Admiration

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ABSTRACT

The paper, by way of conceptual analysis and empirical research, defines admiration in terms of a cognitive model of emotions. Admiration is a positive emotion stemming from a positive evaluation of the other or a quality of his, which makes us desire to have positive relations with him and possibly to imitate him. It has an adaptive social function of making interaction pleasant and cooperative, and a cognitive function of learning from others through imitation.

Categories and Subject Descriptors

J.4. [Social and Behavioral Sciences]: Psychology

General Terms

Theory, Human Factors.

Keywords

Emotions, Admiration, Evaluation.

1. INTRODUCTION

In the theoretical study of affect, a relevant issue is the distinction of different types of them. For example, one could set social from individual emotions apart, namely those that are felt toward another person from those that are not, say, jealousy as opposed to enthusiasm, or respect vs. serenity. Moreover, among social emotions some, like the sense of guilt, can be seen as "moral" emotions, in that they are felt about actions or situations that have an ethical impact.

However, to distinguish types of emotions it is necessary to carry on a clear definition and analysis of them.

This work presents a conceptual analysis of a social emotion: admiration. We provide a definition of admiration based on a model of mind, social interaction, and emotions in terms of the notions of goal and belief, aiming to find out the "mental ingredients" of admiration: the beliefs and goals that are represented in the mind of an agent when s/he feels that emotion [2], concerning 1. the current event and its relationship to the Agent's goals, 2. the goals monitored by the emotion, and 3. the goals activated by it. Moreover, since emotions are adaptive devices in that their function is to monitor the state of achievement of thwarting of adaptively important goals of humans, the work tries to find out what is the adaptive function of admiration, that is, what are the goals it monitors.

2. THE FEW ADMIRERS OF ADMIRATION

The emotion of admiration has not been studied thoroughly, although a few prestigious scholars have attempted a definition of

it. According to Darwin [3], admiration is "surprise joined with feelings of pleasure and approval". Freud [4] considers it as a way of putting another person in the place of one's ideal ego. Klein [5], in talking of envy and gratitude and the way they stem from the child's relation to his mother, observes that "sometimes we feel grateful for the other has a unique capacity to produce some good, and this gratitude is a part of admiration". Again within a psychoanalytical framework, for Sandell [9] admiration, like envy, comes from a sense of "relative deprivation", since the other has something you don't have. But in admiration you divide the object in two different objects, the whole and a part (trait-object), so the entire object becomes irrelevant while the trait object becomes distinguished and comes to be admired. Sandell also observes that the pathological narcissist is incapable of admiration, while in normal narcissism the relative deprivation leads to identification with the other: thus one can feel joy from the good of the other, and admiration becomes a narcissistic gratification. In the Cognitive Science domain, [7] consider admiration an appreciation emotion stemming from attributing the responsibility of a praiseworthy action to another agent. Its intensity is mainly determined by deviation from role-based expectations: we admire more a weak old lady for saving a drowning child than a baywatch.

3. JOINING FORCES TO FIND OUT INGREDIENTS

To find out the ingredients of an emotion, two different methods can be used: conceptual analysis and empirical investigation. With the former, the investigator produces examples and counterexamples to discover the necessary and sufficient conditions for feeling the emotion under analysis. With the latter, the investigator submits interviews and questionnaires to people. In our case, we used the two methods in conjunction. First, through conceptual analysis we drew a list of ingredients that in our view constitute the cognitive structure of admiration. Then, we constructed a questionnaire whose questions tested whether the ingredients hypothesised are in fact present in the feelings and cognition of subjects.

4. THE MENTAL INGREDIENTS OF ADMIRATION

To provide a definition of admiration, we first conducted a conceptual analysis aimed to single out the mental ingredients of this emotion, that is, the beliefs and goals that are represented in the mind of a person who is feeling it. The mental ingredients that we hypothesised for admiration are the following:

- 1. A believes that B possesses a quality X
- 2. A believes Q is a positive quality

- 3. the quality itself or the fact that B possesses it is beautiful (causes A to feel pleasure)
- 4. A has the goal to have quality Q too
- B exhibits Q in a situation in which it was difficult to have it, or in a way or to an extent that other people do not
- 6. the fact that, or the extent to which, B possesses the quality Q is in some way surprising
- 7. A believes that B is in some way superior to A
- 8. A evaluates B positively
- 9. A feels a positive affect towards B
- 10. A believes that A is similar to B
- 11. A believes that even if having Q is difficult, yet it is not impossible
- 12. A feels hope (believes it is possible) that A will / would finally be able to acquire the same quality Q that B has
- 13. A feels gratitude toward B for giving him the hope to achieve that quality
- 14. A feels that staying with, interacting with, seeing B is pleasant
- 15. A has the goal of taking B as a model to imitate
- 16. A has the goal of staying close to B
- 17. A has the goal of having positive interactions with B

As results from this list of ingredients, our tentative definition of admiration is the following.

