

# Distinguishing Between the Material Reality and Social Reality

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## Abstract

In the so-called “post-truth age” that commenced in the mid-2010s, fake news and unsubstantiated claims have gained popularity mostly stemming from the human observer’s confusion between the material reality and social reality. The article proposes a logical grid for testing whether an object or phenomenon under scrutiny belongs to the former or latter type of reality, and whether, from the human observer’s perspective, its existence is objective or subjective within such a given reality’s confines. The discussion is foregrounded with the history of spatialized conceptualizations of the material and social reality, and concludes with a reflection on the prospect of a rising non-human (machine-generated) social reality.

## Keywords

biosphere, extrasemiotic sphere, group bonding, language, material reality, mode of existence, social reality, semiosphere, speech, speech act

## Introduction

At the turn of the 21st century, when teaching students in Poland, I noticed they struggled with the question of whether phenomena of social importance “really exist.” The sociopolitical world that surrounded them in this country was and still is composed, above all, of the Polish *nation* and *state*. The first is defined as a cohesive group of people who see themselves and are perceived as Poles because they share the Polish language. On the other hand, the Polish state is a set of institutions and political principles that underpin the existence of this nation within a delimited territory known as Poland, or the country of the Poles.

Yet, neither this nation, state, language nor Poland is visible, tangible or audible in the same way as a material object — such as a stone, some foliage, snow, a cow in the meadow, or the Moon. The nation, language or state cannot be weighed, touched, seen or measured as a modest Ikea bookcase can be. During my lecture, some students objected to this conclusion, which they found, in their view, “nihilistic.” Instead, they proposed that the Polish

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language is, after all, clearly *audible*, as we were employing the medium in the lecture hall for the very discussion. But what was audible in this case was speech produced by a specific person, *not* a language.

Language is usually understood in the Western tradition to be an entity composed of a lexicon of words, employed in line with the rules governing syntax, grammar and the like, as well as semantic compartmentalization, spelling and pronunciation. These rules were ironed out through scholarly and political quarrels alongside their actual use in book production and in education. These rules, and the lexicon, are often recorded in special-purpose books, known as dictionaries, grammar books, and textbooks of (correct or good) usage. Thus, like states or nations, languages, construed as objects, are invisible, intangible and inaudible.

These students of mine who grappled with this dilemma of such phenomena's existence — the nation and its state or language — were incentivized to think about this essentially philosophical issue by post-communist Poland's turbulent politics and the unexpected rise of the internet. In the former case, the invisible and intangible communist *doctrine* of the centrally planned economy deprived their families of essentials throughout the 1980s, while the post-1989 gear shift to the equally unseeable *capitalism* ensured an abundance of goods in the shops previously bereft of merchandise. What is more, one could now “do things” on the invisible internet as much as one did in one's “real life.”

The question arose of what is, then, “more real.” The things done with one's own hands by touching, moving and reshaping objects, such as a clump of dirt dug up with a spade in a garden, appear to be real enough, and are often physically exhausting. On the other hand, for the latest generation, who grew up in the age of cyberspace, a computer game in which players score goals, scale levels and “build” new worlds seems equally real, with any exhaustion entailed rather mental in its character.

I tried to address the students' questions of this type, which eventually prompted me to develop a series of lectures on this topic. I delivered these talks during the 2010–2011 academic year to undergraduates at the University of Economics in Cracow, Poland.

Afterward, I gathered the insights and summarized them into a single presentation. It was this fine-tuned summary that, subsequently, during the 2010s, I presented for a variety of audiences at Ukrainian Catholic University in Lviv, Ukraine; Tallinn University in Estonia; the University of Malta; the University of Las Palmas de Gran Canaria in Spain; and the Ivo Pilar Institute of Social Sciences in Zagreb, Croatia.

The plan was to eventually write up the main findings and propositions in the form of an article. But, as usual, teaching, way-overdue research projects, and edited volumes took their toll on my leisure. Time and again, for a decade and a half, the planned article was pushed to the back burner. Meanwhile, by the turn of the 2020s, amid the rise of social media-enabled populism across the West and most of Asia, the novel collocation “fake news” had taken public discourse by storm. Traditional journalism — committed to newsprint and sending foreign correspondents for corroborating findings and claims — declined fast. In turn, online news aggregators parasitized the paper press, accelerating its decline, which opened the gates to falsehoods, propaganda and entertainment spoofs posing as “genuine news.” Commentators began talking about the arrival of the “age of post-truth” (Post-truth 2025).

Another cohort of my students, this time at the University of St Andrews in Scotland, required an explanation of what difference might be drawn between “fake news” and “real news.” The widening and increasingly divisive public discussion on this subject assumed highly politicized undertones. The 2020–2023 pandemic exacerbated this shrill politicization to an unprecedented level. Previously contained to the lunatic fringe of popular opinion, conspiracy theories mixed with chiliastic and messianistic messages entered the mainstream of public discourse. The waves of new infections that kept circling the globe for three years necessitated the imposition of repeated lockdowns across the world. De facto house arrest for billions, along with remote working and teaching, resulted in unprecedented isolation and atomization for most.

The preventive measures for checking the spread of the pandemic made individuals keep to themselves for months and even years on end. This unwilling seclusion intensified the spread of, and growing acceptance for, a plethora of unfounded and unevidenced beliefs cultivated in social media bubbles. With time, social media’s monetization algorithms more robustly pushed anxious individuals glued to computer and mobile screens into information bubbles with people sharing their beliefs. The pandemic’s frightening death toll was rampant and appeared to justify individual and group fears. This further boosted the fracturing of public opinion and its disjunction from fact and evidence. Dispassionate reflection, conducted in a causal manner and grounded in the actual events, has increasingly become a thing of the pre-pandemic past. Despite the unprecedented level of education achieved in the West, its seemingly modern and rational societies also fell for numerous fringe theories, including the delusion of the supposed non-existence of viruses (Ullah et al. 2021). This opinion draws on the “commonsensical” belief that only those

things are real that can be seen with the naked eye. Paradoxically, though a layman has no means or technical knowledge to observe and comprehend the circuitry of a microchip or its actual functioning, antivaxxers use computers, smartphones and the internet for spreading their views, and do not doubt the existence of these technologies, let alone refrain from using them.

