

Body Worlds Exhibition and Healthy Lifestyles Promotion An Educational Research on Neapolitan Visitors

Antonia Cunti, Sergio Bellantonio, Alessandra Priore

Università di Napoli Parthenope
antonia.cunti@uniparthenope.it

Abstract: *Body Worlds* is an informative scientific exhibition which displays human anatomical specimens that have been conserved using plastination, an innovative technique invented by Gunter Von Hagens. The *Body Worlds* allows visitors not only to observe the exposed bodies as mere aesthetic phenomena but also to think about the quality of the relationship that can be established with their own body. The exhibition can be considered an opportunity to effectively participate in the creation of new meanings about body; in this sense *Body Worlds* is a valid example of performative pedagogy, a democratic teaching practice that can help the individuals to choose more responsible behaviours about different area of life. This paper aims to explore the impact that the *Body Worlds* exhibition in Naples had on visitors, paying particular attention to its educational implications. The research has taken into account the use of two questionnaires, one created from scratch to obtaining socio-demographic information and the other to revealing habits and lifestyles in order to identify the target visitors. The results show that after the visit a good part of the visitors wants to change his lifestyle; self-change passes through a deepening of self-knowledge and in order to do this it is useful to involve other people to take part in this process. The awareness of healthy lifestyles becomes effective when the information is supported by an educational approach, intending education as a process that aims to emancipate the individual by sparking the development of critical-reflexive capacities.

Abstract: *Body Worlds* è una mostra scientifica con scopo divulgativo che espone campioni anatomici umani conservati con la tecnica della plastinazione, una tecnica innovativa inventata e brevettata dall'anatomopatologo tedesco Gunther von Hagens. La mostra consente ai visitatori non solo di osservare i corpi esposti ma anche di pensare alla qualità della relazione che può essere stabilita con il proprio corpo. La mostra può essere considerata come un'opportunità per partecipare effettivamente alla creazione di nuovi significati sul corpo; in tal senso, *Body Worlds* è un valido esempio di pedagogia performativa, una pratica di insegnamento democratico che può aiutare gli individui a scegliere comportamenti più responsabili su differenti ambiti della loro vita. L'articolo ha lo scopo di esplorare l'impatto che la mostra *Body Worlds* di Napoli ha avuto sui visitatori, facendo particolare attenzione alle sue implicazioni educative. La ricerca ha utilizzato due questionari, uno creato per ottenere informazioni socio-demografiche e l'altro per ottenere le abitudini e gli stili di vita, in modo da identificare il target dei visitatori. I risultati mostrano che una buona parte dei visitatori dichiara di voler cambiare il proprio stile di vita dopo la visita alla mostra; il cambiamento passa attraverso una profonda conoscenza di sé e, per fare ciò, è utile coinvolgere altre persone a prendere parte a questo processo. Il raggiungimento di stili di vita salutari, allora, diviene effettivo quando l'informazione è supportata da un approccio educativo, intendendo l'educazione come un processo che ha lo scopo di emancipare l'individuo attraverso lo sviluppo di capacità critico-riflessive.

Keywords: agentivity, body worlds Exhibition, health education, reflexivity



1. The Body Worlds Exhibition and the debate surrounding it

Body Worlds is an informative scientific exhibition which displays human anatomical specimens that have been conserved using plastination, an innovative technique invented and patented by German Anatomical Pathologist Gunter von Hagens at the University of Heidelberg in 1977. Plastination allows the human body to keep organs and tissues intact thanks to the use of a reactive polymer which substitutes bodily fluids and fats, leaving the organs rigid, odourless, and in their natural colours. The exhibition gives viewers an inside look at the body's vital mechanisms, while also showing how the inner systems work and the differences between healthy organs and diseased ones. Initially designed to train medical students, today plastination has revolutionised the traditional perception of the anatomy by making it accessible to the general public through a process of democratization of the anatomy; the idea of the touring exhibition has created a new space, an alternative context to discuss the human body (vom Lehn, 2006), as well as providing an opportunity to promote a greater sense of community (Moore & Brown, 2004).

