

ГБОУ «САНКТ-ПЕТЕРБУРГСКИЙ ГУБЕРНАТОРСКИЙ  
ФИЗИКО-МАТЕМАТИЧЕСКИЙ ЛИЦЕЙ №30»

Командный конкурс эссе

**“Unity in Diversity: Russia and the English-Speaking World.  
Time for Equal Opportunities”**

Исследовательская работа (эссе)

**«СОГЛАСНЫ ЛИ ВЫ С ТЕМ, ЧТО ТОЛЬКО НЕЗАУРЯДНЫЕ  
ЛИЧНОСТИ СПОСОБНЫ НА ВЕЛИКИЕ ИЗОБРЕТЕНИЯ И  
ОТКРЫТИЯ, МЕНЯЮЩИЕ МИР?»**

Участники:



Семёнова Таисия



Сергеева Анфиса



Фатрахманова Дина



Сухорослов Артемий

Руководитель группы: Ратькова Анна Николаевна

STATE-FINANCED EDUCATIONAL INSTITUTION

“ST. PETERSBURG GOVERNOR PHYSICAL  
AND MATHEMATICAL LYCEUM №30”

Group essay contest

“Unity in Diversity: Russia and the English-Speaking World.

Time for Equal Opportunities”

Research work (essay)

“ONLY PEOPLE WITH EXTRAORDINARY CHARACTER TRAITS  
CAN MAKE AN INVENTION OR DISCOVERY THAT CAN CHANGE  
THE WORLD. DO YOU AGREE?”

Participants:



Taisia Semyonova



Anfisa Sergeyeva



Dina Fatrakhmanova



Artemy Suhoroslov

Supervisor: Anna Nickolayevna Ratkova

2022

## Theses

What does it mean being a great scientist or explorer? Do you need to be born genius or develop an extravagant personality? In our essay we investigate into the professional careers and personal lives of three outstanding scientists who inspire us and we try to recognise the reason behind their great achievements.

Richard Feynman impressed people by his exuberant personality and versatile mind. From nuclear research to playing drums – his curiosity and passion for life never failed to amaze. On the other hand, it was Feynman's devotion to sharing his knowledge that helped him overcome personal dramas.

Similarly to Feynman, Yuri Knorozov demonstrated a highly comprehensive way of thinking when trying to decrypt Maya script. However, he was extremely reserved, even secretive. He never cared for the public perception and was focused on the mystery he was determined to unveil.

Wilhelm Röntgen's discovery is a remarkable example of the greatest devotion to research. No one could have imagined that Röntgen's numerous experiments would lead to one of the most important discoveries of the 20<sup>th</sup> century. Röntgen never registered a patent, which proved him as a kind-hearted and honest man.

All things considered, every person is unique and capable of great accomplishments. However, it is a combination of talent, hard work and earnest devotion that allows a person make an extraordinary breakthrough.

**ONLY PEOPLE WITH EXTRAORDINARY CHARACTER TRAITS  
CAN MAKE AN INVENTION OR DISCOVERY THAT CAN CHANGE  
THE WORLD. DO YOU AGREE?**

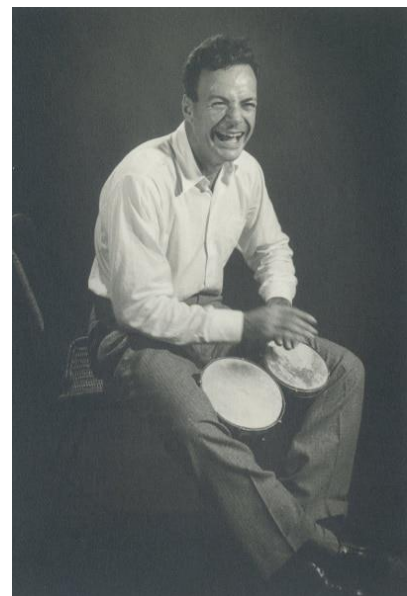
“If you think that you are an extraordinary person,  
you are definitely right  
because every existence represents a miracle  
and every miracle is extraordinary by definition!”

