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Embodied Abstractions and Emotional Resonance in Chrétien's Chevalier de la Charrette

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As maintained in previous contributions (Fuksas 2007, 2008, 2009; Salgaro 20091, 20092), evidence of effector-specific motor responses to speech and activation of mirror matching circuits during the processing of action-related words and sentences while speaking, listening and reading throws open the door to an ecological theory of narrative reference based on embodied semantics. In fact, the understanding of narratives seems to rely on the reenactment of described events that depends on congruent effector-specific motor responses. Indeed, action potential emerging from direct environmental experience likely resonates in the body of the listener or the reader during the processing of corresponding narrative descriptions.

Accordingly, an ecological theory of the novel may even be addressed as a theory of literary reference based on embodied semantics, maintaining that the processing of textually described actions depends on somatotopically congruent sensory-motor responses. The empirical evidence showing that novels do not just describe actions may actually circumscribe the effectiveness of such an ecological approach to some narrative descriptions, namely, those referring to proper actions such as 'I bite an apple', 'I grasp a knife', 'I kick the ball' or 'now I push the button'. Indeed, clauses or sentences referring to so-called 'abstract' generalizations, as in 'now I appreciate loyalty', have not been found to activate the left-hemispheric action-representation neural system as it happens when action-related sentences are actually processed (Tettamanti and colleagues 2005, 2008).

However, other experiments showed modulation of motor system activity during the comprehension of language referring to both concrete and abstract events. Some of them investigated linguistic processing during the performance of a repetitive hand-specific action aimed at transferring beans from a wide mouthed container to a target (Glenberg and colleagues 2008, Glenberg - Sato - Cattaneo 2008). Interestingly, greater modulation of motor activity was found in the hand muscles while subjects were reading sentences referring to 'transfer' of both concrete objects and abstract information in comparison with responses to sentences not describing transfer. Such findings seem to be supporting the idea that verbal descriptions of generalizations might relate to the embodied experience of specific (eventually prototypic) activities, which fall in the conceptual field these descriptions refer to.

The case of narrative descriptions referring to affective states might be eventually more clear, according to the Somatic Marker Hypothesis, which maintains that emotions and feelings are not abstract at all (Damasio 1994, 1996, 2003). Rather, they are the most evident part of a system regulating physiological reactions such as homeostatic adjustments which maintain metabolism,

or support signaling of pain, hunger and thirst. Basically, according to the Somatic Marker Hypothesis emotions are embodied responses to environmental changes, which process emotionally competent stimuli in terms of somatosensory perception. That is, they rely on the activity of a so-called interoceptive sense (Craig 2002, 2008), which aims at placing the organism «in circumstances conductive to survival and well-being».

Patterned chemical and neural responses to emotionally competent stimuli, such as processed objects, items, events or situations or memories target both the brain and the body. For instance, brain-targeting might trigger the alteration in the mode of brain operation during the emotional body adjustments, which may cause a change in attention accorded to a given stimulus. Body-targeting, which is much more frequent, may trigger emotional states involving adjustments in homeostatic balance, the enactment of specific behaviours and/or the production of particular facial expressions.

Damasio (2003: 34-35) mapped various different layers of affective responses, which are typically addressed as 'emotions' in a very broad sense. He made a clear distinction between lower-lever branches where pleasure and pain behaviours arise, middle-level branches in which such behaviours are articulated in drives and motivations and upper-level branches where they emerge as proper emotions such as joy, sorrow, pride, fear, shame or sympathy. The top level is reserved to feelings, which regulate the way emotions are actually felt by the individual who is actually experiencing them. Basically, according to Damasio, feelings are the mental representation of emotionally-dependent physiological changes which amplify the impact of a given situation, enhance learning, and increases the probability that comparable situations can be anticipated.

So, emotions immediately respond to challenges and opportunities, allowing the organism to cope successfully with objects and situations that are potentially dangerous or advantageous. Indeed, «emotions provide a natural means for the brain to evaluate the environment within and around the organism, and respond accordingly and adaptively» (Damasio 2003: 53). Basically, emotions play a crucial role in the way an organism deals with the environment, detecting changes in the ecological interaction, assessing it as a threat or an opportunity for improvement and triggering an action plan accordingly.

