

THE IMPACT OF NON-VERBAL (BODILY) COMMUNICATION ON BEHAVIOURS AND ATTITUDES IN FAVOUR OF THE PLANET

O IMPACTO DA COMUNICAÇÃO NÃO VERBAL (CORPO) NOS COMPORTAMENTOS E ATITUDES A FAVOR DO PLANETA

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Abstract: Nowadays, the state of the planet poses an increasingly urgent environmental challenge, we need effective communication that can have an impact and influence on human behavior. Our article will address the topic of nonverbal/body communication. Indeed, the latter has often been neglected despite its crucial role in transmitting signs and considerable messages concerning the preservation and protection of our planet. However, it can play a very significant role in the action of awareness in favor of the latter. Indeed, body/non-verbal communication is very relevant, namely facial expressions, ecological gestures, the posture of individuals as well as their attitudes and behaviors towards their natural and environmental surroundings, thus being able to send and transmit clear and direct signs and messages on environmental and planetary issues. Through a literature review we will define the basic concepts of nonverbal communication as well as the main theories, such as persuasion and social influence. We will also analyze several practical applications of the latter, thus involving environmental art, visual symbols, and some daily behaviors such as sorting waste. We have opted for a qualitative approach for our study methodology in this article, we choose content analysis to examine the impact of ecological events, awareness images for the planet, artistic performances, and pro-environmental behavior and practices on public awareness and attitudes. The results of this analysis show that visual symbols, such as recycling logos, signs used during demonstrations, as well as the postures and attitudes of participants, awareness images, have a very significant impact and effect on the environmental behaviors and perceptions of individuals. Without neglecting the visual arts and performances which also play an essential role in reaching the public's emotional commitment to the planet and the importance of its protection and preservation. To conclude, our article highlights that nonverbal communication is a very effective and powerful way to raise awareness and promote actions and gestures in favor of the planet. The element of nonverbal communication should be further integrated into environmental awareness campaigns to maximize their impact. We recommend that future research explore new forms of nonverbal communication and measure their effectiveness in many social and cultural contexts.

Keywords: non-verbal communication; environmental awareness; daily practices; ecological gestures; pro-environmental behaviors

Resumo: Hoje em dia, o estado do planeta representa um desafio ambiental cada vez mais urgente; precisamos de uma comunicação eficaz que possa ter impacto e influência no comportamento humano. Nosso artigo abordará o tema da comunicação não verbal/corpórea. Na verdade, este último tem sido frequentemente negligenciado, apesar do seu papel crucial na transmissão de sinais e mensagens



consideráveis relativos à preservação e proteção do nosso planeta. No entanto, pode ter um papel muito significativo na sensibilização a favor deste último. Com efeito, a comunicação corporal/não-verbal é muito relevante, nomeadamente as expressões faciais, os gestos ecológicos, a postura dos indivíduos, bem como as suas atitudes e comportamentos face ao meio natural e ambiental, podendo assim enviar e transmitir sinais e mensagens claras e diretas em questões ambientais e planetárias. Através da revisão da literatura, definiremos os conceitos básicos da comunicação não verbal, bem como as principais teorias, como persuasão e influência social. Analisaremos também diversas aplicações práticas deste último, envolvendo assim arte ambiental, símbolos visuais e certos comportamentos diários, como a triagem de resíduos. Optamos por uma abordagem qualitativa para nossa metodologia de estudo neste artigo, optamos pela análise de conteúdo para examinar o impacto de eventos ecológicos, imagens de conscientização para o planeta, performances artísticas e comportamentos e práticas pró-ambientais na consciência e atitudes públicas. Esta análise mostra que os símbolos visuais, como os logótipos de reciclagem, os sinais utilizados durante as manifestações, bem como as posturas e atitudes dos participantes. As imagens de sensibilização têm um impacto e um efeito muito significativo nos comportamentos e percepções ambientais dos indivíduos. As artes visuais e performances que também desempenham um papel essencial no tocante ao compromisso emocional do público com o planeta e à importância da sua proteção e preservação. Para finalizar, nosso artigo destaca que a comunicação não verbal é uma forma muito eficaz e poderosa de conscientizar e promover ações e gestos em favor do planeta. O elemento de comunicação não-verbal deve ser mais integrado nas campanhas de sensibilização ambiental para maximizar o seu impacto. Recomendamos que pesquisas futuras explorem novas formas de comunicação não-verbal e meçam a sua eficácia em muitos contextos sociais e culturais.

