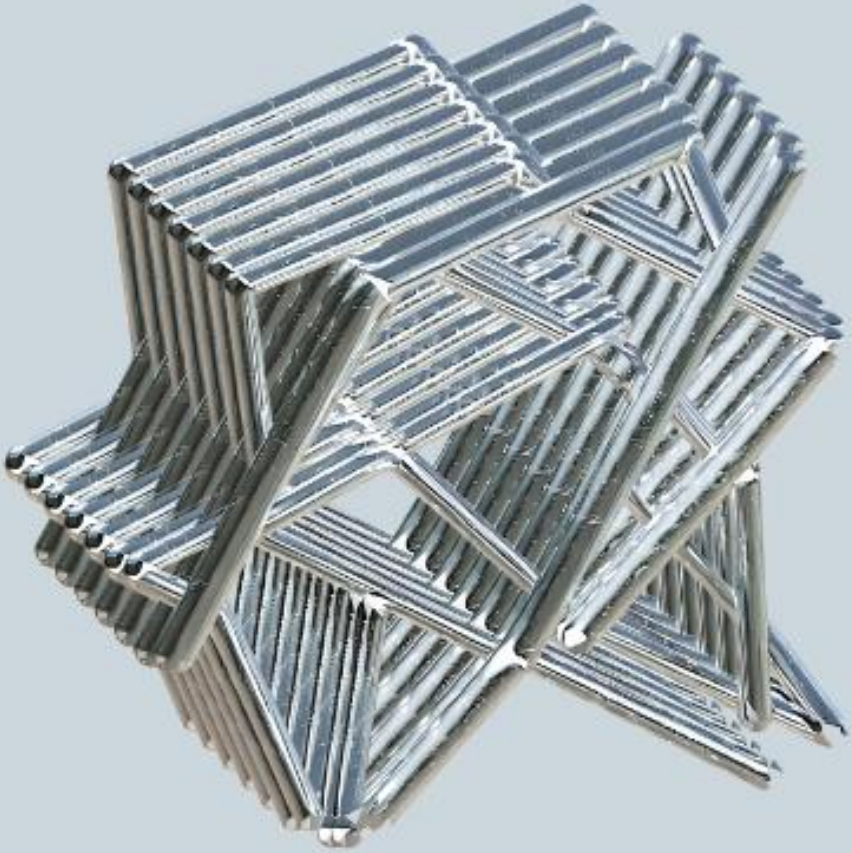
scilogs, XIII

florentin smarandache

nidus idearum

Structure / NeutroStructure / AntiStructure



Biblio Publishing
Publishing for the 21st Century

Florentin Smarandache

Nidus idearum.

Scilogs, XIII: Structure / NeutroStructure / AntiStructure

Grandview Heights, Ohio, USA, 2024

Exchanging ideas with Mohammad Abobala, Ishfaq Ahmad, Ibrahim M. Almanjahie, Fatimah Alshahrani, Nizar Altounji, Muhammad Aslam, Said Broumi, Victor Christianto, R. Diksh, Feng Liu, Frank Julian Gelli, Erick Gonzalez Caballero, Riad Hamido, Yaser Al-Hasan, Ahmed Hatip, Yasin Karmouta, Nivetha Martin, Preda Mihăilescu, V. Lakshmana Gomathi Nayagam, Ze Carlos Tiago de Oliveira, Alexey Platonov, Andrei Pogany, Shakti Prasad, Ranulfo Paiva Barbosa (Sobrinho), Dmitri Rabounski, Ackbar Rezaei, Constantin Sandu, A. Saraswathi, Usman Shahzad, Gocho V. Sharlanov, Stefan Spaarmann, Michael Voskoglou, Vinay Kumar Yadav, Tomasz Witczak, William H. Woodall, Mircea Zărnescu, Mohamed Bisher Zeina (in order of reference in the book).

Biblio Publishing
1091 West 1st Ave
Grandview Heights, OH 43212
United States of America
614.485.0721
Info@BiblioPublishing.com
https://BiblioPublishing.com/

ISBN 978-1-59973-786-7

Florentin Smarandache

Nidus idearum

Scilogs, XIII:

Structure / NeutroStructure / AntiStructure

Biblio Publishing
2024

Peer-Reviewers:

Maikel Leyva-Vázquez

PhD, Professor at Universidad Regional Autónoma de los Andes,

UNIANDES, Ecuador

Erick González Caballero

PhD, Professor (Full) at Universidad Tecnológica de la Habana,

José Antonio Echeverría, Cuba

Ranulfo Paiva Barbosa (Sobrinho)

Web3 Blockchain Entrepreneur,

San José, Costa Rica

Victor Christianto

Ir. (Engineer), MTh., D.Div.,

Malang Institute of Agriculture, East Java, Indonesia

INVITATION

Welcome into my scientific lab!

My **lab**[oratory] is a virtual facility with non-controlled conditions in which I mostly perform scientific meditation and chats: *a nest of ideas* (**nidus idearum**, in Latin).

I called the jottings herein *scilogs* (truncations of the words *scientific*, and gr. Λόγος (logos) – appealing rather to its original meanings "ground", "opinion", "expectation"), combining the welly of both science and informal (via internet) talks (in English, French, and Romanian).

In this *thirteenth book of scilogs* – one may find topics on Neutrosophy, Plithogeny, Physics, Mathematics, Philosophy – email messages to research colleagues, or replies, notes, comments, remarks about authors, articles, or books, spontaneous ideas, and so on.

It presents new types of soft sets and new types of topologies.

Feel free to budge in or just use the scilogs as open source for your own ideas!

previously published SCILOGS

Nidus idearum. Scilogs, I: *de neutrosophia*.

Brussels, 2016 http://fs.unm.edu/NidusIdearumDeNeutrosophia.pdf

Nidus idearum. Scilogs, II: *de rerum consectatione*.

Brussels, 2016 http://fs.unm.edu/NidusIdearum2-ed2.pdf

Nidus idearum. Scilogs, III: *Viva la Neutrosophia!*

Brussels, 2015 http://fs.unm.edu/NidusIdearum3.pdf

Nidus idearum. Scilogs, IV: *vinculum vinculorum*.

Brussels, 2019 http://fs.unm.edu/NidusIdearum4.pdf

Nidus idearum. Scilogs, V: *joining the dots*.

Brussels, 2019 http://fs.unm.edu/NidusIdearum5-v3.pdf

Nidus idearum. Scilogs, VI: *annotations on neutrosophy*.

Brussels, 2019 http://fs.unm.edu/NidusIdearum6.pdf

Nidus idearum. Scilogs, VII: *superluminal physics*.

Brussels, 2019 http://fs.unm.edu/NidusIdearum7-ed3.pdf

Nidus idearum. Scilogs, VIII: *painting by numbers*.

Grandview Heights, 2022 http://fs.unm.edu/NidusIdearum8.pdf

Nidus idearum. Scilogs, IX: *neutrosophia perennis*.

Grandview Heights, 2022 http://fs.unm.edu/NidusIdearum9.pdf

Nidus idearum. Scilogs, X: *via neutrosophica*.

Grandview Heights, 2022 http://fs.unm.edu/NidusIdearum10.pdf

Nidus idearum. Scilogs, XI: *in-turns and out-turns*.

Grandview Heights, 2023 http://fs.unm.edu/NidusIdearum11.pdf

Nidus idearum. Scilogs, XII: *seed & heed*.

Grandview Heights, 2023 http://fs.unm.edu/NidusIdearum12.pdf

Contents

Invitation / 5

Topics / 9-14

Scilogs / 15-96

Cover image is AI generated
based on text provided by author.

TOPICS

Neutrosophics

Neutrosophic Theories 15

Definition of <neut*A*> (also called Neutrality or Indeterminacy) 15

Indeterminacy in Neutrosophic Logic/Set/Probability 16

Neutrosophic Dynamicity 19

The Neutrosophic Logic of the Diamond Sutra 19

A is non*A*, therefore *A* 21

(Neutrosophic) Chess Games 23

Neutrosophic Numerical-Literal Algebraic Structures 24

A Total Order for the Refined Neutrosophic Set *n*-plets .. 28

Their "Generalized Neutrosophic Set" is NOT a generalization of the Neutrosophic Set! 29

Their Generalization of the Neutrosophic Set is actually a particular case of the Neutrosophic Set 31

Extended Nonstandard Neutrosophic Logic 31

Soft Neutrosophic Complement 32

Division of Refined Literal Indeterminacy Neutrosophic Numbers 33

Dictionary Ranking of the Neutrosophic *n*-tuples 33

The Apocalypse 34

Fermatean Neutrosophic Set vs. Neutrosophic Set..... 35

Fermatean Neutrosophic Sets of Types 1 and 2 35

The Cylinder of the Fermatean Neutrosophic Set 36

Julia Set in the Neutrosophic Framework..... 36

Neutrosophic Groups as Neutrosophic Graphs..... 37

Example of sample with unclear size 37

Possibility Neutrosophic HyperSoft Set 37

Turiyam Neutrosophic Set is just the Quadruple Neutrosophic Set 38

Triple Set vs. Neutrosophic Crisp Set of Type 3..... 40

Ranking the Alternatives 42

IndetermSoft Set..... 42

Neutrosophic Numbers in Statistics 44

Population and Sample Dynamicity 45

Not Cancelling Out the True Value 48

AntiAlgebra & NeutroAlgebra, AntiGeometry & NeutroGeometry

NeutroGeometry when I > 0 and F = 0..... 49

Critics of Axiomatization 49

Degree of Passability..... 50

Distance in NeutroGeometry 50

Differential NeutroGeometry & AntiGeometry 51

Structure, NeutroStructure, AntiStructure in any field of knowledge 51

Distance with Indeterminacy 52

AntiTopology and NeutroTopology 52

Types of AntiTopologies 52

Topology, NeutroTopology, AntiTopology 53

Types of AntiTopologies 53

Types of Topologies 53

NonStandard Topology 54

Maximum Nonstandard Topology on $]^{-}a, b^{+}[$ 56

Plithogenics

Plithogenic Random Variables and Plithogenic Probability Distributions 57

Everyday-Life Plithogenic Set 58

Symbolic Plithogenic Algebraic Structures 58

Neutrosophic Statistics & Plithogenic Statistics 60

Symbolic Plithogenic Function 60

Differentiate Plithogenic Soft Sets from HyperSoft Sets . 62

Linguistic Intervals in Plithogenic Decision Making 63

Physics

How did the Primordial (the first ever) Life in the universe arise, and from what? 65

Unmmater colliding with Unmatter 66

Extending Unmmater to Matter and Antimatter 66

Teorii Fizice Nereale 66

The Biggest Blunder in Physics of the 20th Century 67

SuperDeterminism vs Determinism 69

New Physics Projects 69

Constante Fizice 70

Cercetări Experimentale 70

Idei contradictorii în Fizica 71

Cercetarea mea în fizică 74

The superluminal signals exist in nature without violating the cause-effect 74

Duality of Particle-Wave 75

Matematicieni vs. Fizicieni 75

The Landscape of Ideation

Părți comune la lucruri necomune și invers: părți necomune la lucruri comune 77

NonDiophantine Arithmetics 78

De la Paradoxism la Neutrosofie 78

Creating Paradoxist Art with ChatGPT 79

Partially Natural and Partially Artificial Selection 82

Theory of Evolution of the Material and the Spiritual..... 83

Proof of existence of God?..... 83

Intuitive and Rational 84

God vs. Evil 84

Inspirație divină?!..... 84

Hybrid God-Demon and the SuperHybrid God-Human-Demon within Neutrosophy 86

Cause-NonEffect 87

Wetiko 87

Male, Transgender, Female 89

Types of voting 89

Prayer vs. Disease 90

The King Profit 90

Cancel Culture 91

Tanabe's Model of Peace 91

Charge... fall back! La atac... înapoi!

Societal selection 93

About the Pyramid of Human Evolution 93

The scandal is a method of making yourself known 94

Order and Chaos..... 95

În artă, cultură, știință – decide (din păcate) politicul 95

Marionete la Teatrul de Păpuși 95

Conducerea prin Frica..... 96

Täuschung naiver Bürger 96

Neutrosophics

Neutrosophic Theories

Florentin Smarandache

Opposed or somewhat different theories from various fields, can be connected by finding an intermediate element (partially <A>, and partially its opposite <anti-A>), which can constitute a new theory.

Definition of <neutA> (also called Neutrality or Indeterminacy)

Florentin Smarandache

<neutA> is everything which is in between the opposites <A> and <antiA>.

It was called *Neutrality*, because it was neither <A> nor <antiA>, but the neutral in between them.

And it was also called *Indeterminacy*, because it was an indeterminate part from <A> and an indeterminate part from <antiA>.

Since there are many types of opposite pairs (<A>, <antiA>), one has many types of intermediaries (denoted by <neutA>) in between them.

"<neutA>" is just a *generic denomination* (general term) used for everything which is in between two opposites. Do not take it *ad litteram* (literally).