In such a sense, homeostatic processes governed by the so called interoceptive sense seem to be biologically indispensable to decisions, since they bridge the environmentally situated state of involved individuals and the actions they are actually planning. Experimental evidence supports the idea that emotions play a major role in action planning. Some studies show that the process which leads to deciding advantageously starts well before the organism knows which strategy is actually advantageous and other on patients affected by frontal lobe damage indicate that internal states associated with emotional contents support advantageous choice (Bechara and colleagues 1994, 1997, 2000).

Such findings result in an essential discredit of the approaches that directly link actions to the lower branches of affective ramifications while demonstrating the prospective nature of affective modulation, which «appraise the internal and external circumstances of an organism» and makes it possible for him to act accordingly. Indeed, emotions and feelings necessarily depend on the environmentally situated state of the subject, since they trigger specific reactions to the inducing situations and regulate the internal state of the organism in order to prepare specific reactions (Damasio 1999: 53-54).

Given that an action can hardly be defined as 'planned' and 'meaningful' at all if lacking an emotional trigger, such physiological background explains why novelistic descriptions of actions are perceived as intentional and relevant when tightly connected to evident emotionally fueled motivations. Indeed, answers to questions such as "why a given character performs a given action" are to be found in the outcomes of character-specific interoceptive processes modulated by emotionally competent stimuli. Such an assumption certainly fits plays and stories in general, if Damasio (2003: 27) can exemplify his distinction of affective states in emotions and feelings by introducing a reference to Shakespeare's Richard III.

The following discussion concerning the episode of *The chevalier de la charrette*, which describes the crucial encounter between the protagonist and the cart, aims at demonstrating that courtly medieval novels fit the same theoretical framework. In the presented case the problem at stake concerns the reason why Lancelot does not promptly climb on the cart for pursuing his beloved queen, who has been abducted by the evil knight Meleagant. The problem openly arises while the hero is struggling in front of the infamous vehicle, unable to decide what to do (vv. 362-381):

> Tantost a sa voie tenue,
> Qu'il ne l'atant ne pas ne ore.
> Tant solemant deus pas demore
> Li chevaliers que il n'i monte.
> Mar le fist et mar en ot honte
> Que maintenant sus ne sailli,
> Qu'il s'an tendra por mal bailli!
> Mes Reisons, qui d'Amors se part,
> Li dit que del monter se gart,
> Si le chastie et si l'anseigne
> Que rien ne face ne n'anpreigne
> Dont il ait honte ne reproche.
> N'est pas el cuer, mes an la boche,
> Reisons qui ce dire li ose;
> Mes Amors est el cuer anclose
> Qui li comandë et semont
> Que tost an la charrete mont.
> Amors le vialt et il i saut,
> Que de la honte ne li chaut
> Puis qu'Amors le comande et vialt
>
> (Foulet-Uitti 1989: 24).

Such a description has been defined as «un de nos premiers monologues intérieurs» (Vinaver 1939: 360), but a proper «monologue interieur» would eventually feature a single 'interior' voice describing 'thoughts'. Hence, the presented circumstance more likely features an 'interoceptive dialogue', given that Chrétien adopts a descriptive strategy involving conflicting actors such as «Raison», 'Reason', and «Amour», 'Love', who respectively aim at hindering action or prompting the hero to perform it.

Interestingly enough, Reason and Love are not described as abstract generalizations. Rather, they are presented as embodied features, which are openly related to specific effectors. Reason is located «an la boche», that is 'in the mouth' of the character and is essentially described as

lógos, a speaking voice talking to the hero (v. 374). Accordingly, the noun «Raison» just governs *verba dicendi* which target Lancelot as the 'listener', such as «dit», 'it says'; «chastie», 'it recommends'; «anseigne», 'it instructs' (vv. 370-371) and again «dire», 'to say' (v. 375). The noun «Amors» governs some *verba dicendi* as well, namely «comandë et semont», that is 'it commands and exhorts' (v. 377). Still, love seems to be providing the character with direct, less mediated instructions, being «el cuer anclose», that is 'located in the heart' (v. 376).