The great public interest the exhibition has drawn shows Body Worlds' potential as an informative tool, which is why over 70 cities around the world have opted to host the exhibition since 1995, attracting more than 34 million visitors. In 2012, the Body Worlds exhibition arrived in Naples, Italy in the part of the Real Albergo dei Poveri that is currently being renovated to show off the complexity and jaw-dropping perfection of our bodies. The Neapolitan exhibition took visitors on a journey of the human anatomy that included 200 specimens and 20 plastinated bodies in order to allow everyone access to the spectacle that is the human body, while also informing and educating visitors on the importance of a healthy lifestyle: in fact, the main objective of Body Worlds is to educate the public on how to live a healthy life.

On the one hand the single plastinated specimens and parts of the body are used to compare healthy organs with diseased ones (i.e. a healthy lung with that of a smoker's lung) with the aim of emphasizing the importance of a healthy lifestyle, and on the other hand the exhibition is used to show the general public the location of these organs within the body and to illustrate their anatomical peculiarities and structural beauty. The exhibition has been described as a "cultural happening" (von Hagens, 2005, p. 269) that helps us relate to death in an unprecedented way (Burns, 2007) by allowing visitors to see their own bodies in relation to that of a plastinated one, and to unite the dynamic relationship between the popular and professional cultures of the body that we often erroneously think of as separate and discrete.

However, the great success of the Body Worlds exhibition has also raised many questions over the years about its impact on visitors and its educational goals, which have been praised by some and harshly criticised by others.

The objectives of Body Worlds were considered by some critics as ambiguous and contestable (vom Lehn, 2006; Burns, 2007), as the exhibition is intended to be educational, but is presented first and foremost as an art and entertainment exhibition depicting human bodies as works of art; it seems as though Body Worlds would need to make some major changes so that the spectacle aspect of the exhibition does not overshadow its educational value.

According to Burns (2007), the signature cards attached to the whole-body plastinates that bear the title, the signature of Gunther von Hagens, and the date of creation mark the plastinates as artwork and von Hagens as the artist in a gesture that strips the personal dignity from the donors. There are alternative ways to educate people on the importance of a healthy body and lifestyle: working models of body parts and the stories of individual patients may have a greater impact on the general public, who may not necessarily be interested in the intricate knowledge and details of the individual organs.

However von Hagens (2000, p. 34) affirms that the whole-body plastinates are not made with the intention of them being a work of art but “they become works of art through the judgement of the visitor to the exhibitions”. The voyeuristic nature of Body Worlds and the uneasy balance between entertainment and education, as the various typologies of the exposed bodies demonstrate - some illustrate functional and structural poses while others come purely from an artist’s inspiration - have proved problematic for anatomists (Jones & Whitaker, 2009).

Despite the attention and moral discussions that have surrounded these exhibitions, there are few research papers to date that have examined whether or not the educational goals of Body Worlds’ exhibitions have been met, making it very difficult to assess its educational value.

2. The educational value of the Body Worlds exhibition: from the museum's new vision to cultural and educational events for health awareness

Museums have undergone a substantial change of sense and meaning as they are no longer thought of as an enclosed space, but as a means of social communication and representation. This change has helped to increase the attention given to the public by analysing the different needs and expectations that attract the different types of audiences, but above all, it has opened the door for self-assessment with respect to a new wide-ranging functionality that takes into account specific educational emergencies. The modern museum is now a place where you can build a system of interpretation able to construct meanings which actively involve the visitors (Marini Clarelli, 2005), in other words, an educational museum maximises its communicative role (Bertuglia, Infusino, Stanghellini, 2004) and contributes to the process of its “re-signification” as an alive and active environment (Nardi, 2004); thus the modern museum can trigger processes of change and allow the public to think of themselves in a new way. With this in mind, the Body Worlds exhibition is not only an opportunity for structured communication of knowledge detailing how the body works but, more generally, a cultural experience in which the visitor is actively involved in a process of dialogue between the plastinated bodies and the personal baggage of cognitive and emotional experiences related to their own body.

In the phenomenological perspective (Husserl, 1913; Merleau-Ponty, 1945; Galimberti, 1987), which distinguishes between having a body and being your own body, this takes on new meanings; corporeality is one of the fundamental dimensions of our existence, expressing the connection between body, emotion and cognition.