Palavras-chave: comunicação não verbal; consciência ambiental; práticas diárias; ações ecológicas; comportamentos pró-ambientais

1. INTRODUCTION

Body communication or nonverbal communication, represents a very important part of human practice, but it has often been underestimated compared to verbal communication. The latter includes facial expressions, body postures, gestures. These different forms of communication other than words can transmit many effective messages to influence the behaviors and perceptions of individuals. Today, the world is experiencing an environmental crisis.¹, in which individual and collective actions play an important role in promoting and encouraging sustainability, non-verbal communication represents a very effective means and tool to encourage the practice of ecological actions and behaviors and raise awareness of environmental causes.

This climate crisis that we are experiencing, requires a transformation and a change in our lifestyles and our daily practices and especially our consumption habits. Environmental activists and scientists insist on the fact that education and awareness are essential to encourage and stimulate the behaviors and postures of individuals. Obviously, written and verbal communication is the most used to ensure the transmission and circulation of environmental ideas and messages. On the other hand, the non-verbal method to offer an additional dimension, taking on a more subtle and emotional aspect, which can touch individuals in a very deep way and make them change their attitudes towards their planet.

Several psychological theories can explain the effectiveness of nonverbal communication in inciting and promoting individual behaviors toward the environment. Social influence theory² which suggests that individuals influence each other and become more subtle when they see the actions of others, so seeing other people adopt ecological behaviors can generally

¹BECK Corinne, LUGINBÜHL Yves, MUXART Tatiana, Times and spaces of environmental crises. Éditions Quæ, "Indisciplines", 2006, ISBN: 9782759200023.

²FISCHER Gustave-Nicolas, "Chapter 4. Social influence", in: The fundamental concepts of social psychology. Under the direction of FISCHER Gustave-Nicolas. Paris, Dunod, "Psycho Sup", 2020, p. 117-158.



encourage widespread adoption of the same behaviors by observers. Embodied Cognition Theory³, this proposes that physical actions and gestures transmit direct messages to thoughts and emotions, which will strengthen commitment to sustainable practices.

The use of clothing, accessories or objects, made from sustainable or recycled materials, represent visual statements of eco-responsible attitudes, principles and values. These clothing acts, despite their simplicity, give off and propagate images that can be considered a tool or a means of promoting a culture of sustainability, also they can be the origin or initiation of conversations or awareness discussions for those who remain indifferent to written or verbal environmental messages.

Climate events or demonstrations also provide a perfect setting for observing the impact of nonverbal communication. No doubt participants use costumes, placards, flash mobs⁴, with the aim of attracting the attention of the public and the media, who will relay these visual communications on social networks, giving these acts a great reach that will turn into impact. For example, the climate marches, climate marches organized since 2014 in France which aim to encourage the French to change their habits that harm the planet and to adopt new practices that are based on sustainability and eco-responsibility.

Our article proposes to explore and examine the many dimensions of nonverbal communication and its capacity to promote environmental sustainability. This will be done through the study of collective actions in favor of the planet, symbolic ecological gestures, eco-responsible clothing choices, different body postures, facial expressions, etc. Our goal is to understand how these forms of nonverbal / bodily communication can have an effective influence and impact on behaviors and attitudes. We will rely on content analyses of three means that we consider effective in ensuring nonverbal communication, thus training our observations to clarify this impact in different contexts and under several dimensions.

To conclude, we admit that nonverbal communication represents a promising way to consolidate and strengthen sustainable behaviors and ecological and planetary messages. By taking the shortcut of the emotional and intuitive dimension, it would be possible to influence individuals and convince them to change their behaviors and attitudes. This communication enters into a complementary relationship with verbal and written communication which also offers a very promising avenue concerning the protection and preservation of the planet. Indeed, the study of these dynamics and nonverbal messages is essential to be able to create and develop adequate and more effective strategies and actions of mobilization and awareness to be able to confront the environmental and ecological challenges of our time.

