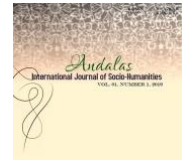




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Article

Green Pantomime When Silence Speaks out Environmental Issues

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A B S T R A C T

Green Pantomime Theater (GPT) is a tool for promoting children environmental awareness and activism. This paper provides insight into how environmental issues can be embedded in green performances and consequently offers a model of socio-environmental change. In Morocco, GPT performances aim to change children behavior, enhance their environmental awareness, and develop their abilities to act as protectors of the environment. The status of PGT upon children has considerably changed within the Moroccan theatre context. The 'Creativity Association for the Development of Educational Work', under Arabic name of 'جمعية إبداعات لتنمية العمل التربوي', is a Moroccan non-governmental association that employs GPT to promote environmental awareness and activism. The study examines a 45 minutes show performed by 'the Joker' theatre group titled 'هجرة البيئة: Environment Migration'. Within the framework of ecocriticism (Bracke & Corporaal, 2010) and visual grammar (Kress & van Leeuwen, 2006), the present work attempts to explain how silence, gestures, and visuals mirror the themes of the show. The study argues that environmental themes adopted in the performance strongly point to the Anthropocene's responsibility in destroying nature. For example, scenes on pollution, deforestation, the killing of species, and unreported and unregulated fishing (UUF) show that man has been dramatically affecting the environment. To make of the show a success, participating actors have meticulously used signs and gestures to silently express their views about a highly sophisticated issue. They have made of this show a universal performance in that anyone anywhere can perceive. Eventually, GPTs are highly recommended to identify lines of confrontation that man has with nature. Also, GPTs are important in that they represent man's practices through gestures and signs and may provide responses for inspiring socio-ecological change.

INTRODUCTION

Green Pantomime Theater is an essential component of comprehensive and lifelong education that uses dramatic output to make children reconsider their relations with the natural environment. Based on environmental issues, GPT aims to help children grasp the complexity environment crises, both natural and man-made. Importantly, GPT is based on silence and gestures to enforce environmental awareness, to foster the respect of nature, to promote individual and collective responsibility, and to develop children abilities to protect nature. Non-verbal communication (gestures, postures, and facial expressions) are basically used in pantomime shows to replace the linguistic text. According to Brown *et al.* (2019), gestural theories on the origin of language claim that “the pantomime stage precedes speech as an initial form of referential communication” (p. 1). Importantly, gestures and signs express emotion, reinforce and give credibility to plays, but they can distort meaning if they are inappropriately used. Laughter and expressions of pain are the most universal non-verbal expressions considering that these signals are not universal and should be interpreted according to cultural or religious contexts. So far, mimic and gestures are the most explored areas of communication. Many performative activities are encompassed in the staging of comedy and drama. Brockett and Hildy (2015) mention that theatre uses of a number of elements that include time, place, participants, scenario, clothing, sound, and movement. All these elements, says Brockett and Hildy, are treated, combined with others to achieve the ultimate objective of pantomimes. An examination of sources on pantomime is needed to trace its history. For Lada-Richards (2007), pantomime, a silent performance, is one of the greatest aesthetic attractions in the world. Since ancient Greece, pantomime staging included silent and solo dancers incarnated many mythologies that were accompanied by music and songs. In modern times (1930s and 1940s) talking comedy in the ousted pantomime and threatened to vanish (Dutton, 2015). However, pantomime survived thanks to eminent masters namely Charlie Chaplin, Buster Keaton, Harold Lloyd, and Harry Langdon (Agee, 1949). Of great importance to modern pantomime are silence and gestures. In this study these tools are adopted to explain the extent to which the pantomime under study brings to the front natural degradation.

Green Pantomime Theatre is beneficial to children in many ways. Green pantomime or mime *greenturgy* is a learning tool that children use to develop communication skills. It is play, and play is essential in their life. More than that, green pantomimes allow children to be more comfortable with their environment, open them to the world of art, and make of them future actors regarding the preservation of natural resources. Interestingly, the adoption of PGT at elementary school levels is highly recommended in that it strongly improves children’s team work, helps them develop self-esteem, and prepares them to become actors in the preservation of the ecosystem.

In modern times, some of the threatening problems facing individuals and groups are ecological as climate change, biodiversity loss, resource depletion, and chemical contamination are making life difficult for many to achieve wellbeing or even meet basic survival needs (Stibbe, 2017). There is a consensus among the scientific community that the risks are directly linked to the Anthropocene or man’s responsibility in changing natural continuity of the planet. Proponents of this trend argue that man has caused mass extinctions of plant and animal species, polluted the oceans, and altered the atmosphere among other lasting impacts (Clark, 2015; Hance, 2015; Stromberg, 2013). While there is a growing consensus on the role of academia in tackling challenges of sustainability (Kassab *et al.*, 2018), inter- and transdisciplinary research can bring about the importance of environmental awareness and protection. Researchers in multiple fields on complex environmental challenges have shown ongoing enthusiasm for

applying transdisciplinary research to promote environmental awareness. Transdisciplinary research has coordinated efforts to address the relationship between man and the environment (Mattor *et al.*, 2014) and aims at identifying solutions to solve sustainability problems and to foster social learning (Siew *et al.*, 2016). In this vein, the angles opened up by literary creativity on environmental awareness have embraced methods and measures to portray the degradation of natural resource. Among these means PGT becomes a creative alternative to speak about man's uncontrolled behaviors and means to regulate modes of production and consumption. Hopefully, the objective of PGT in exposing man's long-term impacts is to integrate environmental issues among schools, associations, and groups operating in social, institutional, political, and policy making spheres. Nevertheless, ongoing insignificance and inertia towards the preservation of the environment is prolonging the impacts and is enforcing the risks that might be restrained if more interest is assigned to solve environmental hazards. The issue is today at the heart of GPT to build long term environmental awareness measures, to regulate production, and to limit exploitation of resources. A serious weakness with this topic, however, is that no daring scientific accounts were developed locally to understand how PGT contributes in the improvement of environmental awareness among children. To fill this gap in research, the present work attempts to explain the extent to which PGT uses gestures and silence to talk about environmental issues. Not only that, the play also provides ideas and means to enhance environmental awareness and protection.