<neutA> is a class of concepts, not a single one, and depends on the pair of opposites that <neutA> is in between.

Depending on each (<A>, <antiA>) particular opposite pair, <neutA> may be:

neutrality, indeterminacy, tie result, unknown, contradiction, uncertainty, vagueness, unclear, mixtures of <A> *and* <antiA>, etc.

Indeterminacy in Neutrosophic Logic/Set/Probability

Florentin Smarandache

In Neutrosophic Logic/Set/Probability, between opposites <A> and <antiA>, i.e. between T = Truth / Membership / Chance of An Event to Occur, and F = Falsehood / Nonmembership / Chance of the Event Not to Occur, it is used the concept I = Indeterminacy (also called Neutrality).

Indeterminacy (or *Neutrality*) is all between Truth and Falsehood (in Neutrosophic Logic);

or all in between Membership and Nonmembership (in Neutrosophic Set);

or all in between Chance of An Event to Occur, and Chance of the Event Not to Occur (in Neutrosophic Probability).

In Neutrosophic Statistics, *Indeterminacy* is referred to the statistical data, that may be: incomplete, partially known/unknown data, unknown exact sample or population side, probability distribution functions with indetermination (unclear, vague, contradictory data).

It does not mean that *Neutrality* is the same as *Indeterminacy*, but some people call them those ways.

I list in notes[1],[2] all definitions of "indeterminacy" and "indeterminate," together with their synonyms and near-

[1] *Indeterminacy* = the quality or state of being indeterminate, according to *Merriam-Webster Dictionary* [https://www.merriam-webster.com/dictionary/indeterminacy]. Synonyms and Near Synonyms for indeterminate: general, indefinable, indefinite, indistinct, mushy, undefined, undetermined, unsettled, vague, approximate, approximative, ballpark, imprecise, inaccurate, inexact, loose, squishy, erroneous, false, incorrect, off, wrong, faulty, flawed, mistaken, specious, distorted, fallacious, misleading, doubtful, dubious, questionable, uncertain, inconclusive, indecisive, debatable, disputable, invalidated, unconfirmed, unsubstantiated, unsupported.

[2] *Indeterminacy* = the state of not being measured, counted, or clearly known, according with *Cambridge Dictionary* [https://dictionary.cambridge.org/fr/dictionnaire/anglais/indeterminacy;https://dictionary.cambridge.org/fr/dictionnaire/anglais/indeterminate]. Synonyms and Near Synonyms for indeterminate: arguable, be neither fish nor fowl (idiom), blurred, circumstantial, conflicted, debatable, definite maybe,

synonyms, provided by Merriam-Webster and Cambridge Dictionaries, in order to show that the concept of *Indeterminacy* is capable of comprising all possible <neutA> versions between the opposites <A> and <antiA>

Please do not take linguistic dictionaries to give the language definitions of *Indeterminacy* and of *Neutrality*. *Indeterminacy* (and rarely used *Neutrality*) is a *generic terminology*, meaning it has a large meaning, not a narrow one.

Indeterminacy (*Neutrality*) = <neutA>.

An example: In mathematical topology we have "open set". But this does not mean that it has something to do with, for example: "open door", "open account", "open

---

disputable, dodgy, don't bet on it (idiom), doubt, doubtful, dubious, dubiously, elusively, fuzzily, fuzzy, gray area, iffy, inchoate, inconclusive, inconclusively, indecisive, indecisively, indefinite, indefinitely, insecurely, insecurity, it remains to be seen (idiom), kinda, knife edge, lack direction (idiom), limbo, maybe, mistily, mistiness, haziness, murky, nebulous, nebulousness, no-man's-land, not be set/carved in stone (idiom), on a razor edge (idiom), open-ended, parlous, possibly, provisionally, questionable, quite, shade, shades of grey (idiom), shakily, shakiness, shallow, shallowly, spec, sputter, squishy, stutter, swither, tell, tentative, tentatively, tentativeness, tenuous, tenuously, there's no knowing (idiom), touch-and-go, uncertain, uncertainly, uncertainty, unclear, unclearly, unconfirmed, undecided, unlikely, unofficial, unofficially, unsafe, unspecified, unsupported, unwritten, up in the air (idiom), vagaries, vague, vaguely, vagueness, wild card, wishy-washy, indescribable, indescribably, indestructibility, indestructible, indeterminate, indeterminism, index, index card.

person", etc. "Open set" is just a set that satisfies some mathematical axioms.

Similarly, “Indeterminacy” was defined in approximation theories (fuzzy, neutrosophy etc.) as everything which is in between Truth and Falsehood. Period.

Neutrosophic Dynamicity of Body + Mind + Psyche + Spirit

Florentin Smarandache

to Victor Christianto

Body + Mind + Psyche + Spirit.

I think, as in neutrosophy, that there is a partial degree of each of them in every person, and the four types of degrees are dynamic: *in a continuous change*...

The Neutrosophic Logic of the Diamond Sutra

Florentin Smarandache

The Logic of the Diamond Sutra[3]:

[3] Shigenori Nagatomo (2000). “The Logic of the Diamond Sutra: *A* is not *A*, therefore it is *A*”. *Asian Philosophy* 10(3), 213-244. https://doi.org/10.1080/09552360020011277. This paper aims to elucidate the underlying logic found within the Diamond Sutra, which is referred to as the ‘logic of not,’ expressed propositionally as ‘A is not A, therefore it is A.’ While this formulation may appear paradoxical when interpreted through the lens of Aristotelian logic, it is not necessarily nonsensical. The central argument put forth is that viewing the ‘logic of not’ from a

"A is not A, therefore it is A"

(A is nonA) → A

Transposed to a neutrosophic form, where

nonA = neutA ∨ antiA

it becomes:

[A is (neutA ∨ antiA)] → A

Or the inside of A (which is A itself) is contained into the outside of A (which is neutA together with antiA).

It resembles Klein's Bottle, that is the boundary of a 3-dimensional manifold.[4]

dualistic, either-or perspective leads to contradiction, and a proper understanding requires a shift from the dualistic stance to a non-dualistic stance. See also: Nagatomo, Shigenori (2018). "The Logic of Not: An Invitation To A Holistic Mode of Thinking From An East Asian Perspective — An Essay in Celebration of Roger Ames on The Occasion of His Retirement." *Philosophy East and West* 68(4):1239-64. https://www.jstor.org/stable/26753909.

[4] A *Klein bottle* is a paradoxist mathematical surface with several intriguing properties, imagined in 1882 by the German mathematician Felix Klein (1849-1925). Similar to the Möbius strip, the Klein bottle is non-orientable. If you were to travel along the surface, you could return to your starting point having flipped upside down. Also, it does not have any edges or boundaries. This is unlike a cylinder or a Möbius strip, both of which have at least one edge. When represented in three-dimensional space, it appears to intersect itself. However, in four-dimensional space, this intersection would not occur.

Klein's Bottle

This bottle is a surface that has no boundary, also it has no inside or outside, however one may say that it contains itself and its inside is its outside [as in neutrosophy, the overlapping of the opposites: inside/outside].

The Klein bottle is primarily studied in the field of topology, which is concerned with the properties of space that are preserved under continuous transformations.[5]

A is non*A*, therefore *A*

Victor Christianto

This is real story, last five years (2018-2023) in the election of my country, Indonesia. There was strong tension in the followers of two candidates, especially among grassroot people.

[5] Its unique shape has inspired various artistic and design projects, e.g. the mathematical art of Anatoly Fomenko, or the 3D art of Erik Anderson.

Then suddenly the elected president, Mr. Joko Widodo[6] (incumbent), decides to invite his previous opponent, Mr. Prabowo[7], to be military minister in his cabinet.

Hence, the situation became calm, and tension gradually disappears until now. It seems to me that is practically implication of A that includes nonA.

Then I can recommend you to read again Juichiro Tanabe[8].

---

[6] Joko Widodo (Jokowi) serves as the President of Indonesia from 2014. Before entering politics, Jokowi had a successful career in business and served as the Mayor of Surakarta and as the Governor of Jakarta. Jokowi is known for his humble beginnings and his image as a man of the people. He rose to national prominence due to his reputation for clean governance, transparency, and his focus on infrastructure development and social welfare programs.

[7] Prabowo Subianto Djojohadikusumo is a former military officer who has been a prominent figure in Indonesian politics for many years. He held several high-ranking positions in the Indonesian Army, including commander of the Army Strategic Reserve Command (*Kostrad*) and commander of the Army's Special Forces (*Kopassus*). In 2008, Prabowo founded the Great Indonesia Movement Party (*Gerindra*), which quickly became one of Indonesia's major political parties. He ran for the presidency in 2014 against Joko Widodo but was defeated in a closely contested election, and then ran again in the 2019 election, to be once again defeated by Joko Widodo. However, in a surprise move, Jokowi appointed Prabowo as the Minister of Defense in his cabinet, marking a significant political reconciliation.

[8] Juichiro Tanabe (2022). "A Holistic Peace: Buddhism and Liberal Peace." *Rethinking Peace and Conflict Studies*. Palgrave Macmillan, p. 131-161.

But, it seems that proposition: "A is nonA, therefore A" is quite difficult.

What is more common may be like this:

Corollary of Nagatomo Logic:

A *includes* nonA *therefore there will be peaceful dialogue*.

Nagamoto Logic is based on the Asian wisdom / Zen:

A *is* nonA, *therefore* A.

Florentin Smarandache

I agree somehow with Nagatomo Logic Corollary:

A *includes* nonA *therefore there will be peaceful dialogue*.

Nice diplomacy.

In neutrosophy, one has the entities:

$$A, neutA, antiA,$$

with antiA opposed to A, while neutA as neutrality (indeterminacy) between A and antiA. Whence:

$$nonA = antiA \cup neutA.$$

(Neutrosophic) Chess Games

Florentin Smarandache

The algorithm for playing chess with Incomplete Information (which is called Phoenix-Chess Strategy[9]) and

[9] Sergey Ershkov, Millana Ershkova (2023). "Phoenix-Chess strategy or revisiting the algorithm for playing in Chess with incomplete information". arXiv:2108.05204v4 [physics.soc-ph]; https://doi.org/10.48550/arXiv.2108.05204. The Phoenix-Chess strategy is a novel approach to chess strategy, revisiting the

the Game with Imperfect Information, similar to the War Game (*Kriegsspiel*), may be connected to neutrosophy's indeterminate data.

*

Kriegsspiel, which translates to "war game" in German, is a tactical wargame developed in Prussia in the early 19th century. It was designed as a military training tool to teach officers the art of warfare, including tactics, strategy, and decision-making under uncertain conditions. *Kriegsspiel* was played on a large tabletop map representing a battlefield, with miniature soldiers representing military units such as infantry, cavalry, and artillery. The game was typically overseen by an umpire who controlled the flow of information and acted as a referee, while the players, usually divided into two teams, made decisions based on the information available to them.

Neutrosophic Numerical-Literal Algebraic Structures

Ahmed Hatip

Is there any relation between neutrosophic numbers as: x+y*I*, and neutrosophic single valued number:

$$x(T,I,F)\ ?$$

algorithm for playing chess with incomplete information. Each captured rook is not immediately eliminated from the game but is instead considered to be undergoing virtual repair for a set number of future moves, denoted as N. After this period, the rook is reintroduced into the game, provided that the square it occupied prior to capture is unoccupied.

Florentin Smarandache

They are different. The neutrosophic number

$$N = x + yI$$

has a literal indeterminacy "I", where $I^2 = I$,

while $x(T,I,F)$ has a numerical indeterminacy "I".

A possible combination:

Neutrosophic Numerical-Literal Algebraic Structures,

built on the sets whose elements have the form

$$x(t_1, i_1, f_1) + y(t_2, i_2, f_2)I,$$

where $t_1, i_1, f_1, t_2, i_2, f_2$ are included in [0, 1],

and they represent the degrees of x and respectively y of appurtenance/indeterminacy/non-appurtenance to a given set,

while "I" is still the literal indeterminacy with $I^2 = I$.

Try to investigate this new field, never done before, for example check some simple structures such as: monoid, semigroup, group, etc.

You and Dr. M. Abobala originated the important AH-isometry, so you may cooperate again.

I have previously defined:

$$[x_1(t_1,i_1,f_1)] \# [x_2(t_2,i_2,f_2)] =$$

$$= (x_1 * x_2)\{(t_1,i_1,f_1) <> (t_2,i_2,f_2)\}$$

meaning that we operate x_1 and x_2 separately ($x_1 * x_2$)

and their components separately $(t_1,i_1,f_1) <> (t_2,i_2,f_2)$.

Mohammad Abobala

But for the components (t, i, f) I did not understand what kind of multiplication you suggest. Did you mean max(t_1, t_2), min(i_1, i_2), min (f_1,f_2)?

Florentin Smarandache

Yes, we can use them too.

Also, see: Addition, Multiplication, Scalar Multiplication, Power, Subtraction, and Division of Neutrosophic Triplets (T, I, F).[10]

We may also use the t-norms and t-conorms for (t_1,i_1,f_1) <>(t_2,i_2,f_2). (I feel like they depend on the applications).

