotive orientation*, but just of words *oriented towards an emotion*. We'll use "emotion language" as we use "emotion words" or "emotion sentence".

3.6 Covering emotion terms

The words *affect, character, disposition, emotion, feeling, humor, mood, pathos…* can be used to generally refer to the field of emotion. These covering terms can be organized along different dimensions: 1) the foreground / background opposition; 2) an historical and cultural dimension; 3)

3.6.1 Covering emotion terms and the foreground / background opposition

Emotions, *affects* and *feelings* are *foreground* phenomena, developing against *background*, more stable conditions, *moods*, *dispositions*, *characters*.

Foreground: *Affect, emotion, feeling* — These words refer to local variations of tension (arousal), phasic events. This variation can be high, in *affects* as well as in *emotions*.

Emotions occur and develop in relatively well-delimitated episode. Primary emotion episodes can be resumed in narrations, commented upon and more or less re-lived in secondary emotion episodes. Emotions conscious and specifically referred to as anger, joy, fear, etc. They are consciously managed.

Affect refers to an emerging, unspecified state of arousal. Affects are more diffuse than emotion along their "pleasure" and "consciousness" dimensions.

Feeling is more general than *emotion* or *affect*. It can refer to physical sensations experienced through the skin, the sense organ of touch (*a feeling of cold*). It can also refer to the "generalized bodily consciousness or sensation" (M-W, *Feeling*). Following on this lexical definition, Damasio defines *feelings* as "*the mental representations of the physiologic changes that occur during an emotion*" (2004, p. 52, italics in original).

Background: *Character, disposition; mood state of mind, humor* — Emotions, as foreground, phasic episodes develop upon two kinds of *background conditions*.
— *General* background conditions are determined 1) by the permanent basic long-lasting *dispositions* of the experiencer, that is, her *character,* and 2) by her shorter, local private *state of mind, humor, mood*.
— *Task related* background conditions are determined by the *social and professional mood* attached to the encounter (1979, 1983). For example, the professional ethos of researchers is a blend of professional cordiality, enthusiasm concerning their discipline and optimism concerning their current projects and presentations.
As emotions, *moods* are positive or negative: one can be in a *good, happy, expansive* or *bad, irritable, depressed, hostile* mood. *Moods* differ from emotions by their source, their duration, and the associated state of consciousness.

Application to inferred emotion — Inferences to some kind of emotions can be derived from linguistic, semiotic, behavioral data, for example of negation, negative words, negative prefixes (see Plantin, XXX). Frequently such data just points to a fuzzy zone, an *affect*. Pending a more precise determination of the emotion, this zone can be conveniently referred to by a bracketed emotion term. For example, *"Walking in a lonely street, at night, in an unknown city"* points to some kind of affect, noted [fear]. Very general, affect zones can be allocated to experiencers as positive [+] or negative [-].

Pathos / ethos: a special case of the foreground/ background opposition — In rhetoric, *mood* is an essential component of *ethos*. The *pathos* develops the *emotions* corresponding to the specific, *ethotic mood* enacted by the speaker.

3.6.2 Covering emotion terms in history
Pathos — In ancient Greek, the word *pathos* means, "what we experience, as opposed to what we do"; it has a passive meaning: the pathos is what happens from the outside, good or bad, with a specialization for "adverse events, misfortune". Internalized pathos refers to "the state of the soul agitated by external circumstances", that is what we call *emotion*. In their translations of Aristotle's *Rhetoric*, Rhys Roberts and Freese translate the Greek word pathos as *passions* or *emotion*.
In the *Tusculan*, speaking of *grief, fear, lust, anger, envy, delight, pleasure*, Cicero decides, "to call *perturbations* [*perturbationes*] rather than *diseases* [*morbos*] what the Greeks generally call *pathe* [plural of *pathos*]"(Book IV, 10).

Passion — The word *passion* comes from the Latin *passio* meaning "suffering". Its meaning evolved under the influence of Stoic philosophy, which considers *passions* as *diseases* (cf. supra, *Pathos*). When speaking of *the passion of Jesus Christ*, the Christian religion retains the meaning "suffering".
In everyday language, its most commonly accepted meaning is a kind of addiction to something: *passionate love, passion for football*, or for *postage stamps*. In spite of its original *passive negative* meaning, *passion* can be defined as the *active* quest for a specific kind of *positive* emotion — positive at least for the experiencer. "*A has a passion for **X***" is predictive of *A* experiencing an intense emotion when dealing with *X*.

