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SUBSTANCE AND NATURE OF CONCRETE AND ABSTRACT FORMS

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Everything that is excellent,
is equally difficult
as rare.
Spinoza [1)]

Spit on this grave.
Here lies Spinoza.
'T would be better
if his teachings were buried here too.[2)]

GRANULARITY OR CONTINUITY?

Two greek philosophers

The Greeks, and especially Leucippus (470? - 410? BCE) and Democritus (460-356 BCE), developed the idea that the universe is not continuous but granular, which means that all space contains tiny little objects with a specific identity. By logical thinking, not by testing, they concluded that none of these objects could be divided infinitely.[3)] Suppose that, after infinite division, each of the remaining parts would have any magnitude, it still would be divisible. This in itself would be a violation of the hypothesis. If, on the other hand, the remaining parts would have zero magnitudes, it could not possibly be the origin of anything new. Even if zero were multiplied infinitely, zero would remain zero. They concluded that objects could only be divided finitely and the ultimate result of the splitting would be solid objects of the smallest possible size, which Democritus called 'atoms.' These smallest units had a standard size, their substance was one of an infinite series of possibilities.

Democritus was convinced that only atoms and empty space existed. Since atoms were solid, indivisible and continuously moving, empty space between them had to exist. Otherwise, it would not be possible to explain how a knife could be used to cut an apple.[4)] Although he only accepted atoms as elementary objects, he did recognise the existence of the soul, albeit that it also had to consist of atoms. Not all atoms were equal in size and weight. The atoms of the soul were small, light and spherical. Like souls, also the gods were composed of atoms.[5)]

All forms, whether concrete or abstract, physical or metaphysical[6)] are based on a substance and a composition of an infinite variety of 'atoms.' If atoms can vary, they must be based on a substance with an infinite potential to realise that infinite variety. When dealing with 'substance' it will be essential to at least have some idea about what it is or what it is composed of. A definition is needed or at least a coherent picture. Greek philosophy did not give a definition of 'substance.' The same goes for words like 'mind', 'soul,' 'matter,' 'consciousness,' 'concrete,' and 'abstract.' Complex systems do not fall out of an open sky, they gradually grow and evolve within time-space. If mind, soul, matter etc. really exist, what then could be involved in the evolution of homogenous atoms into heterogeneous biological organisms?

Two Catalysts Of Empirical Testing

Descartes (1596-1650 ACE) discussed 'substance.' In doing so, he distinguished between a perfect substance (God) and an imperfect, created substance. A substance is a thing that depends on no other

thing.[7)] Only one thing depends on no other thing: God. God created the universe and with it, all things in it. Two categories of their substances exist: extended substances –res extensa— and thinking substances —res cogitans—. Extended substances concern objects that take up space and have volume. Thinking substances do not take up space; they are mind. All substances have attributes and modes. However, mind and body "are truly substances that are really distinct from each other."[8)] The word 'attribute' can be translated as inherent properties. Attributes of an extended substance, like a concrete beam, can be its chemical composition, colour, weight, fire resistance or strength. Modes of the same constructive element are for instance its shape and dimension. Attributes of a thinking substance, like a human being, are intelligence, creativity, emotions or indifference. Modes of that same human being, are ideas, as well as thoughts, convictions, attitudes and fears.

Descartes distinguished between body and mind, that is to say, in human beings. It was not yet possible for him to include plants, single-celled and multicellular organisms in his approach, because a technology to investigate these organisms did not yet exist. Nevertheless, the approach that he developed was a big boost to implement what the Greeks never used: empirical testing. He showed that only logical analysis was insufficient. His strength was a systematic approach that included observation. Do not expect precise definitions or even limited descriptions of the plethora of bodies and minds that can be observed. Descartes did not touch that subject.