2. LITERATURE REVIEW

Certainly, nonverbal communication in favor of the planet is a relatively new field of study but there are several theories and studies that can help to better understand this subject, known today for its crucial and essential role in raising awareness among individuals to change their usual practices and behaviors that neglected the environmental context and protection of the planet. Here are some studies that have addressed this subject.

2.1 Nonverbal communication and its importance

Nonverbal communication includes all messages transmitted without spoken or written words, including different facial expressions, looks, postures, costumes, physical appearances, etc.

³WEINBERG Achille, "Embodied Cognition", in: Jean-François Dortier ed., *The Brain and Thought. The New Age of Cognitive Sciences*. Auxerre, Éditions Sciences Humaines, "Synthèse", 2014, p. 39-41.

⁴A rapid gathering of a group of people in a given place (usually public), with the aim of carrying out an action previously agreed on the Internet.

According to Mark L. Knapp, Judith A. Hall, and Terrence G. Horgan⁵, nonverbal communication plays a vital role in conveying messages to others and how they are received and interpreted. Judee K. Burgoon, Laura K. Guerrero, Kory Floyd⁶, insist and emphasize the honesty of the direct aspect of non-verbal communication, for them the latter is far from being subject to manipulation which can be conscious and desired.

2.2 Ecologically oriented behaviors and symbolic gestures

Symbolic gestures represent simple gestures or actions that a person can do but that can be very significant and influence other people to imitate them. Cialdini highlights the contamination effect that these gestures can have, which can be, depending on the origin, an incentive and a form of encouragement for the observer who can subsequently adopt the same behavior or posture. For example, participating in the cleaning of public gardens, parks or beaches, planting trees can ideally symbolize the commitment to environmental protection and the preservation of the planet, as well as climate events and demonstrations, in which participants can use placards or make symbolic gestures, confirm how non-verbal communication can be a powerful source for raising awareness and mobilizing the masses, quoted by Sutton. A⁷.

2.3 Facial expressions

Facial expressions are signs that a person can send through their faces, their grimaces, these are the keys to attitudes and emotions. Ekman showed that each facial expression can be at the origin of the transmission of a particular emotion, such as joy, sadness, satisfaction or even anger and fear; in the problem of climate and its crisis, expressions of worry, concern or determination can communicate the urgency to act on a major issue, this represents a non-verbal call to action.

2.4 Environmental engagement and body posture

It is well known that body posture can indicate the degree of determination and commitment of individuals, many studies in social psychology, such as that carried out by Carney, Cuddy, and Yap⁸, have shown that the body postures of individuals participating in a climate protest can have an impact on others, and convey a personal commitment, this confident and determined posture to achieve the goal of preserving the planet, can be perceived as a strong and legitimate movement by observers, and then want to achieve the same posture.

2.5 Clothing and accessories as ecological statements

Wearing certain clothes and choosing to wear certain accessories over others is a direct way of showing what you think and what you want, according to Michael R. Solomon, Nancy J. Rabolt⁹, the choice of clothing is a personal choice of individuals, is a powerful form of non-verbal communication, it is a real means of communicating identity and especially what we think, this will surely influence others, wearing clothes or accessories made with sustainable

⁵Mark L. Knapp, Judith A. Hall, Terrence G. Horgan, *Nonverbal Communication in Human Interaction*, Cengage Learning, 2013, ISBN 1133311598, 9781133311591

⁶Nonverbal Communication My Search Lab Series 15% Off Series, Judee K. Burgoon, Laura K. Guerrero, Kory Floyd, ISBN 0205525008, 9780205525003

⁷ Sutton, A., Trudeau, N., Morford, J. Smith, M. (2020). Expressive and receptive use of speech and graphic symbols by typically developing children: What skills contribute to performance on structured sentence-level tasks? *International Journal of Speech-Language Pathology* 1 (13).

⁸Carney, D.R., Cuddy, A.J., & Yap, A.J. (2010). Power Posing Brief Nonverbal Displays Affect Neuroendocrine Levels and Risk Tolerance. *Psychological Science*, 21, 1363-1368.<http://dx>.

⁹Michael R. Solomon, Nancy J. Rabolt, *Consumer Behavior in Fashion*, Pearson/Prentice Hall, 2009.

materials or putting on bracelets or displaying badges with ecological messages, can undoubtedly mark an adherence to certain values with an environmental aspect. Hiller Connell¹⁰ explains that consumers have become increasingly aware of the environmental crisis and this impacts their clothing purchasing choices, we are talking about purchasing behavior influenced by ecology and its values.

