UCFASA Newspaper Annual Pearbook 2021 – 2022

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UEF DSA Newspaper Annual yearbook 2021-2022

<u>Nimiösivu</u> <u>Valmistusmerkinnät</u>

Scientist

Scientists hold one of the highest privileges The privilege of carrying one of the torches of humanity Scientists can stumble, lose hope and despair But they can never carry ill will Those who do not shelter scientists in need cannot be true intellectuals With only power and freedom of mind Scientist is the guardian of human spirit and the human condition Even in struggle task of the scientist is to dare For many will not We must examine our failings to proceed Those who never err will never learn deeply No scientist can achieve greatness without trials No scientist can hold their ground without arguments Scientist must meet success and disaster with same eyes As a scientist, we carry the weight of science through our words It is not a task of leisure Its nature asks for longevity and time

Through our lives, we give the weight of science

Ari J. Tervashonka

The 3.5 years of UEFDSA newspaper

Timeline

UEFDSA newspaper piloted on May 1^{st} 2019 as a single page issue. Very fast it grew to be a complete newspaper. The science series started on the 5^{th} issue in September 2019.

To give some statistics, the issues have been on average 24.5 pages long. Total yearly number of pages has been 85, 167, 88, during 2019-2021 respectively. The first issue of 2022 contained 27 pages.

We have had more than 20 authors. Similarly, we have had more than 20 photographers.

Motives

There were many motives to establish UEFDSA newspaper. To give one, in 2019, I was in the board of UEFDSA and wanted to do something meaningful.

Also, during 2009-2018, ISYY (the student union of UEF) had its own newspaper. The newspaper, named Uljas, was discontinued in somewhat disturbing setting. The printed newspaper had advertisement income but was discontinued. The remaining online newspaper did not have the income and was discontinued.

To make UEFDSA newspaper to survive a little longer, it was managed separately from UEFDSA.

Intellectual motive

TheFinnishlawaboutuniversitieshttps://www.finlex.fi/fi/laki/alkup/2009/20090558saysthefollowing

2§ Purpose

The purpose of the universities is to promote libre research and scientific and artistic civilization, give the highest education based on research, and to raise students to serve their own country and humanity. While doing their duties, universities need to promote lifelong learning, collaborate with the other parts of the society, and to promote the societal impact of research results and artistic works.

Universities need to arrange their functions so that in research, artistic works, education, and teaching a high international quality will be established following ethical principles and good scientific practices.

University students experience the surrounding atmosphere. Therefore, it seems meaningful to expect, that also university students are (or should be encouraged to be) active in expressing scientific and artistic ideas for the benefit of humanity, and to collaborate, starting from day one.

Also, students should have many different platforms to express their thoughts. A formal newspaper is a suitable place to discuss studies, work, and academics. It is a suitable place to practice making scientific publications; non-peer reviewed ones are a good and flexible start.

There need to be some platforms that are more formal than Yammer or blogs, but less formal than peer-reviewed journals.

Also, if a group of people have their own newspaper, they seem more civilized.

Benefits

UEFDSA newspaper was an easy platform to start publishing stories. It was open to all authors. Naturally most authors were UEF PhD students or postdocs.

The newspaper was a platform that was awake throughout the year. Naturally the board of UEFDSA changes during the Spring and is sleeping for a couple of months in the transition period.

Work and money input

Per issue, I would say that I have worked at least 16 hours. The hours cover typesetting the materials, finishing the layout and style, and preparing the reappearing sections such as table of contents. Some of the working hours have gone to the marketing before and after the appearance of the issue.

During the work, we have used some spell-checking services such as Premium Grammarly, which costs 12€/month. Easily, the production has cost a few hundred euros directly from the pockets of the editors.

Gained editorial knowledge

I have experimented with many technical things. I have practiced typesetting the newspaper with LaTeX. Moreover, to display files in the websites, I have learned some IT skills such as PHP.

Thanks

I thank Ari J. Tervashonka. He has been active longer than UEF has existed. Ari has written countless texts on different platforms and mentored countless students.