When Baruch de Spinoza (1632-1677 ACE) was an infant of two years, Descartes stayed in Amsterdam in the summer of 1634. The two never met, but already at the age of 22 years[9)] Spinoza read texts from Descartes, but also from Greek, Latin, French and Belgian authors.[10)] Reading is done to enter into the world of an author or to collect information. Spinoza was a bookworm but saw what he read as a catalyst to mirror, test and increase his understanding of the universe and life. While Descartes opted for a split between body and mind, each with a distinguished substance, Spinoza advocated one single, absolute substance as primordial to both corporeality and mind. To attribute one substance to both chemicals, biological organisms and thoughts in any form of development is not particularly obvious. So, what a courage to dedicate a life to the development of that idea! After him, this approach was called neutral monism and supported by William James and Bertrand Russell.[11)]

Greek philosophy paid attention to the existence of things and the cause of their existence. Descartes and Spinoza had a closer look at the existing 'things' and their substance, but did not deny that the universe is filled with objects and can be called 'granular.' Both mentioned the existence of some substance, without zooming in to the question. Spinoza did not explain how forms of matter can be based on a similar substance as forms of mind. He also did not include the principle of dynamism in the universe. Dynamism means changes of a substratum in spacetime and such changes mean the inclusion of energy. Many questions remain. If one universal substratum exists "What is it?" "What is mind?" "What is the substratum of a thought or an idea?" "What is life and how can it emerge from chemical forms, like atoms and molecules?" "What is the origin of intelligence, intuition, emotions and ideas?" "What causes disease? "What does it mean to choose a positive or negative approach and what are the consequences?"

TWO INDIAN APPROACHES

Samkhya

The quest for an answer to the question "What can be the primordial substance of both concrete and abstract forms?" cannot yet finish in a way that that does justice to both Matter and Mind. While, after Descartes and Spinoza, in the Western world subtle answers are sought for by following a path from outside to inside. Indian philosophy has the opposite approach. This holds the promise of a complementary approach. These days, international communication has so much progress that an exchange of thought could mean an answer to longstanding questions. The pending issues of this paragraph could benefit from the Indian approach.

The focus of Indian philosophical systems is not even intellectual knowledge or perception, but first person experience of third person systems or, in the vocabulary of David Chalmers, qualia.[12)]
The oldest school, Samkhya, knows two approaches, atheism and theism. Classical[13)] Samkhya is atheistic. Theistic Samkhya is called Yoga. Prakrti —nature or skilful energy— and Purusa (spirit or consciousness) are the primordial principles of Samkhya.[14)] Prakrti is one, omnipresent, nonlocal and infinite. Its manifestations are many, local and finite. Prakrti itself is in equilibrium, but because it is composed of essence (sattva), energy (rajas), and inertia (tamas), this state of balance is a kind of tension. Purusa is the subject of knowledge, intelligent and conscious. Prakrti is non-intelligent, not-conscious and the object of knowledge. Aristotle sought what could be the causes of an effect, and concluded four causes of form: a material, an efficient, a formal and a final cause. Samkhya recognises two causes: a material and an efficient cause. Sinha writes:

> "*Gold is the material cause of an ornament; it enters into its constitution, and will continue to be operative as long as the ornament will last, and after its destruction, it will relapse into the potential condition again. But the activity of the goldsmith is the efficient cause of the ornament; it liberates the causal energy inherent in the material cause, and actualises the potentiality of the effect; its causality ceases with the production of the ornament.*"

Gold is the material cause of the ornament, and the goldsmith is the efficient cause of the ornament. But the material cause has no intelligence to know about the ornament and its future form. It is mind, so consciousness, that knows about the attributes, the characteristics, of gold and starts looking for it, collects it and brings it to the goldsmith. It is another mind that wants an ornament of gold, and it is the intellectual and creative mind of the goldsmith that knows how to design it. The same mind knows the characteristics of the material gold and how design could fit in with the features of the material gold, as well as the desire in the mind of the buyer. The material follows merely the directives of the maker; it is what it is. It is the first-person mind of a human being that will discover and experience the third person object.

The above text of Sinha does not show a very efficient relation between consciousness and energy. How can nature afford not to be efficient? What is the cause of the existence of a specific intelligent philosopher, a loving parent, a bright teacher, or a creative and skilled goldsmith? Of the two principles, it is consciousness that has intelligence and creative skill. Observation is undoubtably needed, but only observation will not suffice to win a match.[15)] How will a creative goldsmith ever emerge from a single-celled organism, if the characteristics of both consciousness and energy are not implemented in the course of evolution? Even here the question remains: "If consciousness and energy are primordial components of the universe, and the universe is granular, do granular forms of both exist?"