Admiration is a positive social emotion, that is, an emotion felt by an Agent A toward an Agent B, that encompasses a positive evaluation of either B as a person, or of a quality or capacity Q that B has, and that A considers desirable or definitely would like to have. Thus A possibly has the goal to imitate B, in order to learn or acquire quality Q. But admiration is a positive social emotions also in that A, just due to his positive evaluation of B and/or of his quality Q, also has the goal of entertaining positive interactions and relations with B.

In terms of the typology of emotions proposed in [8], admiration belongs to the "emotions of the other's image". For an Agent it is very relevant to make up an image of the other Agents, that is, to have a set of non evaluative but mainly evaluative beliefs about them, in order to decide with what Agents to have positive relations; thus, some emotions like trust, esteem, contempt, are triggered by - and are a symptom of - a positive or negative evaluation we have of other people. In fact, when you admire someone you evaluate him or her very positively, even positively in a surprising way. In the very word admiration, in fact, we find the latin root "miror" [1] that means "I am surprised", "I am amazed", and indeed A is surprised of how nice or beautiful or clever B is. What is surprising may be the extent to which B displays quality Q, or even the fact that he displays it, with respect to what is expected given B's role (see Ortony et al.'s [7] case: admiration toward the store clerk as opposed to the policeman, for diving into the sea to save a boy).

From this highly positive evaluation it descends that A thinks that B is superior to A. Nonetheless, this comparison between A and B, different from the case of envy, where A feels inferior to B, does not trigger a negative emotion in A. In our view this is because in envy the acknowledgment of a positive quality in B is accompanied by the feeling of A's powerlessness. On the contrary, in admiration A believes he is in some way similar to B – he belongs to the same category – so the fact itself that B has that positive quality Q provides an evidence that possessing B is

not impossible, even if it is rare, difficult and hence surprising. This gives A some hope that he can eventually achieve that quality too, and induces A to have a relationship with B to have the chance of imitating him and learning from him.

5. ADMIRATION: AN EMPIRICAL STUDY

After singling out these mental ingredients through conceptual analysis, we carried on an empirical study to test our analysis.

5.1 Method

6. We submitted a questionnaire of 22 open and closed questions to 274 subjects, 37% males and 63% females, between 14 and 77 vears old. The questions tackled various topics. Eight of them investigated the nature of admiration by asking subjects to provide their own definition of this emotion (Question n.1), to tell a case in which they had felt admiration while specifying its cause and the feeling felt (n.3) and its valence (14); the area – work, school, friendship, love, family, entertainment, sport - in which admiration was more frequently felt (6); the person admired (4), how similar to her they felt (7), whether or not they felt inferior to her and why (13), and whether they admired more the person as a whole or her quality (15). Another group of questions investigated the frequency of admiration (Question n.2); its communication – whether or not they had communicated their admiration to the admired person and why (8), and if they had, how (9); the functions of admiration - if they found it more useful for the admired or the admirer; and whether or not they happened to feel admiration to themselves, and why (questions n.11 and 12). Three questions attempted a differential analysis of admiration as against other germane emotions: n.10 asked to measure its distance from joy, envy, esteem, contempt, trust, gratitude, surprise, jealousy, amazement and sympathy, while 16 and 18, respectively, investigated the differences from envy and esteem from a qualitative point of view. Question 5 specifically tested the ingredients hypothesised by our previous conceptual analysis. The subjects were presented with a list of 25 statements, each rephrasing a mental ingredient in common language, and they were asked: "Imagine to re-live some situations in which you felt admiration. Check how much you agree with each of the following statements, from 0 (I do not agree at all) to 5 (I totally agree)".

Finally, two questions tackled the issue whether admiration can be defined a "moral" emotion. Question n. 17 asked the subjects whether they had or could have ever admired a person they did not approve from a moral or ideological point of view, while n.19 asked to describe someone they could never admire.