2.6 Demonstrations and collective actions in favor of the planet

Protests and collective actions in favor of the planet as well as flash mobs are very significant forms of non-verbal communication that can play a very important role in raising awareness and encouraging behavior change. According to the theory of social influence or the Asch experiment 1951¹¹ or that of Milgram¹² 1963, confirm that individuals can be easily influenced by the behavior of groups, observing the behavior of a group of several people doing ecological behavior during collective actions, pushes them to change their behavior.

3. RELEVANT THEORIES RELATED TO BEHAVIORAL PSYCHOLOGY

3.1 The theory of embodied cognition

The idea of "embodied cognition" is based on the observation that our brain is a living organ connected to a body (also living) and that it is immersed in an environment on which it acts. This living and active bodily inscription of the brain has a major impact on the conception of thought (in the broad sense of "cognition"). This means that all the ideas that pass through our heads - "lemon", "dog", "year", "mom", "god", "freedom" - therefore have a bodily component resulting from our perceptive, emotional or motor systems. In other words, thoughts have shapes, colors, movement and feelings.¹³

Indeed, it is about the close relationship between the body and the mind, that is to say that our thoughts and reflections are conditioned by our movements, it is a bridge between our experiences of the past and our state of the moment. A precise posture (ecological for example) will notably influence our thoughts and emotions, consequently the adoption of a body posture with a positive aspect can necessarily encourage or incite the adoption of ecological practices.

3.2 Social learning theory

According to Albert Bandura, individuals learn automatically from the behaviors of others, this is a theory that aims to show the effectiveness of learning by observation, this proves that participating or just observing a collective action in favor of the planet, will undoubtedly guide the observer to imitate the action and learn from it. Starting from the idea that observation serves to stimulate the desire to do "like" others.

Albert Bandura explains that human behavior becomes easier and stronger when it is part of a particular social context. Individuals take action and skip the experimentation part since others have already done it, the latter imitate and acquire the same social behavior.

People produce new behavioral models that are close to these styles, but that go far beyond what has simply been seen or heard. It further shows that in addition to enabling the acquisition of a new skill, modeling influences motivation by instilling new and usually higher outcome

¹⁰Hiller Connell, Exploring consumers' perceptions of eco-conscious apparel acquisition behaviors, *Social Responsibility Journal* 7(February):61-73(February):61-73

¹¹ The Asch experiment, published in 1951, is an experiment by psychologist Solomon Asch that demonstrates the power of conformity on an individual's decisions within a group.

¹²The Milgram experiment is a social psychology study conducted by Stanley Milgram in 1963. Its purpose is to study human behavior towards authority and submission to it, and consists of testing the ability of individuals to obey, even if it means inflicting suffering on others.

¹³WEINBERG Achille, "Embodied Cognition", in: Jean-François Dortier ed., *The Brain and Thought. The New Age of Cognitive Sciences*. Auxerre, Éditions Sciences Humaines, "Synthèse", 2014, p. 39-41

expectations. This process can further lead to emotional choices or changes in value systems through observation of the affective expressions of others.¹⁴

These two theories can be used to study individuals' behaviors towards social behaviors with an ecological or planet-friendly aspect, and how these behaviors will influence the way we see the planet and the environment and the way we act towards them. This shows that bodily/nonverbal communication plays an important role in influencing individuals to develop ideas, thoughts and behaviors in favor of the planet.

This literature review shows that there were several scientific researches, which dealt with the subject of nonverbal communication and its importance in the communication between individuals and the circulation of messages and symbols in favor of the planet. Many are the scientists who have discussed this idea, we have cited some, but this does not prevent that there are several others, the choice of scientists and theories noted in this article is based on the relationship between them and the interest they have for non-corporeal communication which is based on behaviors and not words. Since it is a subject that raises a great deal of questioning and reflection that can generate a great deal of research and a lot of work to be able to understand the mechanisms and the different aspects of this communication.

4. THE HYPOTHESES

The hypotheses of this research aim to explore the impact of the different facets of nonverbal communication based on existing literature and scientific studies already carried out which have examined the impact of this communication on the behaviors of individuals and their postures and attitudes towards the planet. Can symbolic gestures, facial expressions, body postures, ecological clothing and artistic performances have a favorable impact on individuals in favor of the planet? Can this transmission of nonverbal messages influence and encourage observers to change their vision and behavior towards their environment in their daily practices.