Shri P.R. Sarkar

The Indian philosopher Shri P.R. Sarkar also saw consciousness and the operative principle, energy, as the two primordial principles of the universe, as the first chapter of Ananda Sutram shows. In addition to that, he indicated that the two can never be separated: they are an inalienable concomitance.[16)] This could only mean inherent cooperation, rather than competition between the two. In this duality, either of the two may have no expression and be dormant, but their collaboration is always alert for opportunities to adjust.

Different from what science at this moment in time accepts, consciousness is the material cause of all forms and not only subtler than space but also of a different nature. It has an infinite potential to express in any universe, should more than one exist. One such expression is awareness; others are e.g. observation, concentration, intellect, creativity and emotions. Energy cannot analyse and take decisions, it can only take the form that consciousness in nonlocal or local form suggests. Like the goldsmith mentioned before, consciousness knows the characteristics of energy and will not ignore the presently discovered and still undiscovered qualities of physics. It also means that in situations like

an avalanche or a mudslide, where consciousness finds no expression, energy will cause damage and suffering to biological organisms.
Like Aristotle and Samkhya, Shri P. R. Sarkar asked questions about the cause of forms. In the second chapter of Ananda Sutram he stated:

- "every object has a material cause and an efficient cause."
- "Over and above these there is also a conjunctive agency linking the material cause with the efficient or instrumental cause."[17)]
- "In the process of creation the principle of Consciousness is the material cause."
- "as the efficient cause Consciousness is the primary factor."
- "The operative principle is the conjunctive agency linking the material cause with the efficient or instrumental force."[18)]

His discourse of December 31, 1986, was the first of a series in which he linked his former ideas about the nonlocality of consciousness and energy to local forms of the two. That link was not announced and caused great excitement (and curiosity for what more could come) amongst his listeners. These ideas caused new openings to answer old questions, not to speak of new ones. One such question, which was raised by the ideas of Spinoza about one substance for both concrete and abstract forms, has received openings for an answer.

One such questions concerns, in fact, subatomic particles. If the material cause of all forms is consciousness, how can the substance 'gold' not be a composition of energy, as particle physics has discovered, but of consciousness? The underlying question is whether elementary particles are sole particles of energy –elementary or composite particles– or a composition of elementary particles with microvita. The following paragraphs contain three approaches.

1 - All objects have a mind or at least the germ of it. If micro minds are part of biological organisms our universe must have a Macro mind. In all minds, consciousness and the operative principle are entangled. Only consciousness has insight and visual power, but also the determination to decide for a direction of action.[19)] Consciousness needs energy for any activity, be it abstract or concrete, so it asked its operative principle: "Needed are very particular particles, which after 13.78 x 10^9 years someone will call 'elementary particles.' Can you take those forms?" and the answer was: "Sure, I can do it. Just guide me!" Then, a split second after the Big Bifurcation, the first energy particles, quarks, electrons and photons, emerged. These very subtle, local forms of only energy may not be directly interconnected united with microvita, but still, they are entangled with nonlocal consciousness. Soon after, quarks united into protons and neutrons, the first composite particles. A relatively short time later, 378,000 years after their appearance, they were connected to the particles of consciousness, microvita, with the first atoms as an outcome.

2 - A second approach to conclude whether elementary particles are directly connected to microvita or not is researching the nature of elementary particles. If "every object has a material cause," one could ask "What is an object?" Because, if elementary particles are not objects, they will be as described in the previous paragraph. An object can be defined as "a thing that can be seen and touched."[20)] We cannot see atoms, we can only see the reflection of light on their electrons. Quarks can never be seen; they remain hidden within the electron cloud. A not unimportant characteristic of objects is that they are three dimensional, which should also apply to electrons. In quantum physics, elementary particles are also called "point particles" with an intrinsic size that is exactly zero.[21)]If electrons have zero dimension, they must be purely local forms of energy and can only be entangled with nonlocal consciousness. What we do see is the reflection of light on their wave packet that partly absorbs and reflects lightwaves.

