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ZERO BITCOINS



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Cover photo:

Utra island in winter
in Joensuu
by Salseng Mrong.

Osta suosittu Ari Tervashongan [Lyhyt akateeminen erityisperehdytys](#) Ebook (noin 60 sivua).
NYT vain 4,99 €

Lyhyt akateeminen erityisperehdytys



Ari J. Tervashonka

Oletko pohtinut mikä on optimaalinen tie akateemiseen menestykseen? Akateemiselle kehittymiselle on loputtomasti erilaisia reittejä, mutta monia näistä yhdistää holistinen ja generalistinen ote. Tässä kirjassa ei siksi esitetä asioita yleistettyinä self help näkökulmina, vaan aiheina joita lukija itse kehittää omien tarpeidensa mukaan. Tarkoituksena on havahduttaa lukija kehityksen kokonaisuuteen. Rasituksesta väsynyt mieli ei opi samalla tavalla kuin huolehdittu, avara ja intuitiota käyttävä mieli. Kirjoituksilla avataan aiheita, joiden yhteisenä pyrkimyksenä on akateemisesta elämästä huolehtiminen, sekä kauniin mielen intuition synty.

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Editor 1 Juha-Matti Huusko

Editor 2 Ari J. Tervashonka

Advertising Contact

uefdsa@protonmail.com

Writers (contributions, “≥” = at least)

- Juha-Matti Huusko (∞)
- Ari J. Tervashonka (∞)
- Rowmika Ravi (≥ 4)
- Aytaç Yürükçü, cultural reporter
- Lenka Dvořáková (≥ 1)
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Freedom for the scientific essays!

Ari J. Tervashonka – vice editor in chief

CORONA (COVID-19) – PREVENTION AND CONTAGION

By ARI J. TERVASHONKA

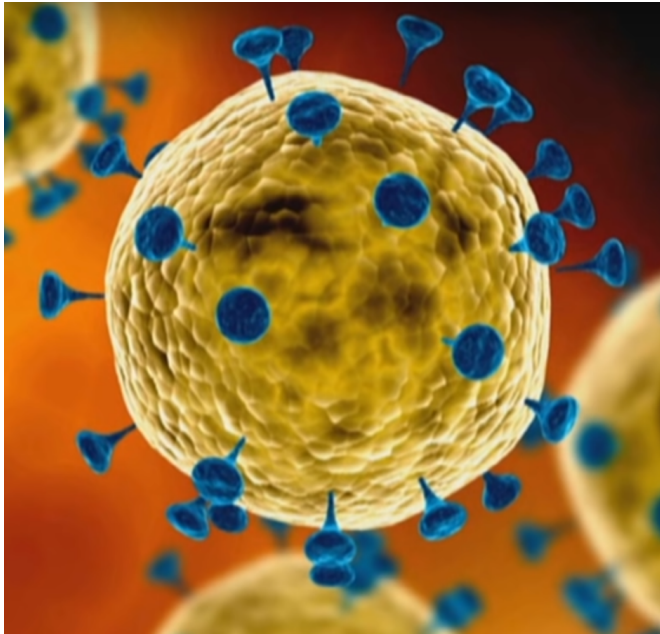


FIGURE: CORONAVIRUS IN AN ILLUSTRATION.

Preparing for the corona varies by the (1) age, (2) medical condition of the people and (3) concentration of corona cases within the area where you are. Age and general health are the main factors of what are chances of surviving coronavirus.

In China, the general mortality rate has been thus far near 3000 with over 80.000 corona cases. In terms of information, we are limited to the cases that hospitals know so the amount of cases is higher than in news. That being said the case amount in China has given information on some of the limitations of coronavirus.

The current general mortality rate of the corona has been 3,4 % that is less than in the case of SARS, Ebola and Spanish flu. For people aged over 80 have had a mortality rate of 15 %, while children below the age of 10 have all so far survived and generally healthy people have 0–less than the general mortality rate. Also the medical condition of the person effects the result of the disease. People with lung and breathing problems, diabetes and other breathing-related conditions have a higher mortality rate.

