Artistic quality as an educational and inclusive tool for subjects with mild cognitive impairment due to Alzheimer's[*]

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Abstract

This paper tries to define what the artistic quality is. In other words, what features of a work of art might favour educational and inclusive processes. We carried out through Charon and Bergson's thought the theoretical path of our work. Moreover, we have tried to intercept the artistic quality through a research concerning the effects produced on memories evoked with musical autobiography in subjects suffering from mild cognitive impairment due to Alzheimer's. After listening to music, the data obtained from quali/quantitative analysis, have captured a variation in the autobiographical memories of the participants by examining three types of memories: personal semantics, episodic and self-defining memories. The achieved results showed a significant increase in memories with a higher sense/emotional and autonoetic content which are predictive of those metamorphoses of meaning in autobiographical narratives that are essential to start inclusive processes.

Keywords: *time; memories; music; narration; emotions.*

1. The artistic quality as an educational/inclusive tool

Rita Charon has carried out a pioneering work by using narratives as a transformative tool. Her main contribution in the development of narrative-based medicine ended up with influencing education, especially those fields concerning the elders' inclusion and the interventions with people who suffer from particular pathologies. Inclusion is a construct resulting from a deep cultural mutation aimed at enhancing and using all the potentialities available in the educational field. Said inclusion organizes heterogeneous resources trying in every way to make diversity a wealth rather than an obstacle and

* While sharing the contents of this paper: Maria Chiara Del Mastro wrote the paragraphs: 1, 4, 5, 6; Maria Rosaria Strollo wrote the paragraphs: 2 e 3; Mohamad El Haj supervised the empirical research.
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Civitas educationis, a. XII, n. 1, giugno 2023 • Mimesis Edizioni, Milano-Udine
Web: universitypress.unisob.na.it/ojs/index.php/civitaseducationis • ISSN (online): 2281-9568
• ISBN: 9791222304717 • DOI: 10.7413/2281-9568069
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creates an existential and practical space for every single human being. Our research, in particular, concerns subjects suffering from mild cognitive impairment. As a starting point for this contribution, we focused on the thought and practice of the American researcher, by highlighting her attention for the artistic quality meant as a transformative tool. Furthermore, we believe that such quality might become a powerful aid with inclusion and education. In fact, in her books and work, Charon refers to a kind of writing that is capable of revelating and transforming one's experience: it is not just a mere report of facts but an evocative writing that closely concerns literariness. It is about stories where the attempt to approach the existential depths of the subject takes place through images, unprecedented combinations of signifiers, metaphors: it is from these particular configurations of meaning that the narratives derive their cathartic virtues. Charon (2015: 24) argues that:

> Writing redeems the lived experience from a chaotic and formless state. This does not imply to attribute a meaning to the experience, which is up to each of the individuals involved. This instead involves making it visible, perceptible, as a starting point. Once we have given shape to the experience, it can be inspected, questioned, shown to the others.

It is a methodology that uses narratives (both of the physician and the patient) to co-construct a therapeutic alliance: these stories arise from a contemplative state disclosing new representations and meanings. Like when, in the presence of a work of art (for example a painting by Rothko, who's dear to Charon), instead of using the reason to reveal its hidden meaning, we open ourselves up for some configurations to emerge; or when the physician stops in some place of suffering next to the patient while he is facing his deepest fears, his darkest loneliness. Charon writes again:

> If I learn to contemplate what I see then I will contemplate what I see at all times – on the street, watching Jupiter set in the night sky, in the office, while visiting a patient at home. I will have become one who contemplates, one that recognizes. Or at least, I try (*Ibidem*).

Artistic quality, as an educational and inclusive tool to learn contemplation, is something that goes beyond a mere communicative functionality: it is similar to that 'ornament' that Ernest Bloch meant as a look or a walk towards ourself. Ornament is an apparently unnecessary element and yet it is what allows us to imagine and proceed towards the utopian. In this sense, Charon's parallel folder (a complementary space that holds the patient's and physician's experience) could appear unnecessary from the biomedical point of view and yet it constitutes the cornerstone of a bet: to radically transform the approach to the disease in order to lead to the construction of a network of structures, women, men and services that concretize in the territory the idea of taking care of the person through narratives.