3 - A third approach can be found in cosmology. Immediately after Planck epoch, the temperature was 10^32K. Since microvita are sensitive to temperature: [22)]

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"They will undergo contraction and hibernation at freezing temperature and expansion and hibernation at boiling temperature."

The first microvita wake op at the end of the photon epoch when the temperature has gone down to 3,500K, which is still quite hot. Not all microvita have the same reaction to temperature, and the first ones that wake up in this situation are in fact the forefathers of life so they must be of the crude type of microvita. At this level, homogeneous crude microvita step on board of, or are instrumental in, the formation of Hydrogen atoms, while the formation of a complete minds is still far away. This can only mean that the here involved microvita are crude, negative microvita.

GRANULARITY AND CONTINUITY

Democritus concluded that all forms in the universe were compositions of solid atoms. Almost 2,200 years later, in 1905, Einstein wrote a paper, in which he showed that tiny particles of matter are the cause of Brownian movement.[23] His analysis and arguments were quickly accepted because they explained many existing phenomena in physics. Six years later, in 1911, Rutherford proposed that atoms consist of a nucleus with heavy particles, surrounded by a cloud of light electrons. In 1913 Bohr and Rutherford refined the previous proposal into a model that included the principle of quanta.

To a certain extent, their findings confirmed the model developed by Democritus. In his opinion atoms did exist and, also if they were connected with more atoms, they were surrounded by empty space. However, the model of Bohr was more refined and showed more profound knowledge. In his model, the existence of space remained, not only outside the volume of atoms but also inside. When I state that space, different from water, is entirely continuous and cannot be blocked by anything, there is little chance that someone will call me back. That may be different if I should claim that empty space does not exist, even theoretically not so. So-called 'empty space' or 'void' still contains gravitons,[24] virtual particles, nonlocal consciousness and its local forms, microvita. If consciousness is nonlocal and granular at the same time, everything in the universe is interconnected, and the universe is both granular and continuous. Nonlocality is also a property of space, be it that the existence of its supposed local gravitons still needs confirmation.

THE NATURE OF GRANULAR FORMS

Atoms

Different from what Democritus thought, atoms are not solid, and perception just brings "an illusion of solidness."[25] Only in very particular conditions, will atoms of the same element be identical[26]This means that atoms have their own identity unless the temperature of their immediate environment goes down to almost absolute zero. In that situation, they lose their identity but do not get lost. After the temperature goes up, they appear again.

Simple or complex atoms alike, all are composed of quarks, protons, neutrons, and electrons which are not homogeneous, but heterogeneous groups of particles. All subatomic particles of one kind are identical and indistinguishable unless conditions change.

Another essential characteristic of all these particles is that they are dynamic and move at high speeds. Electrons have a speed of 2.200 km/s while quarks move at 99.995% of the speed of light.[27] In the same way as propellers of aeroplanes accumulate energy by their speed, also electrons and quarks collect high amounts of energy. It will be difficult to pass through that shell because a higher quantity of energy is required, and in such action new particles will emerge. Precision is an essential quality: despite the high speeds, collisions doe not occur.

Chemical properties mainly depend on the number of protons. Nature cannot be said to ignore possible choices: because the amount of protons that can be found in natural elements ranges from 1 to 92 and all seats are occupied.

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Both Internally and externally, atoms can have a homogeneous or heterogeneous character.[28)]

Are atoms individual objects that exist independent of the milieu they take part in? No, they are sensitive and react in accordance with, e.g. changes in temperature, other forms of radiation and the presence of chemical objects and living organisms.

Not only are atoms homo- or heterogeneous collections of elementary and composite particles, they also contain microvita.

Microvita

If energy can be formless, nonspecific, like in a hot plasma, and with form, specific, like in nucleons, why would consciousness not have similar or the same characteristics? In that case, consciousness can be both be nonlocal, as well as local, in the form of its particles, called microvita. As, I wrote before, in that case, the universe will be nonlocal as well a local.

If even the most uncomplicated atom is heterogeneous, why would molecules of mind appear as homogeneous collections? Atoms can form molecules with identical or different atoms. Atoms can unite into molecules, mega molecules, clusters, homo- or heterogeneous mixtures and fulfil various functions. Molecules do not choose a location because of the presence of similar or the same particles.