Because of the lack of information, many studies on coronavirus are still based on similar diseases or similar coronaviruses as SARS and MERS. According to 22 studies **coronavirus survives in surface areas up to nine days at room temperature. The general surface pathogen persistence is 4-5 days.** This means that if you happen to order something from China the contagion would be highly improbable in cases of weeks or over month waiting times. Low temperatures and high humidity increase virus lifespan. If the comparison to SARS or MERS is correct in case of optimal surface life (virus still being in optimal condition for contamination), that can be counted in hours. On the exact hours of corona virus losing its capacity to copy itself while being on the surface there is no information yet.

Precautions

When you are in public don't touch your face. Only do this after you have washed your hands. This simple action cuts substantially chances for many virus contagions. Hand washing and sanitizing are important when coming back to home or after being at high population density areas. Use your brains, if Corona is spreading in the area don't handshake people and limit, if able, the distance at least to 1 meter.

A contagion of the corona spreads mostly through contaminated surface areas while after touching your nose, eyes, and mouth. Also if other people cough the transition limit is between 1–1.5 meters. Enclosed air ventilation systems such as in public transports or cinemas, shops, gyms, restaurants, and bar, can also raise the probability of contagion in areas where there are more corona patients.

What if I get it?

You contact the hospital of your area with a list of your symptoms. The good side is that you get to know is it Corona or something else. Secondly, by this action, you can limit the contagion of Corona by being sure. You wouldn't want to cause harms for your elder relatives. While you are suspecting that you have corona it is recommendable to use a mask or at least some fabric if you don't have a mask.

Symptoms include fever, cough, and shortness of breath. Symptoms may appear generally 2-14 days

after exposure and the most viral episode of the virus is at the beginning of the symptoms during days 3-5. For the end note generally being contagiously sick at work is thoughtless and stupid.

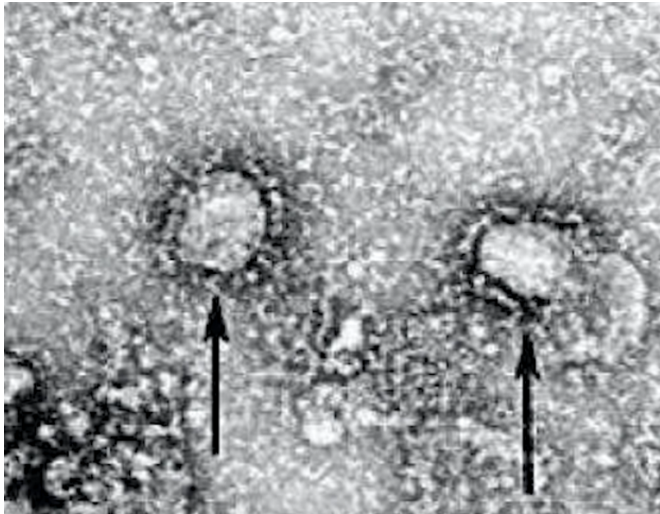


FIGURE: CORONAVIRUS IN MICROSCOPE.

What about masks?

The basic masks have essentially diminishing return as a safety measure and mostly used for corona patients. If you want to go for literal overkill for safety you can result in same masks than doctors use (and should use). In this case, it is recommendable to use masks of these sort N95 / 3M (that specifically equals to N95) / FFP2 (mostly used in Finland). These masks are good for prevention but you have to follow introductions.