This is how Charon tries to do it:

> I leaned against the sink next to the bed. I told her that I was unable to guarantee that her body was not already harboring the disease that one day would take her life. It could be another breast cancer or not, but it would have been something else. I told her that her recent illness had given her a sharper vision and that I thought she was now able to see what we others are hiding from – the awareness that we will die too. I offered to do something with her. I offered to be with her on the precipice while she contemplated that glow, to minimize her terrible solitude (Ibid.: 22).

Even the concept of collateral beauty, namely the ability to catch and contemplate fragments of beauty even in the most painful conditions, may help to outline new educational perspectives which reaffirm ancient awareness. In fact, the artistic experience has always been the tool to produce a deep emotional reworking and a renewed existential significance.

2. The artistic experience and the perception of change

Baudelaire in a letter addressed to Wagner describes his feelings while listening to Wagner's music:

> Throughout your works I found again the solemnity of the grand sounds of Nature in her grandest aspects, as well as the solemnity of the grand passions of man. One feels immediately carried away and dominated. […]. Generally, these profound harmonies seemed to me like those stimulants that quicken the pulse of the imagination… […]. From the day when I heard your music, I have said to myself endlessly, and especially at bad times, *'If I only could hear a little Wagner tonight!'*. […] once again, sir, I thank you; you brought me back to myself and to what is great, in some unhappy moments (Baudelaire, 1860/2007: 312).

However, we might move further and consider the artistic experience as something more ancient than the philosophical thought. While reading some passages of *The Philosophy of Giambattista Vico, new glimmers of understanding seem to reveal:*

> Poetry is produced not by the mere caprice of pleasure, but by natural necessity. It is so far from being superfluous and capable of elimination that without it thought cannot arise: it is the primary activity of the human mind. Man, before he has arrived at the stage of forming universals, forms imaginary ideas. Before he reflects with a clear mind, he apprehends with faculties confused and disturbed: before he can articulate, he sings: before speaking in prose, he speaks in verse: before using technical terms, he uses metaphors (Croce, 1911/1947: 51-52).

Bergson (1911) too underlines the ability of art to recover the primitive cognitive approach that for man was above all perceptive. According to the philosopher, conceptual thinking removes the object from temporality, making it stable in the eyes of the mind. However, this position deprives man of the perception of change and, therefore, of a knowledge of things that Bergson defines as sub specie durationis. Rilke (1923/1978: 57), in turn, in the ninth of the Duino Elegies expresses with indelible pictures the essential quality of this 'durability':

> Threshold: what is it for two
> lovers to be wearing their own threshold of the ancient door
> a little, they too, after the many before them,
> and before those to come... simple.
>
> Here is the age of the sayable: here is its home
> Speak, and be witness. More than ever
> the things of experience are falling away, since
> what ousts and replaces them is an act with no image.

In many ways, these reflections come close to the ideas of François Jullien, a French sinologist who has studied the correlations between the ancient Eastern and Western thought of Greek origin. In fact, he underlines how the attention to duration is essential in the original Chinese philosophy. In this regard, the author uses the construct of silent transformation which is

> Simultaneously global and continuous, it never sufficiently stands out, at one point or another, or from one moment to another, in order to introduce a break that can fix our attention. I dare say that it never stands out enough to be able to distinguish it. Since everything is involved in it and that it is produced over duration, there is nothing that is barely significant to make it emerge (Jullien, 2009: 136).

Ultimately, Jullien compares two different conceptions of time: the first one born from the trend of the Western thought to consider reality *sub specie aeternitatis*. This implies a reality represented through strict models, with well-identified objects, crystallized in discrete moments. The second one is a conception of time that flourished in ancient China focused on durability and the uninterrupted metamorphosis of reality.

According to Bergson (1911: 12), if we could perceive again "change and duration in their original mobility [...] through the extension of our ability to perceive [...] we would restore continuity in all our knowledge".

However, what leads the French philosopher to believe that our perceptive skill can expand? His idea is that "for centuries there have been men whose function was precisely to see and make us see what we normally would not have perceived. These are the artists" (*Ibidem*).