I thank all the contributors and all the readers. I wish to see you again in another platform.

Juha-Matti Huusko PhD Editor in chief of UEF DSA Newspaper

Science series head editor foreword

Novelty and efficacy of scientific writing require the free use of intuition. New ideas cannot form an atmosphere of "no". What is needed in science cannot be determined by one person or even two. No, this is the vast task of the scientific community. Every publication in science is a hand reaching form of argumentative opinions and views on the world with varied proofs, truth values, forms, ethos, argumentative structures, and elements of style.

I have drawn in many cases inspiration from emerita and emeritus professors, philosophers, methodologists, and theoreticians. Even in the hardest times, this inspiration has not been diluted because we all know life and any process can have complicated processes. What matters most is to always continue. The form, output, amounts, or resulting fame doesn't matter in short term but if a scientist doesn't continue working it will make a larger dent. Science is not something that from you can take easy holiday.

Even when you visit Lapland, go to a campfire, or visit other countries all the problems that you are solving are following. Some problems don't even manifest themselves in proper form or even definite form of a question. Some of these difficulties are blurred large blobs of questioning for many years before even evident question is found. This is one of the things that scientists carry deep inside of their skin and mind while trying to help humanity gradually develop outside and inside.

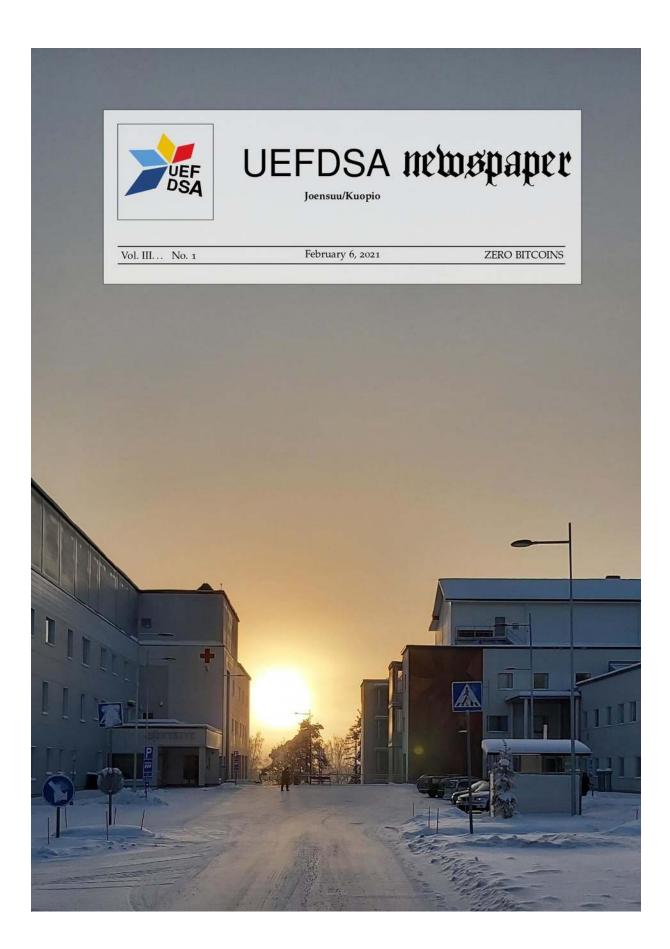
Scientists and philosophers do not always receive understanding, recognition, and proper treatment in due time. Our quarterly is not measured by months but by decades because this is not only work but also a life of science and arts.

I highly doubt that it is healthy to stop doing something as complex and holistic as science after retirement. Decades of trained and evolved brains cannot stop like that. In essence, retirement is just a middle age for scientist. do Universities treat and advocate their retired differently. I hope that professionals in anv case universities would uphold all contacts and records of retired professionals in the public sphere despite what EU privacy regulations might say. This is not a matter of policy but improvement of human development. The value of the long-term scientist for society cannot be measured.

Sadly, this paper will be discontinued. Details and public records on this at the back. On a more positive note, for those who are interested, we will continue our good cooperation with Juha-Matti Huusko in form of a general scientific publication platform project. If you want to write on science, philosophy or methodology leave an email to

Wishes of great future for all our writers and readers. Thanks for everything.