Theater Genres

The term 'theater' comes from the Greek '*theatron*' which means 'the place where we look'. As in many Indo-European languages (German '*theater*', French '*théâtre*', Spanish and Italian '*teatro*', and Russian '*teatr*'), the Arabic version of the term theatre is literally written as (مسرح: *masrah*). Historical studies of wall paintings on caves reveal that humans were engaged in sophisticated forms of artistic expression as early as 20,000 years ago (Brockett, & Hildy, 2015). Theater is one of those artistic staging that involves characters speaking and acting. According to Abrams and Harpham (2015), there are different theatrical genres that include 'Tragedy', 'Comedy', 'Tragi-Comedy', 'History Plays', 'Problem Play', 'Realistic Drama', 'Poetic Drama', 'Epic Theatre', 'Theatre of the Absurd', and 'Classical Sanskrit Theatre'. For instance, Abrams and Harpham mention that tragedy and comedy performances, which date back to the 5th and 5th centuries BC, were rooted in religion and linked to the cult of Dionysus. These performances were organized by the state and were performed twice a year to bring together citizens around a competition between authors and players. In the contemporary period, Kurt Gerard (2006) explains that theatre involves a "multitude of semiotic and linguistic items ... often utilized in a much broader social context" (p. 8). Within a plethora of genres Kurt Gerard acknowledges the existence of an approximately new genre he calls 'Green Theater' the understanding of which should be done within the framework of green theory. For Kurt Gerard (2006), the scope of Green Theatre is so limited in that it focuses on themes of the environment to reinforce man's engagements in consider the world as a precious whole to be protected.

Green Theatre

The inseparability of humanity and nature, and the idea that all environmental problems are social problems, are what motivate this study the role of green theatre in improving environmental awareness among children and creating socio-environmental change. The need for immediate actions to account for environmental problems drives societies and governments to find new influencers of socio-environmental change. In this vein, green theatre is presented today as a means by which nature can be protected. It emerges not only as a means by which to

investigate the long standing humanist question ‘*who are we?*’ but also the current ecological question ‘*where are we?*’ For the former cannot be answered fully without including the latter (May, 2006). On the most foundational level, green theatre plays a social role in “promoting an environmental initiative, and the capacity for that initiative to induce positive ecological change” (Kurt Gerard, 2006, p. 27). Particularly, GPT is becoming an awareness tool that contemporary societies are using to solve crises and to acknowledge the clear causal relationship aligning societal behavior to the decay of the natural setting (Kurt Gerard, 2006). Green playwrights have put in place a new form drama related to the environment (dramaturgy - ecological theater - green theatre) to shape culture and to transform people’s notions of community in such a way that the very boundaries between nature and humans should be respected. Current green theatre practice has broken from its philosophical roots by embracing the environment as a primary element of concern (Kurt Gerard, 2006). More than that, May (2006) adds that new green theatre aims at discovering methods for ecological improvement, primarily through devices that encourage changes in socio-environmental behavior.

Theatre can reach larger segments of the community to become increasingly aware of the threat of environmental degradation. It is important to highlight here that more theatre professionals are becoming concerned about the negative impacts of man’s abuses and overexploitation of nature. The study of green theatre in general and GPT in particular considers what methods and approaches would best help artists and practitioners promote green issues in theatre. Many organizations are highly visible in many countries across the globe. For example, *the Moroccan ‘Development of Educational Work’* (جمعية إبداعات لتنمية العمل التربوي) is an association of committed artists who have taken the lead to bring environmental preoccupations on stage. Research on green theatre has examined the role of theatre in generating of awareness towards climate change, greenhouse gas emissions and global warming. In Australia, for example, studies mention that students are exposed to learning frameworks that foster sustainable processes and practices in the university learning and teaching environment (Baylis, 2009; Fried, & May, 1994; Hassall & Rowan, 2019; Kantor, 2010; Rowan, 2015). Today, the Australian green production philosophy is becoming more apparent with professionals whose objective is to highlight that the planet is facing an environmental catastrophe.

While theatrical creativity has discussed environmental issues in many parts of the world, the issue is met with less concern in the Moroccan context. As an exception, the non-governmental association mentioned in this study has been using PGT since 2010 to improve children’s environmental awareness on pollution, exploitation of resources, and biodiversity loss. The performance under study (*Environment Migration*) is part of ‘Greening the Theatre’ project in Morocco to enhance protection and to enable children to be fully committed to the preservation of nature.

Pantomime Theatre

Pantomime theatre means acting without words. According to Abrams and Harpham (2015), pantomime, halfway between drama and dance, is “acting on the stage without speech, using only posture, gesture, bodily movement, and exaggerated facial expression to mime (“mimic”) a character’s actions and to express a character’s feelings” (p. 266). Furthermore, pantomime performances may include a text that binds gestures and music which makes it easier for actors to perform actions and makes it easier for the audience to understand the core of the theme (Buffy, 2015). Of importance to pantomime theatre, silence and gestures, not much different from the human language, are iconic forms associated with first appearances of acting and nonlinguistic expression system that proliferates in our societies (Sahib, & Taher, 2021; Toussaint, 2000). These nonlinguistic forms, says Toussaint (2000), fall under the categories

of olfactory signs, tactile marks, tasteful marks, indicative or gestural signs, and audio signs. Sahib, and Taher (2021) dwells on the importance of signs for pantomimes and conclude that the Romans realized from the beginning the importance of the musical notes accompanying this type of performance in tuning the kinesthetic rhythm of the actors and contribution to the process of delivering the offer speech. Related to the show under study, the music accompanying the play contributes to the making of meaning and helps to the reinforcing of educational and entertaining purposes. The aim behind this amalgamation in pantomimes in general is to create a mental process that might result in the creation of effects that regenerate love, hate, empathy, and pity (Portnoy, 2004).

Theater in Morocco

Africa is enormously a large continent with a great linguistic and cultural diversity. In the continent, national theatres have been established on European models “to serve as a protest against colonialist and neocolonialist values and practices and the decolonization of African minds” (Brockett & Hildy, 2015, p.61). The result, mentions Brockett and Hildy, has been a blended Euro-African form of theatre which has created a vigorous and dynamic spectrum of theatre in contemporary Africa.

