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**" Robo7' s Adventures "**  
**Participation Theater for Children**



**Robo7 and Al-Biruni**  
**Dr. Mohamed Abou El-khir**

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# **Robo7 and Al-Biruni**

## **Characters**

Robo7: An ambitious Robot who wants to improve his capabilities to be  
Super-Robot

Dr. Hind: Head of Research Lab for Electronic Robotics

The scientist: Abu Rayhan Al-Biruni

Robot 1: tall

Robot 2: short

Children's group: 9 years old

A group of Robots

## **Scenes**

Scene 1: Future Robotics Lab

Scene 2: The Audience Hall

Scene 3: Al-Biruni Lab

Scene 4: The City Center

## Preface

**Thinking is the essence of learning. Participation between the performer and the recipient in a child's theater is considered a primary stimulus to thinking. Hence, the play is based on the "Participation Theater" approach, as the play includes in its dramatic construction some scenes that allow a direct relationship of discussion and interaction with the audience of children during the performance. And this requires the director with the actors to explain the topic under discussion in its many details during the exercises, and what they should behave in different situations during the event, this participation contributes to the growth and development of the cognitive and aesthetic aspects of the children, whether the performers or the audience of participants, realizing the principle of the educational scientist Vygotsky "THE ZONE OF PROXIMAL DEVELOPMENT" In the context of this vision, theater is considered an active and influential element in developing the child's personality with new experiences and knowledge that keep pace with the civilized development of the knowledge age, and face future challenges.**

**The directorial vision expands in presenting this play to different styles in the type of vocabulary of the theatrical performance, where the stage can be, from designing scenes, accessories, "accessories" to clothes, lighting, and composing music .... it depends on advanced technological technology, and in another way the show can be presented with a method. The simple theater "where the place is a garden, a playground or a suitable hall ... and the materials that make up the show depend on the creativity of solutions in the use of simple clothes, the use of symbols that give significance to the event and the character, and also the use of live music with musical or recorded instruments that create the psychological atmosphere of the situation, .. But it is important and necessary that the artistic elements in both styles - audible and visual - harmonize and complement each other and fulfill the values of the theatrical performance.**

## Scene 1 Future Robotics Lab

*(The scene takes place in the robotics lab. There are electronic machines, TV screens on the walls, each showing a group of moving images of a group of robots, and on the other screens a group of numbers and charts appear on the other screens, interfering electronic sounds suggesting whistles.*

*You can create a playful, lyrical exhibition board that shows the work that robots do in factories, the sea, space, nuclear laboratories... etc., and shows that robots have capabilities that exceed human capabilities.)*

Robo7: (Asking Dr. Hind) Dr. Hind... Oh... Dr. Hind..... dr. Hind

*(Dr. Hind is busy at work, does not answer, fixes a computer with many wires, and looks at a screen)*

Robo7: Dr. Hind, I would like to talk to you.

*(Dr. Hind walks into the lab without answering. She is absorbed in solving a problem)*

Robo 7: Do you hear me, Doctor?

Dr. Hind: Yes, I hear you, Robo 7.

Robo 7: Why didn't you answer me?

Dr. Hind: Because I'm busy right now, I want to solve a problem and.....

Robo 7: I'm tired of work.

Dr. Hind: (surprised) What are you saying!?

Robo 7: I'm tired, I'm tired and I want to get out of this lab, I feel like I am restricted, no development, I'm bored.

Dr. Hind: You're bored!

Robo 7: Yes, from a lot of work and monotony. I don't want to stay here, I want to live in a new world, I want to go on a journey around the world.

Robot 2: A journey around the world on your own.

Robot 1: Don't be silly, Robo7, be logical.

Robo 7: I am logical.

Dr. Hind: The lab needs you, we should work together, Robo7, to improve research, and...

Robo7: No, I'm too bored, I want to be developed more, and I want to get more psychological responses such as joy, anger, fear, and,....

Dr. Hind: Robo7, I must test your capabilities in a new lab, give me a chance. This isn't the right time.

Robo7: Why?