Some types of microvita can be mentioned here, such as crude negative, subtle negative, intermediary and positive microvita. Positive and negative microvita have opposite focus. In our biological universe, extremes are relatively rare which means that super positive minds, as well as super negative minds are unique. Between black and white, many shades exist. The bell shape of a Gaussian distribution model visualises that of all actions:

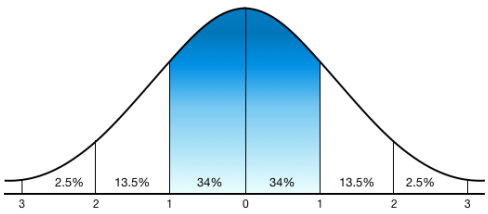

Figure 1.

0,1% is extreme positive or negative
2,5% is clearly positive or negative
13,5% is acceptably positive or negative
34% is neither apparent positive or negative

Out of one thousand actions, only one will be 100% positive or negative. 'Like attracts like', means that positive and negatively minded people seek contact with their own category. In the middle group of 68%, most negativity is caused by lack of information and lack of communication. To change negativity into cooperation, positive minded, knowledgable persons must contact and mix with their opponents, after which the formation of groups will occur. In everyday life positivists and negativist mingle. This situation also applies to microvita. No mind is a composition of only subtle positive or negative microvita.

Human minds and bodiless minds

Atoms are precisely functioning structures, is there any reason why simple or developed minds would not have the characteristic of precision? Not only the components of mind are dynamic, also its atoms must be so.

The biological hierarchy is based upon the evolution from the simplest form without a mind to the most complex organism with one. Differently said elementary particles, composite particles and atoms, molecules, clusters, compounds, macromolecules, organelles and cells include crude negative microvita. Macromolecules also contain subtle negative microvita in smaller or more significant quantities but still cannot yet be called mind. The first minds can be found in organelles and single-celled organisms because they also include positive microvita. Each level on the ladder of the biological hierarchy will show a bit more complex biological mind.

Human beings are enormous biological structures, composed of tissues, organs and groups of organs and the unity of all these in their human body. The human body has a mind, but also cells, tissues, organisms and groups of them have their own mind. Before the entrance of the foetus, body and mind of the mother support the embryo. Once the bodiless mind has entered, mother and foetus have intense cooperation. After birth, an extended period of interaction with mother and other persons and institution develops. When the body has become superfluous, and the included mind leaves the body, the body can no longer take care of itself dies and becomes a bodiless mind. What remains is a mixture of positive and negative microvita that was collected during the previous incarnation.

The different types and categories of microvita enter into –or actively form– atoms, molecules, clusters and ultimately form simple biological and complex human minds. The many clusters are connected by pathways, roads and crossroads of vital energy. More intensely used clusters and connecting paths generate more energy for internal or external expression. Areas of high intensity may be close or far apart. Minds of people, as well as bodiless minds, can have a specific positive or negative focus on a specific structure and intensity. The chapters 3,14-A and 14-B of 'Microvitum in a nutshell' illustrate the relation between individual microvita and collections of them. Three types of individual microvita exist: crude negative, subtle negative and positive microvita. Two of these, form the basis of three categories of bodiless minds: pretayonis, devayonis and gandha yaksinii.

Pretayonis mainly contain subtle negative microvita. The mind of devayonis, on the other hand, includes between many and mostly positive microvita,–but not only because they still have personal preferences.– The substratum consciousness has infinite attributes that can be expressed, which means its local forms, microvita, have the same potential. Be it that they are limited by the milieu they are in. So, many subcategories, –even more than the seven that are mentioned in 'Microvitum in a nutshell–' with a different focus exist. Chapter 3 and 14-B give information about yaksas. In principle, the persons of this subcategory were deeply spiritual people, but in the course of time, they gradually developed more focus on what they were doing –collecting money for a good cause–. In such a situation the amount of positive microvita will decrease while the number of subtle negative microvita decreased. After death, they roam around in the universe and still want to help. If their help is received by the wrong kind of people, they might develop an obsession with material wealth and control. [29]This obsession can undoubtedly be called a mental disease, not of the bodiless mind but of the embodied minds. Also, a siddha is not a positive microvitum, but the name of a category of bodiless minds with specific qualities and specific groups of positive microvita. These people were genuinely spiritual people, but still felt a strong preference for instance knowledge or beauty. To call these personal preferences a disease may not be fully appropriate, but for sure they are limitations.

