# Environmental Pollution and Its Design Presentation in Advertising (Plastic Pollution as a Model)

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**Abstract**

*The relentless pursuit of technological and industrial advancement, coupled with population growth, has erected obstacles that have exacerbated the problem of environmental pollution. Environmental pollution has caused significant losses to living organisms and health systems worldwide. However, there is a realistic hope that many of us will see an improvement in the situation in the coming years. This study explores ways to present environmental advertising as a source of information that can influence individual and societal decisions, and the change it brings about in the thoughts and behaviors of individuals and societies. It also identifies appropriate strategies for designing environmental advertising by highlighting the collection and amplification of the design elements to show the problem of environmental pollution on a wide scale. The first chapter addresses the research problem and is summarized by the question: What is environmental pollution and how can it be presented in advertising design? The importance of the study is as follows: Theoretical importance: The possibility of benefiting from this study in environmental studies, and the benefit of learning about the scientific results produced by this study. The research objective is to identify ways to present the problem of plastic pollution in environmental advertising designs. The second chapter presents previous studies and the theoretical framework, which includes two sections: the first deals with (environmental pollution), and the second deals with (environmental advertising). After completing the theoretical framework, the indicators that were used in the axis analysis questionnaire were extracted. The third chapter is dedicated to the research procedures. And among the results that the researcher reached: Finding the motivation for change through image, text, and color. One of the most important conclusions of the study is that: Environmental advertising is an effective tool in spreading environmental awareness, by providing information, statistics, and urging individual and social responsibility towards the various environmental problems. The communication of environmental advertising is based on strategies for conveying information to the public, largely through images, especially in linguistically and culturally heterogeneous societies.*

**Keywords:** *Plastic pollution, Environmental pollution, Advertising, Design.*

## INTRODUCTION

### First: The Research Problem

The problem of plastic pollution is one of the most important environmental problems, as the deterioration of the marine and river ecosystem in particular has disrupted the balance of this environment and its organisms, which have been depleted in quantity and quality. The rapid increase in the production of single-use plastic products has exceeded the world's ability to deal with them. This problem is prevalent in areas where waste collection systems are often inefficient or have low recycling rates, as well as areas where environmental awareness is almost non-existent. After plastic pollution has become limitless and affects all environments and poses an obstacle to development, especially for developing countries.

The environment needs the efforts of the graphic designer to spread environmental awareness. If advertising has a great deal of power and influence on the public, why not use advertising for awareness-raising? The importance of graphic design comes in stimulating this audience and spreading awareness among its categories. Design makes science easier to understand. By using design, visual communication makes it easier and more widespread to reach environmental problems.

The research problem is summarized by the following question:

What are the problems of environmental pollution and how can they be presented?

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### Second: The Importance of Research

The importance of the research lies in the following:

Theoretical importance: Benefiting from this study in environmental studies, and learning about the scientific results produced by this research and the sources specialized in the subject of the environment.

### Third: Research Objective

The study aims to:

Identify ways to present the problem of plastic pollution in environmental advertising designs.

### Fourth: Research Limits

Subject limits: Environmental pollution and its design presentation in advertising (plastic pollution as a model)

Spatial limits: A campaign entitled "Our Blue Planet" launched by the United Nations, the 35 Multi-Cultural Students Advertising College and University, and financial prizes awarded to the winning posters for the year 2022.

Time limits: The year 2022, which represented the period of the competition that included posters directly related to the topic of pollution.

### Sixth: Definition of Terms

The research presents the following definitions:

**Environmental Pollution**: According to the International Law on Pollution issued by the United Nations in 1947, "it is human activities that necessarily lead to the increase or addition of new materials or energy to the environment, where this energy or materials work to endanger human life, health, livelihood or well-being or natural resources, whether directly or indirectly." (Rushwan, 2006, p. 24).

**Procedurally**: It is any intentional or unintentional act performed by a human being that results in harm to the environment and has a negative and dangerous impact on its resources and wealth.