Ari J. Tervashonka Head editor of UEF DSA Science series



Sunny spring days

This issue is late, sorry about that.

After spending a couple of months in the dark abyss sleeping like a bear during winter, it is nice to see sun shine and to get some energy. For example, I stopped at the Joensuu central hospital to take the cover photo of this issue.

Regarding the contents of this issue I wish to say some positive words and thank all the authors and photographers. In particular

Szabi, thank you for DOGs, ROCKs and WOODs. It is a collection of interesting stories.

In this issue, we have academic and scientific texts from Ari J. Tervashonka, Chloe Wells and Maryam Samavaki. I wish you all success.

Jari Turunen, thank you for the space photo "Stairway to Heaven" hidden in the document. (Jari's recipe for photography enthusiasts: Pentax K-1 II + Irix Blackstone 15 mm F/2.4, ISO 3200, 30 seconds, internal Astrotracer and long-exposure noise reduction turned on.)



Figure 1: Step-by-step, I am becoming a natural Santa Claus.

Quantitative Biology Journal Club

- WHAT A journal club, to discuss research papers using quantitative approaches to tackle biological problems
- Who Whoever thinks numbers are important regardless of career stage, research discipline
- WHY Because numbers are important in life sciences
- WHEN Every other week, starting November 20th at 2pm
- WHERE Online Microsoft Teams Meeting
- How Register to the mailing list (by sending an email to sylvain.tollis@uef.fi) Receive the paper(s) to discuss; Read the paper(s), or not!; Come with open-mindedness!
 - Propose new papers to discuss

Creation of theory — Series part I

Nihilistic elements and despair of theory creation

Ari J. Tervashonka

Philosophically and scientifically the act of theory creation stems from the intellectual need to formalize ideas in a new way. The novelty aspect and sometimes luck determines the effectiveness of the theory and the argumentative spread of the work put into this theory. Sometimes only novelty for theory is that everything klicks in such a way that people understand old ideas in new unison. Theory creation is creative, an intuitive systematic act that in many cases, displays not only the intellectual position of the originator of the theory but also demands a new form of consolidation of facts. In this scope, every new theory is characteristically opinioned voice of cumulated arguments. The only way of knowing which ones are good and bad is the test of time and basically social luck on scientific reception of the theory. Depending on fields of study different rules are applicable, however, in many cases there is need for creative collaboration, intuitive processes, extended periods spent on the work, fundamental problems that carry the novelty along, and years of intellectual preparations.

Sometimes it is a pure miracle that people have the time and guts to finish theories, despite lack of help, arduous situations in a scientific field, a large wall of opposition, cynical disbeliefs conveyed not by the weight of arguments but mostly out of spite. The modern way of publishing doesn't either support the making process of truly substantial theories. If one is lucky, University might support this theory work despite that it is always a risk in terms of time management and for the amount of publications. In many cases, all manner of suboptimal demands hinders the theory creation. Still, theories are carried over and conveyed by scientists and philosophers. Albeit this is easier to be justified in fields of mathematics and theoretical physics, even in these theory intensive fields bigger unification theories are very hard not only do but also to convey reliably. Sometimes matter of opinions, scientific trend fashions and other nonsensical factors can affect the understanding of theories and impair the reception of it in a scientific setting. Sometimes theories can become corners of differing views ostracizing theory makers. Because of these social factors making of theories includes scientific, societal risks that are not, in many cases, justified nor healthy for the development of science.

Despite these hardships, many intuitive people convey their ideas in theory form. Vast intellectual enjoyment of developing systematic explanations and seeking novelty through hard fundamental work in science is what despite everything helps theoreticians to continue these contributions. Historically many theories have been more understood after decades of use and alternatives, sometimes sadly after

the passing of the original maker of the theory. In many cases, theoreticians have forwarded humanity in this way. These difficulties are essential to note at the beginning of this subject because theory creation is not only working on the issue but can also be consistent hardship that can hinder the whole process of creation and reception of theories.