### Modes of Existence

The discussion on what *really* exists or *not*, unhelpfully black-and-white in its character, has started affecting the established normative principles of rational thinking that were previously used to trace the evidenced trains of causes and effects that underpin the rise and dynamics of observed phenomena. The idea has spread that the truth is nothing more than a matter of opinion and does not require any support in the form of an evidenced record of causal relations between individuals, objects or both. AI-enabled online solutions that allow for “truthfully” faking images of people, including their voices and body language, give some credence to this misconception. However, people who may deny the existence of viruses, or trust that Earth is flat, nevertheless drive to a filling station to refuel their car, instead of praying in a church for the holy spirit to reanimate this vehicle.

Believers know from their quotidian experience that, irrespective of the amount or ardency of their prayers, deities never make automobiles run on empty. On the other hand, people tend to fall prey to self-declared “experts” operating in internet bubbles who verbally “prove,” with no evidence provided, that viruses do not exist. The observed atomization of public discourse, alongside the dispensing with the requirement of proof for a proposition deemed as “true,” weakens the overall level of critical thinking, but does not do away with it completely, especially at the pragmatic level of everyday experience.

This weakening of critical thinking stems from the generalized ignorance about the modes of existence of the objects that compose reality. Nations, states and languages *exist*, but they exist *differently* from stones, snow, cows or the Moon. The existence of the objects enumerated in these two sets is governed by *different* principles that amount to different *modes* of existence. A stone exists differently from a nation, which nevertheless also exists. The problem of miscomprehension appears when a person is led — be it by social media, bogus experts or propagandists — to conflate or otherwise mix these two different modes of existence. Believing that viruses do not exist is mistaking the mode of existence typical of nations with that which governs the existence of cows.

In scholarship, these two different modes of existence are often identified as the *material reality* and *social reality*. The material reality is a synonym for the universe — that is, matter, energy and spacetime — that exists *independently* of human will. In turn, social reality is generated by groups of humans who *imagine* into being nations, states or languages (Anderson 1983). In the same manner, jurists produce legal fictions, like corporations that, in light of law, are seen as “legal persons.” In contrast to the material reality, social reality is fully *dependent* on human will. Should humans stop believing in, and stop acting as if they believed in, the existence of nations, states, or languages, these entities would disappear from the obtaining social reality.

Such disappearance at the whim of human will is *not* available for any element of the material reality. Certainly, a deluded person can close their eyes and declare that the mountain behind the coastal town has just ceased to exist. Yet, the town’s inhabitants who are not given to such flights of fancy, and who keep their eyes wide open, will see that the mountain continues sitting where it has been since time immemorial. Traveling inland would require traversing a high pass at the mountain’s side, just as it did as previously. Even the person who issued this declaration of the mountain’s non-existence, when they eventually open their eyes, would have no choice but to admit that the mountain did not budge in the least at those grandiloquent words.

From the perspective of the material reality, human speech is a mere puff of warm air that would hardly move a blade of grass. But it is people talking about nations, states or languages that first evoke these entities’ existence in their minds. They then confirm it by acting in line with what these rhetorically-conjured objects require. A person pledging the existence of, and behaving as a loyal citizen of, Nation A is not doing any more or less than the above-mentioned person who decided to declare the non-existence of a mountain. Both acts were purely verbal. Yet, the former has successfully altered a given social reality, while the latter has turned out to be impotent and just echoed quietly, leaving no mark on the material reality.

British philosopher of language J. L. Austin (1962) proposed the term “speech acts” for the use of speech (that is, utterances) that creates and alters social reality. With utterances incessantly produced by humans, people “do things” within the sphere of social reality. Typically, these “things” amount to greetings (for instance, “hello” or “good morning”), valedictions (for example, “goodbye” or “see you soon”), interjections revealing one’s emotions (for instance, “gosh!” or “wow!”) or acknowledgements of other people’s presence (for example, peri- or non-verbal sighs, grunts or nods) for keeping the channel of communication open (an action known as language’s phatic function).

The grand total of utterances produced by humans in the course of daily life overwhelmingly consists of speech acts that bind people together into cohesive groups (societies), but do *not* convey information of formal logical value. When analyzing human speech, school textbooks tend to focus on this or that language, officially cast as the obtaining medium of instruction in a given institution. A typical textbook of English or Albanian defines such a language as composed of *sentences* that come in the form of affirmative sentences, negations and questions. Sentences are employed for conveying *information*. Each sentence can be ascribed a logical value, namely, *true* (+) or *untrue* (-). If someone says, “At present (2025) Julius Cesar rules Italy,” listeners would react by assessing this statement as “untrue” (-) and instead propose that “Giorgia Meloni is now Italy’s PM” (true, +).

Sentences amount to a narrow and specialized type of utterances that speakers use sparingly. On the other hand, speech acts of no ascribable logical value predominate in speech. They cannot be assessed as true or untrue. Instead, speech acts can be deemed only as *successful* or *unsuccessful*. For instance, the decision to dissolve the Holy Roman Empire in 1806 was successful, because with this act Europe’s then-largest and oldest polity was successfully erased from the continent’s political map. By the same token, public protests or politically frustrated persons have recently appealed particular nations or states to disappear, yet nothing has changed, and Britain or Italy, for instance, have continued to exist.