### Section One

### First: The Concept of Environmental Pollution

Since the beginning of human life on Earth, humans have exploited everything around them to ensure their survival. Humans have been able to live in the environment, benefiting from its various elements in a way that meets their needs. Their continuous pursuit of development has led to a disruption of the biological and non-biological balance in the ecosystem, culminating in other stages that posed a threat to the environment, reaching its peak at the end of the twentieth century. (Al-Bana, 2011, p. 11), as technological and industrial progress, and population growth, have created obstacles that have worsened the environmental situation and caused an imbalance in many environments such as cities, beaches, and the atmosphere. If we want to include pollution in its various types, such as air, water, soil, and other visual and auditory pollutants in a general concept of pollution, we will find what is close to it according to the International Law on Pollution issued by the United Nations in 1974, which stated: "Human activities that necessarily lead to the increase or addition of new materials or energy to the environment, where this energy or materials work to endanger human life, health, livelihood, well-being, or natural resources, whether directly or indirectly." (Al-Atyyat, 2007, p. 55). This indicates the factors of pressure on the environment by adding new materials and energy to the environment, which in turn cause harm in the near and long term.

## Second: Plastic Pollution, Its Causes, and Its Impact on the Environment



Plastic waste is one of the problems that occupy countries at the present time, due to its negative consequences on the environment and all living organisms, resulting from the accumulation of a group of plastics in the environment that have a negative and dangerous impact on wildlife, marine life, and human health as well. The problem of plastic pollution lies in its slow decomposition, which is what we find directly in many living organisms, especially marine organisms, which get caught in these plastics or swallow them, as well as the hormonal disturbances caused by plastic in humans.

With unknown consequences, public awareness of plastic pollution lies primarily in the image presented by the media and the parties and organizations concerned with the problem. Often, these images show giant whales, or turtles entangled in plastic fishing nets, or washed ashore dead by the waves. These dramatic and effective images to draw attention to this problem are not enough, this is only part of the story, as in Figure (1) which shows a seal trapped in a plastic fishing net.

To understand the bigger picture of plastic pollution, water bodies are the final sink for a large proportion of land-derived plastic materials. The concern over the problem of plastic pollution has led to efforts to spread environmental awareness, as it is a societal problem, through the development and dissemination of awareness and ways to direct the activities of people in general, or a specific segment, "to arouse interest and a sense of responsibility, and then to bring about a change in the attitudes, behaviors, and views of individuals towards the environment and its resources, and to involve them in proposing appropriate solutions to environmental problems." (Al-Omari, 2020, p. 32). It is worth noting that some countries have paid early attention to the importance of spreading environmental awareness and have encouraged environmentally friendly consumption patterns. This has been done through the adoption of a "green marketing" approach through various electronic advertising campaigns by civil society institutions and economic business organizations. (Gharib, 2023, p. 8). The researcher believes that societies have become more exposed to social media, so awareness-raising efforts through advertising campaigns that can be directed to a wider audience work to enhance and increase their environmental awareness in a way that ensures a future in which a culture of preserving the environment and reducing pollution spreads.

## Section Two

**First:** The Structure of Environmental Advertising Design

## Environmental Advertising

Environmental advertising is rooted in human societies, and its methods, treatments, and techniques have diversified to serve the idea and purpose of its use for a specific purpose. Advertising has not been limited to promoting a product, service, or idea, but has become an "effective" factor in driving various aspects of human activity. Environmental advertising has also become a part of daily life, from participating in public service activities to shopping and service preferences. It (is an educational and cultural tool that helps the recipient adopt a particular viewpoint or behavior. Since the matter of changing ideas, desires, and behaviors is a difficult matter in itself, but it can often do this if it is well-designed and employed, because behavior is subject to a number of influential factors, including cultural, social, economic, and other factors. Environmental advertising can provide a general environment of support for the recipient that confirms the correctness of their decision to accept the idea or new direction). (Al-Abdeli, 1998, p. 24). On the other hand, the effectiveness of environmental advertising is measured in terms of its ability to solve problems, communicate, and innovate within the limits of the communication, design, and method of influence of the advertising solution on the audience in their demand for them to take action, and perhaps also the way it enters the environmental culture.

It is also a specific message for persuasion, promotion, provocation, or to stimulate the audience for an idea or direction, according to the American Advertising Council, [1] then "the goal of advertisements is to educate and raise awareness of important social issues, in an attempt to change the attitudes and behaviors of the audience and promote positive social change." (Landa, 2021, p. 23). That is, the design of environmental advertising is a good way of addressing in the visual image industry, as it helps in conveying the goals to be achieved.