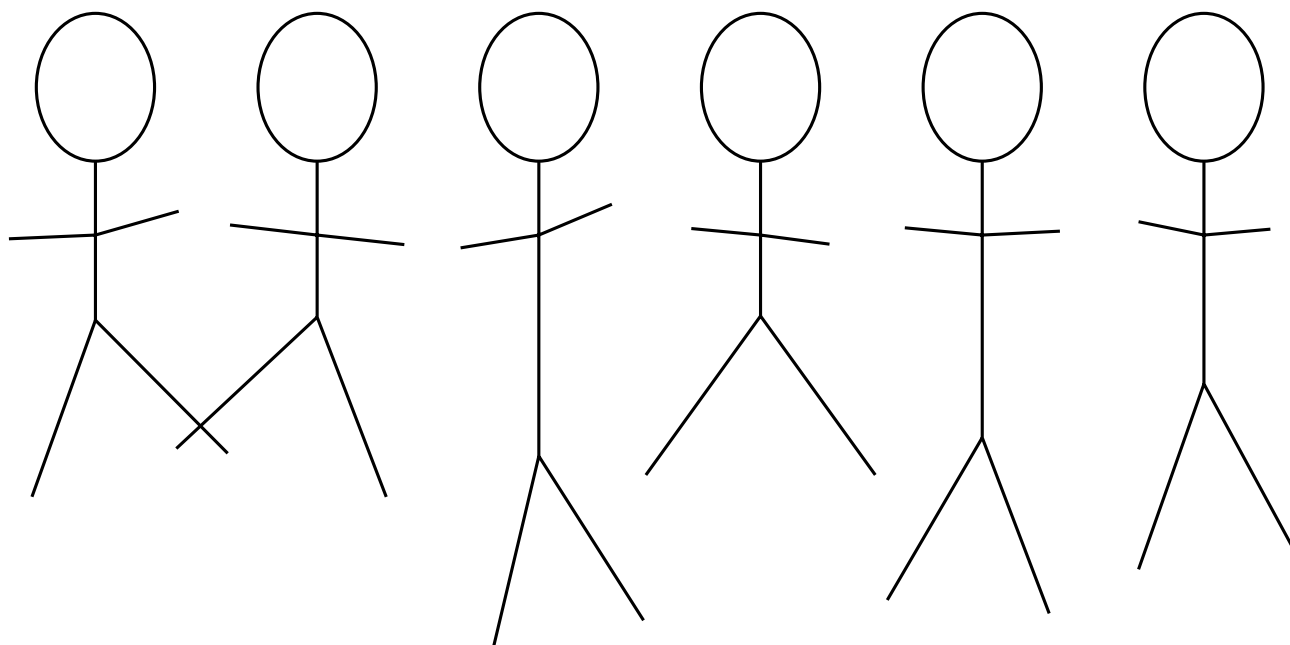
If you get a mask, go to YouTube and find videos on 'N95 how to wear and remove', to make sure you are using mask correctly. These types of masks are harder to use and breathing will be more laboured. **This is why you should only use them when country or area where you are going has more corona cases** and there is a higher chance of Corona, including closed air systems such as trains, buses and other public transportation, shops, and public high population density places.

More information:

- Gladstone Institution lecture – Understanding the 2019 Novel Coronavirus Outbreak
<https://www.youtube.com/watch?v=UAFj-sp-SYs>
- N95 mask How to wear & Remove <https://www.youtube.com/watch?v=zoxpvDVoNI>
- Sciencealert – New Study indicates how long coronaviruses can survive on a surface
<https://www.sciencealert.com/study-shows-just-how-long-coronaviruses-can-stick-around-on-a-surface>
- THL (Finnish institute for health and welfare) updated information
<https://thl.fi/en/web/infectious-diseases/what-s-new/coronavirus-covid-19-latest-updates>

Ari J. Tervashonka

In 2020, who will be the UEFDSA board members?



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in Kuopio/Joensuu, date not fixed yet