Symbolic gestures made during environmental protests, such as the use of placards containing environmental messages, reinforce and increase observers' awareness and consideration of environmental and planetary issues.

Participants' facial expressions of concern and commitment during green protests and activities encourage spectators to consider adopting the same green behaviors.

Adopting engaging body postures during ecological practices increases interaction, sharing of ideas and environmental discussions and thus strengthens awareness of issues related to the planet.

Choosing to wear clothes and accessories made from environmentally friendly materials or wearing badges with ecological messages involves individuals and observers in the issues and puts them in a questioning in favor of the environment and the planet, this increases the memorability of the messages and gives them great value.

Artistic performances carried out by flash mobs to convey environmental messages increase awareness of the problems and the adoption of new ecological practices that respect the environment and the planet.

Based on existing theories and research, these hypotheses will guide our study to verify their relevance and confirm them during our exploration of the different aspects of nonverbal communication and its crucial impact on ecological behaviors, postures and attitudes.

Each of these hypotheses will be tested using the adapted methodologies described in the following sections of this article.

¹⁴CARRÉ Philippe, "Bandura: a psychology for the 21st century?", *Savoirs*, 2004/5 (Special issue), pp. 9-50.

5. THE METHODOLOGY

To analyze how nonverbal communication can influence individuals and transmit nonverbal messages to them, we will examine a video of an ecological demonstration, an image with an ecological aspect and an artistic performance dealing with the same subject.

Video analysis:

<https://youtu.be/TI9nVTxRFR0?si=d9DIS4GhDECu0K6K>

Image analysis:

<https://media.istockphoto.com/id/1462151129/photo/prevent-global-warming-girl-planting-a-small-tree.jpg?s=1024x1024&w=is&k=20&c=2KuIJE6-lnsKpLi9FMvNLmQCRzere08e3D9GaF4Sfto=>

Analysis of an artistic performance:

Applestrophe, Planet apple protection global warming, 2018. Acrylic on linen canvas, 160 x 130 cm

The video:

The video depicts a mock funeral for the planet, a protest held in New Delhi, India. Climate change and planet protection activists hold a mock funeral procession holding a model of the earth on a stretcher.

Analysis of the staging:

The activists are arranged in an orderly manner, the first two holding a large placard announcing the objective of the demonstration framed by two large symbols expressing the rebellion against extinction. Just after a person in the center holding a drum, preceding the four people carrying the model of the planet Earth on a stretcher "like a dead person", thus simulating the approach of the funeral in another shot individuals follow them as in real farewells, adopting an orderly and very serious cadence.

Analysis of facial expressions and postures:

The first participants wear gas masks, thus hiding their faces, they adopt a rigid posture without allowing their facial expressions to pass, while the other participants show great sorrow and let see an expression of sadness and worry and especially of serosity to communicate the seriousness of the situation, the adoption of this attitude transmits a very clear message of the objective of this demonstration, the song played by the participant of the center, gives the others the possibility of respecting a certain cadence similar to that of the real funerals.

Analysis of clothing and accessories:

Firstly, the choice of wearing gas masks, we know very well the conditions in which we have to wear a gas mask, the participants in front want to send a sign that it has become difficult to breathe on this planet because of pollution, a direct message to encourage observers to change their daily practices.

The choice of colors, the clothes are simple white, black or red; each color has its own meaning, white is used here to express mourning, according to Hindu culture, black for the unknown and red to express danger. All its meanings represent a call to courage and awareness of the critical problems that our planet is experiencing.

Through the analysis of this video, we can see that during a demonstration in favor of the planet, the effectiveness of non-verbal communication is confirmed by the symbolic gestures used, the staging carried out is a clear and direct way of transmitting ecological messages that

will involve observers in addition to verbal communication and will encourage them to adopt ideas and gestures in favor of the environment and the planet.

Indeed, the facial expressions and postures used by the participants have an impact and a crucial role in capturing the interest and attention of individuals, these attitudes communicate seriousness and legitimacy towards environmental problems and encourage others to imitate the same practice (social learning theory).