Mohammad Abobala

Their properties depend on how we build a ring from them, if we can make this set an algebraic ring, then it can be extended to number theory, module theory, and matrix theory.

In a similar way of plithogenic numbers/neutrosophic numbers/ refined neutrosophic numbers.

Question:

How can we explain the logical meaning (not algebraic one) for the combination x(t_1,i_1,f_1)+y(t_2,i_2,f_2)*I* ?

Florentin Smarandache

Yes, indeed, we need to get good real examples.

[10] Florentin Smarandache (2016). "Subtraction and Division of Neutrosophic Numbers." *Critical Review* XIII, 103-110. https://fs.unm.edu/CR/SubstractionAndDivision.pdf

See one of them:

Two neutrosophic researchers,

Abobala(0.9, 0.2, 0.4) and *Hatip*(0.8, 0.1, 0.3)

work together and form a research Team, so their effort together will be stronger:

Abobala(0.9, 0.2, 0.4) + *Hatip*(0.8, 0.1, 0.3) =

= *Team*(max{0.9, 0.8}, min{0.2, 0.1}, min{0.4, 0.3}) =

= *Team*(0.9, 0.1, 0.3).

Other examples may be found, of course.

Florentin Smarandache

We may consider:

$$x_1(t_1,I_1,f_1)+x_2(t_2,I_2,f_2)=$$

$$=(x_1+x_2)(\max\{t_1,t_2\},\min\{i_1,i_2\},\min\{f_1,f_2\}).$$

We may get all kind of relationships between the components as needed in each application. Can you think at practical examples?

For x_1—x_2 we may take min/max/max for the components. About their neutrosophic components, we should get some relationships inspired from our everyday life.

A Total Order for the Refined Neutrosophic Set *n*-plets

Florentin Smarandache
to Dr. V. Lakshmana Gomathi Nayagam

Did you see this paper on total ordering of (T, I, F) neutrosophic triplets?[11]

I was asking if you can get a total order for the **Refined Neutrosophic Set** n-plets:[12]

$$(T_1, T_2, \ldots, T_p;\ I_1, I_2, \ldots, I_r;\ F_1, F_2, \ldots, F_s),$$

where $p + r + s = n$, and $p, r, s \geq 1$ are integers, and at least one of p, r, s is ≥ 2.

[11] Florentin Smarandache (2020). "The Score, Accuracy, and Certainty Functions determine a Total Order on the Set of Neutrosophic Triplets (T, I, F)." *Neutrosophic Sets and Systems* 38, 1-14. https://fs.unm.edu/NSS/TheScoreAccuracyAndCertainty1.pdf

[12] Florentin Smarandache (2013). "n-Valued Refined Neutrosophic Logic and Its Applications to Physics." *Progress in Physics* 4, 143-146. http://fs.unm.edu/RefinedNeutrosophicSet.pdf

Their "Generalized Neutrosophic Set" is NOT a generalization of the Neutrosophic Set!

Florentin Smarandache

M. Palanikumar, M. Suguna, and Chiranjibe Jana, in their chapter,[13] asserted that their defined set is a generalization of the neutrosophic set.

This is false.

Their definition for the so-called "Generalized neutrosophic Set" (GNSS) was:

"Let X be the universal, and m, p. n are the non-negative integers; then a generalized neutrosophic set G in X is defined as:

$$G = \{< x, T_G(x), I_G(x), F_G(x) >, x \in X\}$$

where $T_G(x), I_G(x), F_G(x) : X \to [0,1]$ specify the degree of truth, the degree of indeterminacy, and the degree of false membership of the element $x \in X$ to G, respectively, which is a subset of X,

and $\forall x \in X, 0 \le (T_G(x))^m + (I_G(x))^p + (F_G(x))^n \le 2$

[13] M. Palanikumar, M. Suguna, Chiranjibe Jana (2023): "Generalized Neutrosophic Sets and Their Applications for Aggregated Operators Based on Diagnostic Disease Problem." Chapter 11 in Chiranjibe Jana, Madhumangal Pal, Ghulam Muhiuddin, Peide Liu (eds.): "Fuzzy Optimization, Decision-making and Operations Research - Theory and Applications," Springer, Switzerland, pp. 219 – 240.

In this case, the generalized neutrosophic set index of x in X is defined as:

$$Ind = \sqrt[lcm(m,p,n)]{2-((T_G(x))^m + (I_G(x))^p + (F_G(x))^n)}\text{ ”}$$

I changed their notations to have a better description of the neutrosophic components, and simply used Latin letters T, I, F for the truth, indeterminacy, and false memberships of an element x with respect to a given set G, instead of their Greek letters.

Their Remark 1, Section 5:[14]

“The well-known neutrosophic set (NSSs) result when *m, p* and *n* are all 1.”

This is categorically false.

Counter-Example that their assertion is false.

Let’s take (T, I, F) = (1,1,1) that is a neutrosophic triplet, since

T, I, F ∈ [0, 1], and

$0 \leq 1 + 1 + 1 \leq 3$,

but this neutrosophic triplet (1,1,1) is not a GNSS because

$$0 \leq 1^m + 1^p + 1^n = 1+1+1 = 3 > 2$$

Therefore, clearly their improperly called GNSS (Generalized Neutrosophic Set) is not a generalization of the neutrosophic set.

[14] *Ibidem*, p. 223.

Their Generalization of the Neutrosophic Set is actually a particular case of the Neutrosophic Set

Florentin Smarandache

Actually, it is the other way around.

Let's use the notations (*T, I , F*) for the components.

In their case:

T ∈ [0, 1] implies that T^m ∈ [0, 1];

I ∈ [0, 1] implies that I^p ∈ [0, 1];

F ∈ [0, 1] implies that F^n ∈ [0, 1].

From $0 \le T^m + I^p + F^n \le 2$ in their set,

of course $0 \le T^m + I^p + F^n \le 3$ as in the neutrosophic set.

Therefore, their set is a particular case of the neutrosophic set.

Extended Nonstandard Neutrosophic Logic

Ze Carlos Tiago de Oliveira

I just stumbled in Takuma Imamura paper.[15]

Allow me to kindly request your invaluable observations.

[15] Takuma Imamura (2022): "On The Definition of Neutrosophic Logic." arXiv:1811.02961v2 [math.GM]; https://arxiv.org/pdf/1811.02961.pdf

Florentin Smarandache

I responded to that long ago,[16] Imamura was wrong:

> "We point out several errors and false statements by Imamura with respect to the inf/sup of nonstandard subsets, also Imamura's "rigorous definition of neutrosophic logic" is wrong and the same for his definition of nonstandard unit interval, and we prove that there is not a total order on the set of hyperreals (because of the newly introduced Neutrosophic Hyperreals that are indeterminate), whence the transfer principle is questionable."

And later on, I introduced the Extended Nonstandard Neutrosophic Logic.[17]

Soft Neutrosophic Complement

Florentin Smarandache

The soft neutrosophic complement was defined as follows:

If $f(a_1) = h_1(t_1, i_1, f_1)$,

then the complement of a_1 is:

$$f(\textit{complement of } a_1) = h_1(f_1, 1-i_1, t_1).$$

[16] Florentin Smarandache (2022): "Improved Definition of NonStandard Neutrosophic Logic and Introduction to Neutrosophic Hyperreals (Third version)." arXiv, https://arxiv.org/ftp/arxiv/papers/1812/1812.02534.pdf

[17] Florentin Smarandache (2019): "Extended Nonstandard Neutrosophic Logic, Set, and Probability Based on Extended Nonstandard Analysis." *Symmetry* 11, 515; https://fs.unm.edu/neut/ExtendedNonstandardNeutrosophic.pdf

Division of Refined Literal Indeterminacy Neutrosophic Numbers

Florentin Smarandache

to Yaser Al-Hasan

Did you do some division:

$$(a_0 + a_1I_1 + a_2I_2) / (b_0 + b_1I_1 + b_2I_2) \text{ ?}$$

Using the identification method (as for the Symbolic Plithogenic Numbers).

Second paper:

Explain what the refined literal indeterminacy constant C is equal to, for example did you consider only 7 refined literal indeterminacies P_i's?

So, $C = a_0 + a_1P_1 + a_2P_2 + \ldots + a_7P_7$, where $a_0, a_1, a_2, \ldots, a_7$ are real?

Your papers are very interesting. Resubmit them.

Dictionary Ranking of the Neutrosophic *n*-tuples

$(T_1, T_2, \ldots, T_p; I_1, I_2, \ldots, I_r; F_1, F_2, \ldots, F_s)$, where *p.>.r.>.s.±.n*

Florentin Smarandache

to Dr. V. Lakshmana Gomathi Nayagam

Unless you may establish the weights / priorities / importances of all sub-components:

$$T_j, 1 \le j \le p,$$
$$I_k, 1 \le k \le r,$$
$$F_l, 1 \le l \le s,$$

where *p, r, s* are integers,

meaning you list them into a decreasing order of their weight/priority/importance... and when one in *N* is bigger that its correspondent in *N'* you ignore how are the others that follow...

It may be some weak justification...

The Apocalypse

Florentin Smarandache
to Ackbar Rezaei

There is NonStandard Neutrosophic Logic,[18] where the supremum Falsehood degree is 1^+ (or 1 + ε (where ε is a positive infinitesimal),

which is the worst of the worst, since 1+ ε > 1.

So, for the Apocalypse, we have the degree of Falsehood (or Absolute Evil) > 1,

while the degree of the Truth (or Negative Angel) is the opposite, $^-0 = 0 - \varepsilon < 0$.

The degree of Indeterminacy is also absolute 1 + ε > 1.

Therefore: *Apocalypse* = ($^-0$, 1^+, 1^+).

[18] Florentin Smarandache (2022). "Improved Definition of NonStandard Neutrosophic Logic and Introduction to Neutrosophic Hyperreals (Third version)." arXiv, https://arxiv.org/ftp/arxiv/papers/1812/1812.02534.pdf

Fermatean Neutrosophic Set vs. Neutrosophic Set

Florentin Smarandache
to Said Broumi

The fermatean neutrosophic set space (represented by a prism whose based if formed by two perpendicular segments [0, 1] x [0, 1] on the x and z axes respectively of the 3D-Cartesian system 0*xyz*) is included into the neutrosophic set space (the unit cube, formed on the segments [0,1] x [0,1] x [0,1] on all *x, y, z* axes respectively, of the 3D-Cartesian system 0*xyz*). You can say that the fermatean Neutrosophic set is MORE SPECIFIC than the neutrosophic set for some applications, since it is smaller.

Fermatean Neutrosophic Sets of Types 1 and 2

Florentin Smarandache

Previous authors (not me) have defined the Fermatean Neutrosophic Set (of Type 1) as:

$$t, i, f \in [0,1], \text{ with}$$

$$0 \le i \le 1,\ 0 \le t^3 + f^3 \le 1, \text{ and } 0 \le t^3 + f^3 + i^3 \le 2.$$

If Michael Voskoglou wants to define it as:

$$t, i, f \in [0, 1], \text{ with}$$

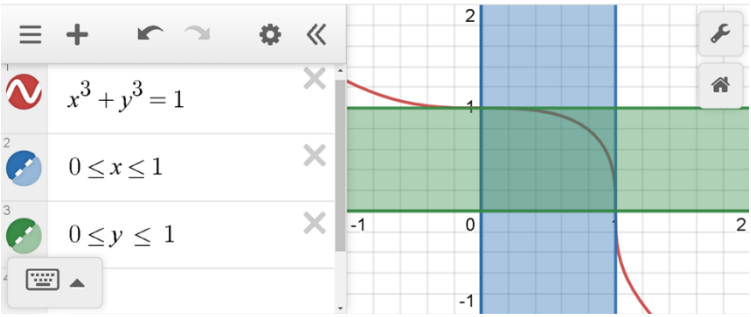
$$0 \le i \le 1,\ 0 \le t^3 + f^3 \le 1, \text{ and } 0 \le t^3 + f^3 + i^3 \le 1,$$

because it is needed in some applications, it is still okay. It may be called Fermatean Neutrosophic Set of Type 2 (for example).

The Cylinder of the Fermatean Neutrosophic Set

Florentin Smarandache
to Michael Voskoglou

The Fermatean Neutrosophic Set (which was not proposed by me) is represented by a cylinder, whose base is as below, in the square [0, 1] × [0, 1] on the 0*XY* axis (the area to the left of the curve), and the height is on the 0*Z* axis, from 0 to 1, which is a vertical line.



Julia Set in the Neutrosophic Framework

Florentin Smarandache

Besides attracting fix point, and repelling fix point, the authors also added the neutral fix point in the Julia Set.

Which is a new application.[19]

[19] M.N. Bharathi, G. Jayalalitha (2024). "Analysis Of Neutrosophic Set, Julia Set In Aircraft Crash." *Neutrosophic Sets*

Neutrosophic Groups as Neutrosophic Graphs

Florentin Smarandache
to Nivetha Martin

Just extend from *groups as graphs* to *neutrosophic groups as neutrosophic graphs*.