feel free to contact

juha-matti.huusko@uef.fi, +358 40 528 2815

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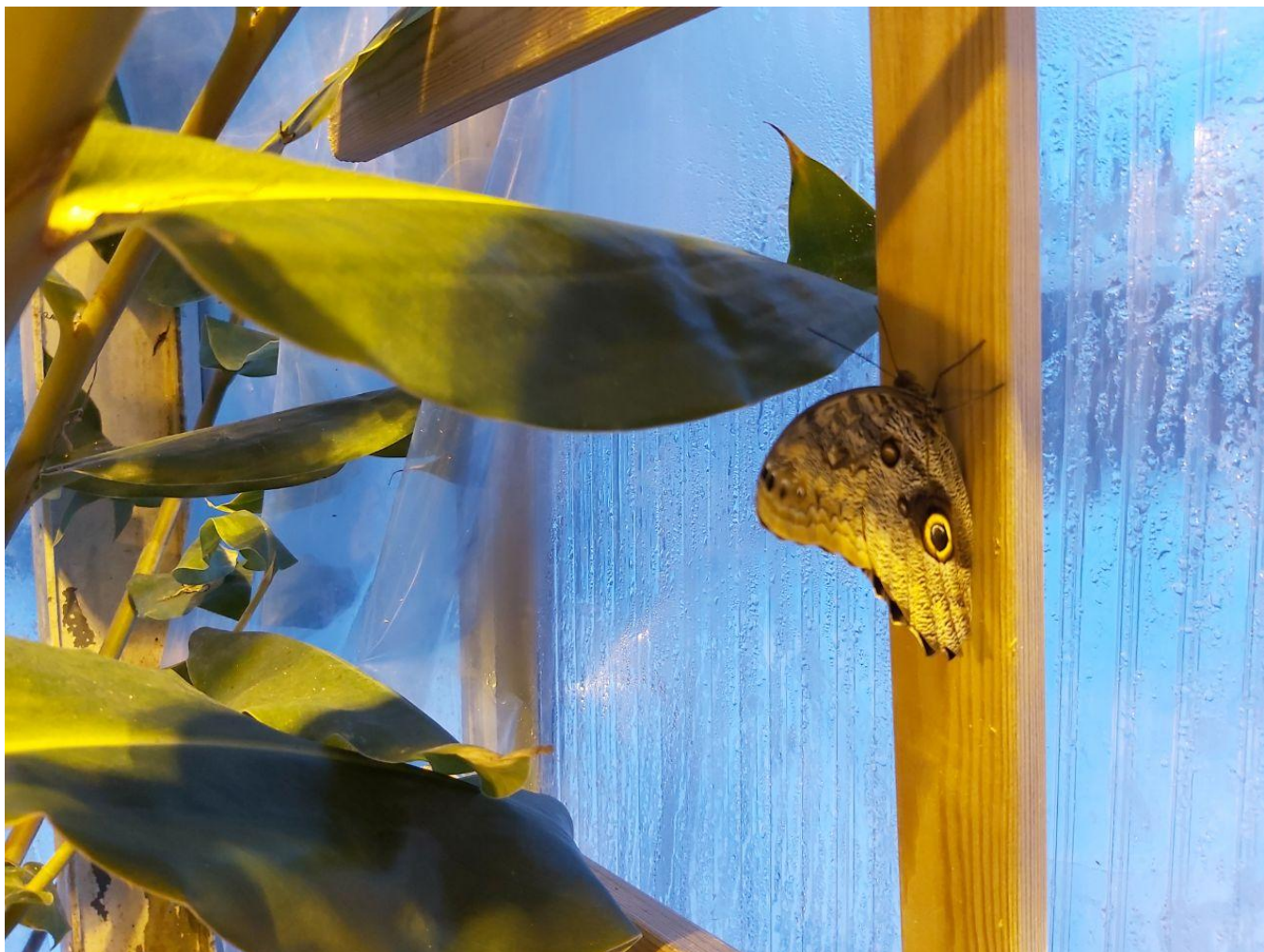


FIGURE. BOTANIA IS A BOTANICAL GARDEN IN JOENSUU. THERE ARE ALSO BUTTERFLIES.

Dear all,

Botania is a botanical garden in Joensuu. It is open during Thursday-Sunday. <https://botania.fi/>

I have bought a "myself + 3 friends" pass for 1 year. Therefore, I can take my friends to Botania for next 1 year. If you wish to go with me, I am usually free on

- Thursday 15-17
- Friday 16-18
- Saturday (perhaps for 2 hours, at some point, during 10-20)
- Sunday (perhaps for 2 hours, at some point, during 10-18)

For me, the idea is that after working in Metria, I will go to Botania for 1-2 hours to relax / hang out / drink coffee / work with laptop.

Best wishes,

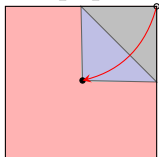
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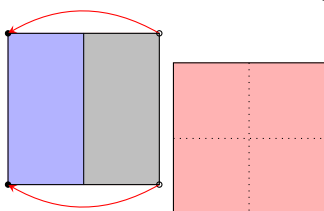
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An origami cube

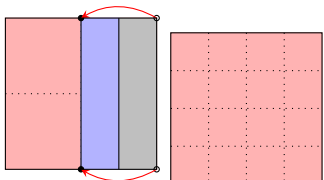
Let's make an origami cube. In these instructions, the front of the paper is **red** and the back of the paper is **blue**. The paper is on top of a table of similar size, which is **gray**.



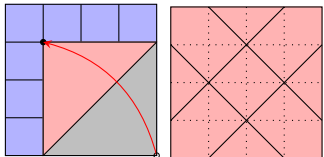
Fold the paper in half (2 times).