Therefore, the Western artistic experience has taken on, for many eras, the task of preserving the primal perceptual/emotional relationality with the world, giving back to man what the rational approach took away from him: the phantasmatic elaboration, the perception of durability and continuity of the things, their metamorphosing nature expressed by the metaphor and the value of the emotional knowledge. Artists, Bergson clarifies, are able to indicate such an evolutionary path to humanity by virtue of a characteristic that, at first, may appear to be a defect: distraction. The philosopher adds that

> sometimes, by a happy chance, men are born who, either for the senses or for the awareness, are less attached to life. Nature has forgotten to link their faculty of perception to that of acting. When they look at something, they see it as it really is, and no longer for themselves. They no longer perceive simply to act; they perceive in order to perceive – for nothing else, for pleasure (Ibid.: 12).

To summarize, distraction distances the artist from action and, consequently, from that skimpy vision of reality that is normally cut out of the world in view of what is useful. Thus, an expansion of the perceptual horizon is produced as the artist moves away from the intellectual schemes, letting the imaginal thought emerge; in this new cognitive dimension, that is mainly contemplative, he recovers things within their detailed becoming.

For someone who is not an artist, the Mont Sainte-Victoire is a mountain about 1,100 meters high that stands out in the landscape of Aix-en-Provence. For Cezanne instead, who painted its bulk 87 times from 1870 to 1906 from different perspectives (from Gardanne, Jas de Bouffan, Les Lauves, Bellevue and Montbriant) it probably represents the opportunity to catch a more complex representation of reality in the perception of 'durability'. The mountain is composed and decomposed by the artist eyes in a continuous variation of lights and shadows, colours and volumes: its identity appears in a continuous metamorphosis of shapes/colours that astonishes the painter, forcing him to a cognitive *tour de force to maintain the connection with the object*.

According to Proust, the increase in perceptive capacity shuffles the order of time but it concerns a sudden intuition, an ecphoria, rather than intentional contemplation:

> but let a sound, a scent already heard and breathed in the past be heard and breathed anew, simultaneously in the present and in the past, real without being actual, ideal without being abstract, then instantly the permanent and characteristic essence hidden in things is freed and our true being which has for long seemed dead but was not so in other ways awakes and revives, thanks to this celestial nourishment. An instant liberated from the order of time has recreated in us man liberated from the same order, so that he should be conscious of it (Proust, 1927/2005: 366).

3. Neuroscience and the Default Mode Network

Furthermore, what has had a predominantly philosophical and artistic approach at the times of Bergson, Cezanne and Proust, has been transformed, starting from the 90s of the last century (thanks to new neuroimaging techniques such as fMRI) into the possibility of studying the physiological basis of the aesthetic experience. This result allowed to visualize new modes of the mind/brain functioning and specifically, of a neural network called the default mode network (DMN) which activates when someone is awake and alert, but not directly engaged in an attention task. This network is indicated in many studies as correlated with those moments of attention pause that lead to mind wandering during which a mnestic-imaginative reworking and a remodelling of existential contents seem to take place. In particular, the DMN appears linked to artistic language and it is believed that

> certain artworks can 'resonate' with an individual's sense of self in a manner that has well-defined physiological correlates and consequences: the neural representations of those external stimuli obtain access to the neural substrates and processes concerned with the self—namely to regions of the DMN (Vessel *et al.*, 2013: 18).

It is a privileged access that other external stimuli do not normally obtain, and that allows "the representation of the artwork to interact with the neural processes related to the self, affect them, and possibly even be incorporated into them" (*Ibidem*). Furthermore, it is difficult to decide exactly what features in a work of art tunes with one's mind. However, we assume that precisely the lack of goals typical of the active state of the DMN makes the latter 'open' and suitable for intercepting artistic quality. That is, the state of distraction from usefulness, typical of the default mode network, makes possible for the subject to see the reality *sub specie durationis*. Said perspective is capable of broadening the perceptual spectrum in order to reach a different awareness of the world. Vessel, director of the New York University ArtLab, carried out an interesting experiment on the relationship between the DMN and the artistic perception (*Ibidem*). Sixteen people were subjected to functional magnetic resonance imaging (fMRI) while 109 images of works of art of different genres, geographical origin and eras were presented to them. In any case, these were works not particularly known to the general public and the participants were asked to express their evaluation of the individual images with a vote from 1 to 4. Vessel's experiment showed that, in cases of a higher evaluation (4), the DMN tends to activate rapidly, supporting the hypothesis that an intense aesthetic experience triggers the so-called self-referential mental processing: a cognitive process that binds to the self the exteroceptive (and interoceptive) information that we gradually receive. In other words, fMRI let us observe what happens in our brain when we are excited by a work of art.