From an historical point of view, we should also consider that each of these words has been used as catchword during certain historical periods and cultures. For example, in France, the Classical age (17th century) is "the period of the *theories of passions*, the Enlightenment (18th century) considers *feeling* [Fr. *sentiment*] as the fundamental category of emotional vocabulary" (Caloric 2002, p. 23). Although the newest addition to the list, *emotion* is now the preferred term of the series.

Moreover, each field has its own preferences. *Passion* is used in philosophy, ethics, religion; *affect* in psychoanalysis, while psychology prefers *emotion*. In linguistics, grammarians seem to prefer "sentiment", while discourse analysts favor *emotion*.

3.6.3 Covering emotion terms and their syndrome organization

The semantic grid mentioned supra (§3.2) "psychological state, cognitive state, behavior, bodily transformation" can be used to differentiate the set of covering terms *affect, character, disposition, emotion, feeling, humor, mood, sentiment, pathos*… Some of these terms seem more cognitively loaded than others (*sentiment*); some imply more bodily participation (*feeling*?); some are more action oriented (*character*?), others are less conscious (*mood*) and others have a more definite psychological content (*emotion*)

4. Emotion frame, emotion key roles

The preceding section focused on finding a definition of emotion adapted to the study of emotion in texts and interactions. This section proposes a user's guide to get started in practical work.

4.1. Emotion frame

4.1.1 Basic emotion frame

The *basic emotion frame* is defined by the relation between an experiencer (**Exp**), an emotion (**Em**) and the relevant context or source (**S** as described when it comes down to justify the emotion. The first step to reconstruct this frame is to determine:

> ### *Who?* Feels *what?* *Why?*
> ### Experiencer — Emotion — Source

What? Which emotion? — First step, emotions or affect zones have to be determined. The first step to take is to look for emotion terms and terms orienting towards an emotion. These terms are to be found in the description of the justifying context; in the description of the experiencer physical and communicational ethos during the emotion episode and in the new direction taken by the current activity.

Who? — Second step, emotions have to be duly attached to their experiencer. The task looks easy, but is not; Its outcomes   may seem boring; they are actually illuminating when it comes to 1) analyzing the distribution of emotion over the participants involved in the situation under analysis, and, 2) determining the point of view of the narrator, or arguer, staging the events.

Why? — Emotions have their source in a situation (actual or imaginary) as seen under a specific experiencer's perspective.
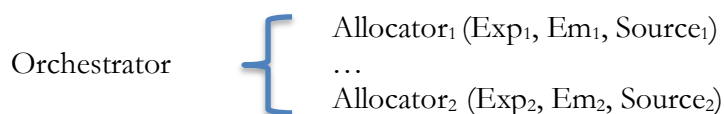
4.1.2 Extended emotion frame

To better account for the complexity of the data, the basic emotion frame must be supplemented by two more key players on the emotional stage. The *allocator* attributes emotions to the experiencers:

> ### Who says that [*somebody - feels such emotion - in such situation*]?
> ### Allocator [Experiencer, Emotion, Source]

The *orchestrator* distributes emotions over a set of *experiencers* through various *allocators*. For example, in a novel or a play, or an every day narrative of a salient event, emotions are attached to the

experiencers 1) directly (by the narrator), or 2) indirectly, by other characters. In either cases, the narrator orchestrates the repartition of emotions:

$$\text{Orchestrator} \begin{cases} \text{Allocator}_1 (\text{Exp}_1, \text{Em}_1, \text{Source}_1) \\ \dots \\ \text{Allocator}_2 (\text{Exp}_2, \text{Em}_2, \text{Source}_2) \end{cases}$$

Who says that {such allocator says that [*somebody - feels such emotion - in such situation*]}?

