



(REVIEW ARTICLE)



## What awaits us in the future?

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### Abstract

Today we see large changes in the field of electrical power and information transmitting. All these changes are justified, useful for contribute to the emergence of new results.

**Keywords:** Three wires; Sample; A to D converter; Frequency band; Gender; Art

### 1. Introduction

In many scientific and technical works authors predicts how will be developing this field tomorrow. But unfortunately not always there is understanding what will be on day after tomorrow. A history shows that there are many examples when direction is changing. And sometimes account for come back.

### 2. Digital Technology

The word digital has become very popular today. It is used when talking or writing about the transfer of information, about medicine, about economics, about art, and so on. When and how did it start? It began gradually, around the middle of the last century. Until that time, almost all processes in nature, in culture, in the human body were described by continuous, analogous quantities [1].

Today, the main method for transmitting information is the digital method. In these cases the digital values of the analog signal (Samples) are transmitted at a rate of at least twice the maximum frequency of the analog signal spectrum. In reality samples are very short pulses. The digital representation of the signal allows for various signal conversions. Modern electronics make them quite easy to perform. Some of these conversions are not possible in analog representation. All this explains the widespread use of digital methods. Sometimes, for example, there are written information or talk about digital music, digital economy, digital painting. In fact, in all these new directions what is new is only the representation of the signals. Digital methods allow to increase the accuracy, speed and variety of transformations.

However, all these benefits are not free. The fact is that the digital signal has a wide band. Sometimes, after an analog-to-digital converter (A to D converter), the frequency band of the signal expands ten times. Today everyone has enough space in the frequency bands. But this is today.

However, the volume of transmitted digital information is rapidly expanding. Many sources such as You Tube often broadcast the same signal multiple times. Telephone conversations today sometimes last for hours. Radio and TV broadcasting are moving to digital. New digital communication systems are emerging in health and social care. But the frequency range is not unlimited. And this is not coal or oil, which can still be found.

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What then shall we do? It is possible that it may be necessary to revert to analog methods.

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### 3. Gender Equality

At the present time much is written, spoken and demanded that equality be observed between men and women. Is it correct?

Approximately thirty years ago, in Russia, a serious article on this issue was published in the journal Science and Life. It argued that the average level of IQ in men and women is about the same. However, there is a difference in the distribution of this parameter. Men and women have different IQ dispersion. It is higher for men. This means that the percentage with high IQ in men is higher. And if so, then there should be more scientists among men, more Nobel laureates among them, and more writers and so on.

Maybe that's how it is in our world. And if so, then why to talk about gender equality. But apparently it is necessary to speak carefully. Because it can be considered a tragedy when a woman is not admitted to a university or to scientific work just because she is a woman.

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### 4. Art

Today, anything can be called art. And works of painting or music, and a spectacular building, and a ballerina performance or a children's dance. You can hear such words about the new painting "This work of art, written in an abstract manner, attracts attention." Is it right to call anything art?

The author decided to use Google and Wikipedia to figure out how to correctly define the concept of art. Unfortunately nothing definite could be found. Several countries use the following similar definitions:

- Art is what remains.
- Art is what remains when everything else is forgotten.
- What is done today is not necessarily art.

Once in Hungary, the anniversary of composer Imre Kalman was celebrated. He was highly praised. But in response, he said. "I know that everything I have written is not worth one page of Mozart."

Many composers often think about whether their descendants will listen to their music. Tchaikovsky is especially famous for this. Maybe that's why today his music is in one of the first places in popularity.

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### 5. Artificial Intelligence

- There is information on the Internet that supposedly tens of thousands of years before the era of Christianity, aliens settled on earth. They tried to extract something from the earth, but it was difficult and they created smart beings. Today, some people have genes from these creatures.
- Israel and USA have "established contact" with aliens in the "Galactic Federation" several years ago, but they keep it a secret so as not to cause panic among earthlings. This was stated in an interview with the Israeli edition of Yediot Aharonot by the former head of the space security program, three times winner of the Israel Security Award, 87-year-old Professor Chaim Eshed.

According to him, the aliens and the United States "have entered into a cooperation agreement." The treaty allegedly refers, among other things, to the creation of a joint base under the surface of Mars.

See <https://rg.ru/2020/12/09/professor-izrail-i-ssha-ustanovili-kontakt-s-inoplanetianami.html>

- The United Nations has prepared a "bridgehead" on Earth for a meeting of earthlings with aliens: the director of the UN Office for Outer Space Affairs, the first astrophysicist of Malaysia, Mazlan Othman, has been appointed the official responsible for the first contact with alien guests, reports news.com.au

## 6. Electrical Energy and Its Transmission

Today, electrical energy is almost always and everywhere transmitted by a three-phase method. This method was proposed almost 100 years ago by St. Petersburg professor Dolivo-Dobrovolsky. We can say that now the entire globe is shrouded in three-phase lines. These lines use three to eight wires. Many articles and books have been published on the benefits of the three-phase method. But unfortunately it also has serious drawbacks. These include:

- A lot of very expensive wires;
- It is almost impossible to make underground wiring;
- The need to compensate for reactive power;
- Losses during the transition to a three-phase system and the reverse transition;
- It is not possible to get full power at the output; output powers from each phase are transferred to different consumers;
- It is practically impossible to conduct a three-phase line under the ground.

In 2012, a single-wire method for transmitting electricity was proposed. This method eliminates all the disadvantages described above. For example, it allows to transfer all the power transmitted in a three-phase system over one wire, the same as the wires in the compared three-phase system [2 - 4].

Using the single-wire method it is possible to transmit triple power in a three-phase line.

However an even newer and more interesting idea is presented in our recently filed patent for invention, which significantly increases the output circuit of a three-phase electrical energy transmission line. The application of this method will increase the output power of each three-phase electrical energy transmission line by more than 12%, at no extra cost whatsoever. This will be the only new electrical energy output of the new system. The resulting such significantly increased power can be freely divided between an unlimited plurality of consumers.

If this new technology is implemented in many electrical energy transmitting lines on our planet, then there will be enough electricity on earth everywhere and for everyone.

And in order for this to achieve we do not need either dictators or aliens, because we can produce this huge increase of electrical energy and deliver it to its consumers just ourselves.

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## 7. Conclusion

This article shows that further continuation of work in the chosen direction, especially in the absence of agreement on the main definitions, can lead to the opposite results.

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## Compliance with ethical standards

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