5.2 Results

Within the questionnaire, questions 1 and 3 mainly tested the "psychological reality" of our definition, that is, how much the ingredients hypothesised through conceptual analysis do make part of the cognitive structure of admiration represented in subjects.

Definitions and cases of admiration

From answers to questions 1 and 3, asking subjects to define and to tell a case of admiration, the definition above, drawn through conceptual analysis, is generally confirmed. Some of their definitions sound as follows: Admiration is

Feeling which triggers surprise

A feeling of affect towards an object or a person

Feeling one senses in admiring - seeing something beautiful

To acknowledge in a person a way of being I would like to be mine (...) that I did not have

Appreciation for a behaviour that is considered apt in a situation, even if it is difficult to assume

To notice one or more positive qualities and hold them as an example to imitate

I think admiration is also the simple enjoyment of something beautiful

It is a positive judgment about a person or a result

It is a sensation you feel towards someone who accomplishes some task that is difficult for us

Attitude of profound esteem for another person

Admiration is the emotion you feel towards someone who has or does something more than you in a surprising way

To sum up the bulk of the subjects' definitions, admiration is defined as: an intense pleasant emotion of surprise leading to a positive affect toward (a desire to stay close to) an object or a person that is evaluated more positively than you due to a behaviour, an achievement, a quality exhibited or achieved in a difficult situation; a positive quality that A does not have but wants to have, so that in order to obtain it A desires to stay close to the person and takes her as an example to imitate.

As compared to our hypothesis, the only ingredients lacking from the subjects' definitions were the emotions of hope and gratitude (n12 and 13), while the only ones added by the subjects to our definition were that admiration can be felt also for a behaviour or even a result, not necessarily for the person as a whole or a quality.

Here are some cases described as a response to question 3:

Admiration for a teacher who struggled with students for a just cause

Admiration for my mother who even in the most difficult moments went on without surrendering

I feel admiration toward the children living in conditions of unease (coming from poor places in the world), because their expressions manifest joy in living simple everyday things, even among high suffering

I admired a person during a karate match. I admired his passion

I admired a woman that I saw as more beautiful, more selfconfident and more skilled than I am, in any situation

I admired a friend of mine who, forsaken by her boy-friend, gathered all her courage and left all by herself for vacation

I admire for example all those people who confront critical and difficult times with smile on their face

In general, the qualities admired range from tenacity, strength, courage, to beauty, self-confidence, skill, passion, and any difficult behaviour or rare quality. Also confirmed is the ingredient of something "surprising", since from the cases described by subjects what is most frequently admired is a positive attitude of a person *notwithstanding* a difficult situation.

Germane emotions

Question 10 measured how close, on a scale 1 to 5, admiration is seen with respect to 10 related emotions (Table 1.).

Table 1. Proximity to other emotions

| EMOTION | PROXIM. |
|-----------|---------|
| Esteem | 4,48 |
| Sympathy | 3,82 |
| Trust | 3,48 |
| Joy | 3,32 |
| Gratitude | 3,11 |
| Surprise | 2,61 |
| Amazement | 2,51 |
| Envy | 0,58 |
| Jealousy | 0,38 |
| Contempt | 0,11 |

Esteem resulted to be the closest emotion (4,48 out of 5), followed by sympathy (3,82), trust (3,48) and other positive emotions, while envy, jealousy and contempt are the most distant (0,58, 0,38, and 0,11 proximity, respectively) from admiration.

Admiration vs. envy

As to the similarities and differences between envy and admiration, 20% subjects answered that when admiring someone they happen to feel a sense of inferiority, while 19% wrote they may feel envy and admiration at the same time. In this case, they also described what made them feel envious and what induced admiration, thus allowing us to outline the elements responsible for the two emotions

In general A feels envy, together with admiration, when:

1. A would like to be able to do as B does

Admiration for his qualities; Envy because perhaps I would have liked to be in his place

2. A would like to be like B

Because I can like a person very much, but I can't help wanting to be like her

3. A feels he cannot do what B has done

Admiration sometimes can result in envy because some person has achieved something, while we do not think we could do so. Thus we admire and envy that person at the same time

(Envy) Because I would have never been like him

(Envy) Because what he can do I am not able to

4. A feels frustration of not being able to do like B

Envy possibly because along with admiration there is a slight sense of frustration

5. A feels B's achievement as unjust

I felt admiration because I acknowledged his quality, I felt envy because possibily I thought he did not deserve it (since he is not a good – right person).