This dimension recognizes the complexity of man, and therefore the need to consider it in its entirety. Therefore, to speak in terms of corporeality (de Mennato,

2006; Cunti, 2010; Cambi, 2010) is to recognize the value of the body as an expression of one's being, one's own identity which is also one's body identity. This means embracing a holistic view of body and mind that gives dignity and importance to man's bodily aspect as unity and totality. The body is no longer a mere tool, but it is the point of contact with the world through which we explore, give meaning to reality and act on it, putting self-care ahead of everything (Cambi, 2010), which allows the individual to manage the complexity of the adaptation process with the environment. As previously mentioned, you cannot think of education, in particular to health, which facilitates this process without calling into question the perceptions, experiences and needs linked to one's own body, seen as the most important part of complex systemic process, that are at the centre of overall well-being and the possibility to live a full and healthy life.

Even today, while we emphasize the need for society to make a commitment to health, there is still much to do in view of the objective, for individuals and communities, the acquisition of an adequate health culture, the control over the life choices we make, and the adoption of healthy lifestyles; health itself is, in fact, a complex condition, resulting from a comprehensive and integrated approach that sees the individual being active in a relationship with himself and with the environment. The definition of health as "the ability to adapt and manage oneself" calls into question a proactive and not only reactive response to the numerous emerging stimuli (Bandura, Mischel, 1965); starting with the biomedical paradigm crisis and its losing out to the biopsychosocial paradigm, for which it has become a priority to investigate the ways in which health is built into its social and subjective representations in order to intervene in a salutogenesis perspective.

Therefore, health education is presented as an opportunity to acquire understanding and skills through the sharing of knowledge which encourages active lifestyles and gives apt tools to the individual and the community in order to develop agentivity (Bandura, 1995) in terms of health; the ability to act proactively and to intentionally influence one's personal development and the circumstances of one's life, through lifestyle and context changes, represents an important educational objective in this area.

Despite psycho-pedagogical literature heavily debating the educational aspects relating to the modification of the individual's salute-genesis behaviour, problems in terms of health awareness and the conscious adoption of healthy lifestyles are still being identified today. The ways in which individuals deal with areas related to health are closely related to the differences in individual attitudes and natures, and they contribute to, along with other situational factors, the prediction of behaviour (Becker, 1974; Bandura, 1977; Maddux & Rogers, 1983).

Therefore it is of paramount importance that cultural opportunities that deal with health education, such as the Body Worlds exhibition, push for the internalization of the best lifestyles in the most effective way possible in order to have a real effect on the quality of life, incentivizing change and encouraging the active participation of those involved.

In which way will Body Worlds pursue its goals of health education? According to Sweaney (2012), the exhibition is a valid example of performative pedagogy, which is a democratic teaching practice that gives the public the opportunity to effectively

partake in the creation of new meanings which can then be attributed to their own body and, more generally, can help them choose more responsible behaviours that affect their health.

Performative pedagogy presents itself as an effective teaching-learning process that is not purely didactic, but that promotes the individual's intervention by means of an active construction of knowledge (Giroux, 2001), involving the individual's experiences in the process of sense-making (Sweaney, 2012). Therefore, the goal of performative pedagogy here is to emphasize the importance of individual life experiences in order to induce a process of finding relations between the visitor and the "work of art", represented in this case by a human body with its life story. Body Worlds is an opportunity for public bioethics education (Myser, 2007), an area that invites visitors to reflect on the order of things and the suitability of the exhibition. In this way the museum, thought of as an heterotopia (Foucault, 1966), becomes a place where experiences that actively involve the public are put into effect, facilitating and enhancing a type of learning that is not centred around the transmission of content (Myser, 2007).

According to Turner (1986) human beings lean toward a cultural need of self-reflexivity, which is to be understood as a kind of meta-commentary that is able to effectively "re-present" and then "re-semanticize" reality. In modern society, art is an active part of a very intense visual and aesthetic culture that constantly involves individuals in their complexity: it is therefore necessary that the public learn to give thought not only to aesthetic phenomena but also to the different types of relationships that can be made with themselves, and to other possible ways to experiment with their own body through encounters with art.

The Body Worlds exhibition allows visitors not only to observe the exposed bodies as mere aesthetic phenomena but also to think about the quality of the relationship that can be established with their own body, encouraging them to think of and try new ways of living their own embodiment that goes beyond traditional ways; and in this sense also Maienschein & Creath (2007) acknowledge that only from a wide conception of education is it possible to recognize the educational value that Body Worlds may have for each individual.