Of course, due to their nature, speech acts are invariably unsuccessful when misdirected at the material reality. It is a case of confusing a given mode of existence for what it is not. Words are incapable of moving a pail of water, conjuring things from the thin air, let alone extinguishing stars. The mode of existence that characterizes the material reality is not dependent on human will. Unlike social reality, the material reality is not generated through the human use of speech, that is, with the employment of speech acts. It is the mode of existence that pertains to social reality. Humans and their groups, in

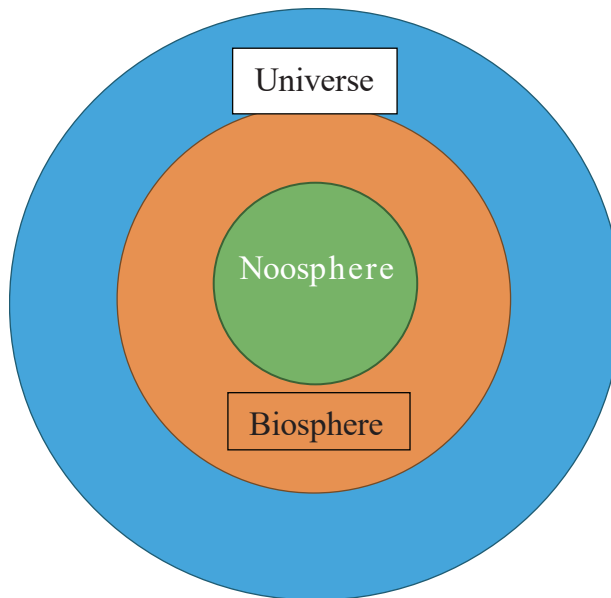
**Table 1:** *Functional and frequential composition of human speech*

| <i>All Utterances</i>             |                                       |                                                                          |
|-----------------------------------|---------------------------------------|--------------------------------------------------------------------------|
| <b><i>Overwhelming Number</i></b> | <b>Speech Acts<br/>(Doing Things)</b> | <b>Primary (Evolutionary)<br/>Function: Group Bonding</b>                |
| <i>Minimal Number</i>             | <i>Sentences</i> (Logical Value)      | <i>Secondary Function:</i><br>(Evidence-Based, Logical)<br>Communication |

line with their wishes, generate social reality, which is entirely dependent on human will. Hence, humans can and do alter social reality through speech acts (words).

### Material and Social Reality: Spatializing the Divide

In the early 20th century, Volodymyr Vernadsky, a Ukrainian geologist from the Soviet Union, approached the issue of the existential difference between the material reality and social reality from the perspective of outer space. In 1925, he proposed that the space where biological life exists and reproduces on the surface of Earth can be defined as the *biosphere*. In turn, wherever such DNA-based life does *not* exist — on, within or around the planet, alongside elsewhere in outer space — amounts to the inanimate *universe*. Hence, in this model of “concentric circles,” the biosphere is placed *within* the sphere of the universe. Next, *inside* this biosphere, Vernadsky distinguished the noosphere. In ancient Greek, νόος *nóos* means “mind, reason, intellect,” which, in the scientist’s schema, is a metaphor for speech. Vernadsky identified the noosphere with the biological niche of *Homo sapiens* because, on the present-day Earth, only humans are capable of articulated speech, with which they produce and maintain social reality (Vernadskii 1925).



*Diagram 1. Vernadsky's model of reality.*

Obviously, this spatialization is guilty of the period's typical prejudices and stereotypes. By placing the noosphere in the conceptual center of the universe, Vernadsky, in a way, reversed the Copernican revolution. Once again, like proponents of geocentrism, the researcher unduly privileged humanity as the supposed acme of all creation. This founding biblical myth and norm of Middle Eastern (Judeo-Christian-Islamic) mythologies resurfaced in such a scientific guise during the period when the Soviet leadership announced the end of all religions. The self-reflective (articulate, capable of speech) forms of life, as exemplified in the singular by the *Homo sapiens*, was posed as "higher" or "better" than inarticulate forms of life (that is, animals, plants, bacteria or viruses). Without stating this explicitly, Vernadsky put social reality generated by the human use of speech in the role of a yardstick for separating the noosphere from the rest of the biosphere.

The ranking was also applied to all the material reality, making the vastness of the universe into an entity of tertiary importance behind (without, or even below) the noosphere and the biosphere — as though it were humans alone who decide about the biosphere and the universe and not the other way round. In this age of the anthropocene, the destructive activities of humans and their groups may unpredictably alter the biosphere, but people are not able to destroy it. The destruction of all DNA-based life is an impossibility for humans, even with the mass employment of nuclear weapons. Proverbial cockroaches would survive, along with a host of other forms of life. What people would destroy in this manner is their own biological niche, in which the species of *Homo sapiens* is able to live and propagate. Indeed, humanity is at present capable of destroying itself or Vernadsky's noosphere, but *not* the biosphere. And whatever humans do on their own or together would be of *zero* consequence for the universe.

Yet, a collision with a mere asteroid — let alone with another planet, star or a black hole — could smash Earth into smithereens, destroying the biosphere in its entirety.