Dr. Hind: Because the research I do is going to change the world of robotics, it's going to make a new generation. You will be one of this generation.

Robo7: How?

Dr. Hind: I will make you superior to man. Don't make trouble and don't be in a hurry.

Robo7: No, I'm not in a hurry.

Dr. Hind: you should think carefully, because each one of us has a role to play, do you understand? Let's wait and see.

Robo 7: Wait! Ha ha ha, I am out of this lab, I want to do many things, I feel I am talented at singing... my voice is special, don't you?

*(Robo 7 makes operatic sounds. Dr. Hind laugh while Robo jumps on a high table)*

Robo7: Why are you laughing? I will go out of this lab, and go out into the joyful world, away from here.

Dr. Hind: Please, Robo7, come down.

Robo 7: Please, Go away.

Robot 2: Come down, Robo7, you're not in an amusement park.

Robo7: I want to do a lot of things; I want to act in cinema like Batman and Harry Potter.

Dr. Hind: Come down, Robo 7, I'm afraid, you'll fall and get smashed...and....

Robo7: Don't fear, I am so strong.

Robot 1: Get down, Robo7.

Robo 7: No, I will not go down unless you pick up me to the top.

Robot 2: Top?

Robo7: Yes.

Robot 1: Top of the lab?

Robo7: No.

Robot 2: Mountain?

Robo7: No.

Robot 1: Top of the pyramid?

Robo7: No.

Robot 2: Top of the tower?

Robo7: No.

Robot 2: How clever you are! Which top do you mean?

Robo 7: I mean the top of knowledge, I want to understand all books, magazines, and encyclopedias, I want to add something new to humans and knowledge, such as Newton when he added the law of gravity, Edison who

made the electric lamp and, like Einstein, who put the theory of relativity and, like Ahmed Zewail when he discovered the theory of Femtosecond.

Robo7: (Jumping to the stage) Look .

*(There can be a discussion between the actors and the audience about these scientists. Robo7 can also press a key on his chest, a screen moves gradually to present a documentary film about the scientists' achievements. The duration of the film is three minutes)*

Robo7: I want to be a scientist.

Dr. Hind: Relax, Robo7, you are the first robot asking this request.

Robo7: And I won't be the last one. I know my way.

*(Robo7 runs outside the lab)*

Dr. Hind: Come on quickly, look for Robo7 everywhere, and don't let him run away.

Robot 1: We'll do that...

Dr. Hind: Hurry up before he gets out of the lab....

Robot 2: Now...Come on, Robo7...Robo7...Robo7

*(Robot 1 and Robot 2 come out of the lab, while Dr. Hind is worried)*

**(Blackout)**

## Scene 2 The Audience Hall

*(Interlaced electronic sounds are heard as sirens. The lights go out and turn on in a situation of tension, whether on the stage or the audience hall. Robot 1 and Robot 2 enter the theater hall, and they talk to the children's audience)*

Robot 1: Has anyone seen a Robo7? Has anyone seen Robo7?

Robot 2: We are looking for something very important...

Robot 1: We hope for more lighting...more lighting

*(The stage lights are illuminated the hall, and the actors talk to the audience about Robo7's escape)*

Robot 2: I feel we're going to find him...we have to find him...

Robot 1: Yes, we'll find him...We'll find him...

Robot 2: we tried to send many emails to different areas..., but we did not receive any responses.

Robot 1: (Speaking to a child) If you'll... move a little right, I'm looking for him...ah he's not here.

Robot 2: (talking for children) And if you allow me, please move to the left a little bit, oh, I did not find him.

Robot 1: The management of the future lab will announce a very special prize for the one who can find Robo7...He is the best robot in the Future Lab.

Robot 2: What is the prize?

Robot 1: The prize is an advanced laptop that works with Quantum.

Robot 2: So, we must struggle to search for him, to get the valuable prize.

Robot 1: I found him..."He points to a child in the audience".

Robot 2: Not him, my friend...Yes, I found him, he's here...

Robot 1: Not him...not him...

Robot 2: Robo7 has disappeared, and we don't know where he is?

Robot 1: I think I know where we can find him?