3. Previous Research on the Body Worlds Exhibition

Despite the heated debate surrounding this exhibition-event and its undeniable success, there are few research papers that have been involved in investigating the type of people who participate, the modality of use, the reactions, the short and long-term effects on their lifestyles and, more generally, the achievement of specific educational goals for which the exhibition was originally designed. The few studies that have been carried out - especially sociologic studies - have only explored the exhibition's immediate impact on visitors by collecting different types of data. These researches have used both direct methods, such as interviews, and indirect ones, such as video recordings of the visits, to collect their data.

Walter (2004) investigated visitor reactions to the plastinations, as they saw death in a new way; starting with field notes during his visits to the exhibition and using various other sources, he came to the conclusion that the ease with which visitors

accept the whole-body plastinations may be due to a process of dehumanization of the displayed bodies. Visitors see the plastinations as human bodies that have been turned into "lifeless" ruins for a scientific exhibition; if studying medicine promotes clinical detachment, the people visiting the exhibition - seeing odourless and anonymous bodies - do not feel the need to defend themselves with emotional detachment, but are indeed quite fascinated. The process of identification with the exposed bodies occurs in only a part of the visitors, namely those who are disturbed by the post-death poses of the plastinations or by the skin, hair and nails that relate to pre-death identity.

Vom Lehn (2006) incorporates the results of Walter (2004) when exploring the ways visitors experience the exhibition, and how they examine and discuss the exposed human bodies with other visitors. Through the analysis of video-recordings and informal interviews carried out at the Body Worlds exhibition in London in 2002/2003 he shows how visitors use their knowledge regarding the human body, which has been acquired through formal and informal education, and largely through their own encounters with illnesses and other personal experiences, to give meaning to the plastinated bodies and to reflect on their own body and that of others', while also identifying functions, parts, and characteristics in interaction with others, and taking into consideration their knowledge of the effects of illness and the adoption of specific lifestyles. According to the author, the exhibition provides visitors with the possibility to create a link between a biological condition and a psychological experience which in turn allows them to build an image of the body.

Leiberich et al. (2006) started with the hypothesis that the majority of visitors were interested in gaining more knowledge about their own bodies, but were also driven by the curiosity of a much-discussed event that is able to break some taboos regarding death. The most important aspect is that the authors believed that the exhibition is able to create awareness regarding the importance of health, inducing a part of visitors to adopt better lifestyles. An analysis of the responses to a specially created visitor survey shows that the visitors attend the exhibit because of a desire to know more about their own bodies; in fact, visitor reactions are mainly positive, both for the group of visitors who work in health sector (about 20%) and also for all the other visitors. However, it also appears that a significant portion of them were not aware that the bodies on display were previously living people, which is an aspect that does not facilitate a process of identification with one's own body that can in turn influence health awareness or the adoption of better lifestyles; this aspect is further confirmed by the fact that the majority of visitors do not see any consequences to their own health, especially when dealing with smoking and alcohol consumption, and they show no interest in changing their behaviours.

4. The research about Body Worlds Exhibition in Naples

The research presented in this paper was done with the goal of creating an exploratory investigation on the impact that the Body Worlds Exhibition in Naples had on visitors, paying particular attention to its educational implications. The research focuses on the possibility that the exhibition reminds visitors to have more conscious behaviours to take better care of themselves, improve their health, and to adopt salutogenetic lifestyles. The theme of health awareness and adequate lifestyle

is, of course, a social emergency, affecting both individual lives and the socio-economics of the community; therefore, to study and organize the best educational opportunities has become a priority.

Research tools

The research has taken into account the use of two questionnaires, one created from scratch and divided into two sections, one dedicated to obtaining socio-demographic information and the other to revealing habits and lifestyles in order to identify the target visitors of the Body Worlds exhibition in Naples. The second questionnaire comes from the "Questionnaire on the Body Worlds Exhibition" (Hanze & Lantermann, 2001) used in a different form modified by us. The "Questionnaire on the Body Worlds Exhibition", which was originally created to investigate the reactions and reasons for participation of German visitors, underwent changes that took into account the cultural differences between the two countries and was extended to include an additional section relating to the objectives collected from the public. This added section focuses primarily on lifestyles and behaviours related to health, which follow the guidelines of our research. Ultimately, the questionnaire consists of 4 sections which include the reasons of the visit, the perceived objectives, the reactions of visitors, and the personal changes after viewing the exhibition.