Example of sample with unclear size

Florentin Smarandache

An instructor makes an investigation related to a given subject [what was the hardest topic in the mathematical course he taught them] on two of his classes of students, but he does not know exactly the total number of students, so he approximates their number between 90 and 100.

Possibility Neutrosophic HyperSoft Set

Florentin Smarandache
to Nivetha Martin

Sumyyah Al-Hijjawi and Shawkat Alkhazaleh bring in their paper[20] an additional degree, called "degree of possibility" of an estimation of an element appurtenance to a set to be correct.

---

and Systems 66: 218-225; available online: https://fs.unm.edu/NSS/AnalysisNeutrosophicSet15.pdf

[20] Sumyyah Al-Hijjawi, Shawkat Alkhazaleh (2023). "Possibility Neutrosophic Hypersoft Set (PNHSS)." *Neutrosophic Sets and Systems* 53, 117-129. https://digitalrepository.unm.edu/nss_journal/vol53/iss1/7

For example, given the below Plithogenic HyperSoft Set element:

x_1[(0.4, 0.1, 0.3),

(0,7, 0.0, 0.2),

(0.6, 0.6, 0.0),

(0.5, 0.2, 0.1)],

one may add that its possibility to be correct is, for example, 0.5,

so the authors would write

x_1[(0.4, 0.1, 0.3),

(0,7, 0.0, 0.2),

(0.6, 0.6, 0.0),

(0.5, 0.2, 0.1);

0.5].

Turiyam Neutrosophic Set is just the Quadruple Neutrosophic Set

Florentin Smarandache

The Turiyam Set (by Prem Kumar Singh) inserted a state of "awareness" into the neutrosophic set to get 4 components. But in algebraic structures, etc. a number, a variable etc. do not have a degree of "awareness" - it is a nonsense, only people and maybe animals have degrees of awareness.

The more appropriate term for this set should be Turiyam Neutrosophic Set, because it is 75% neutrosophic

(since, out of four components, this set uses three neutrosophic components T, I, F) and only 25% Turiyam (since it uses only one new component L = liberal, awareness).

Anyhow, this is just the Quadruple Neutrosophic Set (T, C, U, F), already done, but renamed as *Turiyam* (a Hindu concept[21]).

Also, all of them are particular cases of the most general form of set, Refined Neutrosophic Set,[22] where one has:

$$T_1, T_2, \ldots;\ I_1, I_2, \ldots;\ F_1, F_2, \ldots .$$

Indeterminacy "I" can be refined/extended in many ways - depending on what is needed into each application.

For example, some authors have defined the Pentagonal Neutrosophic Set, where besides T, F they

[21] *Turiyam* (*Turiya*, meaning "the fourth") represents the fourth state of consciousness, distinct from the three commonly experienced states: waking (*Jagrat*), dreaming (*Svapna*), and deep sleep (*Sushupti*), particularly within the context of *Advaita Vedanta* and certain interpretations of the *Upanishads*. *Turiya* is considered the pure consciousness or the underlying reality that permeates and transcends the other three states of consciousness. Unlike the other three states, *Turiya* is not something one "experiences" in the conventional sense but is rather the realization of one's true nature. The realization of Turiya is considered the goal of spiritual practice, leading to liberation.

[22] Florentin Smarandache (2013): "n-Valued Refined Neutrosophic Logic and Its Applications to Physics." *Progress in Physics* 4, 143-146.

http://fs.unm.edu/RefinedNeutrosophicSet.pdf

added C (contradiction degree), U (uncertainty degree), V (vague or so degree).

All of them are particular cases of Refined/Extended Neutrosophic Set. T and F are also refined/extended if needed in an application.

Triple Set vs. Neutrosophic Crisp Set of Type 3

Florentin Smarandache

1. Triple Set

Definition 3.1 in Witczak's paper (p. 49)[23]:

Assume that *X* is a non-empty universe, while A_1, A_2 and A_3 are its subsets such that A_1 is contained in A_2 and A_3 has empty intersection with A_2. Then we say that an ordered triple

A = (A_1, A_2, A_3) is a *Triple Set* (TS) on *X*.

2. Neutrosophic Crisp Set of Type 3

Definition 1.1.2.c in Salama & Smarandache (p. 27)[24]:

A Neutrosophic Crisp Set of Type 3 (NCS-Type3) if it satisfies that $A_1 \cap A_2 \cap A_3 = \phi$ and $A_1 \cup A_2 \cup A_3 = X$.

[23] T. Witczak (2023): "A note on the algebra of triple sets." *Asia Mathematika* 7(2): 48-56.

[24] A. Salama, F. Smarandache (2015): "Neutrosophic Crisp Set Theory." Education Publisher, Columbus, Ohio, 330 p.; https://fs.unm.edu/NeutrosophicCrispSetTheory.pdf.

3. Comparison of the two sets

Since for the Triple Set $A_1 \subseteq A_2$ and $A_2 \cap A_3 = \phi$, one has that $A_1 \cap A_2 \cap A_3 = \phi$ as in the Neutrosophic Crisp Set of Type 3.

In this respect, the Neutrosophic Crisp Set of Type 3 is larger than the Triple Set.

But from the restriction $A_1 \cup A_2 \cup A_3 = X$ imposed by the NCS-Type 3, and no restriction on the NT for $A_1 \cup A_2 \cup A_3$, one has that the NT is larger than the NCS-Type 3 in this respect.

4. Refined Neutrosophic Crisp Set

Refined Neutrosophic Crisp Set[25] is like the Refined Neutrosophic Set,[26] where A_1, A_2, A_3 are split into subsets.

Let *X* be a non-empty universe, and *D* = <*A, B, C*> be a Neutrosophic Crisp Set, where *A, B, C* are subsets of *X*.

We refined/split *D* (and denoted it by *RD* = Refined D), by refining *A, B, C* into sub-subsets as follows:

---

[25] Florentin Smarandache (2019). "Refined Neutrosophic Crisp Set (RNCS)," pp. 114-116, http://fs.unm.edu/RefinedNeutrosophicCrispSet.pdf; extracted from the author's book from: "Nidus Idearum," vol. VII, third edition, Brussels: Pons; http://fs.unm.edu/NidusIdearum7-ed3.pdf.

[26] Florentin Smarandache (2013): "n-Valued Refined Neutrosophic Logic and Its Applications in Physics." *Progress in Physics* 4:143-146, 2013; https://arxiv.org/ftp/arxiv/papers/1407/1407.1041.pdf, and http://fs.unm.edu/n-ValuedNeutrosophicLogicPiP.pdf.

$$A=\bigcup_{j=1}^{p} A_j,\ B=\bigcup_{k=1}^{r} B_k, \text{ and } C=\bigcup_{l=1}^{s} C_l,$$

where *p, r, s* are integers ≥ 0.

By convention, when some of *p, r, s* is equal to *0* (zero), then there is no refinement with respect to that set. For example, if *p* = *0*, then *A* is not refined.

In the general form, no other restriction is imposed on A_j, B_k, C_l for $1 \le j \le p, 1 \le k \le r, 1 \le l \le s$ respectively.

Ranking the Alternatives

Florentin Smarandache
to Nivetha Martin

In the case when one has as attribute values:

dominant = *d*, satisfactory = *s*, recessive = *r*. I think that there should be taken the maximum of *d* + *s* - *r*.

IndetermSoft Set

R. Diksh

I have been exploring your research on IndetermSoft Set and I found your work both fascinating and highly insightful.

As I delve deeper into your paper, I have encountered a few aspects that I would greatly appreciate your clarification on the definition of IndetermSoft Set. I find this aspect particularly interesting.

There are two definitions of the IndetermSoft Set which is defined by you in a paper titled "Introduction to the IndetermSoft Set and IndetermHyperSoft Set".

First definition has three possibilities and the second one is based on IndetermSoft Algebra.

I am confused between these two definitions. From my point of view, the first definition is more general than the second. So, why do we need the second definition and if you defined the second definition because of algebraic structure then why do you leave out the first two conditions.

Florentin Smarandache

Yes, you are right.

1. The general definition of an IndetermSoft Set is that where at least one of F, A, H, or P(H) has some indeterminacy (unclear, conflicting, incomplete etc. data), where F: A → P(H).

2. The second one is a particular case of the first one, i.e. when the function F has indeterminate results, i.e. F(a) = h_1 or h_2 (so it is not clear if only h_1, or only h_2, or both h_1 and h_2; or F(a) = not h_1, therefore F(a) = either h_2, or h_3, ...

See these references:

2018 - 2023 - Introduction of new types of soft sets: HyperSoft Set, IndetermSoft Set, IndetermHyperSoft Set, SuperHyperSoft Set, TreeSoft Set:

https://fs.unm.edu/TSS/NewTypesSoftSets-Improved.pdf;

https://fs.unm.edu/TSS/SuperHyperSoftSet.pdf;

https://fs.unm.edu/NSS/IndetermSoftIndetermHyperSoft38.pdf[27]

https://fs.unm.edu/TSS/

The General definition says that at least one of F, A, H and P(H) should contain some indeterminacy (not necessarily all of them).

So, for the second definition, only the function/operator(s) has(have) some indeterminacy.

Neutrosophic Numbers in Statistics

William H. Woodall

How does one determine the endpoints of a neutrosophic number?

Florentin Smarandache

If $N = a + bI$, for its endpoints, one computes the *min/inf* and *max/sup* respectively of the set:

$$\{a + bx, x \in I\}.$$

William H. Woodall

What does it mean for a value to be in a neutrosophic interval of values as opposed to outside?

Florentin Smarandache

If a value $v \in N$, where N is a neutrosophic number, we do not know it exactly, at least we have an estimation of the exact value of v, we know that v is contained within N.

[27] With IndetermSoft Operators acting on IndetermSoft Algebra.

William H. Woodall

Is a + b*I* equivalent to (a + b) - b*I*, where *I* ∈ (0, 1)? If not, why not?

Florentin Smarandache

They are mathematically equal,

since if I = (0, 1), then *a + bI = (a, a + b);*

and:

(a + b) - b*I* = a + b - (0, b) = (a + b - b, a + b - 0) = (a, a + b).

William H. Woodall

What are the rules for adding and multiplying *a + bI* and *c + dI*?

Florentin Smarandache

Addition is straightforward:

$$(a + bI) + (c + dI) = (a + c) + (b + d)I$$

Multiplication:

If $I = (0, 1)$, then $I^2 = (0, 1) = I$.

It is classical:

$$(a + bI) \times (c + dI) = ac + (ad + bc + bd)I.$$

Population and Sample Dynamicity

Florentin Smarandache

In general, the population size and even the sample size are approximations, since both population and sample are dynamic, some individual move in or out of a population and of a sample, also there are individuals that do not fully

belong to a population or size, but only partially they do, or for others is not even known if they belong or not.

It does not matter if the sample/population size variation does not fit into somebody's statistical or probabilistic formulas or equations, this is the reality, in continuous change, so we need to be able to deal with this as it is.

Muhammad Aslam

N1 and *N2* are indeterminate neutrosophic numbers. But their addition and multiplication may or may not be neutrosophic. It depends on the degree of indeterminacy.

Muhammad Aslam

to William H. Woodall

We believe you may have difficulty grasping the theory, and your viewpoint appears biased. Consequently, we aren't inclined to continue the discussion further.

Florentin Smarandache

A clarification that escaped to all of us:

If the true value *v* (we are looking for) is in both intervals (and in general both sets) *A* and *B*,

$$v \in A, v \in B,$$

and one has an operation A*B (where * means any kind of operation), it does not mean in general that *v* is also in A*B, or

$$v \notin A*B$$

It only means that v*v is in A*B, or

$$v*v \in A*B$$

An elementary example:

$v = 1.6 \in [1, 2]$ and $1.6 \in [1.5, 2.5]$.

But $1.6 \notin [1, 2] + [1.5, 2.5] = [2.5, 4.5]$,

yet $1.6 + 1.6 \in [1, 2] + [1.5, 2.5]$,

since $3.2 \in [2.5, 4.5]$.

Subtraction of Sets

The rules were provided previously, except for the subtraction of two sets.

Let A and B be real subsets and * be an operation (addition, subtraction, multiplication, division, power).

Then A*B = {a*b, a*b not undefined (when talking about division or power), where a in A, and b in B}.

If, in general, A is a real set, then A + A = 2A, but A - A is not equal to zero (empty set), as interpreted before.

Let A = [a, b], and B = [c, d], then:

A - B = [min{a-c, a-d, b-c, b-d}, max{a-c, a-d, b-c, b-d}],

Whence A - A = [min{a-a, a-b, b-a, b-b}, max{a-a, a-b, b-a, b-b}].

Example: (0, 1) - (0, 1) = (-1, 1), not zero (nor the empty set).