In my research on Oliver Heaviside and his sense of academic community¹, the feeling of struggle was self-evident after reading decades of his work. Heaviside was academically oddity in 19th century Britain without having academic education. Despite this, Heaviside contributed over a thousand pages of academic publications, formulated James Maxwell's electromagnetic equations from quaternion form to vector analysis form that we use even today. His arch type of hermit style of theory creation was in many ways similar aspect that a lot of theory makers have used. To enclose themselves from the hustle and bustle of now, theoreticians can act in reclusive ways to balance the needs for the dedication and cut systematically many non-helpful aspects from their lives to be able to achieve work-intensive theory creation. Even today, this is one of the most popular strategies to survive most of the adverse side effects that come with the theory creation.

Nevertheless, theoreticians still need science community around themselves to provide alternative arguments and thus polish their works. Even extreme examples like in the case of Heaviside quality responses were highlights of his arduous work. It is a delight to see how otherwise a very cynical person transforms to very open and humane person when replying to letters that contain valuable, constructive criticism.

At the end, the act of building theory is long term quest of revealing systematic notion on the part of the world. Half of this endeavour is to formulate an understanding of the subject with immediate connectivity to present and future states of human minds. Sometimes it has taken months, sometimes decades or even multiple lifetimes to polish theory and broaden it to new areas. Barely even the creator of theory wouldn't assume how large spread their theory would cover in future. In the case of Heaviside, vector analysis became later the norm in place of quaternion calculation. Heaviside's transformation of Maxwell's original 20 equations to vector form helped the spread and place of Maxwell's theory in science. He did most of this work alone without much of input from a larger audience.

In this following series, we will venture on different theory creation themes by philosophers, natural philosophers, and scientists. The point of the series is to convey various aspects of theory creation processes to scientific audience and writers. Theory creation is a very individualistic work process that can have a very weighted signature style of personal research. To understand different sides of theory creation, this series will discuss some aspects of the act of theory creation and explain these through historical examples. If you want some specific theory to be analysed, please send a request to UEF DSA Newspaper staff.

 https://hybrislehti.net/akateeminenosallisuus-viktoriaanisen-ajanenglannissa-oliver-heaviside-

UEFDSA newspaper, ISSN 2669-8951 (electronic), ISSN 2669-8943 (printed)

 Made by University of Eastern Finland Doctoral Student Association, Itä-Suomen yliopiston jatko-opiskelijoiden yhdistys - UEF DSA ry
 Owned by Juha-Matti Huusko and Ari J. Tervashonka
 Funding This newspaper supports itself. No membership fees are used to produce it.
 Appears once in two months as pdf at http://www.uef.fi/web/dsa/newspaper

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Contributions (" \geq " = at least) By writing 6 stories (resp. 20 photos) per year, you get an official writer (resp. photographer) status. You can request for a certificate, if you need one.

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| • Salseng Mrong (≥ 6) | Lenka Dvořáková (≥ 3) | |

UEFDSA 2020

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|-------------------------------|--------------------------|
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| Katarzyna Wisniewska (Kasia) | social media coordinator |
| Omotomilola Ikotun | event manager |

Membership • Full membership is restricted to UEF doctoral students.

• Associate membership is open to anybody. Especially, we welcome all master students interested about PhD related matters. (Plan your doctoral studies better by joining as an associate member before you start doctoral studies.) • Supporting membership is open to anybody.

Benefits • All members have priority in UEF DSA Newspaper as a writers and photographers.

• For associate member, much knowledge on doctoral studies, meetings and relevant programs every year.

• Members can join the UEFDSA board.

• Members can join activities of the association without cost.

• Support members are added in public list (if a person wants their name published on it).

Membership fee • Membership fee is paid only once, in total 10 euros. The fee is the same for members and associate members. (Fee is only paid 1 time, in case you are upgraded from associate member to full member the upgrade is free)

• For a support member the one time fee is 50 euros. This fee is intended to support activities of the association. • More information at: http://www.uef.fi/fi/web/dsa/membership

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