Recent research shows that the discrepancy between ordinary and literary language is so consistent that different brain areas have to deal with it:

> There is a longstanding and often ill-tempered debate about whether Shakespeare actually wrote, singly or as a co-author, the 37 plays attributed to him. It is argued that only a well-travelled Tudor aristo-crat, versed in the ways of courtly love, would have had the experiences to write the histories, tragedies, and romantic comedies attributed to Shakespeare. Now we can speculate that some background reading and curiosity about the motivations of others, coupled with a spectacularly well-connected DMN, made the bard immortal despite his humble origins. And we know that the DMN is as active in narrative production as it is in comprehension (Wise & Braga, 2014: 2).

Lately, two working modalities of the mind/brain are emerging from many neuroscientific studies. The first one (task-positive) is a highly attentive modality centred on the working-self (Conway & Pleydell-Pearce, 2000) which is a function equipped with a servo-control mechanism capable of inhibiting distractions from the task.

For example, it prevents perceptual, proprioceptive, interoceptive or exteroceptive stimuli from triggering memory associations such as to construct new distracting representations. Vice versa, the second modality (task-negative) works in a resting cerebral state, which has the DMN as its neural correlate and instead, seems to support the production of new representations of the past, present and future.

When the DMN is active, the working-self and its memory control system are temporarily resting, allowing spontaneous memories and fantasies to arise within the knowledge-base, a storage of sensory and emotional memories. Ultimately, the default mode network is the neural correlate of that state of *rêverie* that allows to 'open up' to the world through the construction and deconstruction of our set of representations. At the same time, it is the neural correlate of the elaboration of artistic contents, an integrated function of our spontaneous capacity to produce meaning through the perceptual enhancement. Therefore, using the artistic quality, from the educational and inclusive perspective, not only seems to lie on solid neurophysiological bases but also to foster the natural oscillation of our mind by lubricating the mechanism that would otherwise settle in stressful or traumatic situations.

4. The artistic quality in a pointilliste society

The artistic quality used for inclusive and educational purposes, concerns any artistic language. Charon (2015: 24) writes:

> I organized a jazz concert at Columbia because Fred Hersch, a famous jazz pianist and composer, was in danger of dying of AIDS. When he fi-

> nally recovered, he composed music depicting the dreams he had while in intensive care in a comatose state. Through his representation by means of music of these deep experiences of fear and beauty and danger, I received, as his listener, uncontaminated, undiluted by language, the cognitive, affective and sensorial experiences that he had lived while he was close to the death. And then I understood.

Two things need to be underlined: the first one is the expression 'undiluted by language' where the potential of music is captured in representing 'cognitive experiences'. There is a kind of knowledge (and self-knowledge) that does not use rationalizing thought but, through music or other media with powerful imaginal characteristics, it uses a 'narrative faculty' capable of a deeper empathy than that granted to words; a faculty that reaches those implicit and pre-linguistic areas of the mind directly in contact with the body.

Such is the narration that music is capable. Neuroscience, by using methods of investigation as the fMRI, allow nowadays to look deeper at the chain of interconnections that binds body, perception, music, language, memory, sense of self and conscience. Music occupies a particular place in this *continuum* as it connects prenatal and perinatal language, which are essentially made of sounds, to the universe of meanings and signifiers. Its primordiality connects it very intimately to the world of emotions and to the body, making it a tool of choice for soliciting the implicit aspects of memory. However, a possible question might be whether in the contemporary society of consumers, the artistic forms and their fruition are still able to expand the perceptive/processing capacity of man. Bauman while defining the cultural liquidity describes problems caused by the flood of information in our media society: those elements have become something to protect ourselves from, since their claim to fill consumers' attention. Bill Martin (1998) coined the term vertical stacking to indicate the multiplication of musical fashions trying to saturate any space left free. Of course, such invasiveness ends with opposing any narrative order that lies on a cyclical or linear temporal dimension, shattering in a *pointilliste* time. Eriksen (2001: 109) argues that "Instead of ordering knowledge in tidy rows, information society offers cascades of decontextualized signs more or less randomly connected to each other". In short, it seems that in postmodernity, the subject has lost its substantiality and then the possibility of a narrative construction of its own identity:

> not to be tied up by the legacy of one's own past, wearing current identity as one wears shirts that may be promptly replaced when falling out of fashion, scorning past lessons and disdaining past skills with no inhibition or regret — are all becoming the hallmarks of the present-day, liquid-modern life politics and attributes of liquid-modern rationality (Bauman, 2011: 38).

It takes a reflection to transpose the observations so far outlined into a formative an inclusive strategy that recovers the narrative, representational and perceptual/emotional potential of the artistic experience, also with regard to the elders and/or burdened by some pathology. We should consider how much the weakening of art and its 'liquefaction' might result from neo-liberalism and globalism that are completely disinterested in the humanistic aspects of our cultural tradition.

Furthermore, political, cultural and educational strategies have to be prepared in order to prevent the reduction of art to entertainment. Said commodification should not constitute a serious obstacle to the processes of formation and conscious transformation of one's sense of self and identity. In fact, everyone has the right to be, far from manipulation and subliminal seduction. The generalized loss of artistic quality in communication systems, in the end, could even weak those brain functions of perceptual enlargement, reworking of meaning and processes linked to the self as described in the context of the default mode network.

This is the main reason that leads us using art-based pedagogical devices even in pathological contexts. All this in order to work on the quality of the existential elaboration supporting said process when it seems threatened by seriously disturbing agents.

5. Empirical research

Our aim is to describe a research with a double purpose. The first one, has concerned life-long learning with a frame focused on narration, music and neuronal plasticity. Said research has been described in a paper entitled *Life-long learning and musical autobiography* (Del Mastro *et al*., 2022) where the results of qualitative and quantitative analyses have been reported.

The second purpose takes shape with this paper where we tried to assess whether the artistic quality is a suitable tool to design inclusive strategies for people suffering from mild cognitive impairment (MCI) due to Alzheimer's. We used the musical autobiography (modified in its original layout), a pedagogical device that combines traditional autobiographical methodologies with musical stimuli that allow the emergence

> of memory which is involuntary, spontaneous, implicit and free of the rational selection made by the subject while choosing what to include in his own autobiography, allowing, on the one hand, to reflect in retrospect on some dynamics of the autobiographical narration. On the other hand, to experience the intimate sound/body/personal history connection (Strollo, 2014: 33).

However, this study investigates the effects of the artistic quality of a work of art. We assume that said effects mainly drive to a senso/emotional experience of reality rather than to an intellectual and conceptual one. So, one should feel of living in a denser and more personal time by influencing

the memory system itself. The autobiographical narration (solicited through music) is the main tool of our research since

> [it] refuses the dynamics of integration meant as a distinction and bijective interaction between the integrated subject and the integrating one, to embrace processes of inclusion as a spontaneous enhancement of intra and interpersonal resources and diversity (Ghedin & Invernici, 2022: 252).

According to the authors, there are three elements that make the autobiography a mediator of inclusive teaching (Damiano, 2013). First of all, an easy accessibility. Secondly, the autobiographical narrative gives the chance to reconcile with one's own life by loosening the knots obstructing a healthy emotional flow. Thirdly, the autobiography develops creative skills meant as the ability to regenerate one's own story and memory in ever new and original shapes.

We chose to evaluate the quality of the elicited memories in order to understand the scope of musical autobiography considered as an inclusive tool. Specifically, that is, how an artistic product - a piece of music - would have detectable effects on a subject with mild cognitive impairment. Moreover, we verified through an interview, if the exposure to the music preferred and considered artistically significant by the interviewee, might produce a sense/emotional variation with MCI autobiographical memories. We have also evaluated a possible increase in the total number of autobiographical memories. Lastly, if there were variations in the three internal components of said memories: personal semantics, episodic memories, and self-defining memories. The latter, according to Singer (2005), help with the explanation of who we really are to ourselves and the other people. They store emotional intensity, vividness, recursion of memory, connection to similar memories, and focus on enduring goals or unresolved conflicts.