Mehmet Murat İldan

Have you ever thought whether it is easy to distinguish a person who is able to make some great discoveries? Are there certain qualities in a person who is capable of the greatest achievements or can anyone become a prominent figure? At first it may seem that such a person can be immediately recognised. He must be versatile, hardworking, extraordinary, - in general, standing out from the crowd. However, there are a lot of people who had not followed the path of a scientist or an altruist from childhood, but made inventions that were bound to change the world of the future. This makes one think about the necessity of being an extraordinary person in order to be able to change the world somehow. To check this idea, we can refer to examples of popular people, or rather their becoming such.

Richard Feynman (1918 – 1988) was a theoretical physicist, one of the creators of quantum electrodynamics, one of the developers of the atomic bomb, a university lecturer. Does it sound great enough? He seems to have been an outstanding person, but who was Feynman in real life?

Probably Richard Feynman deserves the title of the most versatile and creative scientist and person, because his industriousness helped him in developing his talents and possibilities. He became famous not only for his scientific accomplishments,

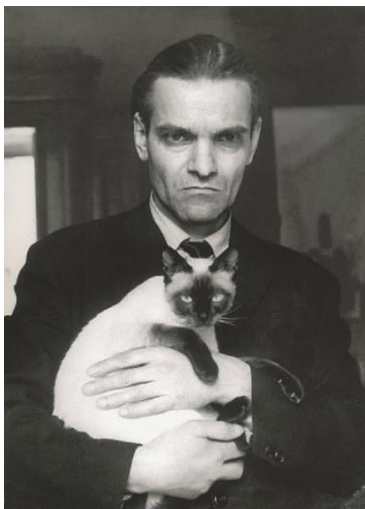


*Picture 1. Richard Feynman  
playing bongo*

where he was able to unleash his full potential and formulate the basic laws, but also for his cheerfulness. His contemporaries sometimes thought he was crazy, because sometimes he could stand in the middle of the street and start shouting mathematical formulas applicable to the problem that he was solving at the moment. He did not like pathos, and often criticized the scientific community, because he considered many of them “pompous fools”. Feynman was honest and straightforward and could openly express his seemingly contradictory opinion.

He loved drums, and maybe devoted even more time to them than to physics. His private life was far from idyllic: the death of his beloved wife Arline and the complete loss of interest in physics and enthusiasm for work almost ruined his scientific career. According to Feynman, only teaching at the university saved him, because it was important for him to share his knowledge with the world.

Undoubtedly, we can say that Feynman was an extraordinary person: talented, hardworking and purposeful, but he wrote about his individuality like this: “To note that the thing I call my individuality is only a pattern or dance, that is what it means when one discovers how long it takes for the atoms of the brain to be replaced by other atoms. The atoms come into my brain, dance a dance, and then go out—there are always new atoms, but always doing the same dance, remembering what the dance was yesterday.” [3]



*Picture 2. Yuri Knorozov with his Siamese cat Aspid*

Another example of a person who played a big role in the great discoveries of mankind is Yuri Valentinovich Knorozov (1922 - 1999). He was an exceptionally gifted scientist from the USSR who made an incredible impact into understanding one of the greatest mysteries of the human civilization – Maya script.

In one interview Knorozov said, “I read an article written by a German scientist. It was titled

“Decrypting Maya script is an unsolvable problem”. I decided that I had to object. My thesis was: “Something created by one person’s mind can be understood by another person’s mind”. So I think fundamentally unsolvable problems do not exist in any field”. [10] Not only did he prove that scientist wrong, but also demonstrated the value of a versatile mind in his field of science.