It should be mentioned that only the Moroccan theatre is covered in this section to provide an idea about history and trends of theatre in the country. Moroccan theater is a story of playwrights and creativity. The Moroccan theatre is linked to the Italian notion of entertainment (فرجة: *furja*), marked by the visit of oriental groups in Morocco lead by Mohamed *Ezz El-Din*, *Najib Al-Rihani*, *Fatima Rushdi*, *Youssef Wehbe* and others (Fertat, 2009). At the beginning, mentions Fertat (2009), Moroccan theatre was based on Arabic texts that glorify the achievements of Arab and Muslim heroes like *Salah al-Din al-Ayyubi* and others. During the colonial era, playwrights wrote on nationalist and patriotic themes to support Moroccan resistance get independence. First Moroccan theater professionals (*Tayeb Al-Alj*, *Tayeb Saddiki*, and *Ben M'barek Afifi*) organized drama workshops to denounce the presence of French and Spanish administrations. In the aftermath of the independence, Moroccan popular theater emerged thanks to the contributions of local populations (Berber, Jewish or Arab). Particularly, it was in the 70s that it achieved its identity (Fertat, 2007, 2009). The Moroccan popular theatre handled fictional and realistic themes that correspond to people's daily life. In this respect, Fertat (2012) reported that entertainment (*Lbsat*: لبساط) and circular (*Halqa*: حلقة) genres are what makes the originality of popular theater in Morocco. He defines entrainment theatre (*Lbsat*: لبساط) as a satirical and moralizing theater that was often used to denounce injustice. As for circular theatre (*Halqa* (حلقة)), Fertat (2012) says that it stands for a lively shows that flourished in opened public squares in ancient towns like Fez, and Marrakesh among others. As far as language of performance is concerned, Fertat (2020) mentions that standard Arabic was the language of first Moroccan performances. But very quickly, the Darija, a Moroccan variant of standard Arabic, will be widely used by Moroccan playwrights (*Bouchib el Badaoui*, *Abdellah Chakroun*, *Tayeb Al-Alj*, *Tayeb Saddiki*, and *Mohamed Kaouti*) to present most striking experiences and creativity (Fertat, 2020).

Children Theater

Children's Theatre is a hybrid contemporary genre that mixes conventions and styles to create dramatic plays specifically staged for children. It is defined in the Oxford dictionary as a means of artistic expression that involves puppets, professional, and amateur theatre performed for young people in theaters or in schools. Similarly, Gratiot-Alphandéry, Rosemberg, and Chapuis (1973) listed two axes when they defined Children's Theater:

- Nature of actors which corresponds to the role of children as actors. This form of theater is reserved for dramatic games and School Theater.
- Professionalism character refers exclusively to professional children's theater. In Morocco, we have rarely found documents that refer to amateur theater for children.

Studies on adult/amateur theatre had mostly relied on aspects related to technics, characteristics, and trends (Hamdaoui, 2007; 2009). For instance, Children's Theaters in general or School Theater in particular are barely examined because of the difficulties they show in terms of documentation, theory, creative writing, staging and scenography (Hamdaoui, 2007). The judgment developed by Hamdaoui is built on the fact that School Theatre is an inert-student activity that is part of extra-curricular performance. However, Children's Theater reaches a large audience that is not necessarily from the educational domain. A perquisite with School Theatre is that involved actors are supervised by teachers who on the level of artistic training in line with pedagogical, psychological, and didactic standards. However, Children Theatre is not necessarily performed for the benefit of students in schools. In fact, actors of Children Theatre can be from inside or outside schools. In line with Hamdaoui (2007, 2009), we believe that School and Children Theaters, are or must be, for children, designed for children to ameliorate their personal development and to improve their self-confidence and interpersonal skills. What is more, both genres are recommended to transmit knowledge, to support educational, social, and environmental integration.

In this respect, the identification and promotion of environmental awareness via theatre is a chance for children to correctly behave in their natural environment. A real emergence of a creative green pantomime theatre in Morocco should be supervised by professionals who can plan and support projects on environmental degradation. We hope that the PGT initiative, undertaken by The *Creativity Association for the Development of Educational Work*, under Arabic name of (جمعية إبداعات لتنمية العمل التربوي), adds a stone to this experience and contributes positively to raising children's environmental awareness to the preservation of nature.

Environmental Awareness

Masson-Delmotte et al. (2021), published in the 7th of August, summarizes current state of the climate, how the role of human influence is changing world climate. The report presents key findings of the Working Group I (WGI) and contributions of the IPCC's assessment on the physical science basis of climate change, the state of knowledge about possible climate futures, climate information relevant to regions and sectors, and limiting human-induced climate change. Scientifically, the document warns against fast dramatic changes and raises environmental awareness towards the consequences of man's interference in nature. Environmental awareness (EA) is a precondition of taking environmental action (Jensen, 2002). Universal treaties and conventions related to EA emphasize that issues of the environment must be part of community policies put into practice by environmental actors. For Jensen (2002), EA refers to an ideology that evokes the necessity and responsibility of humans to respect, protect, and preserve the natural world from its anthropogenic afflictions. To realize these principles, Omoogun, Egbonyi, and Onnoghen (2016) recommend that teaching the human being that the ecosystem is fragile and indispensable can improve the level of EA. For example, the 'Amsterdam treaty', signed on 2 October 1997, aims to amend the European Union's constitution in light of recent experiences concerning the protection of the environment within the community. Gehring *et al.* (2000) simplifies that the 'Amsterdam Treaty', which establishes environmental awareness programs particular to the European Union, includes training and educational programs to realize European will in environmental awareness.

At the national level, there is no such charter. However, awareness is promoted nationally through ‘*Environmental and Sustainable Development Education Program*’ (*PEEDD*), known under French name of (*Programme d’éducation à l’environnement et au développement durable*). The *PEEDD*, developed by the ministry of Energy and Mines, aims to popularize the concepts of environmental protection and sustainable development among students. Interestingly, it aims to reinforce the presence of environmental schools, youth associations, and environmental education centers. More specifically, *PEEDD* targets students’ environmental on biodiversity loss, desertification, liquid sanitation, pollution, deforestation, and solid waste management among others. To implement this program, the ministry works in collaboration with partners and actors including the ministry of ‘National Education and Vocational Training’, the ministry of ‘Youth and Sports’, the ‘Mohammed V Foundation for the Protection of the Environment’, and the ‘Association of Teachers of Life and Earth Sciences’ among other active associations in the domain.

Of great importance to the promotion of environmental awareness is environmental education (EE). On its website, the U.S Environmental Protection Agency (EPA) defines EE as a process that allows individuals to “explore environmental issues, engage in problem solving, and take action to improve the environment” (www.epa.gov). Currently, EE is fundamental to merge the self, the other and the environment (UNESCO-PNUE, 1977), and to make learners comprehend humans and nature relationships by focusing on mans’ explicit responsibility in the degradation of the environment (Mliless *et al.*, 2021).