In 1984, half a century after Vernadsky had proposed his model, in the same Soviet Union, the Estonian literary scholar of a Jewish and Russophone extraction, Juri Lotman, simplified the geologist's spatialization. Lotman reduced the number of salient elements in the model from three to two. The scholar introduced a novel concept of the *semiosphere*, or the space where semiosis takes place. In his thinking, semiosis amounts to processes that, with the manipulation (use) of signs (that is, words, utterances, speech), produce meaning. This specialist neologism was coined from the two cognate ancient

**Table 2:** *Misperceiving Humanity's Position in the Universe: The new geocentrism (humanocentrism)*

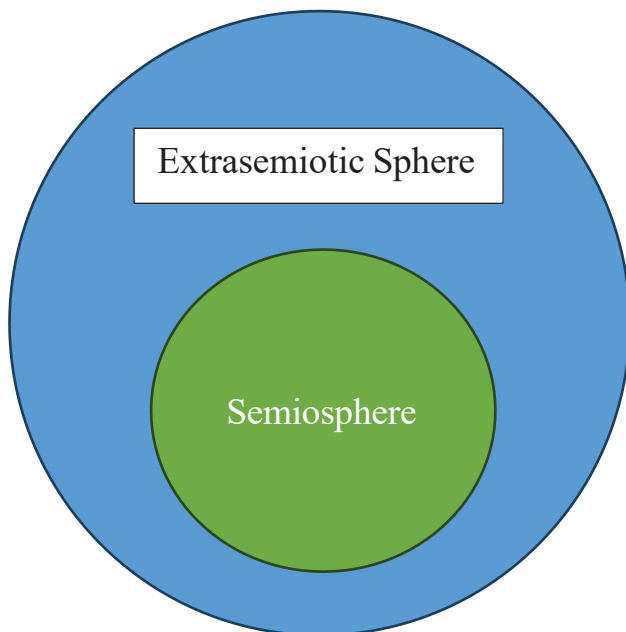
| Spatialization and Concepts                                                | Ranking / Evaluation / Importance |
|----------------------------------------------------------------------------|-----------------------------------|
| Humanity = Noosphere = Semiosphere = Culture                               | Primary = Higher                  |
| Biosphere = DNA-based Life (minus Humanity) = part of Extrasemiotic Sphere | Secondary = Lower                 |
| Universe = Extrasemiotic Sphere (minus Biosphere)                          | Tertiary = Lowest                 |

Greek words, namely, σημειόω *sēmeiōō*, “to mark, interpret as a portend” and σημα *sēma*, “mark, sign.”

Of course, on today's Earth, none other than humans and their groups launch and carry out the aforementioned processes, signs and meanings. The perceived esotericism and otherworldliness of these issues recently found their down-to-earth match in the form of statistically-enabled neural machine translation, which, alongside LLMs (Large Language Models), underpins recent AI technologies (that is, chatbots). After centuries of philosophical and religious handwringing at the mystery of the relationship between signs (words, utterances) and meaning, this mystery is no more. The story recalls the abandonment of the theoretical element of ether at the turn of the 20th century. Supposedly, ether was an indispensable medium for transmitting or carrying electromagnetic and gravitational waves across the universe. Observation had never confirmed the existence of ether, and the development of theoretical physics allowed for ether's removal from new mathematical models of the universe.

In his spatial schema, Lotman placed the semiosphere in its center. Functionally and definitionally, it is synonymous with Vernadsky's noosphere. Everything else — that is, Vernadsky's biosphere (less the human biological niche), and the rest of the universe — Lotman defined as the *extrasemiotic sphere*, or, in other words, the space where semiosis does not occur. In Vernadsky's terms, it was this “elsewhere” where humans and their groups did not live, so speech did not pop up there. Almost nowhere in the universe is speech (as understood in human experience) possible. Apart from humans and the conditions attuned to their survival and well-being, the medium of air is a *sine qua non* condition for the production and transmission of speech in the form of acoustic waves.

Lotman's extrasemiotic sphere, and Vernadsky's synonymous universe and biosphere (less the noosphere), can be likened to the material reality. In turn,



*Diagram 2. Lotman's model of reality.*

the former scholar's semiosphere and the latter scientist's noosphere correspond to social reality. Social reality is also known as "culture" in popular parlance. Culture consists of speech-enabled relations among humans and their groups, together with the products of human effort and ingenuity through which humans have altered their biological niche. In contrast, nature consists of things as they were produced by the universe (including the biosphere) without any human intervention.

### **Evolution and Language**

Obviously, all the aforementioned schemata that draw binary oppositions between material reality and social reality, nature and culture, or the extrasemiotic sphere and the semiosphere implicitly stem from the Middle Eastern religious distinction between the material body and the spiritual soul. This vernacular and rarely questioned dichotomy is thoroughly illusory and unevidenced. Social reality (i.e., culture, the noosphere, and the semiosphere) is *secondary* in relation to the material reality (i.e., nature, the universe, the extrasemiotic sphere). Without the material reality, there would be no social reality.

**Table 3:** *Correspondence between concepts and their names as proposed by Vernadsky, Lotman and other thinkers*

| <b>John Searle (1995),<br/>Robin Dunbar<br/>(1997)</b> | <b>Volodymyr<br/>Vernadsky (1925)</b> | <b>Juri Lotman<br/>(1984)</b> | <b>Vernacular<br/>(Middle Eastern)<br/>Distinction</b> |
|--------------------------------------------------------|---------------------------------------|-------------------------------|--------------------------------------------------------|
| Social Reality                                         | Noosphere                             | Semiosphere                   | Culture<br>(Soul, Spirit)                              |
| Material Reality                                       | Universe +<br>Biosphere               | Extrasemiotc<br>Sphere        | Nature (World,<br>Universe)                            |

For the production of social reality, humans need bodies, as well as the evolutionarily-developed capacity for speech, which is hardwired into the human brain and vocal tract. Likewise, speech itself is a material phenomenon, “shaped in space” in the form of acoustic waves that move through the material medium of air at the bottom of Earth’s atmosphere. Not a single element of this equation is spiritual, non-material or somehow otherworldly.