References

We have more information on *Neutrosophic Statistics* herein: https://fs.unm.edu/NS/, where you can access many papers on the subject (their links are provided), see especially the paper indicated by Prof. Dr. M. Aslam.[28]

[28] Florentin Smarandache (2022): "Neutrosophic Statistics is an extension of Interval Statistics, while Plithogenic Statistics is

Not Cancelling Out the True Value

Florentin Smarandache
to William H. Woodall

If the true value "v" is in I *(or* $v \in I$*)*, it does not mean that "v" is in $a + bI = N$ (the neutrosophic number), but $a + bv$ is in $a + bI$.

Your $a + bI = (a + b) - bI$ gives that:

$$a + bv \in a + bI$$

$$(a + b) - bv \in (a + b) - bI,$$

which after addition, term by term, we get:

$$a + bv + (a + b) - bv \in a + bI + (a + b) - bI$$

or

$$2a + b \in 2a + b$$

(the problem herein is that the true value "v" has been cancelled out, which is of no help in the statistical or probabilistic process).

---

the most general form of statistics (second version)." *International Journal of Neutrosophic Science* 19(1), 148-165. https://fs.unm.edu/NS/NeutrosophicStatistics-vs-IntervalStatistics.pdf

AntiAlgebra & NeutroAlgebra, AntiGeometry & NeutroGeometry

NeutroGeometry when I > 0 and F = 0

Florentin Smarandache

If I > 0 in at least one axiom (and no axiom is totally false, i.e. F = 1),

then it is still a *NeutroGeometry*.

For example, you may have: T = 0.9, I = 0.1, F = 0,

then it is a *NeutroGeometry* (assuming that no other axiom has F = 1).

The distance in *NeutroGeometry* depends on each specific *NeutroGeometric Model*.

I do not think it is possible to get a general equation/algorithm to calculate it for any model.

Critics of Axiomatization

Florentin Smarandache

Actually I am not for axiomatization since as I wrote in these web sites: http://fs.unm.edu/NA/ and http://fs.unm.edu/NG/ in our real world the laws (axioms) are not 100% true, but partially.

Therefore, I present cases of algebraic and respectively geometric spaces where the axioms are only partially true (this is *NeutroAlgebra* and respectively *NeutroGeometry*), or some axioms are totally false (this is *AntiAlgebra* and respectively *AntiGeometry*).

Degree of Passability

Florentin Smarandache
to Erick Gonzalez Caballero

Degree of Passability (or ε) is better;

If $\varepsilon_n = 0$ then Indeterminacy = 1.

If $\varepsilon_n = 1$ then Indeterminacy = 0.

You were not wrong when you took I > 0, indeed it is a subcase of *NeutroGeometry* (provided that no axiom is 100% false).

When I = 0, if some T < 1 (or some F > 0), it is still a *NeutroGeometry* {provided that no axiom is 100% false (or F = 1), because in this last case one has an *AntiGeometry*}.

Distance in NeutroGeometry

Florentin Smarandache
to Erick Gonzalez Caballero

How do you integrate it into the *NeutroGeometry* (NG)? Say about indeterminacy that belongs to a geometric space in NG. The path could go around (avoid) indeterminacy, and being the smallest (fastest, easiest) one.

Show that on the example with river in our paper.[29]

Differential NeutroGeometry & Differential AntiGeometry

Florentin Smarandache

to Erick Gonzalez Caballero

This is our next stage of research, extending the *NeutroGeometry* and *AntiGeometry* to their differential forms.

Structure, NeutroStructure, AntiStructure in any field of knowledge

Florentin Smarandache

1) A *classical Structure* is a structure whose all elements are characterized by the same given Relationships and Attributes and Laws.

2) A *NeutroStructure* is a structure that has at least one NeutroRelation or one NeutroAttribute or one NeutroLaw (i.e. there are some elements that do not satisfy it), and no AntiRelation and no AntiAttribute and no AntiLaw.

3) An *AntiStructure* is a structure that has at least one AntiRelation or one AntiAttribute or one AntiLaw (i.e. no elements satisfy it).

[29] Erick Gonzalez Caballero, Florentin Smarandache (2024). "Theory of Distances in NeutroGeometry." *Neutrosophic Sets and Systems* 67: 179-189; available online: https://fs.unm.edu/nss8/index.php/111/article/view/4451

Distance with Indeterminacy

Florentin Smarandache
to Erick Gonzalez Caballero

Do you need a distance between two points

$$A(t_1, i_1, f_1) \text{ and } B(t_2, i_2, f_2) \text{ ?}$$

AntiTopology and NeutroTopology

Florentin Smarandache

AntiTopology and *NeutroTopology* are particular cases of *AntiAlgebra* and *NeutroAlgebra*:

https://fs.unm.edu/NA/.

See also *AntiGeometry* and *NeutroGeometry*:

https://fs.unm.edu/NG/,

and all of them are in general particular cases of *AntiStructure* and *NeutroStructure*:

http://fs.unm.edu/NA/NeutroStructure.pdf.

Types of AntiTopologies

Florentin Smarandache
to Tomasz Witczak

Your paper "Some remarks on anti-topological spaces" is getting attention. You consider that all three classical topological axioms are false, which is a good definition of AntiTopology.

There are a few more types of *AntiTopologies*, i.e.

- when two topological axioms (out of three) are false, and the third one is 100% true, or partially true;
- also, another type when only one topological axiom is false, while the other two are 100% true, or partially true.

See the *AntiTopology* as a special case of *AntiAlgebra*:

https://fs.unm.edu/NA/NeutroAlgebra.htm

Topology, NeutroTopology, AntiTopology

Types of AntiTopologies

1) A topology who's all axioms are totally true is called a classical Topology (or **Topology**).

2) A topology that has at least one NeutroAxiom (and no AntiAxiom) is called a **NeutroTopology**.

3) A topology that has at least one AntiAxiom is called an **AntiTopology**.

Therefore, a neutrosophic triplet is formed:

<Topology, NeutroTopology, AntiTopology>

where "Topology" may be any type of classical topology.

Types of Topologies

Sixteen new types of topologies have been introduced in the last years (2019-2024), such as: NonStandard Topology, Largest Extended NonStandard Real Topology, Neutrosophic Triplet Weak/Strong Topologies, Neutrosophic Extended Triplet Weak/Strong Topologies, Neutrosophic Duplet Topology, Neutrosophic Extended Duplet Topology, Neutrosophic MultiSet Topology,

NonStandard Neutrosophic Topology, NeutroTopology, AntiTopology, Refined Neutrosophic Topology, Refined Neutrosophic Crisp Topology, SuperHyperTopology, and Neutrosophic SuperHyperTopology.[30]

NonStandard Topology

Riad Hamido

In *Definition 28* of your paper[31]: Can we delete $\overset{0}{R}$, $\overset{+}{R}$ and $\overset{-}{R}$ because it is repeated in $\overset{-0}{R}$, $\overset{0+}{R}$, $\overset{-+}{R}$ and $\overset{-0+}{R}$?

Florentin Smarandache

Actually they are different, because:

– for example $\overset{+}{R}$ means only the nonstandard real numbers of the form $\overset{+}{r}$,

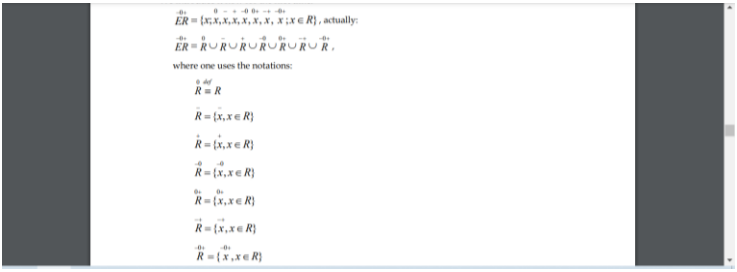
– while $\overset{0+}{R}$ means only the nonstandard real numbers of the form $\overset{0+}{r}$ (it does not include the nonstandard real numbers only of the form $\overset{+}{r}$),

– also $\overset{-+}{R}$ include only the nonstandard real numbers of the form $\overset{-+}{r}$ (it does not include the nonstandard real numbers of the form $\overset{-}{r}$ nor $\overset{+}{r}$).

[30] Florentin Smarandache (2024): "Foundation of Revolutionary Topologies: An Overview, Examples, Trend Analysis, Research Issues, Challenges, and Future Directions." *Neutrosophic Systems with Applications* 13:45-66; https://fs.unm.edu/TT/RevolutionaryTopologies.pdf

[31] *Ibidem*.

All nonstandard R's are done by definitions, all its elements are of the same style, see *Section 28* in my paper:



$\overset{-0+}{ER} = \{\overset{0}{x}, \overset{-}{x}, \overset{+}{x}, \overset{-0}{x}, \overset{0+}{x}, \overset{-+}{x}, \overset{-0+}{x}; x \in R\}$, actually:

$\overset{-0+}{ER} = \overset{0}{R} \cup \overset{-}{R} \cup \overset{+}{R} \cup \overset{-0}{R} \cup \overset{0+}{R} \cup \overset{-+}{R} \cup \overset{-0+}{R}$,

where one uses the notations:

$\overset{0}{R} \overset{def}{=} R$

$\overset{-}{R} = \{\overset{-}{x}, x \in R\}$

$\overset{+}{R} = \{\overset{+}{x}, x \in R\}$

$\overset{-0}{R} = \{\overset{-0}{x}, x \in R\}$

$\overset{0+}{R} = \{\overset{0+}{x}, x \in R\}$

$\overset{-+}{R} = \{\overset{-+}{x}, x \in R\}$

$\overset{-0+}{R} = \{\overset{-0+}{x}, x \in R\}$

Riad Hamido

In *Definition 26*,

($I_{nonstandard}$): Can we delete $\overset{+}{x}$, $\overset{-}{x}$, and $\overset{-0}{x}$ because it is repeated?

Florentin Smarandache

No, because they are different types of (open/closed) monads,

$\overset{+}{x}$ is a right monad,
$\overset{-}{x}$ is a left monad,
and $\overset{-0}{x}$ is a left monad closed to the right,

even if one is included in another one (for example $\overset{-}{x}$ is included in $\overset{-0}{x}$, but they are different nonstandard entities.

Or different types of pierced binad $\overset{-+}{x}$, and unpierced binad $\overset{-0+}{x}$.

I agree that some are included in others (for example the pierced binad $\overset{-+}{x}$ is included in the unpierced binad $\overset{-0+}{x}$), but they are different nonstandard entities.

Riad Hamido

Can you provide me with examples of about nonstandard topology and topology? Can I define ideas about this paper, such as interior and closure in nonstandard neutrosophic topological space in a new paper? Your opinion matters.

Florentin Smarandache

Example of NonStandard Topology is at Section 27, topology on the powerset of the nonstandard interval $]^{-}a, b^{+}[$. The first defined NonStandard Topology was on the powerset of the nonstandard unit interval $]^{-}0, 1^{+}[$ needed in foundation of the nonstandard neutrosophic set and logic.

Yes, please do the interior and closure in nonstandard neutrosophic topological space, it was not done.

Actually, a collective book will be announced soon and let you contribute chapters.

Maximum Nonstandard Topology on $]^{-}a, b^{+}[$

Florentin Smarandache
to Riad Hamido

I took the maximum nonstandard topology on the nonstandard $]^{-}a, b^{+}[$, for $a \leq b$, meaning all standard and nonstandard subsets of $]^{-}a, b^{+}[$, or the whole powerset $P(]^{-}a, b^{+}[)$. Which means that any standard or nonstandard subset of $]^{-}a, b^{+}[$ is an open set. But you may study some particular case, i.e. a nonstandard topology $\tau_{nonstandard}$ formed by a family of nonstandard subsets of the powerset $P(]^{-}a, b^{+}[)$.

Plithogenics

Plithogenic Random Variables and Plithogenic Probability Distributions

Florentin Smarandache
to Mohamed Bisher Zeina,
Nizar Altounji, Mohammad Abobala, Yasin Karmouta

Sincere congratulations for the introductions of *plithogenic random variables* and *plithogenic probability distributions* and their properties.[32]

The AH-isometry (by Abobala and Hatip) is again a wonderful tool on the symbolic plithogenic algebraic structures. It would also be good to get in the future some real applications of the symbolic plithogenic algebraic structures / random variables / probability distributions.

[32] Mohamed Bisher Zeina, Saeed Hemeda, Mazeat Koreny, Mohammad Abobala (2023). "On Symbolic n-Plithogenic Random Variables Using a Generalized Isomorphism." *Neutrosophic Sets and Systems* 59:330-339; available online: https://fs.unm.edu/NSS/OnSymbolicNPlithoRandomVariable.pdf

Everyday-Life Plithogenic Set

Florentin Smarandache
to Vic Christianto

The plithogenic set is a set *P* such that each element *x* from *P* is characterized by many attribute-values (like in our everyday life. For example, the element *Victor* is characterized by the attributes: *height, weight, intelligence, marital status, research type,* etc.