Robot 2: Quickly say where is he?

Robot 1: You will find him in his quiet corner with a computer, swimming in the world of Internet.

Robot 2: This global network has caused us a lot of problems and...

Robot 1: Who did invent this network?

Robot 2: It's Tim Berners-Lee who dedicates this invention to humanity.

Robot 1: Mr. Lee has caused us a lot of problems.

Robot 2: What?

Robot 1: Because Robo7 does not leave the Internet all day and night.

Robot 2: Not only Robo7, but all children and young people and that's a terrible thing.

Robot 1: No, it's a good thing.

Robot 2: It's terrible. It is a waste of time.

Robot 1: That's good, and thanks to Mr. Tim Berners-Lee. I enjoy watching pictures, movies and get a lot of information about what I need so easily and so vastly.

Robot 2: It's terrible.

Robot 1: It's good.

Robot 2: Let's ask our friends.

Robot 1: Ok, Let's ask our friends

*(Through improvisation, it could be a debate between Robot 1, Robot 2, and the children's audience about: Is the Internet useful? Do we use it to obtain information? How much time do we spend with the Internet? Do we organize our time between work, and rest? The conclusion of the discussion is to focus on the positive perception of using Internet.)*

Robot 1: We want to solve the problem now...Where is Robo7?

(Sound effect of receiving email on Robot 1's mobile)

Robot 1: Wait... I just got an e-mail.

Robot 2: What is this message? Please read it quickly.

Robot 1: "The control department in our lab declares that Robo7 has been sighted in the City Center.

Robot 2: So, forward to the City Center.

Robot 1: Yes. let's go.

Robots 2 and 1: Hurry up.

**(Blackout)**

### Scene 3

#### Al-Biruni lab

*(Al-Biruni's laboratory has chemical tools that correspond to that era (973 AD). Al-Biruni scientist standing in front of a table with a group of bottles, Al-Biruni holds in his hand a tube containing liquid.*

*Robo7 enters on one side and talks with the audience. Robo7 observes Al-Biruni, he immediately enters on one side and talks with the audience.)*

Robo 7: Time-Gate is great. It can do anything. It can take me wherever I want. Ha, how beautiful to be here in the lab of Al-biruni, I came quickly. Wow, here is the scientist Abu Rayhan Al-Biruni, who was born in the year four hundred and forty Hijri, in Birun, Uzbekistan. Please, Aren't you Al-Biruni, the scholar of Medicine, Botanicals, Chemistry, Astronomy, and...??  
Al-Biruni: (surprised) Yes, but who are you? Oh, God, and how did you know me?

Robo7: I'm Robo7, because I know I have a lot of books and encyclopedias, which include files about your books and journeys, however, I came to consult you, I need to be improved by Dr. Hind.

Al-Biruni: Who is Dr. Hind??

Robo7: The head of the Robotics Lab in the twenty-first century.

Al-Biruni: (surprised) So, are you coming to me from the future?

Robo 7: Yes.

Al-Biruni: Why are you here, Robo7?

Robo7: I came here to escape from other robots.

Al-Biruni: Why did you run away from them?

Robo 7: Because I ran away from the lab.

Al-Biruni: Why did you run away from the lab?

Robo7: I'm tired of working...I'm tired of solving equations and deciphering ciphers. I am tired of the arrangement, and the work is boring. I want to improve my skills.

Al-Biruni: No, Robo7, you should not say that!

Robo7: Why?

Al-Biruni: Work is very important for the development of life. Each person is necessary to have a job, and you may not escape aimlessly, I can't escape from this lab. Without you own a lot of encyclopedias, through your job, you couldn't know me that I am Al-Biruni, is that true?

Robo7: Right, but aren't you bored of your work here at the lab experimenting with pipes, metal, and smoke?

Al-Biruni: No, I love my work, I love this place, and I spend long hours reading, researching, meditating, and writing there. This place is my home in which I find my comfort.

Robo7: How did you learn all these sciences?

Al-Biruni: Since I were young, I loved to contemplate flowers in the orchards, and I used to ask myself, how do all these types of plants grow, with their different colours, smells and tastes if they are all growing from the same soil?