Orchestrator {Allocator [Experiencer, Emotion, Source]}

4.2 Emotion Key roles: *Experiencer, Allocator, Orchestrator*

4.2.1 Experiencer

Emotion is a synthetic *experience* typically made by *humans*, more broadly *living beings*, performing an action in a given environment. The term *emotion* is used as an abbreviation for the encompassing expression "emotional experience". In French, Littré defines *expérience*, "experience" as "the act of experiencing", a remarkable combination of activity and passivity characteristic of emotion.

In general, experience produces empirical knowledge and know-how. In the same sense, emotion is an experience we get, that we go through and that we acquire. We experience *unemployment* as we experience *mourning*. One acquires an emotional experience a bit like a professional experience, understood as a know-how.

The *experiencers* of the emotion are the individuals living the emotion experience. This word has the advantage of referring to a synthetic experience, encompassing various realities, physiological, psychological, and behavioral. Such is not the case the designation "psychological subject", sometimes used in linguistics, which seems to restricts the emotional experience to its psychological component.

If we consider that emotion is an essentially conscious phenomenon, we will find rather puzzling the statement "*I am angry, but I didn't realize*" (vs *I am deaf, but I didn't realize*).

The speaker as experiencer — Ortony, Clore & Foss observe that:

> "*being angry*" is an emotion, but "*being abandoned*" is not [...]. We should emphasize that we do not want to deny that "*feeling abandoned*" refers to some kind of emotional state. Our point is that "*being abandoned*" does not. Moses was abandoned, but this was not a fact about a psychological state of Moses at all, let alone about an emotional one» (1987, p. 346).

When actually abandoned, young Moses can indeed feel *happy* when sailing downstream, and *joyful* when meeting Pharaoh's daughter.

"*Moses was abandoned*" is part of a narrative, told by a narrator to a narratee; both are potential experiencers in the narrative situation. Considering this utterance as a communicative act permits to introduce two more experiencers, the speaker and the listener(s). "*Feeling abandoned*" corresponds to an affect like [*distress*], self-attributed to the speaker by the statements "*I feel abandoned, you have abandoned me*". Such self-attributed emotion determines, by empathy, a complementary affect like [*pity*] towards Moses. This is the affect linguistically displayed by the person who says, "*Moses was abandoned*"; the speaker is the experiencer. Taking into account the communication process make it possible to recover under this last statement the emotion frame [*speaker*, [*pity*], *Moses*]. Narrative empathy transfers this feeling to the narratee.

Experiencers: humans, higher animals, living beings… — Prototypical experiencers are human beings, and minerals are not experiencers. If emotion is defined as a temporally delimited and more or less intense experience of pleasure / displeasure, then all beings capable of pleasure / displeasure are experiencers. Animals), at least "higher" ones, are not "machines", and can

experience emotions (Darwin, 1872/1890. Being an experiencer looks like a gradual property, that should be noted independently of the feature [+ Human], for example [+ Animated]. Robots can use emotion speech and mimic emotions; as long as they lack self-consciousness and the capacity to act autonomously upon their feelings, they are not full experiencers.

Higher animals are undisputed experiencers; but are they aware of their emotional experience? Or should we consider that the consciousness of emotion does not appear as a necessary correlate of emotion? Should we add a condition of consciousness, and restrict to humans the definition of emotion as a *conscious* experience of unpleasant pleasure?

The question of beings that are granted the status of experiencer has anthropological, moral and historical dimensions. To recognize a being as an experiencer is to engage in a respectful relationship with it/her: "Indians do not distinguish between humans and non-humans, they treat them with courtesy, anger or good agreement. They impute to non-humans consciousness and intentionality" (Bidima 2013, p. 51).

Potential experiencer, actual experiencer — All sentient beings mentioned in a discursive sequence are potential experiencers, including speaker and listeners. Among these potential experiencers, the *actual* experiencers are those to whom an emotion is attached.

Two reports of the same event can be spectacularly different according to the strategy of attribution or not of emotion to this or that actors of the staged situation.

We are not in the same discursive genre depending on whether we attribute emotions to the murderer to the victim, to both or none. Historians, writers, journalists, politicians are expert in the orchestration of the relevant social emotions.