Basically, «Raison» and «Amors» are openly and dwelling in the body of the protagonist and they operate by activating different embodied responses. In the terms suggested by the Somatic Marker Hypothesis, this episode seems to be describing the interoceptive modulations that target the body of the hero in response to emotionally competent stimuli, which arise from his specific interaction with the environment. The "interoceptive debate" crucially defines the purposefulness and the intentionality of the very action that defines the whole meaning and relevance of the episode.

Indeed, the resolution of the emotional conflict opposing 'Reason' and 'Love' plays a crucial role in Lancelot's decision to climb on top of the cart, which is described at verse 379. Chrétien raises the *suspense* by mentioning the audacious action from Reason's point of view, which is presented in reported speech (vv. 369-373). The potential interaction between Lancelot and the vehicle is described by the key-verb «monter». The additional periphrasis that features the pair of *verba faciendi* «face ne n'anpreigne», subjunctive forms of «faire» and «emprendre», 'to do' and 'to start doing', focuses on the interdiction of any action causing the protagonist to be charged with «honte ne reproche», that is 'shame and disapproval'.

Chrétien emphasizes the impending events by stressing the predictable social consequences of an action such as the one Lancelot is required to perform «tost», that is 'promptly'. That very action is mentioned again at verse 378, where the «charrette» is openly presented as the vehicle that provides Lancelot with a much needed and extremely dangerous affordance. The key-verb «monte» defines the extent of the expected interaction between the hero and the cart, which is finally described as an actual event a few verses later (379-381).

In the final part of the episode Chrétien exerts *repetitio* so as to restate the circumstances that underlay Lancelot's dilemma. Namely, the keyword «honte», 'shame', is a reprise from verses 366 and 373 and verb «commande», 'it commands, orders', is already mentioned at verse 377. The textual tradition of the novel shows that editors recognize and amplify the authorial intention. For instance, versions AE reiterate verb «semont», 'it instructs', at verse 379 and the version E adopts verb «dits», 'it says', instead of «vieuts» (A), «vialts» (C) or «velts» (T), 'it wants', reiterating the same *verbum dicendi* from verse 370. Crucially, Chrétien avoids *repetitio* when it comes to the keyword defining the actual interaction between Lancelot and the cart. Instead of reiterating the recurrent verb «monte» (vv. 358, 365, 378) he adopts the verb «saut», «he jumps», so as to introduce a clear distinction between the description of the decision making process and that of the actual action leading to new developments of the story.

Interestingly, the presented textual segment reflects in all aspects the Somatic Marker Hypothesis, according to which affective states are directly associated with body effectors, being at the same time dependent on the environmentally situated experience the character is immersed into. Moreover, the description of the protagonist's awareness of his own affective states amplifies the dramatic intensity of the situation, crucially supporting specific action-planning and decision-making strategies. Finally, interoceptive modulations, which target the body of the hero in response to emotionally competent stimuli arising from his interaction with the environment are described as leading to actual action.

Indeed, the thematic forces operating throughout the entire novel actually emerge on the surface of the text in a crucial situation, namely when the hero is required to perform the action that defines his identity as the *Chevalier de la Charrette*. The decision that prompts Lancelot to action depends on an environmentally situated event, namely his interaction with the cart, which clearly implies emotionally-competent correlates. These correlates directly target the body of the character, where they are processed according to the prerogatives of specific effectors, namely the mouth and the heart.

Therefore, the motor plan that underlies the action of the protagonist is clearly described as arising from a decision, which depends on a deeply embodied interoceptive processing strategy. Hence, presented textual evidence shows that the processing of language referring to affective states is all but general and aspecific. Rather, it actually involves bodily effectors and is likely processed by storytellers, writers, editors, readers or listeners on the basis of previously embodied experience of the actual states they refer to.