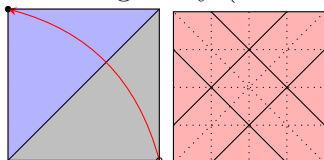
Fold the sides next to the folds, which were just created (4 times).



From the back side: fold three quaters ("3/4") (4 times).



Fold diagonally (2 times).



The end is a little bit difficult. See the video [5:11→]:

<https://www.youtube.com/watch?v=7vXVblyJnqY&t=311>

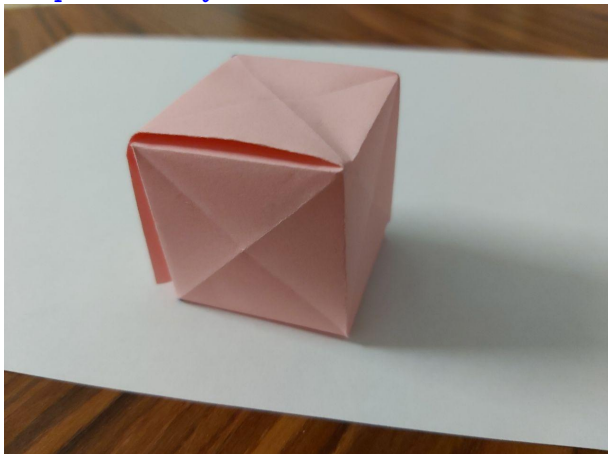


FIGURE. FINAL RESULT.

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Size A9	5 €

For the next 3 newspapers

(ota 3, maksa 2)

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Size A8	20 €
Size A9	10 €

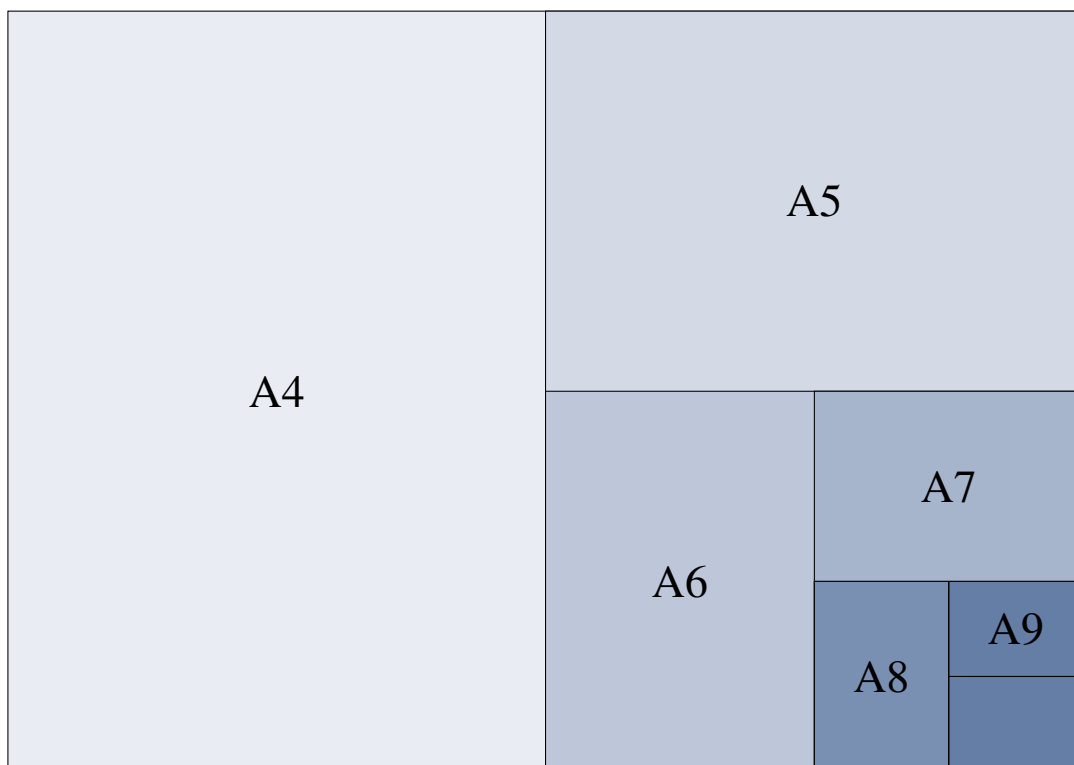
Long term

(at least 3 newspapers)

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Scientific Papers – I. Essays

WHY THE SOCIAL SCIENCES ARE NOT REDUCIBLE TO NATURAL SCIENCES?