American philosopher of language John Searle, who used to be a student of J. L. Austin’s, continued working on the topic of speech acts that his tutor had initially broached. Searle developed a theory of social reality that is produced, maintained and altered by humans through their use of speech (language) (Searle 1995). British evolutionary psychologist Robin Dunbar (1997) approached the same problem from the perspective of primatology and evolution. Through evidenced research, he showed that more time-efficient bonding among individuals presented with itself an evolutionary advantage that led to the development of speech (language). Non-verbal bonding is time-consuming because it is only possible between two individuals at any given time — as executed, for instance, through reciprocal fur grooming. In contrast, verbal “grooming” — in other words, conversation — is possible with two and even three other individuals simultaneously. Hence, talking is twice to three times more effective than one-on-one fur grooming when it comes to group bonding.

The *primary* function of speech (language) is group bonding, *not* communication (whether dispassionate, rational, evidence-based or causal). Austin’s speech acts, or “doing things with language,” constitute the core of the biological (human) capacity for speech (“*humanese*”) and account for the vast majority of ever-produced utterances. Speech-enabled bonding is evolutionarily and socially of more salience than producing affirmative

sentences and negations that faithfully (truthfully and in an evidence-based manner) reflect the reality in which interlocutors operate (live). This reality may be material or social in its character, or amount to an intersection between both.

From the perspective of evolution and sheer biological survival, truthful communication is secondary to group bonding. The latter is literally more natural, which may explain the easy attraction of populism. Becoming part of a group by sharing emotions and convictions with no need for proof or evidence (like in the cases of religions or conspiracy theories) comes more easily (“naturally”) to humans than rationalizing about a situation in a logical and evidenced manner.

**Material or Social Reality?**

Not falling for the easy option of populism, but taking informed decisions based on evidence, data and causal relationships among salient facts, amounts to a sustained effort that can be costly in terms of time and energy. By definition, this effort is unnatural (that is, cultural) and thus arguably at variance with the biological process of evolution. It is humans who establish schools and curricula, not forces of nature (evolution) or the universe.

Critical thinking is a result of education combined with the repeated deployment of causal and evidenced findings for action and further research without flagging down the effort these entail. Yet, the burden of this effort can be lessened a bit if the educational process supplies learners with the skill of distinguishing swiftly between different modes of existence. In a nutshell, it would be advantageous for learners if they could decide whether phenomena under discussion and causal relations between them belong to the realms of the material reality or social reality. The resultant clarity of mind would lessen confusion about the objects under scrutiny. This would also allow for selecting

**Table 4:** *Debunking the implicit geocentrism, humanocentrism and/or wishful thinking of the spatialized schemata of humanity’s place in the material reality*

|                  |           |                           |                                                         |
|------------------|-----------|---------------------------|---------------------------------------------------------|
| Material Reality | Primary   | Independent of Human Will | Perceivable to all sentient beings (humans and animals) |
| Social Reality   | Secondary | Dependent on Human Will   | Perceivable only to those in the know (humans alone)    |

suitable methods and techniques of analysis for dealing appropriately with the aforesaid objects in accordance with their respective modes of existence.

For this purpose, I devised a logical grid of a heuristic character. When needed, it can be applied to objects and phenomena, like a litmus test. This grid is divided into the categories of the material and social reality, and a tested entity or phenomenon can be allocated to those respective rubrics. Its mode of existence is established as “physical” (that is, part of the material reality) or “epistemic” (that is, part of social reality), while the intersecting categories of objective (existent) and subjective (non-existent) forms of existence comment on the existential status of such an entity or phenomenon.

The purpose of these intersecting categories is to include the perceiver’s perspective as they are confronted with the observable material reality — or, in the case of social reality, with the majority’s view on the object or phenomenon in question at a given point in (geographic, socio-political) space and time.

The term “objective” is intended to signify “really existing” entities, objects and phenomena, and “subjective” non-existent ones. For the sake of more fluent usage in speech, I replaced the term “material reality” with the adjective “physical” as referring to the universe — that is, matter, energy and space. The term comes from the ancient Greek word φυσική *phusikḗ*, meaning “natural things” or “nature” — in other words, the material reality. At one point, I planned to use the adjective “ontological” in this function, the term stemming from ancient Greek ὄντος *óntos*,

**Table 5:** *The logical grid (“litmus test”) for checking whether an entity or phenomenon belongs to the material reality or social reality (asterisk [\*] denotes entities that are non-existent)*

|                                      | <i>Objective</i>                                                                                                        | <i>Subjective</i>                                                                                                                                                                       |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Physically</b><br>(Ontologically) | Material reality                                                                                                        | Social reality, non-existent<br>*elements of the material reality (*yeti, *ether)                                                                                                       |
| <b>Epistemically</b>                 | Material reality, elements of social reality in which people believe that they exist (nation, state, a language, deity) | Non-existent *elements of the material reality (*yeti, *ether) in which people do not believe; elements of social reality in which people have ceased to believe (*Greek gods, *ghosts) |

which denotes the state or fact of “being.” Yet, as an attendee of my Philosophical Friday talk at Tallinn University helpfully pointed out, nowadays ontology is a branch of metaphysics. As such, in the Western tradition, this discipline of philosophy deals with things *beyond* or supposedly underpinning nature (the universe, material reality). That is why, from the point of view of the “social reality” side of the grid, the use of the adjective “ontological” as a synonym for the material reality could be confusing, especially for people with formal training in philosophy.

The use of the adjective “physical” as a synonym for the material reality is complemented in the grid with that of “epistemic,” referring to social reality. The term comes from ancient Greek ἐπίσταναι *epístamai*, “to have knowledge of, to know about.” This meaning emphasizes that social reality is perceivable only to those in the know (humans). It is “visible” only in the mind’s eye. Unlike in the confusing case of ontology, with its unhelpful metaphysical connotations, epistemology as a branch of philosophy deals with the study of knowledge. Hence, the term “epistemic” is an appropriate synonym for social reality.