## The Structure of Environmental Advertising



The design structure within which a set of elements are formed that are related to relationships organized by different mechanisms, and appear in various techniques and methods, as it is a formal translation of ideas that the designer wants to work on, in order to achieve a clear and clear goal, for the purposes of presenting the environmental problem, spreading community awareness, and providing new patterns at the level of advertising design in different and unconventional methods and techniques. It also seeks, through its designs, to propose a suitable environment suitable for future generations. There are several ways to create environmental advertising. Some designers think within the limits of words, while others think of pictures, and at the same time there are designers who alternate thinking in the two ways. In the end, as long as the phrase and the picture both work together to show the idea, that is what matters to us, (because in any advertisement, the picture and the words work to create a complete message that its effect as a whole exceeds the effect of its individual elements. Most designers agree that when the picture has the upper hand, the words should play a supporting role. If the picture and the words compete for the attention of the recipient, this may cause confusion or have an excessive effect, "Drawings and pictures, in addition to the title, constitute what the Americans call (an eye trap), the picture, as specialists in the field of advertising say, is equivalent to 1000 words." (Al-Sayfi, 2019, p. 48).

## Graphic Elements

Images, drawings, and layouts



The formal and color variations of the image are one of the visual nutrients, in addition to what it carries of content, (the picture) is a general term that includes many types of representational, abstract, or non-objective drawings: such as photographs as in Figure (2) and diagrams, as in Figure (3), and prints and illustrations as in Figure (4), and graphic elements and primary images such as banners, or pictorial drawings, or symbols; And pictures are called "visuals". The image conveys a number of diverse emotions, from happiness, sadness, anger, and others. This excitement that the image presents works to attract the recipient towards the event, and to attract his attention, which is what creates a visual discourse far from the routine with the rest of the

advertisement components, as the form is a visual symbol that plays a role identical to what it represents from characteristics "It adds expressive connotations that reflect a connection that creates interaction with the recipient" (Abu Huntish, 2000, p. 12).

## Image Function

The image has important functions in building the advertisement, whatever its type, as it is a global communication language, and these functions are: (Al-Aalam, 2014, p. 20).

Attracting the audience to the advertisement.

Expressing ideas quickly.

Adding honesty and realism to the advertisement, due to the element of suspense for the recipient, and pushing him to know what is related to it, since the image is sometimes like a magnet that attracts the recipient to know what is behind it.

It prepares the ideal atmosphere for reading the advertisement and contributes greatly to remembering it.

The image explains the advertising text and clarifies what it contains in an understandable illustrated way.

## Typographic Elements

## Headings and Written Texts

The main verbal message is called the main title; This is because in the early days of advertising, the title occupied the top of the page, according to the design idea and its purpose. The title is also one of the elements of the formal structure in environmental advertising, as it accepts diversity and treatment.

## Title Function

Draw attention to the advertisement, and this is done by choosing appropriate words and signals that cause that attraction.

Arouse the reader's interest, so that the title is chosen accurately in its words, based on a study of the expected impact of it.

Win over the expected audience to read the advertising text, in a way that is easy and quick to understand, and that it is able to make a certain impression, or give a certain image, which makes it more effective. (Al-Aalam, 2014, p. 194).

## Color

Color is important in influencing emotions. It is the designer's tool for defining form in space, and in addition to its psychological effects, color forms a visual message that the designer uses to convey the idea to the recipient. Colors have interconnected visual relationships, have psychological effects and meanings, and approximate meanings, as well as cultural and social connotations. Since colors carry aesthetic and expressive energy, they have made them one of the necessary building blocks in advertising in general and environmental advertising more specifically (Jum'ah, 2006, p. 13). Color treatments require the designer to be familiar not only with the process of harmony, but also with how colors relate to the content of the discourse and the message to be conveyed. The result of this relationship is all the aesthetics of color and its expressive capabilities. (Color value can be used to achieve dominance, unity, balance, contrast, or kinetic illusion and spatial depth illusion. Colors are also linked to other elements in the composition of the visual form. We cannot perceive the form except in the form of color, as it adds an apparent property to the form, arouses our senses, and the importance of color lies in two goals: the symbolic and the emotional or affective) (Mansour, 1980, p. 5).

Ways of displaying environmental advertising:

Among the most prominent advertising media are: (Khujah, 2005, pp. 51-52)

Lighted signs.

Images and billboards.

Wall posters, exhibitions, propaganda billboards, product display areas.

Newspapers and magazines, printed materials, advertising booklets, catalogs and brochures.

Promotional gifts, competitions, cinema, radio and television.

From the foregoing, the researcher believes that one of the ways to preserve the environment and reduce its problems is to mobilize individuals and groups and create a level of environmental awareness.

As the environmental advertising contributes to presenting the problem and presenting the solutions proposed by organizations, institutions and governments, and showing them in a way that directs focus and attention at the individual and international levels, in addition to the pressure factor that environmental advertising campaigns exert on companies and governments to follow environmental methods and plans that contribute to putting treatments and solutions to environmental problems.