The presented episode of the *Chevalier de la charrette* might eventually be especially consistent with a view based on the Somatic Marker Hypothesis. However, by no means typical other cases would be describing emotions as completely unrelated to environmentally situated events and/or actual actions based on decisions, which depend on how such emotions are felt by specific characters. Indeed, the understanding of environmental descriptions relies on the recognition of corresponding sensory experiences and contextual processing of emotional correlates. On the other hand, narrative actions are understood as purposeful and intentional because they rely on an emotional appraisal of the environmental circumstances they respond to.

Consequently, the understanding of a story necessarily requires readers or listeners to recognize and properly process the emotional correlates of a described sensory experience and/or the interoceptive modulations which underlay the planning of purposeful actions. Accordingly, novels typically provide readers or listeners with descriptions of character-specific affective reactions triggered by specific to perceptual experiences which underlay the decision-making processes leading to purposeful intentional actions. So, being descriptions of affective states such as emotions and feelings that crucial to the understanding of a novel, how do readers and listeners recognize and process them?

According to theories of embodied cognition, the correct answer might be the same that explains the understanding of descriptions which refer to perceptual events and actual actions. Indeed, neuroscientific evidence suggests that emotional resonance across individuals plays a crucial role in observational learning, which is likely supported by the reenactment of the emotional experience of the model in the observer. Indeed, Wicker and colleagues (2006) showed that observing an emotion activates the neural representation of that emotion, as observing hand actions activates the observer's motor representation of that action, providing evidence which support the idea of an unifying mechanism for understanding behaviours of others.

Moreover, Chakrabarti and colleagues (2006) investigated the influence of empathy on perception of different basic emotional expressions (happy, sad, disgusted, angry), finding common neural regions which underlay empathy across different emotions and regions that show an emotion-specific correlation with empathy. Other experiments performed by Olsson and colleagues (2007) suggest that indirectly attained fears may be as powerful as fears originating from direct experiences. Further significant evidence emerged from studies concerning direct and social experience of pain.

Namely, Singer and colleagues (2004) presented data suggesting that empathizing with the pain of others does not involve the activation of the whole pain matrix, being rather based on activation of second-order re-representations containing the subjective affective dimension of pain. Accordingly, they proposed that cortical re-representations have a dual function. First, they ground subjective representation of feelings allowing the prediction of how emotional stimuli with impact the self. Second, they serve as the neural basis for human ability to understand the emotional importance of a particular stimulus for another person, hence to predict its likely associated consequences.

Ogino and colleagues (2007) provided evidence supporting the idea that the imagination of pain elicited by viewing images referring to painful events might be based on representations of pain in the human brain, which reflects the multidimensional nature of experiencing pain, including sensory, affective, and cognitive components. Lamm and colleagues (2007) showed that the perception of pain in others results in an activation of almost the entire pain-matrix, including its sensory-discriminative component. They even found that both the sensory-discriminative and the affective-motivational component are modulated by the context in which pain has occurred, and by the consequences the observer is focusing on.

So, emotions flow from one person to another based on empathy, as described in another interesting segment of Chretien's *Chevalier de la Charrette* (vv. 1420-1444):

--Trop a certes m'an apelez,
Fet ele, si le vos dirai,
De rien nule n'an mantirai :
Cist peignes, se j'onques soi rien,
Fu la reïne, jel sai bien ;
Et d'une chose me creez,
Que li chevol que vos veez
Si biax, si clers et si luisanz,
Qui sont remés antre les danz,
Que del chief la reïne furent :
Onques en autre pré ne crurent.»
Et li chevaliers dit : «Par foi,
Assez sont reïnes et roi ;
Mes de la quel volez vos dire?»
Et cele dit : «Par ma foi, sire,
De la fame le roi Artu.»
Quant cil l'ot, n'a tant de vertu
Que tot nel coveigne ploier ;
Par force l'estut apoier
Devant a l'arçon de la sele
Et quant ce vit la dameisele,
Si s'an mervoille et esbaïst
Qu'ele cuida que il cheïst ;
S'ele ot peor, ne l'en blasmez,
Qu'ele cuida qu'il fust pasmez

(Foulet-Uitti 1989: 82-84).