When applying the grid to test the mode and state of existence of an entity, it is important to state that the material reality, as a whole, is always *physically objective*. This means that the universe (nature) does exist independently of human will or perception. In contrast, social reality is fully dependent on human will and perception, making it *physically subjective* — that is, non-existent from the perspective of the material reality. Social reality does *not* exist as part of matter, energy or space; this entails that it or its elements cannot be weighed, measured or detected, as radiation or an acoustic wave can be.

Yet, from a human’s vantage point of observation, social reality is *epistemically objective*. It does exist in the generalized, multi-generationally confirmed group human experience, thanks to the shared ideas that are conjured with and reproduced through speech. As such, it remains “visible” to the mind’s eye. The material reality is *also* epistemically objective. Obviously, human speech may declare the non-existence of the universe (nature) or its elements. But puffs of air (what utterances physically are) are unable to alter the material reality — after all, it is independent of human will and perception.

The testing grid’s four cells allow for the sorting of a given entity or phenomenon. Depending on into which cell it falls, it belongs either to the material reality or social reality. This means its mode of existence is, respectively, either physical or epistemic. Subsequently, as part of the material reality or social reality, such an entity or phenomenon may exist or not, that

is, may respectively be seen as extant objectively or subjectively. To reiterate, the material reality and all its elements are physically objective, while social reality is physically subjective. Both social and the material reality, however, are epistemically objective.

What, then, is epistemically subjective? When people stop believing in certain elements of social reality and acting in accordance with them, these obsolete entities stop being epistemically objective and instead become epistemically subjective. This has been the fate of ancient Greek gods like Zeus, Hera, Poseidon or Hades. Two millennia ago, people used to revere and pray to these deities. At that time, the Greek gods were epistemically objective. Nowadays, people do not act like that in regards to these deities and do not believe in the ancient gods' existence, meaning the ancient Greek gods have become epistemically subjective.

The same is true of witches and ghosts. In the past, people accused some women of witchcraft and burnt them at stake as a legal punishment for it. Likewise, people used to fear the ghosts of the deceased, who were believed to haunt the living.

These physically and materially unsubstantiated beliefs have disappeared over the past century. This passage of witches and ghosts from epistemic objectivity to epistemic subjectivity took place mainly in these geographic areas of the world where formal education became compulsory and universal. Elsewhere, such beliefs (often called superstitions) may persist. Hence, depending on the perspective of a specific individual and the human society in which they exist, ghosts and witches may be either epistemically subjective or epistemically objective.

Social reality and its elements are always physically subjective. Unlike stones, cows in a meadow or radiation, they are imperceptible to those who are not in the know. Elements of social reality cannot be measured, weighed or otherwise detected with the apparatuses that physicists employ for probing into matter, energy and space.

But can there be elements of the material reality that are physically subjective? This is the case for material entities that are *mistakenly* declared to exist, like yetis or ether. When the generalized belief in these entities persists, such non-existent material entities remain a solid part of social reality and thus remain epistemically objective. During a period when a mistaken claim of this kind is held, explorers might embark on futile expeditions in search of these non-existent elements of the material reality (such as yetis).

Likewise, until the 20th century, physicists kept trying to detect ether and measure its characteristics. When it was finally established beyond any doubt that neither yetis nor ether physically exist, people stopped postulating their existence. Hence, their status as *de facto* elements of social reality moved from being epistemically objective to being epistemically subjective.

### **Deploying the Testing Grid for Action**

Let us now apply the testing (logical) grid for verifying the existence of viruses. Antivaxxers propose that viruses do not exist as material entities. Hence, from their perspective, viruses are physically subjective. They see viruses as an invention of elites and the “deep state” to deprive masses of their freedoms, such as not observing the strictures of anti-pandemic lockdowns. Hence, from the perspective of antivaxxers, viruses are “imagined,” and as such belong squarely to social reality, but are epistemically objective — a political tool in the hands of elites and deep state. Yet, when talking about viruses as entities in themselves, antivaxxers see them as epistemically subjective, and effectively place them in the same category as Greek gods, yetis or ether.

Of course, scientists have at their disposal instruments with which viruses can be detected, measured and analyzed as part of material reality. A virus’s DNA structure and actual shape can be decoded and observed. On this basis, causal links are established between certain diseases and specific viruses that produce the former. Such findings enable researchers to come up with antiviral medications and treatments. Yet, antivaxxers — due to their religion-like convictions, lack of education and unwillingness to engage with research on the subject — persist in their error of excluding viruses from their material reality, preferring to believe that viruses belong to social reality.

Hence, it is apparent that the application and usefulness of this testing grid depends on users’ knowledge and willingness to categorize objects and phenomena in accordance with evidence on the actual mode of their existence. Propagandists prey on the lack of such knowledge among a given population, and on the population’s blind trust in the powers that be (oftentimes with a charismatic dictator at the top). In an authoritarian or totalitarian regime, the main goal of propaganda is to mislead voters or mass-media consumers in a manner useful for a state’s government or a ruling dictator.

The basic mechanism of this misleading function rests in the miscategorization of the mode of existence of an object or phenomenon under discussion. Upon Russia’s full-scale attack on Ukraine in 2022, Kremlin propagandists claimed that at Washington’s behest, Ukraine had been developing biological weapons in multiple secret laboratories. It was one of a host of bogus “justifications”

for Russia's onslaught. In lockstep with the Kremlin's propaganda, television anchors shared this "horror" of such biological weapon labs with viewers across Russia (Robinson, Sardarizadeh and Horton 2022).

The story is similar to the supposed existence of yetis. With no shred of evidence, the propagandists claimed the existence of such laboratories as part of the material reality, deeming them physically objective. Lack of any evidence to support this claim with made these laboratories physically subjective. However, the state propaganda's verbal insistence on the point of these laboratories made them into an effective tool for swaying public opinion in Russia. So, in the aggressor country, this claim about Ukraine's biological weapon labs became epistemically objective, especially as an effective tool of propaganda.