Admiration prevails, instead, when:

A acknowledge B's qualities

Admiration for achieving some goals; instinctive envy because you would like to obtain the same result

A is happy for B

Because I would have liked to be like that person and admiration because I was happy for her

A would like to be or do as B

I felt admiration because she was as I would have liked to be and envy because I was still very young and uncertain

It is not right to talk of envy. Basically it is that you feel spurred to do the same. But for yourself

A feels pleasure at seeing B

Admiration for the pleasure I feel in beholding what I find beautiful and, perhaps, a little bit of envy if I perceive that the model is difficult to pursue and imitate

A has a positive attitude or affect towards B

Admiration because I approved what she was doing and envy because I would also have liked to be able to do so

Envy because that person had been able to be a way I can't, admiration because I supported her

Admiration vs. esteem

In answering question 18, whether there are, and which are the differences between esteem and admiration, only some subject say they are very similar or even the same. Some realize they are not necessarily related:

Admiration may do without esteem

To others, esteem derives from admiration:

I think esteem is a consequence of admiration

Esteem stems from admiration in that first you observe, admire and then you completely esteem and appreciate the gifts, but they can even be parallel feelings

For various subjects, esteem includes admiration, that is, admiration implies esteem:

If you admire a person you also esteem her. On the contrary, if you esteem someone you do not necessarily admire her.

Esteem is a part of admiration but not the other way around. That is, I can esteem someone but not admire him, but I cannot admire someone without also esteeming him

Admiration is a wider feeling, wherein esteem is included

I can esteem a person without admiring her but I cannot admire her without esteeming her

If you admire a person you certainly esteem her, but not necessarily if you esteem someone you also admire her

They are in any case different emotions, but they are linked to each other. It is difficult for admiration to hold if there is no esteem

Subjects contrast the two mental states in terms of various dimensions:

1. transitory vs. permanent,

Admiration is and can be occasional, esteem is an enduring opinion

Because esteem endures across time

2. more intense vs. deeper,

Perhaps the former (admiration) is more emotional, the latter is the result of a process of aware knowledge

Admiration is to see someone externally, esteem is something that comes when you have interactions with someone

Admiration is more marked, more passionate

Admiration also entails a sense of amazement, while esteem is something more firm and more enduring

Esteem is deeper than admiration

Admiration is a warmer and more coloured emotion as opposed to esteem which is instead cold and grey

Admiration is a more violent feeling than esteem is

3. concerning a single quality vs. the whole person,

Esteem is more of a global value within a person, admiration is more specific

In admiration I feel amazement only for some qualities or features of a person. As I esteem a person, instead, I esteem her totally

Admiration is pointed to some specific qualities of the person, esteem over the entire person

Esteem refers to the person as a whole, admiration to one or a few qualities. Admiration can be transitory, esteem is persistent

I can admire an action, while I feel esteem for a person

You can admire the action of someone, but esteem the person

You can admire a person for some qualities of hers and you esteem a person globally

Esteem, to me, is something more. I can admire a single feature of a person and I can even not have such a relevant relation to her. In order to esteem a person I must have a more intimate relationship and I must like more of one feature of hers.

4. requiring vs. non-requiring trust,

In esteem there is also trust. So you feel esteem toward one you know well. Admiration also for less deepened relations.

Admiration is a less profound feeling than esteem is; esteem is a blind trust that I have within a very narrow field

Admiration is more general: admiration is to be satisfied with the other's actions and qualities. Esteem, instead, is to be completely certain you will not be dissatisfied by a person, while you admire her simply for what she is

5. more focused on the result vs. on the action.

You admire someone who achieved a goal; you esteem someone for what he does

You can esteem even the most humble person, you admire someone who in some way is successful

There is admiration for the goals you achieve. There is esteem for what you do in you everyday life

Two differences are also relevant:

6. in admiration – as from our hypothesis – you generally want to take the admired as a model, while this is not the case for esteem;

Esteem is based on the situations accomplished but you do not want to look like him, while admiration is a different way to see the person

Esteem is more global, esteem arrives from a deeper knowledge, in esteem there is not the emulation which is there in admiration

Esteem is to feel trust and to appreciate the qualities of a person. Admiration is, instead, desire to have the qualities of another person

You esteem a person that you hold as important for something she does, you admire a person that you will think to imitate or you hope not to disappoint

and finally,

7. admiration is more about aesthetical, esteem only about moral qualities.

Esteem toward someone leaves admiration out of consideration. Esteem is often triggered by his moral, behavioral, intellectual aualities

I see esteem as a feeling of respect towards a subject while admiration leads one to appreciate him.