Participants

407 visitors, all over 14 years of age, participated in the study (female=257, male=150) by filling in the questionnaire anonymously and voluntarily at the end of their visit to the exhibition and after a brief description of what the questionnaire entailed. The socio-demographic section of the questionnaire shows that 40% of visitors to the exhibition were aged between 20-30 years old, while only 10% were older than 50 years old. In relation to sex, we noticed a female majority (about 63%). In relation to the level of education, 45% of the respondents possessed a high school diploma, but this percentage may be miscalculated given that almost half of the total visitors were aged between 20 and 30 years old and currently enrolled in a university course, therefore they must have possessed a higher level of education despite not having a university degree yet.

With regard to the visitors' professions, only 12% were employed in the healthcare sector, compared with 21% from the research conducted in Germany. The latter figure can certainly be considered positive as the Neapolitan Body World exhibition was able to entice a good percentage of the population not involved in the healthcare sector, but it also points out the lack of participation of professionals working in this sector. In this sense, given the age of the majority of participants (20-30 years), of which 27% claimed to be enrolled in university, it is conceivable that events like this have a greater appeal to those who are still actively involved in contexts of formal education and, consequently, have a minor impact on those who are no longer studying and are now foreign to such contexts. However, this variable could be further investigated with a potential future research, in which the underlying

causes of the limited participation in health awareness events, such as the Body Worlds exhibition, by professionals could be identified.

Results

The decision to investigate the participants' habits, lifestyles and the desire to change at an exhibition which intends to educate visitors on health is not only innovative with respect to previous research, but also fundamental to understanding what factors come into play and through what way this goal can be achieved. For this reason, our research was designed to explore what relationship participants had with their health in areas of physical well-being, such as nutrition, smoking, use of alcohol, and physical activity. As far as nutrition and smoking go, more than half of the visitors said to have good habits. Most claimed to follow a healthy diet (75%), and to not smoke (70%), while only 2.45% were regular smokers (more than 20 cigarettes per day); however, the 25% of participants who do not maintain a healthy diet (both overeating and under-eating) and the 27% who smoke between 10 or 20 cigarettes a day should not be overlooked.

Moving on to examine other lifestyle habits that affect health, half of the visitors stated that they occasionally drink alcohol and 28.58% said that they do not drink at all. Regarding "physical activity", 29% of participants claimed to be physically inactive, while 28% said that they walk about half an hour a day and 34% take part in regular physical activity 2 times a week.

Reflecting on how the participants responded, it can be said that leading a fairly healthy lifestyle serves as a strong motivating factor to participate in initiatives such this, as most visitors to the Neapolitan Body Worlds exhibition claimed to be healthy individuals. In addition, current students are more likely to welcome initiatives that are perceived as educational.

Participants were allowed to select multiple responses and express a wider range of feelings when filling out the section of the questionnaire regarding reactions, reasons, perceived objectives and personal changes relating to their experiences at the exhibition of Naples. As for the reasons of their visits, participants claimed that they were compelled to visit the exhibition in order to satisfy their curiosity, since the exhibition had aroused public interest, and to gain more knowledge on the structure and workings of the human body; only 3,6% visited the exhibition to learn about the health effects of certain behaviours and lifestyles.

An analysis of the results shows that the majority of visitors responded positively to the exhibition, saying that it sparked their interest and curiosity and left them fascinated; the exhibition provoked anxiety and fear of death in a very small number, and no one claimed to have been disturbed by the sight of the plastinated bodies. It seems that visitors were almost driven to the exhibition exclusively by curiosity, as they had no preliminary idea of what the main goals of the exhibition were (in particular, the comparison between healthy and diseased organs). They also did not expect to be encouraged to change lifestyles, but only to be "educated" on how the human body works. Despite the "health education" aspect being discovered upon visiting, it seems that it still had an important effect on them, since it was considered a prominent dimension of the exhibition. This hypothesis is supported by the desire

that a large part of the visitors expressed at the end of the visit to change bad habits and improve their lifestyles, a result that reinforces the importance of the exhibition's educational value.