Indicators of the theoretical framework:

Advertising is an effective tool in spreading awareness of the pollution problem and helps to adopt a certain viewpoint or behavior by attracting attention.

Environmental advertising works to motivate the public to be part of the solution by creating an incentive for behavioral change.

Environmental advertising relies heavily on images more than texts, especially when communicating with a mixed audience.

## Chapter Three

Research procedures and sample analysis

## FIRST: RESEARCH METHODOLOGY

The researcher adopted the descriptive method for the purposes of content analysis.

## Second: The Research Community

The current research community includes environmental advertisements, the "Our Blue Planet" campaign launched by the United Nations, the 2022 Multicultural Student Advertisement, on the electronic website www.helmut-langer.eu which the researcher collected in (10) advertisements that represented the winning advertisements, and in accordance with the research topic.

## Third: Research Sample

The research sample was selected in a non-random purposive manner, representing (30%) of the research community, i.e., three models, due to the availability of objective reasons in each advertisement.

Fourth: Sources and methods of collecting information

The researcher relied on the following sources for collecting information:

Arabic and foreign sources and references authored by specialists in the same field, or parallel or complementary specialization.

Scientific research (master's - doctorate).

Local and Arab magazines and periodicals.

Verified information on the 4.international information network (Internet).

## Fifth: Research Tool

The researcher designed a sample analysis form based on the theoretical framework's literature and its indicators to meet the research requirements. The form included the most important axes that the researcher found necessary for analysis according to the topic.

## Sixth: Tool Validity

To ensure the validity of the designed questionnaire, the researcher presented it to a group of experts. The comments and modifications were taken into account, and thus the questionnaire acquired its apparent validity from a research point of view.
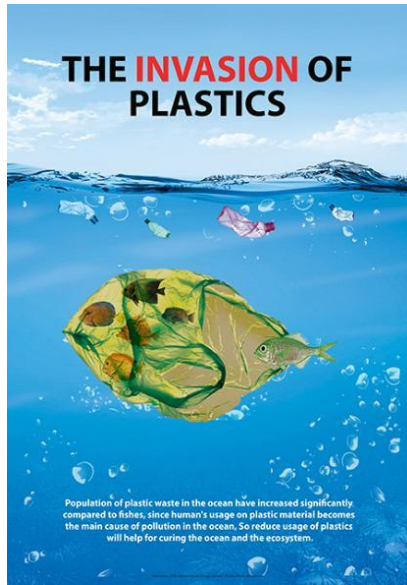


Seventh: Sample Analysis:

Description and Analysis of Models

Model No. (1)

Campaign Name: Blue Planet

Designer Name: Meri Aisala

Country: Finland, University of Lapland

General Description:

The model is titled "The Invasion of Plastic" to raise awareness of the danger of plastic pollution to marine life. It illustrates that plastic waste exceeds the number of fish. The model includes a picture of a plastic bag inflated with a number of fish stuck in it, apparently looking for an exit. It also shows a number of plastic bottles floating near the surface of the water.

## Structure of Environmental Advertisement Design and Presentation Methods

The model shows a realistic space of clear blue sky and a wavy ocean to simulate the atmosphere of the seas. It also includes symbolic images of a number of colored plastic bottles. The (drawn image) occupied 30% of the design space and appeared in a realistic symbolic way, representing a transparent plastic bag swallowing a number of fish. The model mixes realistic and symbolic images to present the idea in an effective way. It also includes a picture of a scene that confirms the existence of pollution caused by throwing plastic waste. The realism and symbolism of the image formed an effective visual actor due to the technical action that the designer used in adding technical effects that enhance its presence and add attractiveness to it.

The designer relied on natural colors for realistic representations to facilitate the process of understanding the presented advertisement.

As for the written text, it included a clear main title in large spaced letters in the middle of the design, (THE INVASION OF PLASTIC) in black, except for the word INVASION in red, to give a warning of the danger of the invasion that sweeps the ocean. It also appears at the bottom of the advertisement an explanation in white in a graded title, which reads: (The amount of plastic waste in the ocean has increased significantly, compared to fish, to become the main cause of pollution in the ocean, so reducing the use of plastic will help in treating the oceans and the ecosystem). The writing was placed parallel to the image, which gave balance to the design, to attract attention and highlight a specific part for the recipient due to its importance.