By ALIREZA MOMENI

Introduction

The natural sciences, based on *universal law* [1], historically, stand up distinctively valuable epistemic position over all field of sciences. On the other hand, *philosophy of social sciences* is based on some certain concepts, which are developed by a set of social regularities/situations. The most important questions, in this sense are; are the social sciences reducible to the natural sciences, particularly physics? Does social inquiry utilize the same “*scientific methods*” as natural science?

In this essay, I show that even before considering the social sciences as the real sciences, several epistemic fallacies were occurred leading somehow by two sets of perspectives including *Reductionism* and *Essentialism*. I emphasis on avoiding both two models of viewing to secure the social sciences standing which might be recognized as inferior discipline. Otherwise, by losing significance of the social sci-

ences, several issues may arise for the field, for instance, receiving much less support and funding from government, universities, etc., than other disciplines, consequently discouragement of scholars who chose the inferior pursuits [2, 3].

Finally, I am going to argue that a compelling account of the social sciences based on the certain ontological principals in social phenomenon help us to build up the compatible and realistic expectations from the social sciences.

The Social Sciences beyond of the philosophy of science

So many years ago, *Thales of Miletus* claimed that he knows the originating principle of the natural world by declaring water as the first cause of the nature [4]. The other Milesian, *Anaximenes* stated that the air is the source of every things [5]. *Heraclitus* insisted in ever-present change and motion of the univers [6]. *Socrates*, after six centuries later, was concerned that some of the early naturalist Greek philosopher explain things merely in favor of matter and motion regardless of human intelligent order [7].

The study of human behavior, over the centuries, had been the realm of theology and mythology, just *Rene Descartes* in 17th century attempted to explain human body function with mechanical explanation.

In nineteenth century, *Aguste Comte*, as known as father of *sociology* [8] aimed to place social sciences in the scientific hierarchy [9, 10], however, his concern was that the new-established discipline may fall to pre-science realm – metaphysics and theology – it made him to refer to physics by developing concept of “*Social Physics*” [10] based on “*the positive philosophy*” [9]. At the turn of the 20th century, Science has historically been a physics-dominated field [11]. Since the early 1980, *the philosophy of social science*, which address certain basic philosophical questions toward the social sciences, has become a popular discipline [2, p. xv]. Philosophers of science turned formerly to social realm for understanding how the *knowledge* can be acquired from social world as well as natural world. During the 20th century, Karl Popper and Thomas Kuhn built the most fundamental criticisms of knowledge created through induction in natural sciences. Karl Popper pay more attention to the social sciences, although he never hides his interest in the natural sciences [12]. He proposes the idea of “*unity of the method*”, while he suggests the “*situational analysis*” more benefit method to the social sciences [12].

Viewing the social sciences through the essentialist lens and reducing it to the natural sciences and physics, such the epistemic fallacies make an unrealistic hierarchy for the sciences in which the social sciences might be recognized as inferior discipline. In next part, I deal with to show these misleading perspectives within emphasizing to avoid them through study sciences.

Essentialist lens

“Are the social sciences really inferior to the natural sciences?” To arrive at that question asked by Austrian-American economist, Fritz Machlup in his article in 1961 [1], at this point, you may think that; are the social sciences really science? The later question by itself bears a certain in-depth question that ask what science really is. As you see, Machlup’s question inquires the position of the social sciences in a hierarchical clustering of sciences, with holding implicitly the scientific nature for the social sciences in advance. It seems the first question lead us to go deeper and deeper into the subject until reaching the roots.

The philosophers of science, historically, moved most often from the surface to the depth; getting to the origins. They constantly seek out the common principles that lie in the underlying layers of sciences, attempting to reach the essence of the sciences, and finding a common ancestor to all the sciences evolutionarily. For instance, the controversy between the *rationalists* who hold the origin of knowledge as *rational inference* [13], and the *empiricists* who maintain the *experiment and observation* as the basis of knowledge [11, 13] is such a long story in philosophy of science.