### **Conclusion: Language(s) Between Nature and Culture**

With speech (composed of utterances), humans and their groups generate, maintain and alter social reality. As an example of this dynamic, it is sufficient to glance at political maps of the world in 1900 and today. This exercise allows for observing how humans' and their groups' imaginations about politics dramatically reshaped the epistemically objective entities dubbed "states." Between the turn of the 20th century and the present moment in time, the most obvious change lies in the total number of officially recognized states a century ago compared to the present day. Yet, on the physical map of the world, hardly anything has changed except for geometrical and printing methods employed for the production of maps themselves.

The physical map aspires to depict faithfully the material reality of the surface of planet Earth. This surface is part of the material reality, and as such is physically objective. On the other hand, political and historical maps, alongside maps of peoples and languages, seek to depict (or rather, represent) pre-selected elements of social reality. These elements (namely, states, peoples or languages) are physically subjective — that is, they are non-existent from the perspective of the material reality. Therefore, neither states, peoples nor languages can be seen in the photos of Earth taken by astronauts in orbit. These entities belong squarely to social reality, which is perceivable only in the mind's eye. In contrast, features known from physical maps — such as mountain ranges, continents, oceans and islands — do feature in actual snapshots of the planet.

Metaphorically speaking, humanity ceaselessly weaves a cocoon of social reality around itself. This cocoon ensures group cohesion for humanity (or its fragments) and mediates humans' perception of the material reality. In a

way, it is a verbal manner of pulling the “wool” over one’s eyes. Social reality amounts to the “dust” or “white noise” of humans simply being what they are and interacting with each other. This white noise of social reality obfuscates people’s perception of the material reality. From an evolutionary perspective, the primary function of language (speech) is to more efficiently bind humans into cohesive groups for the sake of improving their chances of survival and propagation. It does not matter if social reality impedes an impassionate (objective, unmediated) perception of the material reality, so long as it increases the fitness of humanity as a species within its ecological niche.

Speech — or more exactly, the biological capacity for speech — is a product of evolution. It is hardwired into the human body, above all in the brain and the vocal tract. This capacity is part of *nature* — that is, the material reality. The use of speech generates social reality — in other words, *culture*. In English, rather unhelpfully, speech is referred to with the uncountable and article-less word “language,” while group-specific actualizations of this capacity for speech (such as English, Tamil or Swahili) are known as countable “languages” that require an article in front of them.

The seemingly identical word “language” is actually two syntactically and morphologically *different* words (homographs, homophones) that denote two *different* phenomena that nevertheless are causally related.

As part of the material reality, the biological (evolutionary) capacity for speech is *independent* of human will. On the contrary, its actualizations in the form of languages (plural) are the product of human ingenuity and effort. As such, languages *depend* on human will and thus belong to social reality. The functional cleavage between the evolutionary origins and uses of the biological capacity for speech and its group-specific actualizations in the form of languages draws a boundary where nature (the biosphere, or the extrasemiotic sphere) ends and culture (the noosphere, or the semiosphere) commences.

The capacity for speech always comes in group-specific actualizations (languages). Humans generate social reality through their use of the former under the guise of the latter. The relationship between speech and language is similar to the one between the biological capacity for bipedal walking and the culturally specific ways of executing this capacity. After all, people can saunter or march; they can wear trousers, a skirt or a sarong. They can walk barefoot, or with their feet shod in sandals, boots or high heels.

Western thinking tends to be permeated with the religiously-construed Middle Eastern normative dualism that opposes matter with spirit. In individual terms, this dualism is expressed through the metaphor of one’s body and soul, which

supposedly exist as two separate (and separable) entities. These two entities are seen as only fleetingly and inconsequentially connected. One's body and soul are believed to exist separately before one's birth, bind together during one's lifetime, and come apart again upon one's death. The "spiritual" soul is believed to be the "true" seat of one's own person (personality, mind), whereas the "material" body is downgraded to the role of a shell. In this thinking, the body amounts to a vehicle in which the soul (person) "drives" itself around during its temporal existence on Earth, before returning to the hereafter ("heaven") of things spiritual. From this perspective, the material universe is deemed inferior and impermanent in contrast to some eternal and higher "spiritual world."

Nevertheless, with no detectable proof of their material existence, spirit and soul constitute elements of social reality. For individuals and societies who believe in these entities and act in accordance with what they entail, spirit and soul are epistemically objective. In contrast, for people (especially researchers) who refute the unevidenced existence of spirit and soul, these putative entities remain epistemically subjective.

Western-style socialization, which is based on the Abrahamic religions, emphasizes the body-soul dualism and silently assumes the existence of spirits and souls. In everyday speech, even scholars fall back on allusions and metaphors that postulate the existence of such entities. It is difficult to escape the historically-ingrained semantic strictures of the medium of one's own language, let alone transcend such limitations. This is the salient feature of the "white noise" of social reality that obscures our perception of the material reality. Hence, there is a temptation to identify the material reality with the religiously-defined "temporal world" (universe) and perceive social reality as synonymous with some "spiritual world" (heaven or the hereafter).

But this is a false opposition. There is no proof for such dualism categorically opposing the material reality with social reality. Under the scrutiny of evidenced observation, the former is primary and the latter secondary. Social reality cannot exist on its own without the foundation of the material reality. This means that social reality is fully dependent on, and constitutes, a (very modest) part of the material reality. Concepts, norms and entities of social reality that humans generate or invent, accept (or reject), and act in line with (or not) are "visible" only to the mind's eye. This is nothing else than a metaphor for the human brain. In this organ, the recently-evolved region known as the neocortex both enables and controls the biological capacity for speech. The neocortex amounts to a proverbial hard disk that runs the "computer" of the human brain, which is functionally connected to the "loudspeaker" of the vocal tract and the "microphone" of the ear. Thanks to

the neocortex, humans and their groups generate social reality through their use of speech. Through this medium, they project such reality across societies, actualized in multiple languages.