A key structural element in emotion narratives is the position taken by the orchestrator in relation with the emotion (or non emotion) of the experiencers. When the narrator aligns upon the emotion of such and such participants, she posits herself as the reference experiencer representing the preconized emotion. She orients the emotional identifications of the listener, through phenomenon of emotional alignment (identification, empathy, sympathy, antipathy). This is for example the classical case of propaganda or militant videos where the targeted emotion frame is allocated to a key actor, who is actually the ghost of the viewer, as ultimate experiencer. This fact is accurately described in classical rhetoric (Plantin (2011: 166-172, especially Rule 3 "Show emotion").

4.2.2 Allocator

Emotion can be self or hetero-allocated. The emotion is *self-allocated* when the experiencer says s/he in such emotional state:

> I'm afraid.

The emotion is *hetero-allocated* when a second person, the *allocator*, says that the experiencer is in such emotional state:

> Peter is afraid.

In interaction, hetero-allocated emotion can be accepted or declined or refuted on the spot by the so-called experiencer, or by some other allocator. Such disagreements can generate full-fledged disputes about emotions.

> S_1 — *Good news indeed!*
> S_2 — *You are joking, I hope?*

To allocate an emotion to someone is not only to make an hypothesis about her inner mental states, but also to allocate to him a specific kind of behavior, and, above all, to predict her future actions.

> She's scared so ... she's curling up, she will not engage in a new project

Emotions allocated to inanimate beings — Inanimate beings cannot be experiencers. Ruskin defines the "pathetic fallacy" as the allocation of an motion to inanimate beings:

> I want to examine the nature of the other error, that which the mind admits when affected strongly by emotion. Thus, for instance, in Alton Locke,
>
> > '*They rowed her in across the rolling foam*

> *The cruel, crawling foam.'*
> The foam is not cruel, neither does it crawl. The state of mind which attributes to it these characters of a living creature is one in which the reason is unhinged by grief. All violent feelings have the same effect. They produce in us falseness in all our impressions of external things, which I would generally characterize as the 'pathetic fallacy'.
>
> John Ruskin, *Have the pathetic fallacy*, [1856] 1

Speaking of fallacy doesn't say much about what is going on in such situations. A *sad landscape* is probably a landscape that inspires or suggest sadness; the landscape is not the experiencer but the *source* of emotion. The associated self-allocated emotion frame is

> Speaker, sad, landscape

But a *proud rock* is not a rock that inspires pride, but a feeling interactively linked to the confrontation with something "higher", possibly a feeling of [humility] attached to a low position. The associated emotion frame is:

> Speaker, [humbled], rock

Emotions can be allocated to humans, according to the same process as it can be allocated to a rock. That is, sadness can be allocated to a person who is not necessarily sad, but *triggers my sadness*. *Arrogance* can be allocated to a person who is not necessarily arrogant, but triggers the feeling associated to interacting with an arrogant person, may be some kind of [irritation] (Plantin 2011, Allocated feelings are not necessarily accepted by the so-called experiencer.
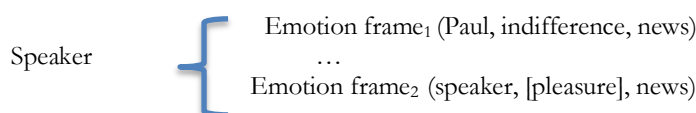
4.2.3 Orchestrator

The role of orchestrator appears clearly in emotion narratives, even in elementary ones such as statements allocating different feelings to different characters about the same situation:

> The news enraged Peter but left Paul indifferent

Speaker {
Emotion frame$_1$ (Peter, rage, news)

Emotion frame$_2$ (Paul, indifference, news)
}
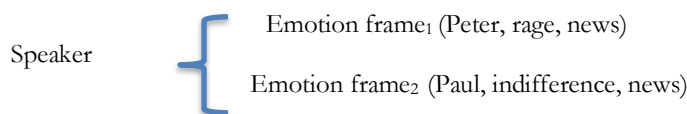
> The good news left Paul indifferent

Speaker {
Emotion frame$_1$ (Paul, indifference, news)
…
Emotion frame$_2$ (speaker, [pleasure], news)
}

The orchestrator organizes the emotional world. She decides about who feels what or feels nothing in the universe of discourse she develops (potential and actual experiencers). Such a world can be seen as a set of emotion frames, possibly void, in the case of potential experiencers.