Lancelot and the damsel he is escorting reach a natural spring in the middle of a meadow, next to which there is a rock. On top of the rock there is a comb, between the teeth of which a tuft of hair of a woman was caught (vv. 1356 to 1368). The damsel left the main path and rides in a different direction, so as to prevent Lancelot to notice the presence of the item that somewhat awaits him on the rock next to the source (vv. 1369-1376).

The following dialogue stresses the implications of such a narrative switch. Lancelot prevents the damsel not to venture on an unknown direction alone: in that case he will not follow her, and will rather keep riding the main path (vv. 1377 - 1395). Hence the damsel gets back on track and follows Lancelot, who rides towards the rock and suddenly notices the comb, being immediately captivated by its exceptional beauty. The damsel claims the comb and the knight reaches out for picking it up for her, but the item fascinates him so much he gets lost in contemplation, causing the young lady to laugh (vv. 1395-1406).

The following discussion between the two characters concerns the identity of the lady whose blonde hair got stuck in the teeth of the comb (vv. 1407-1422). The damsel informs Lancelot that both the comb and the hair belong to the queen Guenavere, and suddenly the knight gets extremely emotional. The consequent empathic response of the damsel is presented as completely understandable from the storyteller's point of view, since her fear clearly depends on the fact that Lancelot is apparently fainting.

Interestingly, manuscripts E and T describe the reaction of the protagonist in partly different terms, in respect to the other manuscript versions:

E	T
1437 que la terre l'estuet garder	1437 que tot nel covenist plessier
1438 et par force l'estuet clinier	1438 (*lacking*)
1439 de dessus l'archon de la sale;	1439 devant en l'arcon de la sele.

According to version E Lancelot can not help turning his gaze to the ground and to lean forward on the bow of the saddle, whereas version T, which laks verse 1438, does not mention that Lancelot grabs the saddlebow so as not to fall, as clearly explained in versions A, C and V. To some extent, versions E and T take a more dramatic stance, since they catch the protagonist in the act of (almost) falling. Hence, they provide the audience with the perfect prelude to the empathic reaction of the damsel, who gets surprised and awed as soon as she notices that Lancelot is likely about to faint (vv. 1441-1442).

It has been shown that it's impossible to understand the description of an action not being aware of its affective background. The presented textual segment suggests that novelistic descriptions of emotions are mostly descriptions of feelings, since they address character-specific affective responses to given circumstances, that is the specific way given characters actually feel the described emotions. Such feelings are often described so as to amplify the impact of a described situation, so as to fully appreciate the reason why characters act the way they do.

The discussed textual segment entails the description of very common mechanisms of empathic resonance, which looks extremely "realistic", according to current neuroscience. Still the empiric evidence of the fact that empathy can be described in novels does not imply that such descriptions necessarily activate the neural representation of that emotion in the reader or the listener. However, other studies presented evidence supporting the idea that the recognition of

emotional meaning in emotion words and locutions seems to be depending on the embodied resonance of the corresponding emotion.

Glenber and colleagues (Glenberg - Havas - Becker - Rinck 2005 and Havas, Glenberg and Rinck 2007) showed that full understanding of language referring to emotional states requires those emotional states to be simulated, or partially induced, using the same neural and bodily mechanisms that are recruited during the corresponding experiences. Essentially, language concerning emotions is grounded in the emotional states of the body and simulating those states is a prerequisite for the full understanding of the language that describes them. Interestingly, Havas, Glenberg and Rinck introduce the paper in which they presents evidence supporting such a view remarking that «reading a passage from a favorite novel makes it clear that language evokes emotion».

Indeed, narrative descriptions of emotions are likely understood according to feelings arising while reading a novel, based on individual experience of similar circumstances. Such hypothesis is congruent with the idea that «the body-sensing areas constitute a sort of theatre where not only the "actual" body states can be "performed", but varied assortments of "false" body states can be enacted as well, for example, as-if body states, filtered body states, and so on» (Damasio 2003: 117-118). In Damasio's view, «the commands for producing as-if body states are likely to come from a variety of prefrontal cortices as suggested by recent work on mirror-neurons on both animals and humans».