Hence, it is the neocortex — the brain — that is the material basis of social reality. The brain alone functions as the generator and storage facility of social reality, with which humans enact and interact using their bodies, which in turn thrive in their species' biological niche. Neither spirit nor soul play any detectable or proven role in this process. Hence, the relationship between the material reality and social reality does not amount to any form of dualism. Social reality is part and parcel of the material reality, making it *secondary* in its relationship to the material reality. The material reality is the *sine qua non* condition for the emergence and existence of social reality. Without nature, there is no culture. Yet, nature (the universe, the material reality) can exist without needing to spawn some social reality (culture).

Until recently, social reality was stored exclusively in the human brain (the neocortex). Books or audiovisual recordings preserve fragments of social reality, thus separating these elements from their producers. Yet, only people — through their effortful (and energetically costly) acts of reading, watching or listening — can revive, relive, reactivate or creatively alter such recordings of social reality. For the sake of subterfuge or propaganda, recordings of social reality may be tampered with or otherwise manipulated to skew subsequent reactivations in line with the meddler's interests. But again, it is invariably humans who execute such tampering or manipulation. Hence, even in these technology-assisted cases, the generation of social reality does not leave the human mind and hands.

In 2022, the situation changed dramatically with the first-ever public release of globally-available online consumer AI solutions and services, such as ChatGPT, Claude or Midjourney (popularly dubbed “chatbots”). The LLMs (large language models) that underpin such AI solutions statistically emulate speech in numerous languages. This emulation has been successful enough that in many cases, humans can be duped into believing that it is their fellow humans, rather than machines, generating social reality.

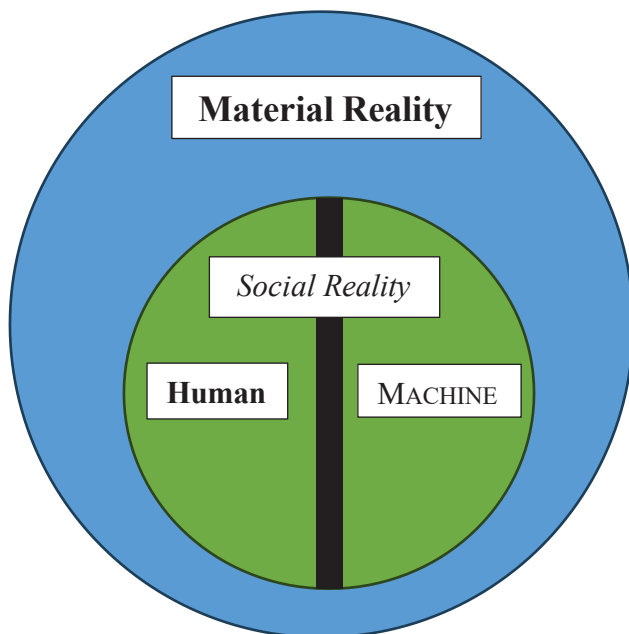
This is a point break. Prior to this, technical devices and computers merely *recorded* and stored social reality so that humans could *reactivate* it, given an opportunity. Nowadays, widely-available AI online solutions are capable of generating, manipulating, maintaining and altering social reality *without* direct human involvement. Of course, it was humans who indirectly developed these solutions by statistically mapping out speech so that it could be generated believably without human participation. As a result, people

now find themselves at the receiving end of such machine-generated, but deceptively human, social realities.

This gap in the quotidian comprehension of this unprecedented technological leap opens up a space for unscrupulous individuals with control over AI technology and its deployments to abuse humans' evolutionarily in-built credulity. With the targeted deployment of LLMs, powerful individuals can influence the world's population(s) without the latter suspecting that something might be amiss. In the past, propaganda relied on prompting people to reactivate printed or audiovisual recordings of social reality in line with propagandists' wishes. But now, machines (AI solutions) can actively generate a form of social reality that propagandists can propagate without their direct involvement. Hence, it becomes exponentially more difficult for individuals to discern between propaganda-generated social reality and "normal" ("true") man-made social reality.

Faced with this challenge of the near-future, I hope that the logical grid proposed in this article for testing the mode of existence of a given object or phenomenon may come to be of assistance in this unequal trial of strength. Half a century ago, in his 1971 story "The Futurological Congress," Polish-Jewish writer Stanisław Lem employed the genre of science fiction to explore what might happen if people at large started confusing machine-generated social reality with the "normal" human-produced form of social reality. This satire poked fun at the socio-economic absurdities typical of the Soviet-style totalitarianism in communist Poland. But nowadays, this story has become a veritable cautionary tale that may faithfully describe future adverse effects of machine-generated social reality.

If the trend persists, social reality will soon bifurcate into human- and machine-generated social reality. I propose that anything machine-generated social reality spawns should be classified as epistemically subjective from the perspective of the human observer. After all, the biological capacity for speech developed through evolution to improve the biological fitness of humanity as a species. Man-made machines and online solutions emulate this capacity by generating social reality as a mere task — basically, a series of mathematic calculations. Computers (machines) and software (online solutions) do not experience or live in the "white noise" of social reality; it is not of any evolutionary or existential importance for them. Social reality does not skew machines' perception of the material reality beyond the human bias inherited through LLMs. Through neural network-enabled machine learning, machines and online solutions may become capable of weeding out this bias. What then will come next is anyone's guess.



*Diagram 3. Human- and machine-generated social reality.*

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