And with respect to each attribute the element *x* has a degree of appurtenance to the given set *P*, let's say *Indonesia* is the set *P*. The degree of appurtenance may be fuzzy degree, neutrosophic degree, or any fuzzy-extension degree.[33]

Symbolic Plithogenic Algebraic Structures

Florentin Smarandache
to Yaser Al-Hasan

$(P_3 / P_2) \cdot P_2 = ?$[34]

We are not allowed to simplify P_2 with P_2.

[33] Florentin Smarandache (2018): "Plithogenic Set, an Extension of Crisp, Fuzzy, Intuitionistic Fuzzy, and Neutrosophic Sets – Revisited." *Neutrosophic Sets and Systems* 21, 153-166. https://fs.unm.edu/NSS/PlithogenicSetAnExtensionOfCrisp.pdf

[34] Yaser Ahmad Alhasan, Raja Abdullah Abdulfatah (2023). "Division of refined neutrosophic numbers." *Neutrosophic Sets and Systems* 60:1-5; available online: https://fs.unm.edu/NSS/RefinedNeutrosophicNumbers1.pdf

We separately compute the division P_3 / P_2, by identification method, then the result is multiplied with P_2.

$P_3 / P_2 = x_0 + x_1P_1 + x_2P_2 + x_3P_3$,

where x_0, x_1, x_2, x_3 are real numbers that we need to determine.

$P_3 \equiv$ (identical with) $P_2(x_0 + x_1P_1 + x_2P_2 + x_3P_3) =$

$= (x_0+x_1+x_2) \cdot P_2 + x_3P_3$,

whence $x_0 + x_1 + x_2 = 0$ and $x_3 = 1$.

So, $P_3 / P_2 = (x_0 + x_1 + x_2) \cdot P_2 + P_3$.

Then:

$(P_3 / P_2) \cdot P_2 = [(x_0 + x_1 + x_2) \cdot P_2 + P_3] \cdot P_2 =$

$= [(x_0 + x_1 + x_2) \cdot P_2 \cdot P_2 + P_3 \cdot P_2 = (x_0 + x_1 + x_2) \cdot P_2 + P_3$,

where $x_0 + x_1 + x_2 = 0$.

$P_2/P_2 \neq 1$,

$P_2 / P_2 = x_0 + x_1P_1 + x_2P_2$

or

$P_2 \equiv P_2(x_0 + x_1P_1 + x_2P_2) \equiv P_2(x_0 + x_1 + x_2)$,

whence $x_0 + x_1 + x_2 = 1$.

Therefore, $P_2 / P_2 = x_0 + x_1P_1 + x_2P_2$, with $x_0 + x_1 + x_2 = 1$.

$1 / P_2$ = undefined (impossible).

In general:

P_m / P_n, for positive integers $m < n$, is undefined.

Neutrosophic Statistics & Plithogenic Statistics

Florentin Smarandache
to Vinay Kumar Yadav, Ibrahim M. Almanjahie, Fatimah Alshahrani, Usman Shahzad, Ishfaq Ahmad, Shakti Prasad

You should mention the possibility of using non-interval sets as well in neutrosophic statistics (https://fs.unm.edu/NS/).[35]

Also, mention the multivariate statistics (plithogenic statistics),[36] when a statistics is evaluated by multiple sources of information (experts).

Symbolic Plithogenic Function

Florentin Smarandache

Let *SPS* be a **Symbolic Plithogenic Set** [1], defined as:

$SPS = \{a_0 + a_1P_1 + a_2P_2 + \ldots + a_nP_n; n \geq 1,$

with $a_0, a_1, a_2, \ldots, a_n \in R$

[35] Florentin Smarandache (2022): "Neutrosophic Statistics vs. Interval Statistics, and Plithogenic Statistics as the most general form of statistics (second edition)." *International Journal of Neutrosophic Science* 19(1), 148-165.

[36] Florentin Smarandache (2021): "Plithogenic Probability & Statistics are generalizations of MultiVariate Probability & Statistics." *Neutrosophic Sets and Systems* 43:280-289; DOI: 10.5281/zenodo.491489; http://fs.unm.edu/NSS/PlithogenicProbabilityStatistics20.pdf

or C or to some given algebraic structure}, where *R* is the set of real numbers, while *C* is the set of complex numbers.

And all P_i are letters (or variables) and are called Symbolic (Literal) Plithogenic Components (Variables)}, where 1, P_1, P_2, ..., P_n act like a base for the elements of the above set SPS, with $P_i \cdot P_j = P_{max\{i,j\}}$ for integers $i, j \in \{1,2,\ldots,n\}$.

Also, $a_0, a_1, a_2, \ldots, a_n$ are called coefficients.

And the algebraic structures defined on SPS are called Symbolic Plithogenic Algebraic Structures.

A Symbolic Plithogenic Function is defined as:

$f : SPS \to SPS$

For any

$x \in SPS,\ f(x) \in SPS$.

An Example of Plithogenic Function:

$$f(x) = 3 + (1 - P_2)x + (P_1 + 2P_3)x^2$$

Let $x = 2 - P_1$, then one substitute *x* by $2 - P_1$ into the function, and one has:

$$f(x) = f(2 - P_1) = 3 + (1 - P_2) \cdot (2 - P_1) + (P_1 + 2P_3) \cdot (2 - P_1)^2 =$$
$$= 3 + 2 - P_1 - 2P_2 + P_1 \cdot P_2 + (P_1 + 2P_3) \cdot (4 - 4P_1 + P_1^2) =$$
$$= 5 - P_1 - 2P_2 + P_2 + (4P_1 - 4P_1^2 + P_1^3 + 8P_3 - 8P_1P_3 + 2P_1P_3) =$$
$$= 5 - P_1 - P_2 + 4P_1 - 4P_1 + P_1 + 8P_3 - 8P_3 + 2P_3 =$$
$$= 5 - P_2 + 2P_3$$

The limits, derivatives, and integrals are with respect to the variable *x*, while the symbolic plithogenic coefficients are treated as constants, and of course the operations between these constants are those from the *SPS* paper.[37]

Differentiate Plithogenic Soft Sets from HyperSoft Sets

Nivetha Martin

How shall we differentiate *Plithogenic Soft Sets* from *HyperSoft Sets*?

Florentin Smarandache

HyperSoft Set:

f(white, central) = $\{x_1, x_2, x_3\}$

Soft Set:

f(white) = $\{x_1, x_2, x_3\}$

Plithogenic Soft Set:

$$f(\text{white}) = \{ \quad x_1(a_1(d_{11}), a_2(d_{12})), \quad x_2(a_1(d_{21}), a_2(d_{22})), \quad x_3(a_1(d_{31}), a_2(d_{32})) \quad \}$$

where a_1 and a_2 are some attributes, and d_{ij} are the degrees of appurtenance to the set of each element x with respect to those attribute values.

[37] Florentin Smarandache (2023). "Introduction to the Symbolic Plithogenic Algebraic Structures (revisited)." *Neutrosophic Sets and Systems* 53, 653-665. DOI: 10.5281/zenodo.7536105, http://fs.unm.edu/NSS/SymbolicPlithogenicAlgebraic39.pdf

For example:

Plithogenic (Fuzzy) Soft Set:

f(white) = { x_1(big(0.7), heavy(0.6)),

x_2(big(0.3), heavy(0,2)),

x_3(big(0,8), heavy(0.9)) }

which means that the elements that are white are x_1, x_2, and x_3, where x_1 belongs to the plithogenic soft set in a degree of 0.7 with respect to its bigness, and in a degree of 0.6 with respect to its heaviness; similarly for x_2 and x_3.

Linguistic Intervals in Plithogenic Decision Making

Florentin Smarandache
to Nivetha Martin

Yes, your idea with 3 thresholds, each one as a single label, for example

(*small, medium, high*)

is good.

Just in case when the thresholds are not clear (not single labels) we can use interval labels, for examples:

'[*smaller, small*]' instead of only *'small'*,

similarly for the other two thresholds:

'[*Medium, AboveMedium*] instead of only '*Medium*',

'[*High*, *Higher*]' instead of only '*High*'.

Other examples:

Quality = { [VeryLow, Low] = RecessiveValue,

[Moderate, MoreModerate] = ExpectedValue,

[High, Higher, VeryHigh] = DominantValue };

Price = {[VeryCheap, Cheaper, Cheap] = DominantValue, [Budgetary, AboveBudgetary] = ExpectedValue, [Expensive, VeryExpensive] = RecessiveValue }.

We may have, more generally, as thresholds for decision making applications within the frame of plithogenic sets, the Linguistic Intervals.

For example:

Quality = { [VeryLow, Low] = RecessiveValue,

[Moderate, MoreModerate] = ExpectedValue,

[High, Higher, VeryHigh] = DominantValue };

Price = { [VeryCheap, Cheaper, Cheap] = DominantValue, [Budgetary, AboveBudgetary] = ExpectedValue, [Expensive, VeryExpensive] = RecessiveValue }.

Physics

How did the Primordial (the first ever) Life in the universe arise, and from what?

Florentin Smarandache

The **Biogenesis** {enunciated by Francesco Redi (1626-1697), Lazzaro Spallanzani (1729-1799), and Louis Pasteur (1822-1895) and supported by experiments} is the theory that:

living matter arises only from other living matter,

while **Abiogenesis** (or Spontaneous Generation) is a theory that life can originate from non-living matter. [38]

The first theory is the most accepted by scientific community.

But, if life arises only from another life, then how did the Primordial (the first ever) Life in the universe arise, and from what?

[38] Flinn Scientific / Bio / Fax!, Spontaneous Generation vs. Biogenesis / Classical Experiments by Redi, Spallinzani, and Pasteur, Publication No. 10878 061616, year 2016.

Unmmater colliding with Unmatter

Florentin Smarandache
to Dmitri Rabounski

I read that CERN has produced one gram of antimatter and if it is collided with un gram of matter a huge amount of energy is produced.

I think making unmatter might be easier than making antimatter, then making unmatter of opposite signs than the first unmatter and then colliding them.

Or the second unmatter being only partially opposite to the first one, then collide them — of cause less energy resulting with respect to the first.

Extending Unmmater to Matter and Antimatter

Florentin Smarandache
to Victor Christianto

Why not extending unmatter to matter and antimatter being symmetric with respect to unmatter (which is in the middle). Could they be connected with Bose-Einstein universe?

Teorii Fizice Nereale

Florentin Smarandache

Teoria Relativității a lui Einstein este ireală, science-fiction. Mulți fizicieni sunt de acord cu acest lucru, dar *mainstream*-ul controlat, desigur, nu vrea să audă, și ea

generează multe paradoxuri – ceea ce nu este permis pentru o teorie adevărată și reală.[39]

O teorie care nu folosește la nimic, dar tot globul e obligat să o învețe.

Am scris două cărți în temă:

- *Absolute Theory of Relativity & Parameterized Special Theory of Relativity & Noninertial Multirelativity*;[40]
- *New Relativistic Paradoxes and Open Questions*.[41]

Nu am lucrat în Teoria Corzilor, dar mulți susțin că este la fel de ireală (de exemplu, 11 dimensiuni?!), matematică pură, imaginație.

Geometriile neeuclidiene le-am generalizat la NeutroGeometrii (când axiomele sunt parțial adevărate și parțial false) și AntiGeometrii (când toate axiomele – nu doar postulatul V al lui Euclid – sunt total (100%) false).[42]

The Biggest Blunder in Physics of the 20th Century

Gocho V. Sharlanov

The preprint of "The Complete Evidence for the Invalidity of Special Relativity"[43], which is actually a

[39] Peter Šujak (2017). "Einstein's Destruction of Physics." Morrisville: Lulu Press, 209 p.

[40] https://fs.unm.edu/ParameterizedSTR.pdf

[41] https://fs.unm.edu/NewRelativisticParadoxes.pdf

[42] https://fs.unm.edu/NG/

[43] https://doi.org/10.13140/RG.2.2.26412.64641

breakthrough in the biggest fallacy in 20th-century physics, has already been published in the *Journal of Modern and Applied Physics*.[44]

Also, the preprint of " 'Dark Matter', 'Dark Energy', and Other Problems in Physics Today",[45] which is actually a breakthrough in the second big fallacy in 20th-century physics, *accelerating expansion of the Universe,* has already been published in the same *Journal of Modern and Applied Physics*.

Gocho V. Sharlanov

https://physics.bg/

https://twitter.com/Gocho_Sharlanov

Master of Science in Engineering

"Instrumentation and Control Systems for Nuclear Power Plants";

"Automation of Heat-and-Power Engineering Processes";

"Applied Mathematics".

Academic Member of Athens Institute for Education and Research

Author of the following books in the series "On the True Nature of Things in Physics":

1. "Theory of Relativity - the Classical Review" (https://www.amazon.com/Theory-Relativity-Classical-Breakthrough-Physics/dp/B084QKKHCH).

2. "The Special Theory of Relativity - the Biggest Blunder in Physics of the 20th Century" (https://www.amazon.com/Special-Theory-Relativity-Analyses-Invalidity/dp/1701145154).