The research uses a mixed methodology (Johnson & Onwuegbuzie, 2004) which continuously intertwine qualitative and quantitative logics. This choice results from a pragmatic orientation

> which implies the fact that there is a false dichotomy between qualitative and quantitative and that, in order to understand the true nature of the reality of educational and social phenomena, both points of view (objective and subjective) and both paradigms (quantitative and qualitative) are necessary (Picci, 2012: 91).

The narrative material obtained from the interviews was analysed twice. The first time, with quantitative analysis, as expected by a quasi-experimental design. The second time, with qualitative analysis, by using the Nvivo software, as part of a hermeneutic research.

Firstly, an interview was carried out for each participant in a silent condition. Secondly, one week later, we did a new interview while the interviewee was listening to his favourite music. We chose to play the music

suggested by the interviewee since this preference testified to the artistic quality of that song and to its capacity of resonating (sensorially and emotionally) with the subject. Furthermore, much research indicates that this is the most fruitful method in memory recovery: El Haj, for example, claims that "AD patients showed better autobiographical recall when listening to their own-chosen music than to researcher-chosen music or than in silence" (El Haj *et al.*, 2015: 1). As mentioned before, said research has a quasi-experimental design since no randomised assignment to treatment and control groups have been possible. Only one group was subjected to the two experimental conditions and it was evaluated within group if the independent variable (listening to the music) had produced changes in the dependent variable (the memories of the MCI subjects).

At the AIMA Centres (Associazione Italiana Malati di Alzheimer) in Portici (NA) and Pozzuoli (NA) we had the opportunity to interview 15 people (7 males and 8 women) with a diagnosis of mild cognitive impairment previously formulated by a neurologist or a geriatrician.

Memories emerged during the interviews were assigned to three categories: personal semantics, episodic and self-defining memories. Scores were assigned on a scale from 0 to 5 points already used in another similar research (Ibidem). Unlike the previous study (Del Mastro *et al.*, 2022) where we evaluated the number and percentages of the three memories, here we have considered the scores obtained from each memory according to the aforementioned scale. It allowed the amplification of mnestic specificities and a better evaluation of phenomenal quality and self-describing capacity. We have found an increase in the overall score of the autobiographical memories going from 111 in the 'silence' condition to 185 in the 'music' condition with an increase of 67%. A slight increase in personal semantics going from 69 points in the 'silence' condition to 75 in the 'music' condition with an increase of about 10%. On the other hand, the result of the episodic memories is surprising: the score changes from 42 in the 'silence' condition to 85 in the 'music' condition. The percentage increases in the score of about 103%. As for the self-defining memories, they score 0 in the 'silence' condition and 25 in the music condition, increasing by frankly exorbitant percentage values. However, it is interesting to point out that in the 'silence' condition, memories with low sense/emotional significance (personal semantics) add up to 69 points against 42 points for highly meaning/emotional memories (episodic and self-defining memories). During the music condition this relationship literally flips over with a score of 75 for low sense/emotional memories (personal semantics) and 110 for those with high sense/emotional significance (episodic and self-defining memories).

This trend highlights a clear reduction in the hypergenericity of memories which is a typical phenomenon of old age, assuming a pathological intensity with MCI and Alzheimer's. It signals the sclerosis of the entire autobiographical memory system (Conway & Pleydell-Pearce, 2000). The lack of event-specific details in hypergenericity prevents the remode-

ling of memories and the definition of future goals and scenarios. Further evaluation, already carried out in the previous analysis (Del Mastro *et al.*, 2022), has resorted to the response times of both interviews (silence and music condition) to understand if there had been differences among the spontaneity of memories and therefore, a greater involvement of implicit memory. Response times decreased from an average of 3.32 seconds in silence condition to an average of 2.43 seconds in music condition. Those results showed their statistical significance with a great effect by using Wilcoxon (1945) signed rank test and Cohen's (1992). To sum up, memories stimulated through music require less effort in the recovery process. Therefore, we might consider said memories as more influenced by the implicit processes of memory.