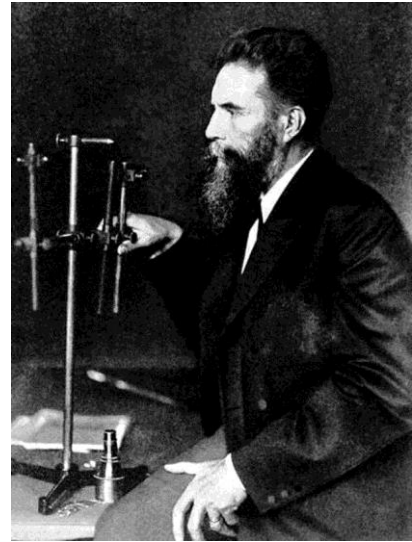
Knorozov introduced mathematical method into linguistics. It was a unique method which Knorozov came up with because of his incredible natural talent. He did most of his Maya research in his small apartment in Leningrad, thousands miles away from Mexico. He threw himself into work, focusing his whole life on making this eye-opening discovery. He was truly a genius, but, as many geniuses, he had an exceptionally weird character. He would only speak to people he trusted, was very secretive, and his closest colleague was his cat Assya. Knorozov claimed his cat was the one that helped him decrypt Maya script.

Owing to his outstanding behavior and methods of work, he was not treated well in his homeland. Yury Knorozov died at the age of 76 in a hospital because of poor medical treatment. Nowadays, very few people in his country know the name of one of the most extraordinary scientists and human beings in history. However, he was a very well-known scientist in other countries. There is a big statue of him in Mexico, and all the Mexican people are very grateful to Knorozov because he helped them understand their culture.

He achieved everything he was aiming at with few resources at his disposal. His success was due to his exceptional character qualities, love for what he was doing and his unwavering determination to achieve his goal. His achievements and his character makes Yury Knorozov a truly remarkable person and scientist.

The third person to be considered in the question of the need to be extraordinary to make the greatest discoveries is one of the greatest physicists of

all time: Wilhelm Conrad Röntgen (1845 – 1923). As a child and young man, Röntgen did not seem to possess any qualities or skills that made him look special. He was born on 27 March 1845 in the small town of Lennep, Prussia. He studied at a private school, entered a technical school, but was expelled from there for drawing a caricature of a teacher. It was only when he received his Ph.D. that



*Picture 3. Wilhelm Conrad Röntgen in his laboratory*

he suddenly realized that he wanted to become a physicist. After defending his dissertation, he taught at various universities and simultaneously engaged in scientific work. He was renowned for his hard work and often stayed up late in his laboratory. Many years of painstaking studies and experiments led Röntgen to one of the greatest discoveries in Physics - X-radiation. At that time he was already 50 years old. Even after receiving a Nobel Prize, he continued working to his death at the age of 77.

It was neither extravagant behavior nor ostentatious lifestyle that made Röntgen important and famous – on the contrary, he was a rather reserved and modest man. On the other hand, his devotion to research, persistence and curiosity led the scientist to one of the most valuable discoveries of the 20th century. Röntgen never sought patents for his discoveries – he insisted that they would be available to the whole humanity. Röntgen was an extraordinary person due to his honest and hardworking character. He said, “Great discoveries are made accidentally less often than the populace likes to think.” [8] What an inspiring devotion to research.

To sum up, many people think that geniuses are born like this. However, we believe strongly that in 98% of cases a genius turns out to be a combination of hard work and talent (and hard work to a greater extent). We have considered three outstanding personalities who are proof of this thought. None of them was

genius from birth. None of them had known what he would do in the future, but all of them stoutly moved forward, achieved their goals and worked on what they were interested in. For example, Knorozov began to unravel the secrets of the Maya, simply after reading an article by a scientist, but in the end he devoted his whole life to this.

Each person in his life may encounter some difficulties that can discourage him from doing what he loves. Yet this was not the case for people who changed our world. They knew how to overcome all obstacles and continue their path to achieve goals. For example, Feynman wanted to give up Physics at some point of his life, but he was able to solve all the problems and continued his kind of activity.

We can also highlight the important fact that all the three scientists were doing exactly what they loved. They did not care about fame. They did not have a goal to promote themselves. They were focused on their field of science, which helped them not to be distracted from work. As a proof, we can recall that Röntgen continued to study Physics even after he had received the Nobel Prize.

In order to make some worthy discoveries and become really important in the history of mankind, it is not necessary to have certain qualities of character, which seem to be inherent in every scientist with stereotypes.

In fact, from birth, we are all unique. No wonder people say that no two people are the same. Although we all have some flaws, in contrast, each of us has some features that help us fulfil our potential.