Similarly, the clothing side and the wearing of accessories, such as the use of a gas mask during the demonstration, generates a striking awareness for the public, who find themselves in front of a horrible staging, bringing them closer to the reality that they can live, if they continue to destroy their planet. The idea of funerals also shocks observers and forces them to predict the future and have an image of the presumed end in the face of their daily behaviors. This scene encourages them to adopt a more responsible way to preserve their planet.

The messages transmitted in this video were clear and effective, thanks to non-verbal communication, which confirms our first three hypotheses.

The image:

Through the analysis of this image, cited above, we will explore how images of beautiful nature can arouse positive feelings towards the protection and preservation of the planet, as well as the representation of people practicing ecological behavior, easily reaches the receiver and encourages them to adopt the same behaviors.

The image we have chosen to analyze, represents a little girl, protecting between her two hands, a piece of land from which comes out a small bud, very healthy and very alive, thus showing the importance of protecting the planet. Our exploration will take into account the different visual elements of the image and their role as well as the graphics and the choice of colors and of course the body language, also the actions.

The visual elements:

In the foreground, we see roughly the small hands of a little girl, holding a piece of earth and protecting it in the palm of her hands, this gesture symbolizes in itself a clear and direct message, in the background we are facing a little girl, who represents the new generations automatically the future of the planet, if we consider the piece of earth protected a meaning of the planet earth, and the gesture that the little girl makes gives her a new breath of healthy life. In the background; we can see a lot of green nature surrounding her.

The choice of colors:

The little girl wears white, as a symbol of peace towards her planet, but the green color is very relative dominant and is directly associated with natural elements, we are in a natural context and in a field of vision which highlights nature.

Yet, this omnipresence of the color green weaves a direct path to nature, and especially to growth and renewal. This combination of colors highlights the importance of protecting and preserving nature. It delivers a direct message to raise public awareness of the planet's value while inviting them to reconsider their behaviors and attitudes toward it. The choice of colors in this image is truly delicate, helping the little girl's body posture to convey this ecological message.

Body language and actions:

The image represents in a very clear way the behavior of the protection and preservation of the planet, the little girl puts forward her hands showing the gesture she makes, as if to show it to the observer. Indeed, she draws a wide smile, showing her white teeth, as a symbol of good health and good humor, she seems to be in a very positive and open attitude, she adopts a joyful

and very calm posture, this posture conveys the idea that well-being is relative to the protection of the planet.

The context and staging:

This staging of the little girl delicately holding this small piece of land shows the importance of this protection, the choice of the age group of the girl; is not insignificant, we are in a narrative context, through which a very clear and very serious message, emphasizing the gesture of protection and the behavior of preservation. This is a story that is told without words, the new generations are the future of the planet, they must also ensure to protect and preserve it.

We can see through this image that positive messages like the one in our image, presented by such a delicate person and performing a positive and meaningful action, marking her joy and satisfaction by performing an act for the protection of the planet, confirms our hypothesis that the representation of people performing ecological gestures, will encourage and arouse the feelings of the public by showing them the good side of things, protection is the solution to well-being, this is the message expressed by the attitude and posture adopted by the little girl in question. A clear and symbolic message, directly encourages us to be responsible and protective towards our planet, which will have a significant impact on observers and lead them to change their behavior towards it.

Analysis of artistic performance:

Title of the work: Planet apple protection global warming

Artist: Applestrophe

Year of creation:2018

Kind: Acrylic on linen canvas

Dimension:160 x 130 cm

Pierre Marcel SCHMIDT, nicknamed Applestrophe, a great French artist, with an artistic career rich in creations and activities in the field of painting, throughout his career he sought to put art in favor of ecology and the painting that we have chosen for our research and a very famous painting among several others that have devoted art to raising awareness and denouncing the environmental crisis that we are experiencing. Still within the framework of non-verbal communication, we will analyze our painting to show that artistic performances are also part of the latter and have the same goals as other tools already mentioned.

Analysis of visual elements:

The composition:

The painting represents the planet earth in the shape of an apple, and two hands with roots are trying to protect it and shelter it in a very delicate way. The message is therefore very clear, it highlights the act of protection. Surrounded by small multi-colored and very lively flowers, the planet seems in perfect condition, the hands coat the earth, in the shape of an apple in a light and transparent layer of fine threads that delicately hide the planet.