In relation to the section of the questionnaire dealing with perceived objectives, visitors declared that the Body Worlds exhibition aims to provide more knowledge about the human body and encourage us to pursue healthier behaviours. According to these results it seems appropriate to point out that the exhibition has double value; on the one hand these results confirm the informative intent of the event, as publicly mentioned by Von Hagens (2005) and also highlighted in German research (Hanze & Lantermann, 2001), with more than half of the visitors selecting the "explicitly informative" response, while on the other hand it must be said that the exhibition was perceived as having an important educational goal, that of a change in behaviour towards salute-genesis. It can be said, then, that among the different aspects of the exhibition, visitors especially enjoyed the informative and educational ones, confirming that it can provide an opportunity for knowledge and education at the same time. The fact that the exhibition itself encompasses many aspects (educational, informational, and artistic) means that it presents itself as innovative and unique in its kind; the museum experience, therefore, in this case, is not just a cultural event, but also an opportunity for education and self-reflections.

Finally, moving on to section of the questionnaire dealing with personal changes related to the exhibition, 35.62% of visitors said that they wanted to donate their organs for transplants, 29.48% wanted to improve their diet, and 29.23% intended to start or increase their physical activity. Referring to the type of visitors who took part in the exhibition of Naples, of which 29% stated to not partake in any physical activity or any sort of sports, while 28% claimed to go walking half an hour a day and 34% declared to practice regular physical activity 2 times a week, these results seem encouraging, as it seems to confirm once again the educational value of Body Worlds, and its ability to encourage participants' to begin or even increase the hours already devoted to physical activity.

It should also be mentioned that 35.62% of the participants said that they would donate their organs to allow transplants, leading us to assume that the exhibition of Naples was an occasion to promote a greater sense of community for the visitors (Moore & Brown, 2004), and a "cultural happening," which allowed visitors to relate to death in an unprecedented way (Burns, 2007) by looking at it as not only the end of their lives, but also understanding it as an opportunity to contribute to the lives of others. Based on this data, as well as in our opinion, it seems that this exhibition brings out a feeling of empathy amongst the visitors; visitors, in other words, by relating to the death, illness, and sick patients in a whole new way, seem to be brought closer to the experience of another person's illness, so much so that they begin to think about possibly donating their organs.

Discussion and future perspectives

The research presented was designed to investigate the impact that the Body Worlds exhibition during its exposition in Naples had on its visitors, paying particular attention to its educational implications and trying to assess if and how the experience

provides the visitor with the opportunity to learn more about the human body, to help them become health conscious and, eventually, to improve their lifestyles. The results clearly show that the exhibition attracts a particular type of audience, as the majority of visitors were those with fairly healthy lifestyles and who were inclined, for this reason and/or for the effects of the exhibition, to further improve their ability to act proactively on their own health. Body Worlds is clearly confirmed, in this sense, as an opportunity to encourage collective learning processes in which visitors can reflect on themselves and on their lifestyles in interaction with others.

The theme of education on individual and social welfare is important since it does not seem that the knowledge regarding the damage that certain behaviours and lifestyles can cause on people's health has any impact on behavioural change, especially in the medium and long term; conversely letting people talk about their own stories can trigger reflexive processes. Starting with the acquisition of critical knowledge, which is filtered through a narrative dimension that permeates the entire process both because it favours communication concerning cases/situations and also because individuals are encouraged to participate by bringing into play their own conditions and specific life experiences, the dynamic learning that is triggered urges identification and, therefore, intricately reflective processes. The thoughts of the observer, in fact, fall on himself with respect to what he is being recounted, for self-meaning and for his own existence and therefore, he can imagine new and different things, while taking into account his own needs/desires and expectations of his own existence.

It is interesting as in this case that the educational and thus social value of a research that, compared to informative or educational cultural events, aims to investigate the interaction between the event and the visitors clearly emerges. This research is done to extrapolate the quality of communication and educational processes, while also identifying the strengths, and formulating more effective hypotheses to create cultural events capable of triggering the processes of change. The results of the Body Worlds exhibition in Naples, in conclusion, lead one to believe that self-change passes through a deepening of self-knowledge and in order to do this it is useful to involve other people to take part in this process.

The opportunity to create educational conditions that guide the individuals willingness to pursue healthy choices generally come out, resulting in each person a internalized and stabilized propensity to make conscious choices regarding their own welfare. The awareness of healthy lifestyles becomes effective when the informational communication process is supported by an educational approach, not intending education as a mere transmission of information, but rather as a process that aims to emancipate the individual by sparking the development of critical-reflexive capacities, also in regards to health.