Esteem presupposes a moral evaluation and knowledge of the person, while admiration concerns more exterior aspects / skills

In my view you admire someone for where he arrived and what personal ideals he has achieved. Esteem instead can be felt for the way he achieved them (and for not coming to compromises), it is a feeling that in my view concerns more of a personal quality.

Esteem gives value to a person, while admiration is an emotional state that does not need value judgments

You can admire a person for a single positive situation which, however, is far from the way you see things

Esteem is reserved for honest correct, moral persons, admiration for people capable to take and give the best of themselves in the various social fields

This takes us to the issue of the "morality" of admiration

Admiration as an a-moral emotion

Another issue we investigated was whether admiration ca be considered a "moral" emotion.

Our hypothesis was that, in a sense, admiration is an "a-moral" emotion in that, as resulted from previous interviews, at least some people can, while others cannot, separate their own ethical and ideological stance from admiration. In other words, some feel they could not admire the other's quality without taking into account the goals to which it is devoted, while for others admiration is more of an aesthetical feeling, where you like the quality in itself, even when it is aimed at goals you disapprove: like when a detective admires the smart thief he is chasing.

Question 17, "Can you admire someone you do not approve from an ideological point of view?" received a "yes" by 26% subjects, "no" by 72%, and no answer by 2%. Here is how some argue for separating admiration from moral judgment:

You must be objective and appreciate also the gifts of those who do not share your ideas. The person for whom I felt admiration

Table 2. Ingredients, envy and morality

| G | Land Morandy | |
|---|--|-------------|
| STATEMENT | Ingredient | Av. Agr. |
| 1) I think he has a positive quality | Positive evaluation of a quality of B (1, 2) | 4,27 |
| 6) I think he is a good guy | Moral positive evaluation | 3,87 |
| 17) His qualities are surprising | Surprising quality (6) | 3,50 |
| 8) I want to have good relations with him | Goal of positive interaction with B (18) | 3,46 |
| 21) I trust him | Trust in B | 3,32 |
| 16) I would like to be his friend | Affect toward B (9, 17) | 3,22 |
| 13) I would like to do what he does and do it as well | Goal to have B's positive quality (4) | 3,01 |
| 4) I would like to be like him | Goal to be like B (4) | 2,97 |
| 23) I would like to stay with him often | Goal to stay with B (17) | 2,75 |
| 19) I feel able to become like him | Capacity to be like B (13) | 2,55 |
| 22) I like how he is even if I don't approve of his ideas | No need for ideological approval | 2,47 |
| 9) would like to imitate him | Goal to imitate B (16) | 2,44 |
| 3) I feel very much like him | Similarity to B (11) | 2,08 |
| 2) I think he is very lucky | Luck of B | 2,06 |
| 14) I would do any kind of thing for him | Goal to comply with B | 1,95 |
| 7) I think I am less worthy that he is | Inferiority of A | 1,39 |
| 12) I feel unable to become like him | Incapacity of A | 1,3 |
| 25) I would like to be in his place | Goal to have the same place as B | 1,28 |
| 24) If I were like him everybody would respect me | A wants the respect credited to B | 1,27 |
| 20) I think he is more worthy than I am | B superior to A (10) | 1,22 |
| 5) I would be willing to comply with his ideas and actions even if I did not approve them | No need for moral approval | 0,92 |
| 10) I envy him | A envies B | 0,72 |
| 15) He is so superior to me that I neither try to imitate him | B is superior and A can't imitate him | 0,61 |
| 18) He is so superior to me that I cannot think to be his friend | B is superior and A can't be his friend | 0,37 |
| 11) I would like to prevent his success | Goal that B does not achieve his goals | 0,17 |

in fact had a not completely ideological formation, given the social context and the role chosen in the life.

I admire those who made their way by trampling on their values, I am not able and this strongly limited me in my life.

I discovered the richness of remaining open towards those who are different from me because I can learn a lot about myself and also about the other

Yes, for a football player with unique gifts, but admiration is limited to this and not to the person

In many cases it happens when you have in front of you a person that does not think like you but that you admire for her strength and determination

I have no prejudice, sometimes I admire the divergent politicians even if they are politicians

The Ingredients of admiration and its difference from envy

Question 5 of our questionnaire, by asking subjects to rate their agreement to 25 statements on a scale from 0 to 5, allowed us to summarize the ingredients of admiration and to check reliability of answers to other questions. In Table 2, the statements are ordered from highest to lowest average agreement: those in white simply rephrase our ingredients of Sect.2., those in dark grey test the presence in admiration of ingredients typical of envy, while those in light grey test our hypothesis about the a-morality of admiration

From the average level of agreement received by these statements it clearly results that the subjects' representation confirm many of the ingredients hypothesised by our conceptual analysis: a highly positive evaluation of B and of his/her surprising qualities, a goal of positive interaction with B and of acquiring his qualities by imitating him, encouraged by the feeling of being able to do so.