Robo7: And they are irrigated with the same water. Nice question, yes how?

Al-Biruni: One day, while I was walking in the forest, I met a botanist, and I asked him to teach me this useful science.

Robo7: Did the scientist help you?

Al-Biruni: Yes, He taught me a lot of information about flowers and plants which obtain medicines to heal diseases.

Robo7: That is why you wrote your book "Pharmacology in Medicine".

Al-Biruni: Yes, in this book, I recorded more than three thousand plants in which the names of medicinal plants were corrected, and I classified them in

the dictionary by Arabic names. Moreover, I discussed about their medicinal properties. Among these plants are the Analgesic plant, the Tea plant, and others.

Robo7: What about astronomy and stars?

Al-Biruni: Whenever I looked in the sky, I used to ask myself how the moon, stars and planets are suspended in the sky without falling on the ground?

Robo7: What was the answer?

Al-Biruni: I met the scientist, Abu Nasr Mansour- a famous astronomer and mathematician-, he is one of the princes of the Al-Khwarizmi family. He also gave me access to lot of knowledge, his lab, and his library.

Robo7: But what's the point about library?

Al-Biruni: The library gave me access to a lot of information and knowing languages. I have mastered several non-Arabic languages such as Persian and Sanskrit.

Robo7: Knowing languages is useful, as it is a new window to know history and sciences of the others. But how did you benefit from that?

Al-Biruni: I went with Sultan Mahmud Al- Ghaznawi to India, and there I got familiar with this world, through reading and watching. I got to know the history of India, the customs, and social traditions of the people such as weddings, marriages, and holidays. Furthermore, I also got to know the animals and plants in that country.

Robo7: As far as I know, you have designed a paper geographical map for the Globe, and you have determined the latitudes and longitudes on it. You distributed some countries and seas on its surface accurately. How did you do that?

Al-Biruni: Through geometric calculations and tangent angles, we reached at accurate measurement results. If we know the distance between two towns, we can calculate the other countries. Measuring the angles of the sun when it is perpendicular to a town, then knowing that to another town, and through the difference between the shade angles between the two towns with some calculations, the distance between the two towns can be extracted.

Robo7: You have written the book " Understanding Astrology " which contains information on geography, astronomy and on countries such as China, Russia, the North Pole, and the Far East.

Al-Biruni: In this book, I demonstrated the sphericity of the Earth, the rotation of the Earth around the Sun, and the revolutions of the Moon around the Earth. I discovered that the Earth revolves around itself, and that the Earth's revolution around the Sun takes a whole year.

Robo7: What about your book " The Mas'udi Law"?

Al-Biruni: I spent several years to complete this book, which included astronomy, geography, engineering, and mathematics. The book was an encyclopedia of these sciences. In this book, there is a mathematical method for determining the four original directions, wherever man is on earth he can find the direction. The book also has an accurate description of many of the stars in the dome of the sky.

Robo 7: Was that during the era of Sultan Masoud Al- Ghaznawi?

Al-Biruni: Yes, the Sultan loves science and encourages scholars to write and translate. Really, he encouraged me to do that.

Robo 7: Yes, and this book is one of great importance in the Arab and Western civilization, where it was translated into many languages. It was a

reference for students and scientists in European universities. Really, we owe you a thank you.

Al-Biruni: Thank you, Robo7. It is the grace of God and hard work.

Robo 7: But you were not satisfied with that, you wrote in the Science of Minerals, right?

Al-Biruni: Yes, I determined the specific weight for a number of minerals such as Gold, Mercury, Brass, Iron, Lead, Sapphire and Emerald, as well as their locations. It also revealed the difference between the temperature of cold water and hot water, or the so-called the Boiling Point.

Robo7: You are influential in all our lives. One of the scientists said about you, “You have contributed to many sciences that made our civilization, and we still learn from them until now.” Conferences still present your contributions to science, which are generated creative ideas.

Al-Khwarizmi: I have tried to do my duty towards the society in which I live in.