Contemporary environmental movement is often said to have begun in the summer of 1962 (Bracke, & Corporaal, 2010). Concerns about environmental degradation arise from man interventionism and change in mode of consumerism. Earlier ecological studies focused on environmental changes, notably the cause and effect relationship between humanity’s behavior and ecological degradation. For May (2007), proponents of socio-environmental change must find a course of action to stop and re-direct behaviors. In this study, GPT is perceived as a means of influence and environmental awareness rising. To examine its role in promoting socio-ecological change, the present study adopts ecocriticism and visual grammar as two distinct but complementary theoretical frameworks. The choice of ecocriticism and visual grammar is important in that they can direct us to explain the contribution of Green Theatre to improve environmental and ecological education and to enrich the debate on environmental degradation and climate change.

Ecocriticism

The choice of theoretical frameworks depends on disciplines and fields of research. Ecocriticism is a literary activity which studies man-nature relationship as expressed in literary works ((Bracke, & Corporaal, 2010; Glotfelty, & Fromm, 1996) and a political project that focuses on the relationship between literature and the physical environment particularly the study of human–nature relations in literature, film and other cultural expressions (Heise, 2008, 2010). It was in the early 1990s that ecocriticism began to emerge as a new literary approach when ‘the Association for the Study of Literature and the Environment’ (ASLE) was created. Following feminism and cultural studies, ecocriticism, an interdisciplinary field of inquiry, detects man’s impact on the environment in poetry and literature; it embraces the idea that literature must be considered as a means to analyze and understand the complex environmental crisis (www.asle.org). Just as feminism examines language and literature from a gender-conscious perspective (James & Morel, 2018), ecocriticism takes an earth-centered approach to literary studies. Many ecocritical reflections examined contemporary novels of ‘Margaret Atwood’ (Bergthaller, 2010), ‘Cormac McCarthy’ and ‘Kim Stanley Robinson’ (Clark, 2015)

to explain the ambivalence of the contemporary situation in which nature is idealized, lamented, present, or lost. Practically, ecocritical studies privilege content of narratives over form. Now, many scholars interested in the intersections of literature and environment are “turning their attention to the very structures by which narratives represent and construct environments for their readers, and are thus increasingly engaging in the concepts and lexicon of narratology, or narrative theory” (James & Morel, 2018, p. 355). In relation to other green methodology disciplines, ecocriticism draws environmental history, gender and postcolonial studies, phenomenology, cultural geography, materialist historiography, and performance studies (May, 2007; Estok, 2005). When applied to theatre, ecocriticism examines how bodies bear the markings of environmental policy, raises questions related to cultural convictions about the self, the other, and identity. Particularly, it focuses on the impact of man’s activities on the material/ecological world in which “humans as organisms are, even in our most abstract and rationalist moments, utterly embedded” (May, 2007, p. 101). In relation to Green theatre, Chaudhuri (2005) maps several compelling ecocritical directions for theatre studies. She suggests an application of cultural geography to show “the mutually constructive relations between people and place” (Chaudhuri, 1997, p. xii). The aim behind this suggestion, mentions Fuchs and Chaudhuri (2002), is to explore the role of landscape in meaning-making, with an emphasis on how “entire dramatic worlds and aesthetic forms can emerge from the landmarks, afflictions, and patterns of particular landscape” (p. 4).

Visual Grammar

Semiotics, cofounded by U.S. philosopher Charles Sanders Peirce and Swiss linguist Ferdinand de Saussure, is a field of study that explains signs, objects, pictures, sounds, and motions in all their forms (EL-Nawawy, & Hamas Elmasry, 2016) to interpret meanings and to assess the representation of reality in signs (Chandler, 2007; Teo, 2004). In relation to GPT, the aim is to examine how images represent themes and scenes of the show. Identified images correspond to stages where participating actors unfold multiple realities about the issues of deforestation, pollution, killing of species, and UUF. An essential role of semiotics in relation to the pantomime is to put emphasis on visual structures and meanings. Within Kress and van Leeuwen’s (2006) dimensions of interpreting meaning (representational, interactive, and compositional), visual grammar is adopted to explain identified images. Additionally, ‘*contact*’, ‘*distance*’, and ‘*point of view*’ (Kress & van Leeuwen, 2006) are supplemented to examine the extent to which silence and gestures provide specific information about the environmental themes. It is developed in Jewitt and Oyama (2014) that ‘*contact*’ (demand/offer sign) refers to situations where the participants use symbolic expressions and/or gestures to demand something from the viewer, and offer images, where participants are displayed in a detached and disengaging manner, as if they are just offering information. As for ‘*distance*’, Jewitt and Oyama say that it is a level of study that examines the intimacy implications of close-up shots, medium shots, and long shots of participants. Finally, Jewitt and Omayama mention that ‘*point of view*’, a level of analysis that Kress and van Leeuwen (2006) uses to analyse visuals, refers to frontal angles (attachment to the viewer) and high/vertical angles (power over the viewer). Eventually, Kress and van Leeuwen’s visual grammar is of great importance for this study in that it can help us to interpret how exhibited silence and gestures lay bare the responsibility of the Anthropocene in the degradation of nature.

METHODOLOGY

The third millennium is the century of rapid climate changes. In many parts of the world, states and governments are no longer ignoring the fact that environmental crises are unpredictable and have extreme impacts in many aspects of life. Many measures have been applied to raise

environmental awareness towards challenges of pollution, climate change, and biodiversity loss. The threat of drastic modification of life on earth has become a preoccupation and reaches a stage of no return. Today, ecological and environmental associations are occupying the front of the media and literary creation scenes to speak out eminent fear for the future of the planet. More than ever, young people are mobilized to denounce political inertia and ask governments to take tangible actions to stop environmental degradation. Green Theatre reflects also this concern. The show under study uses silence, gestures, and music to make children aware of environmental hazards that are strongly threatening nature. For this aim, a cross examination method is adopted to examine the show on the level of the environmental themes and how they were stratified into three phases of transition: ‘order’, ‘disorder’, and ‘reorder’.

Data Description

Relying on a show of 45 minutes, this work examines the role of the GPT to raise children’s environmental awareness. The performance, titled ‘هجرة البيئة: *Environment Migration*,’ is acted by four actors who pertain to a group called ‘*The Joker*’ (figure 1) affiliated to the non-governmental association *Creativity Association for the Development of Educational Work* (جمعية إبداعات لتنمية العمل التربوي).



Figure 1. The Flyer of the show

To treat the data, a multilayered approach includes a ‘visual analysis’ approach (what GPT speaks), a ‘cognitive approach’ (how thoughts are structured into gestures), and a ‘thematic approach’ (how gestures are structured into content). More specifically, this study identifies 18 scenes that were put into three categories: order, disorder, and reorder (table 1).