The colors:



The painter used vibrant colors to represent the vitality and good condition of the planet. The blue of the oceans and sky symbolizes purity and natural balance, while the green of the continents evokes fertility and regeneration. The hands, associated with humanity, highlight people's responsibility toward their environment, their protective role, and their connection to the Earth. The roots, brown like real plant roots, reinforce the idea of grounding, growth, and connection to the nourishing soil.

This harmonious palette conveys a strong message about the interdependence between humans and nature while encouraging the preservation of the ecosystem.

The symbols used

The earth in the shape of an apple; the apple a natural element, known for its fragility and sensitivity, often needs to be very well preserved so that it remains alive, it symbolizes preciousness and weakness.

The two hands: the human hands represent the responsibility and protection that the earth needs to survive, they symbolize the link that unites humans to their planet, the support and the support that the latter can provide by practicing positive actions towards their planet.

there are represented as a strong hand, and the varnish on the nails symbolizes delicacy and gentleness, the painter joins strength to gentleness, as if asking to be hard in one's attitude towards the planet by wanting to protect it but at the same time with caution and delicacy.

Roots; represent the bond that unites humans and their planet, symbolizing growth and sustainability and above all the connection that must be maintained with the natural environment.

In summary we can say that artistic performances that are part of ecological art, also represent another facet of non-verbal communication among many others, also play a very important role in transmitting ecological messages to the public and arousing the interest and attention of observers.

Painting has always succeeded in communicating ideas and reflections, the painter uses a composition, symbols and particular colors to reach the receiver and involve him in his reasoning.

In the painting the artist wanted to encourage the public to recognize the fragility and sensitivity of the planet while being aware of the task they must assume to be able to preserve and protect it, we can thus confirm our last hypothesis and say art also plays a crucial role in non-verbal communication to arrive at the conviction that it is the most important mission that humanity can have towards their planet.

6. CONCLUSION

Through the analyses made on the three elements chosen for this subject, our results reveal that the symbolic gestures made during the demonstrations in favor of the planet, the facial expressions, the body postures adopted by the participants, the choice of clothing or accessories with an ecological aspect and the artistic performances have a very significant impact on individuals, these different facets of non-verbal communication, are effective and capable of raising public awareness of planetary and environmental issues. Changing behavior remains the main goal of this communication which addresses reason and which arouses the feelings and emotions of observers and leads them to adopt new practices respecting the planet.

We can thus say that these results are very consistent with the theories already cited previously and the different studies mentioned in this article. Indeed, non-verbal messages transmitted through one of the elements of non-verbal communication analyzed, are effectively and directly received by observers and will surely have an impact on their behaviors and attitudes towards the planet.

Most of the findings of previous studies have confirmed the same results as our analyses, nonverbal communication can be very effective, symbolic gestures represent a direct and clear way to transmit an ecological message (Cialdini), and easy expressions are deciphered and decoded by the public who adopt them since they touch their emotions and arouse their feelings, they are therefore more effective than text messages (Ekman). According to Carney, Cuddy and Yap, who confirm that the body postures adopted by participants during a demonstration for an ecological goal, can be perceived as determined and legitimate and give a desire to observers to imitate and adopt them. The choice of clothing and accessories also has an impact and represents a direct and clear message to the public as confirmed by Micheal R. Solomon and Nancy. Robolt.

Furthermore, it will therefore be essential that awareness campaigns and organizations must take into consideration the importance of non-verbal/body communication, this must no longer be neglected and must be at the top of interest, for its effectiveness in transmitting ecological messages in favor of the planet.

Limitations of the study:

There are several limitations that can be faced by this study. First, the willingness and ability of the participants, who are generally from urban areas, which could limit the generalization of the same results in rural contexts. In addition, the frequency of awareness campaigns remains very limited, which will subsequently reduce the interest that individuals may have regarding environmental issues.

Future research perspectives:

It would therefore be important for further future research to explore other types of non-verbal communication, such as that relating to conservation or sustainable solutions for the preservation of the planet, in order to be able to make a comparative study on environmental behaviors and attitudes. Also, it would be very relevant to carry out a review to study the interaction and complementarity between verbal and non-verbal communication and to know how we can combine, in an effective way, between the two forms of communication.

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