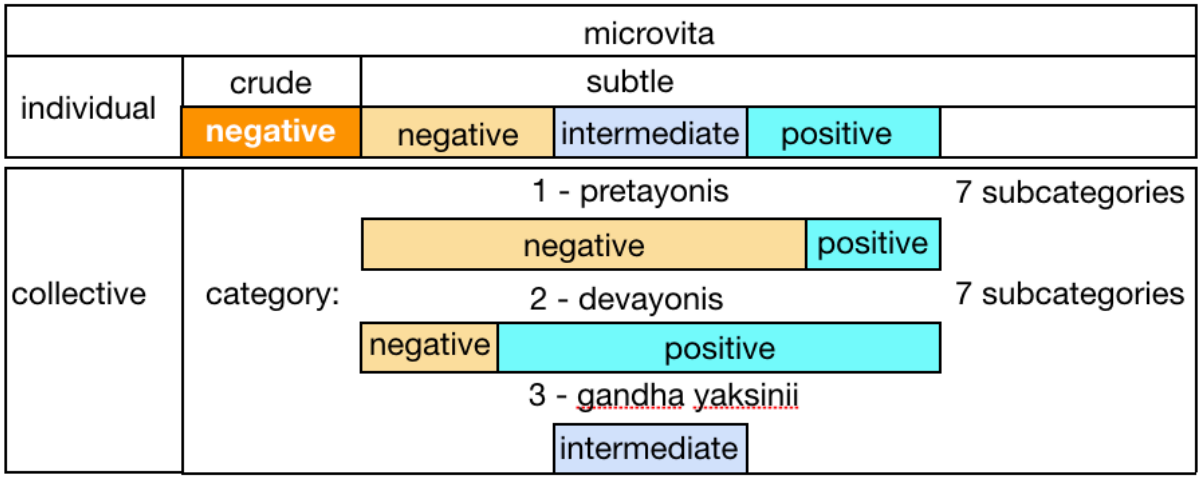

Figure 2.

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CONCLUSION

The universe is a nonlocal space that gives shelter to a huge number of local forms, of which the smallest are atoms. The substratum of all forms is consciousness in its local potential, is called microvita. Different from energy, these microvita have attributes like conscience, intellect, creative skill One deep characteristic of Nature is cooperation. This abstract principle finds its translation in the evolution of mindlessness into mindfulness, into being conscious of consciousness.

Microvita are the substratum of both body and mind. Microvita contain intrinsic, as well as kinetic energy and because of that they can realise their intentions and take part in both abstract and concrete reality. They operate and cooperate in quantities beyond imagination. Crude negative microvita *'are instrumental in emanating life throughout the universe',* while subtle negative and positive microvita microvita form the substance of mind that build up the impetus to ultimately pass beyond the horizon of psycho -spirituality. When reading the words positive and negative microvita, they might seem very different. 'In principle they are the same' the only difference between the two is their focus. Negative microvita focus on the material, while positive microvita concentrate their attention on a continuing increase of deep insight.

Elementary particles are local and find their base in nonlocal energy, but microvita are also local particles of mind. Biological organisms have become complex organisations. Also minds evolved into complexity. This development is the outcome of the infinite potential of its substratum, microvita. Evolution has resulted in minds of different categories and subcategories. The two primary forms of subtle microvita, positive and subtle negative, have ultimately led to three different categories, pretayoniis, devayoniis and an intermediate one. Since the universal principle of nature is cooperation, the three categories are related and mix.