Table 1. Scenes according to themes and phase transition factors

Scenes	Themes				Phase Transition		
	Deforestation	Pollution	Killing of species	U.U.F	Order	Disorder	Reorder
Opening Scene					-		
De-stress					-		
Natural Flow					-		
Admiration					-		
Pollution		-				-	
deforestation	-					-	
Killing/Species			-			-	
UUF				-		-	
Celebration	-	-	-	-		-	
Degradation	-	-	-	-		-	
Resistance						-	
Dual Fight							-
Confrontation							-
Defeat							-
Change							-
Recovering							-
Denouement							-
Last Dance							-

Located in the city of Chefchaouen, north of Morocco, the group was established in 2010 and has performed many and environmental activities across the country (figure 2). On the occasion of the town's '*International Festival of Environmental Films*', 1950 children have been initiated to consequences of environmental hazards. Additionally, the group had been to Figuig,

east of country, to participate in the town's '*International Theatre Festival*' where roughly 400 children benefited from environmental degradation themes. Similarly, the group moved to the city of Marrakesh to animate environmental shows for the benefit of 600 children who attended the '*International Festival of Children Theatre*'.



Figure 2. Activities

The show under investigation contains a succession of scenes ordered according to man's induced environmental impacts. The play is exclusively acted through mimics, gestures, silence, body language, and music to exhibit man's exploitation and degradation of the natural resources. The story of the play has a beginning, an unfolding and an end. Technically, the performance follows a particular diagram to help the audience understand the plot (main action, problem to be solved), the ordering of scenes, and the twist (an unexpected change in the action). The GPT is an association of inseparable images and ideas that say more than words can do. To decode the theme of the show, the scenes were dissected according to environmental themes and stratified in relation to phases of transition of 'order', 'disorder', and 'reorder'.

RESULT AND DISCUSSION

The current environment extinction is a man-made crisis that has taken place few decades ago. The degradation of natural resources (animals, water, air, and soil) is today reported in artistic and literary production including theatre. Remarkably, theatre groups are engaged in raising environmental awareness despite the difficulty they encounter in portraying issues of pollution, deforestation, animal loss, and UUF. To communicate these themes, the GPT relies on actors' professionalism in using accurate gestures and body language to simplify environmental issues for children, to provide answers that fit their understanding, and to augment their awareness towards the protection of the environment. Surely, provocative gestures and images, when applied to the terrible reality of natural disasters, can make children aware of environmental issues without distressing them.

Images and gestures not only explain the role of pantomime in sensitizing teenagers to the role of the environment but they also help to examine how provoking issues of environment degradation are simplified to children. From the start, the show begins with a scene (figure 3) that introduces participating actors dancing to the rhythm of an energetic song. All the actors are on stage including the protagonists (1.2.3), the antagonist (4), a male actor who represents the Anthropocene, and the elements of nature (trees and roses).

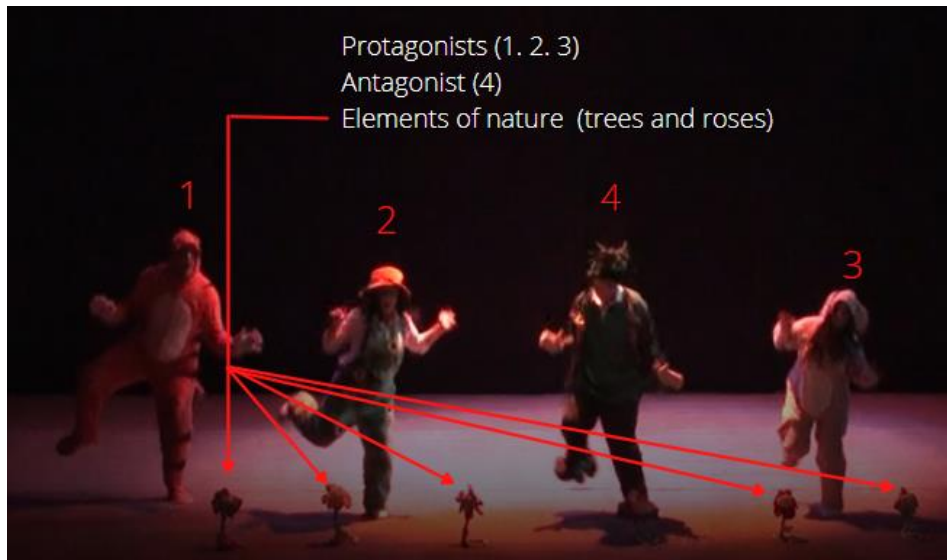


Figure 3. Opening Scene

Order

The opening scene begins shows the pro-environment actress playing innocently a ribbon dance (figure 4). The action reflects de-stress performance accompanied by an Arab song the lyrics of which says that the many bounteous gifts (air, water, and soil) that earth bestows on humanity are threatened by ferocious creatures. Being part of the actor's quick appearance, the song launches a message of de-stress for humans to come together to save earth before it is too late. The singer let say that nature is as vulnerable as we might think under man's undeniable and profound attacks towards animals and plants. The performance illustrates the strength and serenity of the natural environment. The actress is strongly linked to the setting (trees and roses) that will be suddenly distorted by the antagonist, referred to in this analysis as the Anthropocene. De-stress scene is preparatory in that it prepares the audience for a devastating event that will come soon on stage.



Figure 4. De-stress

One happy and peaceful moment encountered in the play is the scene that shows the butterfly playing violin (figure 5). The symphony she plays while swaying around the stage reflects the normal flow of life and the spontaneity that creatures embrace in their natural habitats before the Anthropocene intervenes. The butterfly is personified by a teen girl to evoke innocence peace and at the same time symbolizes the fragility of the ecosystem. She moves with great nobility, just as if she had a perfect fluidity of her whole being. She seems to be walking from flower to flower, enjoying the sun, in the most carefree way. Usually, a butterfly stands for change, evolution, transformation, and rebirth. In our collective unconscious, as in many cultures, the butterfly is above all a sign of luminosity, flexibility, playfulness, and joy. In relation to the GPT, this scene heralds that a different situation will take place. It predicts a bad situation ahead and signals that change in the unfolding of the play will take place in the near future. The scene is a turning point in the GPT that transforms the natural flow of the show and orients actions from order to disorder.