References

- Bandura A., Mischel W. (1965). Modification of self-imposed delay of reward through exposure to live and symbolic models. *Journal of personality and social psychology*, 2(5), 698-705.

- Bandura A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review*, 84(2), 191-215.
- Bandura A. (1995). *Self-efficacy in Changing Societies*. Cambridge: Cambridge University Press.
- Becker M. H. (1974). The health belief model: Origins and correlates in psychological theory. *Health Education Monographs*, 2, 336-353.
- Bertuglia C. S., Infusino S., Stanghellini A. (2004). *Il museo educativo*. Milano: FrancoAngeli.
- Burns L. (2007). Gunther von Hagens' Body Worlds: Selling Beautiful Education. *The American Journal of Bioethics*, 7(4), 12-23.
- Cambi F. (2010). *La cura di sé come processo formativo*. Roma-Bari: Laterza.
- Cunti A. (2010). *La rivincita dei corpi. Movimento e sport nell'agire educativo*. Milano: Franco Angeli.
- de Mennato P. (2006). *Per una cultura educativa del corpo*. Lecce: Pensa Multimedia.
- Foucault M. (1966). *Utopie Eterotopie*. It. trans. by A. Moscati, Napoli: Cronopio, 2006.
- Galimberti U. (1987). *Il corpo*. Milano: Feltrinelli.
- Giroux H. A. (2001). Cultural Studies as Performative Politics, *Cultural Studies. Critical Methodologies*, 1(1), 5-23.
- Hanze M., Lantermann E.D. (2001). *Cognitive, emotional and aesthetic dimensions of the exhibition as a learning place: short and long term consequences for Body Worlds visitors*. Research report of department of psychology, Kassel, Germany, University of Kassel.
- Husserl E. (1913). *Idee per una fenomenologia pura e per una filosofia fenomenologica*. Vol. I., trans. by V. Costa, Torino: Einaudi, 2002.
- Jones D. G., Whitaker, M. I. (2007). The Tenuous World of Plastinates. *The American Journal of Bioethics*, 7(4), 27-29.
- Leiberich P., Loew T., Tritt K., Lahmann C., Nickel M. (2006). Body Worlds exhibition: Visitor attitudes and emotions. *Annals of Anatomy*, 188, 567-573.
- Maddux J. E., Rogers R.W. (1983). Protection motivation and self-efficacy: A revised theory of fear appeals and attitude change. *Journal of Experimental Social Psychology*, 19, 469-479.
- Maienschein J., Creath R. (2007). Body Worlds as Education and Humanism. *The American Journal of Bioethics*, 7 (4), 26-27.
- Marini Clarelli M. V. (2005). *Che cos'è un museo*. Roma: Carocci.
- Merleau-Ponty M. (1945). *Fenomenologia della percezione*. It trans. By A. Bonomi, Milano: Bompiani, 2003.
- Moore C. M., Brown C.M. (2004) Gunther von Hagens and Body Worlds Part 1: The Anatomist as Prosektor and Proplastiker, *The Anatomical Record*, 276B, 8-14.
- Myser G. (2007). Taking Public Education Seriously: Body Worlds, the Science Museum, and Democratizing Bioethics Education. *The American Journal of Bioethics*, 7(4), 34-36.
- Nardi E. (2004). *Musei e pubblico. Un rapporto educativo*. Milano: FrancoAngeli.

- Sweaney K. W. (2012) “The Most Famous Brain in the World”: Performance and Pedagogy on an Amnesiac’s Brain. *Review of Education, Pedagogy, and Cultural Studies*, 34(3-4),184-196.
- Turner V. (1986). *Antropologia della performance*. It. trans. By S. Mosetti, Bologna: Il Mulino, 1993.
- vom Lehn, D. (2006). The body as interactive display: examining bodies in a public exhibition, *Sociology of Health & Illness*, 28 (2). 223–251.
- von Hagens G. (2000). *Anatomy and plastination, in Anatomy art: fascination beneath the surface*. Heidelberg: Institute for Plastination.
- von Hagens G. (2005). *On gruesome corpses, gestalt plastinates and mandatory internment*. In G. von Hagens (Ed), *Body Worlds: The anatomical exhibition of real human bodies*. Heidelberg: Institute for Plastination.
- Walter T. (2004). Body worlds: Clinical detachment and anatomical awe. *Sociology of Health and Illness*, 26(4), 464–88.