## Environmental Awareness Applications

Environmental awareness applications were represented by a number of information that the designer emphasized on what plastic pollution in the ocean represents from a negative impact on the ecosystem, and referred to it as an invasion. The design did not stop at giving information about the importance of the problem, but it also clarified textually the way to reduce the problem by reducing the use of plastic, and the design showed this in the idea of the advertisement.

## Model No. (2)

Campaign Name: Blue Planet

Designer Name: Lisa Troger
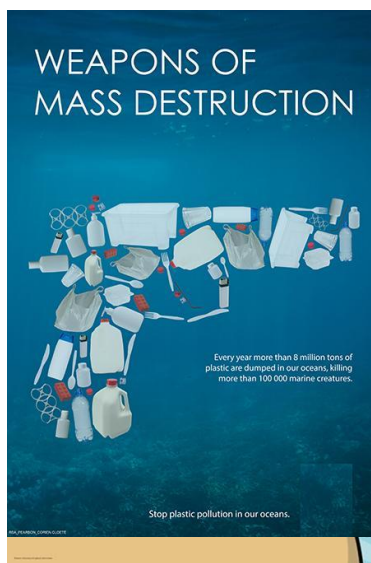


Country: Germany, Mers Akademie

General Description:

A graphic image, simply showing that the problem with plastic pollution is that it is an ongoing process that starts with throwing plastic waste and returns to individuals in one way or another. One of these forms is its return by fish eating it, and then by the individual eating the fish, he has eaten plastic indirectly again.

Structure of Environmental Advertisement Design and Presentation Methods:

The first organizational notes that the designer adopted were represented by the formal dominance of the graphic image, which occupied the space of the advertising design space, through three basic overlapping symbolic forms, one complementing the other. The first and largest form, to make the composition look pyramidal, was represented by a boy's face devoid of expression, while the movement of the mouth appears expressively as he eats a fish that has swallowed a plastic bottle. The form evokes a feeling of discomfort, in addition to the ground in the form of repeated waves in a gradual blue color with low values, indicating the ocean or sea. The designer used the art style with computer techniques to enhance the design idea. The image directly explains the expressive idea of the advertisement as soon as it is seen.

The design includes the title YOU ARE WHAT YOU EAT EATS, which means "You are what you eat". The title is direct (explicit), in black, and in separate medium-sized letters parallel to the graphic form, to indicate and interpret the form shown in the design.

## Environmental Awareness Applications

The designer aimed to show the problem directly and abstractly, and to present it to the recipient by giving him information to the effect that the matter does not end with throwing plastic waste from bottles and containers that end up in water bodies, but rather returns to be eaten by the individual by eating the organisms that feed on these plastics. The designer exploited the nature of the information presented to generate motivation and its ability to attract attention by virtue of a behavior that prompts the recipient to interact with the content of the advertisement.

## Model No. (3)

Campaign Name: Blue Planet

Designer Name: Christine Von Arinim

Country: Australia, Swinburne University

### General Description

The design represents a weapon made of plastic waste, showing the threat of plastic pollution, and showing the size of the problem exaggeratedly, considering that plastic pollution represents a weapon of mass destruction, explaining that it (plastic) kills more than 100,000 marine animals every year.

### Structure of Environmental Advertisement Design and Presentation Methods

The symbolic graphic image in white, which occupies the middle of the design, represents a dominant form of a weapon (pistol), which is formed by assembling repeated units of plastic containers of various sizes of the employed masses and adjacent to them in the overall design. The image was placed in the middle of the design to achieve dominance and attraction, on a blue space that appeared to simulate the ocean. The designer also created a diverse rhythm through the movement of shape and color, direction and size, which created coherence and unity in the overall shape. Visual focus led to the perception of visual unity. The designer also relied on absolute simplicity in the design of the advertisement, and symbolism in indicating that plastic is a weapon that threatens all living things.

The design includes a main title WEAPONS OF MASS DESTRUCTION, which means "Weapons of mass destruction". The title is indirect (vague), and the form interprets it. The title in white achieved harmony with the shape, and contrast with the design background, and with a strong expression that suggests strength and threat. The advertisement also includes a secondary title, also in white, that explains the main title (more than 8 million tons of plastic are thrown into our oceans every year, killing more than 100,000 marine animals), This explanation clarifies the general idea of the advertisement and what is meant by the phrase at the bottom of the advertisement (Stop plastic pollution in our oceans).