Figure 5. Natural Flow of Life

Other instance of order in the GPT is the scene through which pro-environment actors admire the sea (figure 6). Implicitly, the scene reminds the audience that seas and oceans are important to man's existence since they cover roughly two thirds of the planet and represents 97% of the water of its surface. Undoubtedly, life depends on seas and oceans because they are incredible economic resource for even those who are far from their coasts. There are other things that explain man's attachment to these locations. As depicted in figure six, there is a profound attachment and enthusiasm that humans improve towards oceans. Certainly humans admire the sea for its air, its waves' sound, and its calmness. One more reason to contemplate this location is that it is an effective remedy to escape stress. This surprising interminable mass of water, that is constantly changing, reveals calm and transparent situations every day, every hour, or even every minute.



Figure 6. Admiration

Disorder

Usually the word ‘environment’ reflects harmony between elements of nature. The term includes a set of elements like forests, mountains, animals, and plants that are linked to each other by complex relationships. And we, the humans, are one of those elements. For humans, the environment is home that provides resources without which humans could not live. Of great importance to life are forests, oceans, air, water, soil, plants, and microorganisms that purify air and clean water. For several decades, the quality of these environment elements have deteriorated and their ability to provide us with valuable benefits has been reduced. Human activities are surely at the origin of this disorder. In this GPT, disorder scenes portray some of these degradations. For example, the Anthropocene, a man in shabby dress, sways and throws a poisonous powder that pollutes the environment and forces the pro-environment actress to leave the stage.

Pollution, depicted in this scene by the diffusion of a white powder (figure 7), reflects man’s responsibility in making of the planet an unhealthy, a dangerous, and a risky place to live. In fact, the propelled substance stands for chemical, biological, or physical substance that can dramatically change or disrupt the functioning of the ecosystem. The fact of bringing this powder on stage is to tell the audience that these substances are found in places where they should not be.



Figure 7. Pollution

In addition to pollution, man-made ‘deforestation’ (figure 8) is another human activity that is responsible for the degradation/destruction of ecosystems. The message behind the scene below is to show that cutting of forests for expanding agricultural areas destroys the ecosystem. Forests are of great vitality to man’s wellbeing in that they contribute to water cycle, soil balance, and regulate the climate. Another reason for deforestation is to extend and expand urban areas. This latter is made on behalf of forests and wildlife habitats. By developing this relationship, man surely modifies his natural environment and destroys his own living environment.



Figure 8. Deforestation

Drought, habitat loss, deforestation, fires, and poaching are what favor the extinction of animal species. In the ‘killing of species’ scene (figure 9), the butterfly symbolizes endangered species. It is estimated that more than 15,000 animal species are threatened to totally disappear from earth. Many recent studies have revealed flagrant decline in insects over the past few decades

including butterflies (Forister *et al.*, 2021). Among these species 25 subspecies of blue butterfly, which range from British Columbia to southern Baja California in western North America, are threatened with extinction or have already disappeared (Langley, 2021). Symbolically, image 9 illustrates the kind of behavior that the Anthropocene has towards biodiversity: the destruction of nature deserves much attention in the pantomime to avoid devastating impacts. Indeed, this scene shows that human beings are the cause of many worries for the planet. As depicted in the figure below, species are irreparably lost after being caught and killed.



Figure 9. Killing of Species

In many parts of the world, especially in developing countries much of the food people consume comes from oceans. The problem is that today there is an over-consumption of certain species of fish and marine species; an action that has seriously impacted the balance of the marine ecosystem. Fish are endangered because they are not given enough time to regenerate. The objective here is to draw attention to man's unreported and unregulated fishing (UUF) which caused oceans to roughly lose two-thirds of fish stock. The theme of UUF, one of the greatest threats to marine ecosystems, concerns aspects and practices of capture, and can sometimes be associated with organized crime. Fishery resources that could be exploited by authorized fishermen (see the man in white t-shirt in figure10) are threatened by UUF fishing practices, which can lead to the collapse of local fisheries, and weakens small-scale artisanal fishing. UUF, therefore, threatens livelihoods, exacerbates poverty, and increases food insecurity. In addition to the destruction of marine life and the overexploitation of fish stocks, this imbalance leads to jobs loss and the decrease of financial resources in developing countries.



Figure 10. Unreported and Unregulated Fishing

The fight against unreported and unregulated fishing is a priority for pro-environment actors. In figure 11, pro-environment actors are performing a fight against the Anthropocene who stands for exploiters. The action taken by pro-environment actors symbolizes the international fight that NGOs hold against UUF. The scene recalls drastic commitment of us all to strengthen controls on fishing vessels and control measures to stop UUF. Though it seems unparalleled and unbalanced fight, the pro-environment actors show determinism and perseverance to chase away looters and illegal fishers. The scene explains that the measures put forward by defenders are often severely encountered. In many areas across the world some defenders are threatened, imprisoned, and even killed. Symbolically, the scene is cleverly performed to raise awareness among children and encourages them to think locally and act globally.

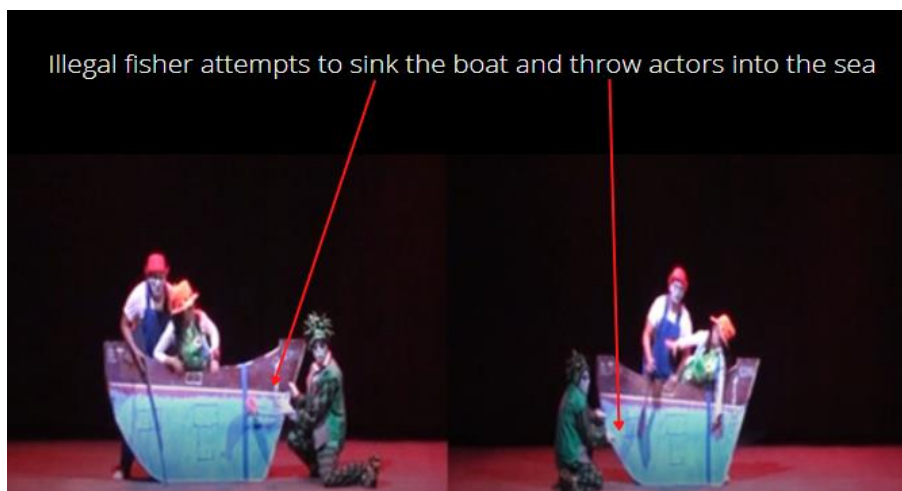


Figure 11. Resistance to change

The human-nature relationship is governed by many needs. The need for survival makes humans look at nature as a source of satisfaction (drinking, eating, and sleeping). Also, the need for security pushes people to consider the planet as an accumulation of food reserves. Consumption is a need that should be satisfied at the expense of the environmental. Additionally, selfishness is one motive that draws humans to destroy nature. They reluctantly cannot give up their personal comfort, even if it causes the loss of the planet. Furthermore, other non-tangible needs are felt in man and nature relationship. For so long, this relationship has been built on confrontation. Usually, humans have shown their desire to exert power over

nature, to domesticate savagery, and to take advantage of forests and seas. In the pantomime many practices towards nature are reported in disorder scenes. What is noticed at the end is a symbolic disorder scene in which the Anthropocene celebrates his achievements (figure 12). The ‘celebration’ scene reflects the antagonist’s self-fulfillment and instigates the audience to rethink man’s relationship with nature. Implicitly, this scene makes the audience grasp the reality behind man’s unchained powers and lack of integrity towards the elements of nature.