Moreover, she decides who allocates which emotion to whom in relation to what, including meta emotion frames:

> Paul thought that Peter would be pleased
> Paul was embarrassed by Peter's nonchalance

She coordinates the evolution of the experiencer's emotions through time.

In interaction, any participant trying to make sense of the emotion of the participants and to position her feelings in relation to the group actually acts as an orchestrator composing the emotions of that group.

In interactions, the role of orchestrator is risky, since at any moment, the participants can depart from their allocated role. In written text, the orchestrator is a *deus ex machina*, who can distribute emotions at will. The following text is from Rosalia de Castro, a deep and inspired poet, describing her country, Galicia. The original text is in Galician, (Annex 3).

> Lakes, waterfalls, torrents, flowery plains, gorges, mountains, blue and calm skies like those of Italy, clouded and melancholic horizons, but always beautiful like those so praised of Switzerland; peaceful shores, awesome stormy caps so impressive in their grandiose and dull anger ... immense seas ... what will I say more? No pen that can describe so many enchantment. The land covered with grass and flowers in all seasons; mountains full of pine trees, oaks and willows; slight winds blowing by; fountains and streams spilling their babbling and crystalline waters, in summer and winter, through joyful fields or dark and deep gorges... Galicia is always a garden were we breathe pure aromas, freshness and poetry... And in spite of this, the arrogance of the ignorants is so extreme, their indecent prejudices against our earth are so entrenched that the same ones that have contemplated such splendors (we do not mention those who laugh at us without ever having seen us neither near nor far, and they are the most numerous) even those who have visited Galicia and enjoyed its delights, dared say that Galicia was ... a repugnant pigsty!! [*un cortello inmundo*]!!
>
> Rosalia de Castro (1863) Cantares Gallegos. Ed. de María Xesus Lama (1995). Galaxia.

Rosalia de Castro orchestrates the emotional dissonance between two main groups of experiencers. The first experiencer is the extradiegetic narrator, with its natural extension, the (extradiegetic) ideal reader. By definition, the latter empathizes with the former; they are emotionally indistinguishable. Here, the allocated emotion is derived from a classical, rather abstract, description of a *locus amoenus*, scattered with emotion terms and positively oriented terms, culminating in a feeling of admiration and love.

In the second part, two experiencers appear in the diegetic space, those who know Galicia and those who don't; both are characterized by their feeling of [contempt, disgust]. This feeling can be inferred from the attributed metaphorical judgement, "a repugnant pigsty", and refuted on account of their ignorance and arrogance. The sentiments of the first group are disqualified on the basis of their lack of experience:

> They laugh at us without ever having seen us

The sentiments of the second group are unintelligible, because contradictory:

> They have visited Galicia and enjoyed its delights, dared say that Galicia was ... a repugnant pigsty!! [*Un Costello innuendo*]!!

Relay experiencers — In face-to-face emotion narratives the interlocutor is the addressed experiencer. In written texts, the *ultimate* experiencer, the experiencer at the end of the emotional chain, is the ideal reader. The public is the ultimate experiencer of an oral rhetorical address, or of a TV show. The ultimate experiencer's emotions can be produced directly or indirectly, or both.

— Emotions can be produced *directly* by *showing* the situation framed as emotive, or by describing the situation as emotive (hypotyposis).

When seeing a person directly involved in an emotive event, for example a person injured during a terrorist attack, emotion affects *directly* the experiencer. A TV interview of the injured person produces mediated-direct emotion.

— Emotions can be produced indirectly through a chain of relay experiencers, expressing, showing, and justifying their emotion in relation with a given situation:

> The minister expressed his concern about…
> This is a worrying situation

The relay gives an emotional interpretation of the situation, detached from the primary experiencers. Depending on her ethos and charisma (politician, anchor-person…), the relay has the power to determine what will be the official (prevailing) emotion of the group.