Notes and References

1. The closing sentence of his book 'Metaphysics" that, for fear of persecution, was published after his death.

2. Fifty years later, the rage of superficial dogmatists was still so great, that a pastor published this text. <https://www.filosofie.nl/shop/spinoza/120784170/kopen.html > Accessed 8-1-18

3. Kenny A. 2012. A New History of Western Philosophy. Oxford: Oxford University Press.

4. Russell, B. 1975. Geschiedenis der Westerse Filosofie. Den Haag: Servire.

5. Kenny A. 2012. A New History of Western Philosophy. Oxford: Oxford University Press. P 79.

6. The word 'metaphysical' suggests that two realities exist or at least could exist, a physical world and a world beyond the physical. The suggestion is that the two have no connection. That supposed separation is blind speculation and acceptable within ontology but needs confirmation in other fields of knowledge. The existence of 'life' -whatever its precise definition- in the universe is an indication, to say the least, that a relation between the two certainly is a possibility. Expressions like abstract and gross reality, as well as 'subtle' and 'gross' reality, leave the possibility of a relation between the two open.

7. <http://www.iep.utm.edu/substance> Accessed 8-1-18

8. Descartes R. 1596-1650 Meditations - translated by Clark D. 2010. London: Penguin Books.

9. i.e., two years before he was expelled from the Jewish community in Amsterdam.

10. Newton wrote Philosophiae Naturalis Principia Mathematica in 1687, ten years after Spinoza passed away.

11. Gluck A L. 2007. Damasio's error and Descartes truth. Chicago: University of Chicago Press.

12. Hydrogen is an exception; it contains only one proton and one electron.

13. Here 'Classical' means the view that accepts the Vedas and Upanishads.

14. Sinha J. 2006. Indian philosophy-volume II. Kolkata: Banarsidass Publishers Private Limited.

15. Unless, of course, the match is a competition in the skill of observation.

16. Sarkar Shri PR. 1967. Ananda Sutram: Chapters 1-1,2, EE7.5, 2009: AMPS.

17. Ibid.

18. Ibid.

"There is an aura of thought-waves revolving around the Cosmic Nucleus, as the result of which energy particles are created."

19. Sarkar Shri PR. 1967. Vibration, form and colour-Phálgunii Púrńimá 1956 DMC. EE7.5, 2009: AMPS.

20. <https://www.merriam-webster.com/dictionary/object> Accessed 13-1-18

21. <https://en.wikipedia.org/wiki/Point_particle> Accessed 12-1-18
22. Sarkar Shri PR. 1967. Microvitum in a nutshell-9B-15. EE7.5, 2009: AMPS.
23. <http://howdoweknow.org/index/atoms_exist.hdwk> Accessed 10-1-18
24. Research is going on. Yet, a confirmation of their existence will be an event in the future.
25. Richheimer S. 2016. The nonlocal universe. Puerto Rico: Inner World publications. p102.
26. "If two carbon atoms are in the exact same molecular, atomic, electronic and nuclear states, then those two carbon atoms are identical, no matter where they came from or what has happened to them in the past." <http://wtamu.edu/~cbaird/sq/2014/03/13/are-two-atoms-of-the-same-element-identical/> Accessed 10-1-18
27. v = 0.99995c (that is, 99.995% of the speed of light) <https://www.quora.com/What-is-the-speed-of-quarks-in-proton> Accessed 11-1-18
28. Some examples. The atom C12 is composed of (6 protons+6 neutrons) and 6 electrons. I call this internally homogeneous. C13 is composed of (6 protons+7 neutrons) and e.g. 6 electrons, is an isotope and heterogeneous. If C12 has (6 protons+6 neutrons) and 4 electrons it is called an ion and also heterogeneous. Elements are collections of one or more identical atoms or di- or triatomic molecules. Almost all hydrogen in the universe exists as diatomic molecules. If those atoms are of the same composition, the element they are part of is homogeneous. If they are not of the same composition, the element they are part of, is homogeneous. Compounds, like water, are homogeneous collections of the same molecules.
29. if the partial negativity of a bodiless mind meets similar negativity in a receiver and evokes waves with the same frequency and wavelength and frequency are in phase, superposition occurs. In that case, the amplitudes will be doubled and can quickly cause into a mental disease. The same can happen if the waves connected with positivity, meet and superposition occurs. This interaction cannot be called 'a mental disease.' but 'an inspiration.'