Figure 12. Celebration

Indeed, the inventory of destroyed elements (figure 11) shows a grim environment. Absolutely, marks of chaos on stage (figure 13) symbolizes that the cause-and-effect relationship between man and nature is marked by degradation and chaos. The increase of human practices and their dizzying evolution towards nature are denounced, sometimes are radical opposed, to decelerate ecological degradation. Man’s destructive interventionism must be slowed down in time, and in space. In order to better understand the measures taken by the pro-environmental actors in the play, a succession of scenes explains the dynamics of the propositions.



Figure 13. Degradation

Indeed, the exploitation of natural resources along with climate change and pollution, appeals to urgent engagements of the international community to save the planet. In the ‘*dual fight*’ scene (figure 14), the focus is put on measures adopted by the pro-environment actors to refrain man’s behaviors depicted in themes of ‘pollution’, ‘deforestation’, ‘biodiversity loss’, and ‘UUF’. To limit man’s overexploitation, the pro-environment actress diagnoses the amount of

disasters and then supplied a radical confrontation scene (figure 15) in which she engages in a dual fight against the antagonist.



Figure 14. Dual Fight

The confrontation scene is a reaction to man's interventionism that has negatively impacted the fauna and the flora. The scene symbolizes man's lack of recognition of the value of nature and testifies his failure to provide sufficient governance systems that regulates access and exploitation of nature. For instance, man's overexploitation (figure 14) is a real menace to the elements of nature (butterfly, trees, and fish). Flagrantly, scattered elements of nature on stage (trees, species, plants, and fish) show that the Anthropocene's impacts on nature are tremendous. In front of this situation, the projected confrontation is an attempt to reestablish order on stage, a place that stands for the natural setting. The scene's visual argumentation is supported by high tone music and shivering of the butterfly actress who fears that this unequal confrontation might turn in favor of the Anthropocene. Identified as a '*Confrontation*' scene, this action is another turning point in the performance. The pro-environment actress plays her ribbon dance to symbolically prepare the audience for hope and order to come. The antagonist was not passive; but he faces the fight with a poisonous powder to stop the maneuvers of the actress. It should be mentioned that the fight is supported by a strong and strident music of many recurrent whiling and screams.



Figure 15. Confrontation

Of great importance to the GPT is the ‘*Defeat*’ scene (figure 16). Though it is short, the ‘*Defeat*’ scene shows the Anthropocene’s powers fainting, his movement slowing down, and his forces abandoning him. The man’s inability to provide enough powder symbolizes man’s failure to dominate nature.

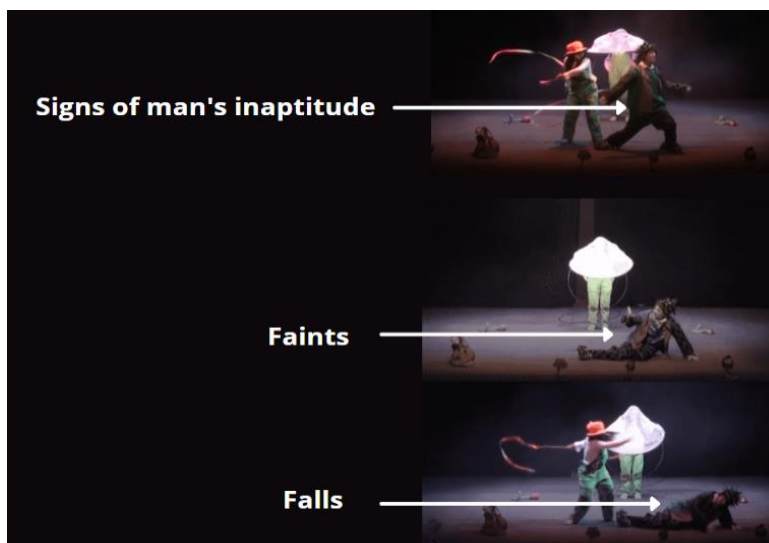


Figure 16. Defeat

How to change our behavior? This question is dealt with in the ‘*Defeat*’ scene. The ferocious ribbon fight illustrates means and methods provided by pro-environment actress to stop the antagonist’s uncontrolled behavior. The scene is a way of thinking and contesting; an opportunity offered by the show to symbolize the mobilization orchestrated by protectors of nature and the extent to which environmental activism defies the borders and the multitude of front line battles against destroyers. In this context, the first image in figure 17 shows the elements of nature freed and emancipated from man’s hegemony. It is a moment of resilience depicted in the actress action who frees the butterfly from the sweep nets. Interestingly, this scene can build teens’ environmental awareness and construct their reactions to the protection of the environment. Under the effect of the ribbon spell, the antagonist’s status (headache) demonstrates that the doze of change injected into his head is confronted with resistance.