When a member of the crowd witnessing the burning of Notre-Dame de Paris was interviewed, the interviewee acted a relay person, displaying and expressing a socially decent emotion and conveying it to a group of viewers attracted by her personal ethos. Emotion is transmitted by staging relay experiencers who will function as emotional models or possibly anti-models for the listener. They are models as much in terms of their emotional manifestations as in terms of actions to be undertaken, according to the orchestrator of emotion.

In the following intervention, Patient **P**, the primary experiencer, consults doctor **D**. She complains of "choking during the night". In order to better convey her global emotional experience to the doctor, she stages a relay experiencer, her daughter.

D   so, you, what you are complaining about is choking during the nights
P   ah yes
D   and that's the only thing you're complaining about, or is there something else
P   I mean, well, I'm going to give you more detailed manifestations
D   yeah
P   when I— I have a 28 years old daughter, she is the last one, she still lives with me and sometimes it happens I see her at my bedside shaking me mum what is happening I choke I choke I groan I groan so I'm looking for air I open my mouth as a carp the air, but it stops here (*puts her right hand on the base of her neck*) and then to try to find some air I have to — it manifests with::: yawns, so I try to [*breathing in*] with open mouth I yawn I yawn — I almost unhinged my jaw it happened to me and the air still does not comes in I'm choking I'm' looking for I'm looking for air I'm really– I feel like I'm dying hmm and I spend nights in the armchair sitting like that the eyes wide open, and I couldn't sleep
D   for fear of such manifestations
P   well I'm afraid to die yes yes yes for fear of another choking
D   is it— so then you say that your daughter from time to time shakes you like that
G.   yes
D   it means that well your family environment is also anxious of what could happen to you, about what is going on

To describe of her physical-emotional experience (demonstration, or an hypotyposis in classical rhetoric) **P** could have said "*my daughter is really anxious*". But she actually chooses to show her daughter involved in the situation (dialogism in classical rhetoric)

    I see her she shakes me mum what are you doing I'choking I'm choking

5. Conclusions

This conclusion recapitulates the main orientations of this contribution, and mentions future developments.

Emotion terms — Emotion is defined basically as what people call an emotion, that is as what dictionaries define as an emotion, and, more specifically, what distinguished speakers – philosophers, rhetoricians, theologians, psychologists — have included in their lists of emotion terms. This section calls for further developments on two points:
1) The distinction between i) *openly* expressed and communicated emotions, through *emotion terms* and ii) emotions *inferred* from descriptive words having an emotional orientation. Due to the complex semantic structure of emotion terms, there is a lexicon-semantic *continuum* between emotion terms directly *referring* to an emotion, and emotional terms *implying* an emotion.
2) Among the VMPG productions of the experiencer, two kinds of emotions signs have to be distinguished, *natural* signs, or emotion signals, versus *semiotic* signs of emotion produced by the experiencer.

Emotion as an experience — Beyond emotion terms, emotion as an experience is defined through a background / foreground contrast. This vision of emotion can be represented as a wave, and emotional life as a succession of emotion waves. Emotion reconstruction is based upon the analytical unit defined as the emotion episode. The concept of *primary emotion episode* has been defined on the case of emerging emotions. *Short-lived emotions*, such as those who are expressed through everyday exclamations, exhaust their life in one emotion episode they belong to. *Long-lived emotions* are re-enacted during *secondary emotion episode*. Life changing emotions are long-lived emotions. Emotion is not considered as an *individual condition* but as a *social-communicational* condition.

Emotion frames — From a practical point of view, the construction of a representation of an emotion episode can conveniently begin with the construction of a *basic emotion frame*, "*experiencer,*

emotion, situation", which can be extended into an *extended emotion frame* taking into account the fact that emotions are distributed by *allocators*, and organized by an *orchestrator*. These concepts are proposed as tentative tools for the construction of adequate representation of emotion in speech and interaction.

Emotion in situation — Emotions are linked to a vision of the current situation, as materialized in a description of this situation. Such descriptions and fragments of descriptions are used to justify the fact that the experiencer is in such or such emotional state. Different descriptions justify different emotions, or the absence of emotion. It follows from such observations, that 1) from a methodological point of view, emotion in argumentative discourse and interaction should be considered as a special case of emotion in speech; 2) when constructing an argumentative perspective one necessarily construct an emotional position.

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