[44] See https://www.pulsus.com/journal-modern-applied-physics/inpress.html

[45] https://doi.org/10.13140/RG.2.2.27678.72007

3. “Accelerating Expansion of the Universe – the Reasonable Alternative”
(https://www.amazon.com/dp/B08VRMVHTV)
4. "Специалната теория на относителността - най-голямата заблуда във физиката на XX-ти век"
(https://www.smashwords.com/books/view/826140)

SuperDeterminism vs Determinism

Florentin Smarandache

What’s the distinction between SuperDeterminism and Determinism?

Victor Christianto

SuperDeterminism... as it seems to me is not just asserting order instead of probabilistic version of Quantum Mechanics a la Copenhagen... but also to induce physical mechanism behind such violation of Bell Inequality.

In summary, Determinism is the default position of Regular Determinism. With SuperDeterminism, every conceivable action is predetermined and there is no freedom of choice.

New Physics Projects

Victor Christianto, Florentin Smarandache

We can work on:

- unified theory of fields from fluid theory;
- unified theory of gravity / Munera → compare with an experimental scheme to detect ether;
- new hermeneutics of our new concept, IntuiLytics: integrating Holy Spirit role, and both sides of brain

hemispheres in a multiple ensemble learning model;
- multiple ensembles learning approach towards modeling ancient Hebrew language;
- science of finance and black swan (?).

Constante Fizice

Florentin Smarandache
lui Constantin Sandu

Știu că nu este o opinie *mainstream*, dar am observat că multe constante în fizică sunt, de fapt, aproximări, adică o constantă fizică variază într-un interval. Probabil că mai mulți parametri influențează o constantă.

Dr. Constantin Sandu

Nu am avut timp să vorbim, dar împreună cu prietenul meu, Dan Brașoveanu, și el inginer aerospațial, ne-am gândit încă din tinerețe, de acum 50 de ani, la principiile propulsiei gravitaționale. Ca ingineri, suntem absolut siguri că principiul deplasării gravitaționale este corect, nu are nicio contradicție și impune utilizarea unei energii/puteri gravitaționale generate la bordul navei.

Cercetări Experimentale

Florentin Smarandache
lui Constantin Sandu

M-am uitat peste narativ. Ideea este de a forma ecuații/formule pentru unde gravitaționale care se calculează aproximativ (neutrosofic).

Efectuând câteva experimente (am înțeles că aveți posibilitatea la COMOTI) să înregistrați rezultatele fiecărui experiment, din care să rezulte o relație/ecuație între parametri (energie, radiație etc.).

Mențineți aceleași date pentru toți parametrii, cu excepția unui singur parametru, ale cărui valori să difere, pentru a studia cum depinde acel parametru de ceilalți. Apoi schimbați parametrul care variază.

Sunteți cercetători experimentali, deci știți mai bine decât mine.

Idei contradictorii în Fizica

Florentin Smarandache
lui Preda Mihăilescu

O să mă documentez și din alte surse, aveți dreptate. Sunt multe idei contradictorii în fizică. Am avut niște discuții cu cercetători de la COMOTI din București; unii susțin că ar exista unde gravitaționale, alții că nu. Cei de la COMOTI vor să demonstreze experimental că există.

Referitor la Teoria Corzilor, unii se îndoiesc de existența celor 11 dimensiuni (poate nu știm noi să le vedem/deducem practic/experimental?).

Am avut și eu o idee despre existența nemateriei, adică între materie și antimaterie, etc. Se spune că fizica a devenit prea matematizată.

Cartea „Pierdut în matematică” a dr. Sabine Hossenfelder[46] din Germania susține că matematica abstractă grea a ruinat întreaga fizică teoretică, împiedicând orice progres productiv.

Preda Mihăilescu

Acesta este punctul central al criticii doamnei Hossenfelder, pe care îl argumentează foarte bine. Argumentul ei elegant sună astfel: fizica pătrunde în domenii care se sustrag experimentelor sau observațiilor, fie microscopice, fie cosmice. În aceste condiții, eleganța formulelor ține loc de confirmare.

Există însă oameni mai temerari și pragmatici care spun, de exemplu: cheltuim miliarde pentru CERN, în timp ce fenomene a căror investigare este la îndemână rămân învăluite în mister și superstiții. De exemplu, marea varietate a așa-numitelor fenomene psi, a căror prezență este la fel de incontestabilă pe cât de capricioasă este predictibilitatea lor.

Vorbim de vedere la distanță (*remote viewing*[47]), anticipare, telepatie, etc. – fenomene multiple confirmate, dar greu de cercetat. Argumentul lipsei de repetitivitate este o chestiune legată de formularea întrebărilor. Specialiștii în curgere laminară ar trebui și ei să se lase de

[46] Sabine Hossenfelder (2018): “Lost in Math: How Beauty Leads Physics Astray.” Sabine Hossenfelder este fizician teoretician, specializată în cercetarea gravitației cuantice.

[47] https://www.gaia.com/video/practical-uses-remote-viewing-paul-smith?fullplayer=feature

meserie dacă li s-ar cere ca rezultatele lor să prevadă forma exactă a fluxului la un moment dat. Întrebările însă, în mod firesc, se adaptează la ceea ce se poate descrie cu suficientă precizie. În domeniul psi, condițiile sunt diferite și fac ca acest subiect să rămână marginalizat în mediul academic.

Ironia face ca, de zeci de ani, serviciile secrete și, uneori, chiar și poliția să se folosească de darurile psi ale unor persoane în mod pragmatic, fără a pretinde să înțeleagă de ce funcționează, cel mult în parte: cum funcționează.

Mai mult chiar, au învățat să cultive potențialul psi prin training și la persoane fără aptitudini native deosebite, și cursurile dau roade.

Între timp, "știința" ridică din sprâncene — și va continua, desigur, să o facă, până când sau moda sau finanțarea, vor face întrebările privitoare la interacțiunea între câmpurile bio-psihice ale omului și informație și mediu, deodată interesante și acceptabile[48]...

[48] V. Philippe Guillemant (2021): "Le grand virage de l'humanité." Philippe Guillemant este un inginer fizician francez, doctor în fizica radiațiilor. Își desfășoară activitatea la CNRS. Specialist în inteligență artificială, lucrările sale au dus la crearea a două companii inovatoare, licențiate de CNRS: Synapsys și Uratek.

Cercetarea mea în fizică

Florentin Smarandache
către Dr. Constantin Sandu

Privind cercetarea mea în fizica, vedeți acest sait:

http://fs.unm.edu/physics.htm,

ca să aveți o idee și să-mi spuneți ce ar putea merge pentru proiect. Am emis și ipoteze despre viteza supraluminală și despre nematerie (un articol chiar a fost aprobat de site-ul CERN). Nemateria ar fi între materie și antimaterie, apoi am discutat puțin și despre fizica cuantică...

Toate acestea s-au întâmplat cu mult timp în urmă. Sunt de acord că multe modele matematice din fizică nu reflectă realitatea, ci sunt pur și simplu imaginate...

The superluminal signals exist in nature without violating the cause-effect

Florentin Smarandache
to Alexey Platonov

Somebody translated for me your paper[49] into Romanian. I read it, congratulations. I agree with you that the superluminal signals exist in the nature without violating the cause-effect. No paradox of causality is produced by the superluminal transmission of information

[49] Alexey A. Platanov, The source of causal paradoxes. Incomplete research by A. Einstein into the possibility of superluminal motion, ResearchGate, accessed on 12 October 2023, https://www.researchgate.net/messages/11926964

or energy or others. Nor for instantaneous (infinite one could say) transmission. I wonder if the classical (subluminal) physical laws sustain or not at superluminal speeds? What about at the instantaneous speed? My opinion is that the Laws of Physics have some variations from the classical laws. Also, Lorentz Transform is unrealistic as are Einstein's STR and GTR.

Duality of Particle-Wave

Florentin Smarandache
to Feng Liu

The duality of particle-wave also falls under the extreme neutrosophic case T=1 and F=1.

An object may be a particle (T=1) or may not be a wave, i.e. the opposite of a particle, simultaneously (F=1).

Matematicieni vs. Fizicieni

Florentin Smarandache
lui Mircea Zărnescu

Vă mulțumesc pentru mesajele interesante trimise.

În legătură cu nemulțumirea dvs. față de numerele complexe, parțial aveți dreptate, deoarece aceste numere sunt, într-adevăr, imaginare. Totuși, ele au o justificare teoretică încă din vremea lui Gauss: pentru a asigura existența a n soluții reale și/sau complexe pentru o ecuație polinomială de grad n, cu coeficienți reali.

Matematicienii lucrează în spații imaginare și recunosc acest lucru, cum ar fi în algebra abstractă, unde

elementele unui spațiu se comportă uniform sub legile și operațiile definite asupra lor.

Utilitatea acestor concepte în practică nu este încă pe deplin cunoscută; poate că nu are nicio utilitate practică și este doar un exercițiu intelectual. Am scris despre acest aspect, subliniind că legile nu se aplică în același grad tuturor indivizilor în viața reală. Am propus o extindere a algebrilor clasice, NeutroAlgebre și AntiAlgebre, unde legile sunt doar parțial adevărate sau total false (ca în viața reală).

Cu toate că matematicienii recunosc această complexitate, fizicienii de azi nu admit întotdeauna că lucrează în spații abstracte și imaginare care nu reflectă neapărat realitatea.

The Landscape of Ideation

Părți comune la lucruri necomune și invers: părți necomune la lucruri comune

Florentin Smarandache

Consideră <A> o idee, o teorie, un concept etc., iar <antiA> opusul lui <A>.

Analog pentru <B>.

Neutrosofia înseamnă încercarea de a găsi:

(i) părți comune la lucruri necomune (adică <A> și <antiA> au ceva în comun, sau intersecția lor <A> ∩ <antiA> nu este vidă),

și invers:

(ii) părți necomune la lucruri comune (adică <A> = <B>, însă au și părți necomune, sau <A> ∩ <antiB> este nevidă, ori <antiA> ∩ <B> este nevidă).

Unde <A> și <B> pot fi curente/școli/idei filozofice, iar <antiA> și <antiB> sunt contrazicerile lor respective.

Common parts in uncommon things, and vice versa: uncommon parts in common things

Consider <A> an idea, a theory, a concept, etc., and <antiA> the opposite of <A>.

Similarly for <B>.

Neutrosophy means the attempt to find:

(i) common parts in uncommon things (that is, <A> and <antiA> have something in common, or their intersection <A> ∩ <antiA> is not empty),

and vice versa:

(ii) uncommon parts in common things

(that is, <A> = <B>, but they also have uncommon parts, or <A> ∩ <antiB> is not empty, or <antiA> ∩ <B> is not empty).

Where <A> and <B> can be philosophical currents/schools/ideas, and <antiA> and <antiB> are their respective contradictions.

NonDiophantine Arithmetics

Florentin Smarandache

It is a kind of recreational/funny mathematics.

I published such jokes, I agree with them.

De la Paradoxism la Neutrosofie

Florentin Smarandache
lui Andrei Pogany

Eu am scris deja că paradoxismul nu l-am inventat, ci l-am descoperit. Contradicțiile au existat de când lumea.

Apoi, am extins paradoxismul la neutrosofie, care studiază dinamica contradicțiilor, dar și a neutralelor dintre ele. Neutrosofia este cunoscută internațional și a dat naștere logicii neutrosofice, precum și conceptelor de mulțimi/neutre și probabilități și statistici neutrosofice.

Puteți consulta mai multe informații în limba română.[50]

Creating Paradoxist Art with ChatGPT

Florentin Smarandache

Let's do an AI book of drawings, images, pictures (AI Album of Art). What about if we make a short album of images created with ChatGPT.

Human also has a percentage in the creation (words) and ChatGPT another one (interpreting and generating images).

Let's ask ChatGPT what it thinks about it.

ChatGPT (2024, May 24).
Retrieved from ChatGPT Platform.

Creating paradoxist art with ChatGPT, using words to inspire images, is indeed a fascinating idea. Paradoxist art, which thrives on contradictions, paradoxes, and unusual juxtapositions, can be creatively explored through the interplay of human and AI contributions. Here's a step-by-step guide on how to create a paradoxist art with ChatGPT:

Step 1: Conceptualization

Define the Theme: Start by deciding on the themes or paradoxes you want to explore. Paradoxist art often deals with surreal or contradictory elements, so think of concepts like "silent music," "burning ice," or "frozen flames."

[50] Florentin Smarandache: "Neutrosofia, o Nouă Ramură a Filosofiei".
https://fs.unm.edu/Neutro-NeutrosofiaNouaRamura.pdf

Step 2: Generate Prompts

Create Prompts: Write descriptive and paradoxical prompts that ChatGPT can use to generate images. For example, "a city floating in the sky with roots reaching down to the ground," or "a bird made of fire flying through a rainstorm."

Refine Prompts: Work with ChatGPT to refine these prompts. You can interact with the AI to expand or modify the prompts to better capture the paradoxical nature of the theme.