At the same time, the lower agreement for all statements rephrasing possible ingredients of envy demonstrates that the subjects clearly distinguish the two emotions; furthermore, the statements with the lowest agreement are just those closer to the aspects of affective distance and ill-will implied in envy [6], that contrast the most with the desire for positive interaction entailed in admiration.

Finally, the five items in light grey do not seem to confirm the amorality of admiration. First, the subjects credit a high agreement rate to statements 6 (I think he is a good guy) and 21 (I trust him): generally, the one you admire has moral positive qualities, and you trust him (while you generally don't trust immoral people). Second, statements 22 (I like how he is even if I don't approve of his ideas), 14 (I would do any kind of things for him) and 5 (I would be willing to comply with his ideas and actions even if I did not approve them) receive decreasing rates of agreement. Even if you admire someone, you do not suspend your moral judgement.

6. THE ADAPTIVE FUNCTIONS OF ADMIRATION

This analysis of admiration also provides some hints as to its adaptive functions. In its implying an evaluation of the other, as any "emotion of the other's image", admiration is adaptive since it tells us what people are more worth to have positive relations with, to cooperate with, and who are better than we are, but embody the qualities we strive for. This leads us to look for people who can add value to our resources and to ourselves, thus aiming to become better ourselves. On the other hand, by leading us to desire to become like the other, and to imitate him, admiration enhances our learning potential.

To sum up, this emotion has important adaptive functions.

- A social function of enhancing cooperative social interaction: to choose persons we like and with whom we would like to cooperate;
- A social and pragmatic function of effective cooperation: to choose persons that we consider better than we are, and may enhance our group's potential; but at the same time persons with whom conflicts are minimized, due to our feeling them as superior, hence worth to be complied with and respected;
- A cognitive function, oriented to learning and personal growth: to learn from people who are better than we are, in order to become better ourselves.

To tackle this issue our questionnaire included a question about the function of admiration: "Is admiration more useful for the admired, the admirer, or both?" 47% subjects answered "the admirer", 18% "the admired" and 35% "both". And one subject wrote:

It is a state of mind stemming from the unconscious or innate need that everyone of us feels of getting better or more complete

7. CONCLUSION

Admiration is a pleasant emotion induced by a highly and surprisingly positive evaluation of a person's quality that we also would like to have. This emotion leads us to desire to stay and interact with that person, and to imitate her in order to improve our personal value. Admiration differs from esteem since it refers more to the quality than to the whole person, and is less sensitive to moral judgement. It differs from envy because it lacks its painful sense of inferiority and the resulting ill-will for the other. Thus it fulfils a cognitive function of learning and a social function of making interaction more pleasant, smooth, and cooperative.

8. REFERENCES

- [1] Calonghi, F. 1891. *Dizionario Latino-Italiano*. Reprinted: *Il Georges Calonghi*, Rosenberg & Sellier, Torino 1999.
- [2] Castelfranchi, C. 2000. Affective appraisal versus cognitive evaluation in social emotions and interactions. In A.Paiva (ed.), *Affective Interactions*. Springer, Berlin.
- [3] Darwin, C. 1872. *The Expression of the Emotions in Man and Animals*. Appleton and Company, London.
- [4] Freud, S. 1920. A general introduction to psychoanalysis. Boni & Liveright, New York.
- [5] Klein, M. 1957. Envy and Gratitude. A Study of Unconscious. Basic Books, New York.
- [6] Miceli, M., Castelfranchi, C. 2007. The envious mind. *Cognition and Emotion*, 21, 3, pp.449-479.
- [7] Ortony, A., Clore, G.L., Collins, A. 1988. The cognitive structure of emotions. Cambridge University Press, Cambridge.
- [8] Poggi, I. (Ed.) 2008. La mente del cuore. Armando, Roma.
- [9] Sandell, R. 1993. Envy and Admiration. Int. J. Psycho-Anal., 74:1213-1221.