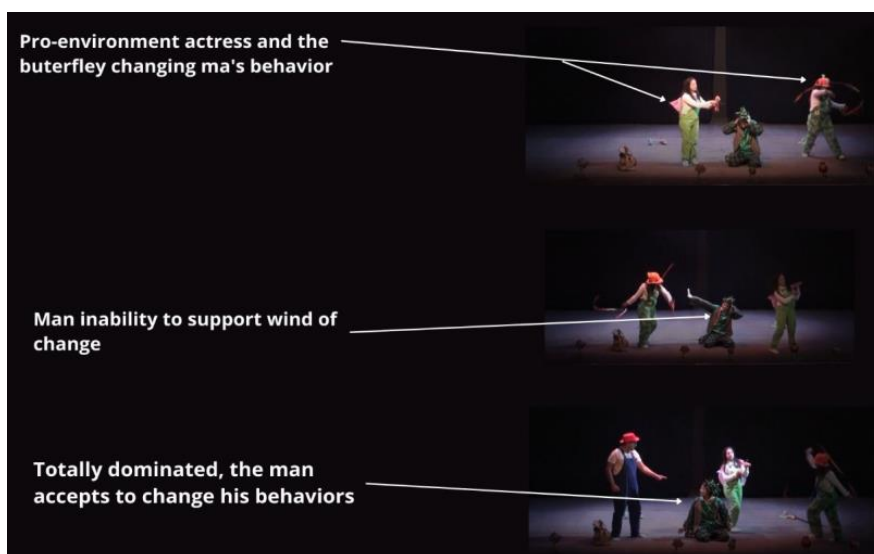


Figure 17. Change

Reorder

Each play has an ending or denouement. In the GPT under study, the denouement is symbolized by the 'Recovering' scene (figure 18) where the antagonist was subject to change (undressing). The 'Recovering' scene heralds change in the Anthropocene relationship with the environment. Additionally, the scene is symbolic in that it reflects the protagonist's endurance and perseverance in rehabilitating and bringing back the antagonist to his normal and natural status as an element of the ecosystem. It should be recognized that the denouement is cleverly selected and played. At a time when the antagonist was weak, the protagonists could have killed him to restore justice as a tribute to the suffering he has procured to nature. However, the protagonist preferred to resolve the crisis by 'Recovering' the drifted antagonist. It is a highly elaborated message which recognizes that order and respect of the environment are the basis of everything especially when it comes to the relationship between man and nature. The 'Recovering' scene highlights that adrift people can have difficulties but wise men have concerns.

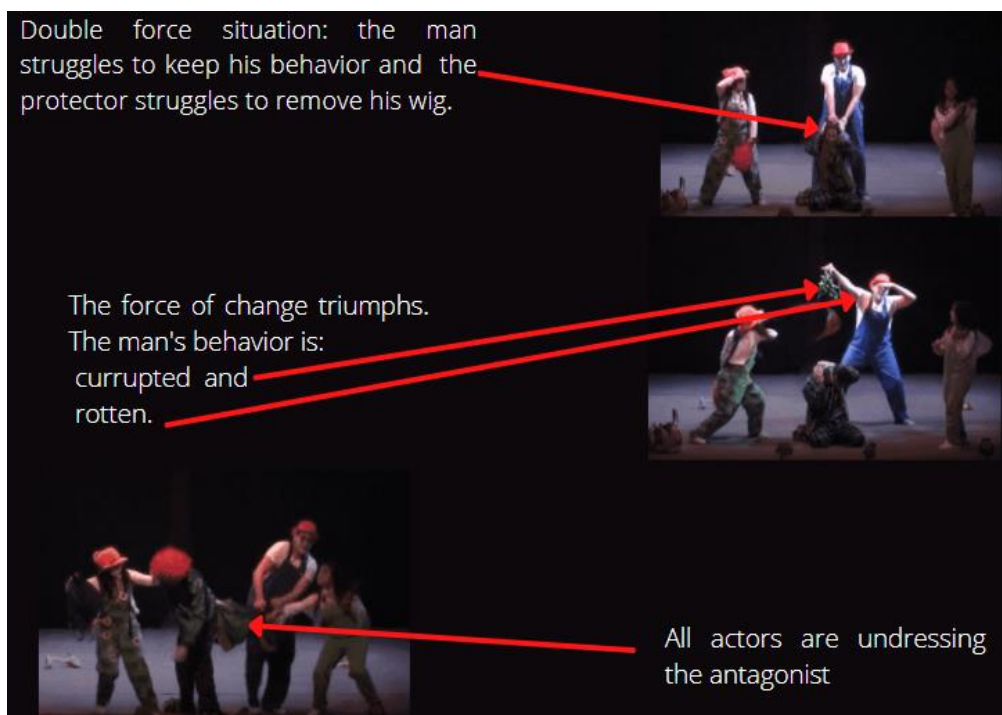


Figure 18. Recovering

It is important to think of methods when we do not have measures. This requires, above all, awareness, illuminated minds, and positive attitude to influence others. Indeed, the 'Denouement' scene (figure 19) shows that audacious people and positive attitudes can influence and change man's relationship with nature. Positive thinking, as depicted in the 'Denouement' scene, is what makes of this pantomime an efficient and successful show to render happiness onstage and to communicate that it is never late to save earth.



Figure 19. Denouement

To end the show, the GPT brings all actors back onstage in a collective dance, including the antagonist who is transformed into a clown. Intelligently, the ‘*Last Dance*’ scene (figure 20) illustrates that order is brought to the stage (nature). In other words, the scene is a culminating point where man has been reintegrated to the group of protectors. The pantomime ends with the elements of nature getting back the original shape. This is what is called environmental resilience, a concept used to describe the capacity of certain ecosystems to regenerate again after being subject to severe disorder and disturbance.



Figure 20. Last Dance

CONCLUSION

Through the lenses of semiotics and ecocriticism, this study examined the implications of GPT in fostering children’s environmental awareness. Ecocriticism helped to explain the role of artistic and literary creativity in bringing to the front the ma-environment relationship as it is expressed by the pantomime while visual semiotics was used to account for the sign and gesture system. The show titled “*Migration of the Environment*” is a Moroccan GPT which aims to

raise children awareness towards man's exploitation of nature. To analyse this show, a cross analysis served to examine environmental themes (pollution, deforestation, killing of species, and UUF) in relation to phases of transition (order, disorder, and reorder). As a result, the pantomime unfolds that the impacts are considerable and the measures to repair man's destruction need the engagement of all. To explain environmental sophisticated issues, the GPT uses efficient scenes that articulate instances of degradation, recovery of the antagonist, and the rehabilitation of life. Perfectly performed, some symbols, images, objects, and gestures contain layered meanings that offer important insights into the way man interventionism has affected nature on many levels.

The green pantomime is significant in that it addresses many environmental issues from theatrical perspectives whereby the instances of degradation, struggle, and restoration were perfectly mirrored. Drawing on growing concerns about green pantomime theater, we suggest that more studies are needed to improve the role of GPTs to raise children environmental awareness about the way humans have been impacting the environment. Also, this work suggests that more Green Theatre productions, be it classical or pantomime, are needed to talk about other issues (effect of overpopulation, consumerism, burning fossil fuels, and deforestation) that are triggering waves of climate change, soil erosion, poor air quality, and undrinkable water.

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