### Environmental Awareness Applications

The advertisement showed a guiding content, by providing comprehensive information about the amount of plastic that enters the oceans each year, and providing information about the number of living organisms that die as a result of this action. Despite the designer's reliance on the intimidation method to show the problem, he also gave an opportunity to change consumer behavior towards plastic, and the text at the bottom of the design revealed the solution.

### Chapter Four

### FIRST: RESEARCH RESULTS AND DISCUSSION

In order to show the results accurately, the researcher relied on the analysis axes, so that the research does not fall into the problem of generality.

### Structure of Environmental Advertisement Design and Presentation Methods

The realistic image was adopted in visual stimulation to create an innovative relationship that is consistent with the elements of the design structure of the advertising space, in model (1), to express the idea of environmental advertising.

It turned out that the graphic image in models (3,2) was an important axis in conveying the advertising message, to add exaggeration to convey the intellectual message.

In models (1, 2, 3), the main titles were used to convey a message of awareness to the audience.

The designer employed graded subtitles in models (1,3) to explain and strengthen the idea of the advertisement.

### Environmental Awareness Applications in Advertising

The designer went in all sample models to give the recipient information about the possibility of monitoring the environmental pollution problem.

The designer showed in models (1, 3), the opportunity to change environmental behavior by proposing a solution to the problem of plastic pollution.

CThe incentive to adopt positive environmental behavior, through image, text and color, was a method for the designer to increase conviction in the idea of the advertisement, and this appeared in all sample models.

## SECOND: CONCLUSIONS

The researcher concludes the following:

The communication of environmental advertising is based on strategies for conveying information to the public, through the image to a great extent, especially in linguistically and culturally diverse societies.

The image is a basic element in giving an interpretation of the vague title, especially in indirect texts.

The direct realistic image in environmental advertising has a greater impact in conveying the idea of the advertisement, and to attract a wider audience at the present time and in the future.

Environmental advertising design is an effective tool in spreading environmental awareness.

Environmental advertising is one of the tools to pressure governments, companies and individuals to replace negative behavior towards the environment with positive sustainable behavior.

## Third: Recommendations

The researcher recommends the following:

Pay more attention to building systems that rely on realistic images as a basic space for them, due to the role of the realistic image in attracting the recipient towards the goal of environmental advertising.

Attention should be paid to the titles and advertising texts that accompany the visual structure of the advertising design, linguistically and visually, due to their great impact in giving the incentive for change.

Benefit from the digital revolution, in order to remove the advertisement from the stereotypical technical mold, and keep pace with its developments to develop its intellectual and technical skills.

Fourth: Proposals

The researcher proposes a study:

The role of environmental awareness advertisements among primary school students.)

## REFERENCES

Ashraf Fahmi Khoja. 2005. Advertising and Promotion Strategies. Egypt: Dar Al Ma'rifah Al Jam'ia, 2005.

Ayad Shawqi Al-Bana. 2011. The Level of Awareness of the Dangers of Environmental Pollution among Primary School Teachers in the Gaza Strip. Palestine: Master's Thesis, Faculty of Education, Islamic University, 2011.

Tahani Abdul Karim Yousef Al-Omari. 2020. The Role of Graphic Design in Reducing the Negative Impact of Single-Use Plastic Products in Jordan. Amman: Master's Thesis, Faculty of Architecture and Design, Middle East University, 2020.

Hassan Niazi Al-Saifi. 2019. Advertising Campaign Planning. Egypt: Maktabat Al-Mutanabi, 2019.

Hussein Juma'a. 2006. Colors: From Psychology to Decoration. Cairo: Office of Engineering Studies and Consultations, 2006.

Hussein Abdel Hamid Ahmed Rushwan. 2006. Environment and Society (A Study in Environmental Sociology). Alexandria: Al-Maktab Al-Jam'i Al-Hadith, 2006.

Robin Landau. 2021. Advertising and Design: Creating Creative Ideas in the Media. United Kingdom: Hindawi CIC, 2021.

Shrouq Mohamed Mohamed Gharib. 2023. Green E-Marketing and Its Relationship to Environmental Awareness among Adolescents. Egypt: Dar Al-Ta'lim Al-Jam'i, 2023.

Safwat Al-Alam. 2014. Introduction to Advertising. Cairo: Al-Dar Al-Arabiya for Publishing and Distribution, 2014.

Qahtaan Badr Al-Abdeli, Samir Abdul Razzaq Al-Abdeli. 1998. Promotion and Advertising. Amman: Zahran Publishing, 1998.

Mahmoud Abu Hantash. 2000. Principles of Design. Amman: Dar Al-Baraka for Publishing and Distribution, 2000.