Basically, a mirror-matching mechanism might be even responsible for the understanding of emotions felt and expressed by others both is somatic and linguistic terms. In that case, as-if body states would be those experienced while processing and understanding narrative reference emerging from the reading of emotionally-competent descriptions featured in a novel. Indeed, readers or listeners are supposed to understand linguistic descriptions of emotions according to their own embodied experience of similar emotionally-competent events.

Accordingly, philological investigations focusing on emotionally-related words or locutions could make it possible to study and compare literary works and their textual tradition in respect to the semantic network that supports their more or less integrated emotional system. Assuming co-occurrence of words as an indicator of semantic proximity and/or interdependency, co-occurring emotionally-related words can be aggregated so as to define the borders of relevant lexical clusters. For instance, the recurrence of the same emotionally-related word in different context might allow to group multiple words in a cluster, as in the case of a pair of other segments from Chrétien's *Chevalier de la Charrette* (vv. 2732-2739 and vv. 3047-3054):

> Li chevaliers de la charrete
> De malvestié se blasme et rete
> Quant son oste voit qui l'esgarde;
> Et des autres se reprant garde
> Qui l'esgardoient tuit ansanble.
> D'ire trestoz li cors li tranble,
> Qu'il deüst, ce li est avis,
> Avoir molt grant pieç'a conquis
> Celui qui a lui se conbat.
>
> […]
>
> Les deus chevaliers qui estoient

Avoec le tierz, que il cuidoient
Que dui lÿon ou dui liepart
Au chief del pont de l'autre part
Fussent lïé a un perron.
L'eve et li ponz et li lÿon
Les metent an itel freor
Qu'il tranblent andui de peor

(Foulet - Uitti 1989: 154 and 172)

The former case is part of the episode in which, after the people of Logres revolted, Lancelot fights an arrogant knight who questioned his knightly pride reproaching him the infamous ride on the cart. The presence of the crowd makes the protagonist realize that he fought for too long and he has yet to defeat his opponent, such awareness causing him to experience the emotional upheaval that triggers the final assault. Indeed, Chrétien clearly remarks that the body of the hero is stirred with anger, so that he starts fighting harder and defeats his opponent. The emotional state, described in terms of *ire*, implies a clear somatic correlate, described by the verb *trambler*, "to tremble", which targets the *cors*, that is the "body".

The latter case is featured in the episode of the sword bridge, which Lancelot is about to cross in spite of the advice of the two worried young knights who are accompanying him. The environmental description directly and completely integrates some attributes to be retrieved by means of a combined sensory and emotional appraisal. A mere visual assessment makes the young knights able to decode the maliciousness of the river and the wildness of the lions, fear and danger being described as part of their integrated experience of the environment. Namely, the sight of «l'eve et li ponz e li lÿon» (vv. 3052-3054) directly causes Lancelot's young companions to experience 'fear' («peor»), the somatic correlate of such emotion being openly described as 'cold' («freor»), which causes 'trembling' («tremblent»).

The description of the *ire* that causes Lancelot to tremble features an emotional state that directly targets the body of the protagonist prompting him to action. Rather, the *peor* paralyse the young companions of the hero, a pair of «mirror characters» who react to specific environmental circumstances in a way which likely aims at enticing the audience to react accordingly (Brandsma 2006: 284 and Brandsma 2008 4/10). Interestingly, the verb *trembler*, that never occurs elsewhere throughout the novel, bridges different emotions, actually described in terms of *ire* and *peor*, being the character-specific somatic response it refers to the same in both cases.

In conclusion, the whole array of presented evidence confirms the crucial points stressed by Carolyne Larrington (2001: 254) in her paper on the study of emotions in medieval literatures. First off, the selected segments of the *Chevalier de la Charrette* clearly show that «reference to somatic indices in historical or imaginative texts encourages readers to infer the presence of an emotion on the basis of our own experience of similar bodily changes». Descriptions emphasizing emotional responses to specific environmental and/or social circumstances are actually found to be targeting the body of the protagonists and minor characters and likely aim at modulating corresponding embodied response in readers and/or the audience.