Reporting in this paper (even if concisely) also the results of qualitative analysis it is suitable to highlight the idea that our research activity constitutes an immersion in the phenomenology of events rather than a laboratory activity: a search for meanings as well as causal links. The interviews were coded with the NVivo software by sharing the text into thematic nodes used to carry out a sentiment analysis (Liu, 2012). Said analysis is based on the evaluation of words and the meanings assumed in the sentence structure.

Data qualitative analysis immediately revealed undeniable differences between silence and music condition. It showed a reversal between a predominantly negative sentiment for the silence condition to a predominantly positive one for the music condition. While referring to the already published graphs to highlight these results (Del Mastro *et al.*, 2022), we would underline that it can be found a correspondence between the specificity of memories emerged in the quantitative analysis (from semantic to episodic and self-defining memories) and a marked increase in positive sentiment resulting in the qualitative one.

Conclusions

This paper began by asking what is the specific quality of a work of art. We have accepted Bergson's idea that said quality reveals as a delatentizing influence on certain human potentials such as the ability to catch the temporal becoming (*sub specie durationis*). It happens while using perceptual and emotional modalities rather than processes of conceptualization and schematization. Therefore, perceiving the change, the metamorphosis of reality, let us see a different texture of autobiographic temporality which ends with influencing the mnestic system itself. We approached this concept with Charon's ideas regarding the ability of a work of art of becoming a catalyst for contemplative processes so that new representations of reality can emerge.

According to the author, the literary qualities of narratives, means that writing redeems the lived experience from its primitive chaotic and form-

less state. When suffering is transformed into a representation of suffering, it is then possible to recompose the inner wounds.

Moreover, we related this humanistic perspective with new neuroscientific acquisitions. In fact, discovering the role and qualities of the default mode network linked to creativity, the structuring of an inner life-time and its direct interaction with artistic contents, broadens the perspectives about the production of a work of art and its enjoyment.

In order to assess whether the quality of a piece of music has detectable effects on the participants, we carried out an analysis of autobiographical memories. In other words, we have tried to understand if memories elicited by an artistic experience go through a significant variation in their sense/emotional and autonoetic connotation. According to an inclusive approach to Alzheimer's disease, we have verified these hypotheses with mild cognitive impairment subjects by using the device of musical autobiography.

As a result of a semi-structured interview, we found out that we had a variation of the autobiographical memories in 15 MCI subjects, after listening to their favourite music. So, on the one hand we had an increase in the overall number of autobiographical memories. On the other hand, episodic memories and self-defining memories have increased, that is, those memories with the greatest sense/emotional significance. Moreover, in this paper we analysed in depth what occurred during our research. A score from 0 to 5 was assigned to each memory in order to underline their peculiar mnestic quality allowing a better assessment of what happened after listening to music.

Shifting towards a sense/emotional direction shows a decrease in the hyper-generalization of memories and provides new articulation to the autobiographical narration closer to the implicit side of memory (and to one's own deepest conflicts). Thus, the subject has the opportunity to reconcile with one's inner story by working on emotional blocks and developing that creativity that gives memories the energy necessary for a continuous metamorphosis of meaning. Undoubtedly, these are the main aspects to increase inclusive dynamics: we wish for this kind of research to continue so that the studies on the default mode network would shed new light on inner narration processes that influence our perspective of the world and the way we relate to it.

Mild cognitive impairment often triggers physical and social marginalization accompanied by the intimate certainty that things are irremediably changing. Memory lapses gradually accentuate leading to a feeling of losing control over one's life. This throws the MCI subject into an existential condition of disorientation, anguish and fear. Furthermore, the awareness of forgetting puts him in contact with the fear of being forgotten by the people he loves.

However, as we have seen, there are inclusive potentials in the autobiographical narrative prompted by enjoying the work of art and, above all, by the relationship with the educator. The latter provides those who suffer with the opportunity to talk about themselves as well as being a re-

lational bridge that helps with soothing loneliness inscribed in every path of suffering. We hope that further research will broaden the perspectives so far presented.

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