This idea that “the essence of sensible things can be found in other and more real things-in their primogenitors or forms” [14, p. 317] outlined by *Plato* and many of his followers [14]. The key role of science, therefore, is to discover the latent reality or essence. The most important question in this sense is; can we simply talk about the soul (or essence) of science with fixed and unchanged properties? Popper argues that the philosopher of science, by adopting such an essentialist approach that inquires what is, or what are and not why [15]. In other words, the philosopher of science might describe the science within its axioms, but by this way, the logic of scientific changes, internal complexity, and extrinsic networks of science will be eventually ignored, whilst the advancements in knowledge take place most often in changes [16]. On the other hand, the common principles of sciences, if any, seems are disputable and no discoverable easily. Applying such a mentioned approach, most importantly, may lead us to build a dogmatic hierarchy, somehow, in science, which boosts totalitarianism and authoritarianism [17].

Furthermore, detection of epistemic errors, in this sense, is more effective than looking for roots of knowledge. Popper proposed a magical technique so-called *Critical Rationalism* [12, 15, 17, 18] to avoid the *scientific dogmatism*. He writes, “Science must begin with myths, and with the criticism of myths; neither with the collection of observations, nor with the invention of experiments, but with the critical discussion of myths.” [17, VII]

Reductionism

“There is physics and there is stamp-collecting” this famous statement of physicist *E. Rutherford*

(quoted by Crane, & Mellor, 1990) [19], recall the idea of *Reductionism* in science which is originated from unified science theory. In the 20Th century, *Rudolph Carnap* (1934), as a leading figure of the *Vienna Circle*, proposed the idea in his book so-called *the unity of science* [20], while it is old as even before philosophy of science was invented [21]. Reductionism most often covers view in which all of sciences regardless of several ontological and epistemological differences are reduced to one discipline such as physics. This reductive process may happen, therefor, in three aspects of science including vocabulary, laws, and explanatory principals [22]. Early philosophers of science, such as Auguste Comet, may initially thought that *demarcation* such a sufficient approach play key role to solve many social issues, and the following controversy in this sense – reductionism or the Unity of Science, never imagined before. Karl Popper, later pointed that “the believers in reduction who, for some philosophical or other reason, adopt a priori the dogmatic position that reduction must be possible, in a way” [15, p. 8].

Social phenomena versus natural phenomena

In this part, I emphasize on the certain features of the social phenomena compared the natural incident, which may inspire to open the comparative discussion between the social sciences versus the natural sciences, and building up the compatible and realistic expectations from all both disciplines.

1. Complexity versus simplicity

The social phenomena, such the highly complex processes [3] have many interrelated parts inside, and a broad network of contributed variables outside, which make them to never acquiesce in the precision and measurability as well. In contrast, the natural phenomena are simple and susceptible to measure mathematical definition precisely.

2. Concept-oriented versus law-oriented

The social phenomena are based on *situations*, instead of the *universal-matter-based laws* of physics. The social situation is defined by a couple of concepts that are utilized by researchers to understand and explain no *absolute reality*, but at least like

the real circumstance (verisimilitude) [12]. For instance, the brain drain in the low-income developing countries as a social phenomenon is explained by such concepts as poverty and new colonialism (concept), whilst the planet movements can be explained by the Newton’s laws of motion.

3. Situational versus Universal

The natural events are explained based on the universal laws that are not limited to a space, time, and state. In contrast, social issues are situational and contextual, that change in a particular geography and time, declining the predictability of social phenomena as well.

4. Changeability versus stability

The social situations as mentioned, are based on a set of internal and external relationships which can be identified and explained within its “time” and “place”, the changeability, therefore, make them to be less generalizable than natural events. For instance, are the leading factors contributing to increase the rate of suicide in Tehran the same as Helsinki?

5. The social theories have many exceptions.

Finally, the social regularities, contrary to the laws of physics, have many exceptions. In the other words, there are a couple of social theories, which would never be falsified. Popper tried to avoid circularity of positivist *verification* by relying on the principles of his innovative method so-called *falsification* [15, 17, 18], but some hypothesis or theory may never have a potential to be falsified in some disciplines, especially in the social sciences.

Conclusion

To sum up, the study of sciences need mostly to adopt a non-essentialist (*nominalist*) approach not only to explain the nature of each science within its consequences, advances, and achievements, but also to develop a plural scientific world. The social sciences, accordingly, based on their certain ontological features, are not simply reducible to natural sciences.