Moreover, the discussion of emotionally-relevant descriptions in a medieval novel makes it evident that studies on medieval literatures should focus on the «mapping of co-occurrences and contrasts between different emotions» (Larrington 2001: 254), so as to define and eventually compare the emotional system of selected literary works. The presented discussion concerning

verses 2732-2739 and 3047-3054 of the *Chevalier de la Charrette* can be generalized, so as to sketch a proper method relying on Wittgenstein's family similarities, interpreting co-occurrence of words as an indicator of semantic proximity and/or interdependency. Provided that at least one word can be assumed as emotionally related *per se*, co-occurring words would likely define pertinent lexical clusters of a branched and integrated system, which supports the emotional understanding of a novel in readers or listeners.

Such an emergent method might definitely help in dealing with literature arising from various social and cultural systems and especially from the past, such as in the case of the medieval novel. Indeed, the crucial problem with affective modulations in literature is that the correlation between language and emotion is extremely variable from a given cultural context to another, the very concept of "emotion" being historically determined as well (Febvre 1941, Rosenwein 1989 and 2001, Dixon 2003, Knuuttila 2004). An emergent method would help in avoiding the adoption of a pre-determined categorization, making it possible to define the borders of a literary emotional system based on the actual descriptions and their embedded implications, such as gender, culture, social role, specific mindset of the characters who are presented as feeling the described emotions.

Finally, the discussed examples fit the idea that «the concepts of appraisal and action readiness help to explain the ways in which emotion is embedded within the texts we scrutinize» since «emotion does not occur without a proximate cause, and it results in some action: it often appear in the text to explain motivation» (Larrington 2001: 254). Indeed, novelistic description typically entails affective responses modulated by perceptual events and/or memories and decisions, which trigger purposeful and intentional actions. Accordingly, description of emotions is a crucial component of the narrative system of the novel that integrates perceptual experience, interoceptive modulations and proper actions in a narrative whole, which aims at working in the exact same way the actual human experience of nature and society does.

In some cases, direct correlation of emotions and action is definitely more evident than in others. Still, the description of affective states is a mandatory requirement of any novel, even those which aim at de-emphasizing the correlation between emotion and action. Indeed, the description of emotions basically clarifies the meaning and purpose of consequent goal-oriented actions. This is why standard novels tend to linearize the process leading from perception through emotion to action in an extremely effective way, which does not necessarily reflect standard human experience.

Indeed, standard novels typically avoid redundant descriptions of emotional states, which do not lead to purposeful actions, since they might result in a disturbing distraction. Rather, this descriptive style is typically adopted in non-standard literary works, which intentionally aim at broadening the borders of the genre or hybridizing the novelistic format with lyric overtones. Specific comparison between different novelistic versions of the same story, say the *Tristan* of Thomas and Beroul, might provide interesting clues on the variable balance between perceptual experience, interoceptive responses and purposeful actions.

Action-driven stories are often perceived as banal, because they mostly lack detailed descriptions of the emotional background which makes characters act the way they do. On the other hand, novels filled with redundant digressions, which over-describe emotions and feelings are usually perceived as boring. The hypothesis that the more even is the balance between described events, the more the novel seems to be convenient in current social terms triggers interesting questions about the development of the genre from its western medieval origins to contemporary developments spreading everywhere around the globe.

Namely, is it possible to identify crucial turning points in the history of the novel based on the way emotions are described? Do critical transitions from a standard novelistic format to another depend and/or imply a different descriptive balance between perceptual events, emotional responses and decisions and actual actions? Moreover, may the role played by classic novels in the global literary system be due or related to such effective balance of perception, interoception and action? Did such novels find the point of equilibrium between action-driven stories and hyper-psychologic ones while exploring the emotional background which underlay decisions and prompt characters to action? Did descriptions of activity patterns based on such balanced integration of perceptual events, interoceptive responses and purposeful actions define specific morphologies of the story which are effective-enough to emerge as a standard and to be somewhat assumed as 'normal'?

Investigations focusing on novelistic descriptions of emotions will certainly contribute to answer such questions, and likely many others, explaining why novels are made the way they are and why the genre evolved into a global standard for storytelling.

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