*(A documentary film can show Al-Biruni 's life and his books. After the film, a discussion can be opened from Robo7 with the audience and with Al-Biruni about the importance of science and scholars in the progress of society.)*

Al-Biruni: Thank you, but you did not tell me about your problem?

Robo 7: I say I'm bored of working in the lab, I work every day for twenty hours and fifteen minutes, twenty-five seconds, I need to take a rest and need to be improved, I would like to be a Super Robo7.

Al-Biruni: There is no objection at all to have a rest and to improve. You can do both through discipline not through escaping. You should know that to be a Super-Robot this requires experiments and time. You should not leave the place without informing your manager to avoid confusion in the work system.

Robo 7: Right...I was in a hurry and rushed off without thinking of a solution to the problem...I should have thought first and then decided, anyhow thank you for your advice.

Al-Biruni: It's my pleasure, please I have to go because I have an appointment with my students to explain to them a new lesson in astronomy.

Goodbye Robo7, and never forget the value of work and science. Promise me you'll think first.

Robo 7: Don't be afraid I won't forget, and I promise I'll think first, bye.

*(Al-Biruni comes out)*

Robo 7: It is wonderful to meet with scientists, and now I would like to go back again through the Time-Gate before my battery runs out, ah, I did not charge it for ten days and six hours ago, what can I do? oh, oh!

*(Robo7 takes out from his pocket a small stick which makes different lights. Then Robo draws a gateway in the space after that, he enters it and disappears outside the stage.)*

**(Blackout)**

## Scene 4 The City Center

*(A crowded street in the city center, buildings, shops, advertisements, trees, cars. Robo7 enters trying to cross the street to the other side in a crowd of cars.)*

Robo7: What's all that noise? What is a crowded street? what is this noisy? What is that? where am I? This is not the street which I entered a little while ago. Am I lost? I can't see very well, it's too crowded. It seems like, I'm back in the twenty-first century. Any Help? Is there any help, my friends?

*(While Robo7 was discussing with the audience, Dr. Hind entered the stage)*

Dr. Hind: Robo7, don't move, ...

Robot 1: Yes, don't move, Robo7.

Robot 2: Yes, you won't run away this time. You can't escape.

Robo7: I told you I would never go back to the lab.

*(Robo 7 tries to escape. The stage in a pandemonium situation)*

Dr. Hind: Don't run away, Robo7...I want to talk to you...Please.

Robo7: Yes, what do you want?

Dr. Hind: I want to tell you that the research that I am doing has succeeded and then I can continue to develop your system, believe me...

Robo7: I'm going to be a Super Robo7.

Dr. Hind: Believe me, Robo 7, you will be Super Robo 7, and will fill your memory with information and encyclopedias, which will help our friends, and people to do a good job.

Robo7: Yes, I believe you, Dr. Hind, you taught us honesty and telling the truth, no matter what.

Robot 1: We want you in the lab, Robo7.

Robot 2: There are many projects in the lab that need you.

Robot 1: Your absence has caused irregularities in the tasks we do.

Robot 2: We need you, Robo7, together we can make good achievements.

Dr. Hind: They want you with them, (Silence).

Robo7: I respect Dr. Hind's opinion. However, I want to know what my friends think. (To the audience) Shall I go with them and cooperate with Dr. Hind in lab.

*(Discussion on this topic will be oriented towards the value of cooperation)*

Robo7: Yes...I'm going back to work...I'm going to work and create new ideas with Dr. Hind and my friends.

Dr. Hind: And I, Robo, 7 I will program you with the encyclopedias that you have asked for, and you will become a Super-Robot.

Robot 1 and 2: We will help you download these encyclopedias

Robo7: You really are the most beautiful and loyal friends...I love you all...We will work together for the future.

The collection: Live Robo7. Long live Robo7, together we will build our city, together we will build a new world.

*(Theater turns into a state of joy, through a Musical show that stimulating cooperation, and the value of science in order to build up our country and our world in a better way. Everyone moves to work hard and actively through expressive movements and mime, such as one builds other works on the computer, another runs a machine in a factory, another paints a picture, And another filming the event with a camera)*

## **Curtain**