Furthermore, the study philosophy of the social

sciences illustrate that the fundamental differences of social phenomena compared to natural events make the fields not amenable to measure precisely definition within a lower power of predictability, generalizability, and uniformity rather than the natural sciences. Applying the same scientific methods as in all both disciplines and “the unity of method” seems as an ambitious approach as well as following the interpretivist which isolate completely the

way for explanation in the social sciences. However, rethinking to basic ontological differences between two disciplines within maintaining the significance of each one and avoiding the epistemic errors help us to choose a middle way. Finally, let us to emphasize that the developments of knowledge and the transition of scientific patterns and paradigms throughout the time mostly occurs in the changes.

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Jouko Hartikainen – Governmental control of information was not total in the early 18th century Britain

**GOVERNMENTAL CONTROL OF
INFORMATION WAS NOT TOTAL IN
THE EARLY 18th CENTURY BRITAIN****By JOUKO HARTIKAINEN**

 In my Master's Thesis I looked into the ways how the first modern Newspaper, *The London Gazette*, of the British Crown told news of the Great Northern War, a series of conflicts between Kingdom of Sweden against a coalition formed by Russia, Denmark, Prussia, Saxony, Poland and Hanover. This conflict emerged mostly as a distant foreign war from the British perspective. However, in the end this war had also political significance in Britain itself, when the changes in international situation, including change of the throne to a new Monarch, and domestic politics caused anti-Swedish bias in the government by 1717.

The era was a very interesting also because it was an early transition period in the history of the western press and emerging media. This was one of the earlier eras of media's proper propaganda usage as well. Furthermore, the Great Northern War has remained mostly part of the traditional historical narratives of countries like Sweden, Finland and Russia and it had at times surprising connections to Britain which have sometimes been overlooked.

The thesis investigated three different occurrences between 1709-1717 and how the paper shared news and information regarding these events. The selected theses were: The Battle of Poltava between Sweden and Russia, British Royal Navy's presence and the trade warfare in the Baltic Sea in 1714-1716 and Swedish plot with British Jacobite rebels in 1717.

The thesis concludes that the control of informa-

tion was clearly practised in *The Gazette*, but that this had little effect in the long run in a period of emerging private press that revealed what the Crown's paper did not. Time was favouring more commenting forms of press, both pro- and anti-governmental, and thus the Crown was somewhat abandoning *The Gazette* as a mean of influencing the emerging bourgeoisie, which was the major component of the public sphere of the era. The paper thus remained separated from actual governmental propaganda that was printed in other publications. Nevertheless, the paper still presented messages directly from the Crown among content such as news reports, which were in turn clearly edited to favour the objectives of the Crown. This was, however, limitedly effective, as other areas of press shared conflicting views.

The author here thinks that this thesis was able to shed some new light on the function of news and spread of information in early modern Europe and early Georgian Britain.

With new developments in both the spheres of international politics (such as Brexit) and changes in media (the prominent role of social media, scandals in the British Royal house and struggle over "fake news") the thesis and its themes can have some slight relevance what is happening right now, despite the obvious distance of the study era and present day. At least one can see some more universal types of changes that tend to happen when more freedom or new ways of expression are made possible in a society. One cannot help but wonder whether the gradual change away from professional journalism towards individualised news and media content via social media is happening similarly than what happened with the British Crown's monopolistic hold of the media three centuries ago.

Jouko Hartikainen

Master of Arts, UEF

Scientific Papers – IV. Abstracts

From ether experiments to ether skepticism: Development of Michelson Morley experiment towards Lodge's experiments

Ari J. Tervashonka

Change from absolute reference frame by Isaac Newton towards relative physics by Albert Einstein was a slow theoretical process that took decades. During this time ether experiments had a role in this development. This article studies technological change from Michelson Morley experiment (1887) towards renewed versions carried out by Oliver Lodge. Experiments that Lodge did were developed further ideas from original Michelson Morley experiment that was optical. Lodge added to this study also electrical and magnetic phenomenon

to gain further knowledge. This development was driven by dissatisfaction towards Michelson Morley experiment that did not find any evidence for the existence of ether. Ether was thought to be the medium substance that was vesicle for magnetic, electric, thermal and optical phenomena. It was believed that through this medium we could explain how these phenomena worked and it was understood in a mechanistic manner. Lodge used similar reasoning while developing further original Michelson Morley experiment to prove the existence of ether.

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