After analyzing all of the above, we must conclude that no one knows better than you what you are capable of. Therefore, for great discoveries and inventions that change the world, you just need to be yourself and work very hard.



## Reference list

1. Famous quotes about extraordinary individuals, <https://quotesinsight.com/topic/extraordinary-individuals-quotes/> (last visited Feb. 13, 2022).
2. Feynman bermain bongo | 1956, Foto, Milik Caltech Archives, <https://id.marinabaysands.com/museum/richard-feynman/a-curious-life.html> (last visited Feb. 13, 2022).
3. May 11, 1918 – Birthday of Richard Feynman, <https://rhapsodyinbooks.wordpress.com/2009/05/11/may-11-1918-birthday-of-richard-feynman/> (last visited Feb. 13, 2022).
4. Surely You're Joking, Mr. Feynman!: Adventures of a Curious Character, Richard Feynman, Ralph Leighton (contributor), Edward Hutchings (editor), 1985, W. W. Norton.
5. What Do You Care What Other People Think?, Richard Feynman, 1988, W.W. Norton.
6. Wilhelm Röntgen, [https://en.wikipedia.org/w/index.php?title=Wilhelm\\_R%C3%B6ntgen&oldid=1067032477](https://en.wikipedia.org/w/index.php?title=Wilhelm_R%C3%B6ntgen&oldid=1067032477) (last visited Feb. 13, 2022).
7. Wilhelm Conrad Röntgen – Photo gallery, <https://www.nobelprize.org/prizes/physics/1901/rontgen/photo-gallery/> (last visited Feb. 13, 2022).
8. Wilhelm Rontgen Quotes, [https://www.azquotes.com/author/32954-Wilhelm\\_Rontgen](https://www.azquotes.com/author/32954-Wilhelm_Rontgen) (last visited Feb. 13, 2022).
9. Yuri Knorozov, [https://en.wikipedia.org/w/index.php?title=Yuri\\_Knorozov&oldid=1061633158](https://en.wikipedia.org/w/index.php?title=Yuri_Knorozov&oldid=1061633158) (last visited Feb. 13, 2022).
10. Как Юрий Кнорозов разгадал тайну майя, не покидая Ленинграда, <https://philologist.livejournal.com/10122849.html> (last visited Feb. 13, 2022).

11. Наука жизни от Ричарда Фейнмана, <https://scientificrussia.ru/articles/nauka-zhizni-ot-richarda-fejnmana> (last visited Feb. 13, 2022).

12. Удивительная история Юрия Кнорозова, разгадавшего тайну цивилизации майя, <https://www.youtube.com/watch?v=F4MRWuTebRE> (last visited Feb. 13, 2022).

## Screenshot from the official lyceum page in VKontakte

[https://vk.com/spb\\_pml30](https://vk.com/spb_pml30)



Тридцатка (ГФМЛ 30)

9 фев в 22:22



Учащиеся 9-х классов под руководством учителя английского языка Ратьковой Анны Николаевны примут участие в международном конкурсе эссе на английском языке «Единство в различии»

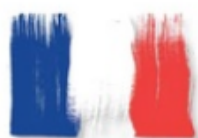
(Unity in Diversity). Конкурс проводит образовательная компания RELOD (<http://unity.relod.ru>).

Конкурс проводится с 2008 года, а с 2017 года имеет статус рекомендованного ведомством, то есть входит в «Перечень олимпиад и иных интеллектуальных и (или) творческих конкурсов, направленных на развитие интеллектуальных и творческих способностей...» Министерства просвещения РФ.

В эссе наша команда (Семёнова Таисия, Сергеева Анфиса, Сухорослов Артемий, 9-1 и Фатрахманова Дина, 9-2) рассуждает над темой: «Согласны ли вы, что только незаурядные личности способны на великие изобретения и открытия, меняющие мир?»

Ребятам предстоит проявить не только глубокие знания английского языка, но и широкий кругозор и системное мышление. Работа над коллективным эссе развивает навыки 21 века, а также межпредметные связи и социокультурные стратегии.

🔍 Поиск



❤️ 37



➦ 6

👁️ 2K