Step 3: Image Generation

Use an AI Image Generator: Utilize an AI image generation tool like DALL-E, MidJourney, or Stable Diffusion. Input the refined prompts into the image generator.

Select Images: Review the generated images and select the ones that best represent the paradoxical themes you intended. This selection process will involve human judgment to ensure the images align with your artistic vision.

Step 4: Curate the Album

Arrange the Images: Organize the selected images into a cohesive album. Consider the sequence and how each image transitions to the next.

Add Titles and Descriptions: Provide titles and brief descriptions for each image to guide the viewer's interpretation. These descriptions can further elaborate on the paradoxical nature of the artwork.

Step 5: Acknowledge Contributions

Credit Human and AI Contributions: Clearly mention that the album is a collaboration between human creativity (in the form of prompts and selection) and AI interpretation (in the form of image generation). For instance, you can include a statement like, "This album is a collaborative creation between [Your Name] and ChatGPT, where human ingenuity meets artificial intelligence."

Step 6: Share Your Work

Publish the Album: Share the album on social media, art platforms, or in a digital gallery. You could also consider creating a physical book if you want a tangible version of your paradoxist art.

Engage with the Audience: Encourage viewers to interpret and discuss the paradoxes in the art. This engagement can add another layer of depth to the project.

Example Project Outline

1. Theme: "Contradictions in Nature"
2. Prompts:
   - "A waterfall flowing upwards"
   - "A forest of glass trees"
   - "A desert covered in ice"
3. Generated Images:
   - Image 1: A surreal waterfall flowing against gravity
   - Image 2: Transparent trees reflecting the landscape
   - Image 3: Frozen dunes in a sunlit desert
4. Album Title: "Nature's Paradoxes"

5. Acknowledgment: "This album was created with the collaborative efforts of [Your Name] and ChatGPT, blending human imagination with AI's creative power."

By following these steps, you can successfully create a unique and intriguing paradoxist art album that showcases the synergy between human creativity and artificial intelligence.

Partially Natural and Partially Artificial Selection

Florentin Smarandache

All occur in cycles: evolution, random mutation, stagnation, and involution.[51], [52], [53]

Thanks to science today one has besides natural also artificial selection, actually partially natural and partially

[51] Vern Poythress (2019): "Interpreting Eden." Crossway. https://frame-poythress.org/wp-content/uploads/2021/10/Poythress-Vern-Interpreting-Eden-A-Guide-To-Faithfully-Reading-And-Understanding-Genesis-1-3.pdf

[52] Jaroslav Flegr. "Frozen evolution: that is not the way it is, Mr Darwin." https://www.frozenevolution.com/frozen-evolution-book

[53] Md. Abdul Ahad (2014): "Darwin's theory is a mixture of Malthus's theory and Lyell's theory and Darwin use wrong Lamarck's theory as well as believe as a mechanism of evolution." *American Journal of Life Science* 2(3), 128-137.

artificial selection of living and organisms and non-living matter / ideas / concepts in all fields of knowledge.[54]

Spiral Evolution (Smarandache-Vatuiu[55]), progressing and regressing and stagnation at a higher then lower levels... and so on[56].

Theory of Evolution of the Material and the Spiritual

Florentin Smarandache

Evolution not only of living beings (microorganisms, plants, insects, animals, humans), but also of non-beings (objects) and of spiritual ideas and theories.[57]

Proof of existence of God?

Florentin Smarandache to Victor Christianto

It depends on what you mean by God: a being?! an invisible spirit?! a symbol?! an idea?! the whole universe?!

---

[54] Florentin Smarandache (2017): "Trip report to Galapagos Island." https://fs.unm.edu/Galapagos.pdf

[55] Florentin Smarandache, Andrușa R. Vătuiu (2019): "Human Neutrosophic Evolution in Spiral or The Divine is in the Man." http://fs.unm.edu/SpiralNeutrosophicEvolution.pdf

[56] Florentin Smarandache (2017): "Theory of Neutrosophic Evolution: Degrees of Evolution, Indeterminacy or Neutrality, and Involution." *Progress in Physics* 13(2): 130-135; http://fs.unm.edu/neutrosophic-evolution-PP-49-13.pdf

[57] F. Smarandache (2021): "Introduction to Neutrosophic Genetics." *International Journal of Neutrosophic Science* 13(1): 23-27, 2021; DOI: 10.5281/zenodo.4314284

Intuitive and Rational

Florentin Smarandache
to Victor Christianto

God is in us as our spirit & feelings & mind, and we are in God as our whole Universe.

Intuitive and Rational, they both work together in neutrosophic degrees — as a way of thinking.

God vs. Evil

Florentin Smarandache
to Vic Christianto

Why doesn't God, which is omnipotent, eradicate the evil (including the natural disasters and diseases) from the world?

A definitive answer was never given by neither theology, nor philosophy, nor believers, nor atheists...

Inspirație divină?!

Florentin Smarandache

De unde ne vine, așa din senin, o scânteie sclipitoare în minte? Vreau o explicație științifică...

Poate, în prezent, cu nivelul nostru actual de știință, nu suntem capabili să înțelegem paranormalul, ori ceea ce credem că este fantastic, dar în fond este real. Un real la care nu putem ajunge cu înțelegerea din cauza nivelului nostru redus...

Nu suntem, probabil, capabili să descifrăm neînțelesul? Unii sunt conectați la univers mai bine decât

alții, au extra-simțuri? Cum putem “culege” ideile din “aer”? Cum ajunge scânteia din negrul subconștient să răbufnească afară, în strălucitul conștient?

Care-i legătura dintre real și divin, cum să dezlegăm misterul necunoscutului prin artă, știință, teologie și univers?

Divine inspiration?!

Where does a sparkling idea come to us, so out of the blue? Divine inspiration?! I want a scientific explanation...

Maybe, at present, with our current level of science, we are not able to understand the paranormal, or what we think is fantastic, but in fact it is real. A reality that we cannot reach with understanding, because of our low level...

Are we not perhaps relevant and do we understand the incomprehensible? Some are connected to the universe better than others, do they have extra senses? How can we "gather" ideas from "air"? How does the spark in the black subconscious comes to surface and rage outside, in the bright consciousness?

What is the connection between the real and the divine, how to unravel the mystery of the unknown through art, science and the universe?

Hybrid God-Demon and the SuperHybrid God-Human-Demon within Neutrosophy

Florentin Smarandache

Notes for an article[58] that explores into the complex realm of mythological and folkloric composite entities.

My analysis suggests that these Hybrid and SuperHybrid creatures demonstrate the human psyche's consistent ability to transcend binary oppositions, akin to the principles of neutrosophy. Across various cultures and eras, the human mind shows a tendency for nuanced and neutrosophic perspectives, challenging simplistic categorizations.

Stud/create SuperBeings:

- Half-God + Half-Demon

Let's assume a Goddess who was impregnated by a Demon, without knowing it. Or a She-Demon impregnated by a God.

- Partially God + Partially Human + Partially Demon: DemiGod + Demon, or Cambion + God

To introduce the Hybrid God-Demon and the SuperHybrid God-Human-Demon.

[58] Florentin Smarandache (2024): "Neutrosophy Transcends Binary Oppositions in Mythology and Folklore." *Neutrosophic Sets and Systems* 65, 57-79; https://fs.unm.edu/NSS/NeutrosophyTranscendsBinary4.pdf

- Partially God + Partially Human + Partially Demon ca o noua incecare/introducere de Mythical SuperHybrid.
- 1/2 God + 1/2 Demon

Let's assume a Goddess is impregnated by a Demon without knowing (or out of confusion).

- Partially God + Partially Human + Partially Demon:
- DemiGod + Demon
- Cambion + God

Cause-NonEffect

Cause-Effect has been studied intensively.

But not all Causes generate Effects.

What about studying: causes that generate only little effect, or no effect at all?

Wetiko

Victor Christianto

For instance, Jack D. Foster argues in his book "Columbus and other cannibalism" that the imperialist soldiers called the conquistador such as Columbus and also Hernan Cortez who attacked middle American ancient kingdom, were actually inhabited by such an evil spirit of *wetiko*[59]... that is why their motto *God, Glory and Gold*

[59] *Wetiko* is a concept derived from Native American spirituality and psychology. It refers to a kind of psychospiritual illness or mental and moral corruption.

seems to suggest that the imperialists were only interested to enslave and rob the gold of indigenous people…

People of Indonesia also received so many slavery and persecutions during hundreds of years… and who were the more civilized? Are they who conquer indigenous people in the name of God? Or we who came from the South?

Europeans mostly believe that they are the first world and they are entitled to teach the South world, but shouldn't we better learn from each civilization? *Wetiko*[60]…

I send you one more material from Masanobu Fukuoka on the one straw revolution. Fukuoka just reminds us how agriculture can be made humbler and nature-friendly. His book has become a movement in its own way…

In opposite, more developed countries seem more interested in technology advancement and hard sciences, so to speak. They don't want to learn from nature anymore.

Florentin Smarandache

I agree with you, they did not come to help but to steal… and enslave people…

[60] The concept of *wetiko* is used to critique modern societal issues such as rampant consumerism, environmental destruction, and the exploitation of others. It suggests that these behaviors stem from a deep-seated spiritual malady. For example, Paul Levy (2013), in his book "Dispelling Wetiko: Breaking the Curse of Evil," discusses wetiko as a collective psychosis infecting humanity, leading to self-destructive behavior and ecological destruction.

Male, Transgender, Female

A. Saraswathi
(on ResearchGate.net)

I'm interested in getting your feedback on:

Analyze the problems of Transgender in India/Study Using New Trapezoidal Fuzzy Cognitive Maps (TpFCM).

Florentin Smarandache

Try to use the Neutrosophic Cognitive Maps[61] for "the problems of Transgender in India",

since they have three components:

<A>, >neutA>, and <antiA>

or Male, Transgender, Female.

Therefore, Transgender is in between Male and Female.

Fuzzy cannot catch this middle term called Transgender.

Types of voting

Florentin Smarandache
to Ranulfo Paiva Barbosa (Sobrinho)

We can vote:

- for candidate A,
- against candidate A,
- white vote (do not choose any person, neither A nor B),

[61] See: https://fs.unm.edu/NCMs.pdf; or neutrosophic set: https://fs.unm.edu/OverviewOfNeutrosophics.htm.

- black vote (vote against both candidates A and B),
- or even not coming to voting.

Prayer vs. Disease

Florentin Smarandache

Why doesn't prayer vindicate the diseases?

Victor Christianto

Sometimes a good prayer by a believer will invite God to indicate the diseases... but mostly the purpose of a prayer is to change our heart.

Florentin Smarandache

So, it is all psychological...

Victor Christianto

True.

Yes, faith is a delicate and mysterious subject

The King Profit

Florentin Smarandache

I don't believe that today there are other things more important than PROFIT for all companies. They all pray to the God Money. Everything is just propaganda (ethics of climate change - which are bogus, since climate has changed all the time. and will do again and again).

You are an idealist...

Vic Christianto

I agree with you. It started with Milton Friedman, then Thatcher.

Cancel Culture

Florentin Smarandache

to Revd. Frank Julian Gelli

Thank you again, Frank, for your comments on cancel culture (CANCELLED PHILOSOPHER: BISHOP BERKELEY). I see today's cancel culture... I partially agree and disagree. I think that if a person was a worst criminal, but also a highly valued professional (writer, artist, scientist etc.), he should not be labelled only criminal, or only professional.

Because today, some negative aspect of a personality totally cancels him, which is not fear. Similarly, some positive aspect of a professional should not totally cancel his negative aspect. In neutrosophic logic a personality may be partially right and partially false at the same time.

Tanabe's Model of Peace

Florentin Smarandache

Tanabe's view[62] aims to bridge Western structurally and institutionally oriented liberal peace with Buddhist

[62] Juichiro Tanabe (2022). "A Holistic Peace: Buddhism and Liberal Peace," *op. cit. supra*. See also: Juichiro Tanabe (2016). Buddhism and Peace Theory: Exploring a Buddhist Inner Peace. *International Journal of Peace Studies* 21(2), 14 p. Online: https://www3.gmu.edu/programs/icar/ijps/vol21_2/Tanabe%20FINAL.pdf.

concepts of inner peace, resulting in a post-liberal holistic peace model.

Tanabe envisages a hybrid holistic peace model, comprising four essential elements:

1. Advocacy for human rights promotion.

2. Transformative democracy, emphasizing self-critique and mutual learning.

3. An economic system that fosters citizens' well-being through principles of social justice and equity.

4. Cultivation of inner peace characterized by reflective self-awareness, non-dualistic thinking, a multi-perspectival approach, and compassion.

Charge... fall back!
La atac... înapoi!

Societal selection

Florentin Smarandache

From animals to humans, Darwin's "survival of the fittest", coined by the first time by Herbert Spencer as equivalent of "natural selection", became in today's human society "survival and success of the most opportunistic human", or **societal selection**.

From where, it can be seen, that an **upright person** has fewer chances to succeed in society, and even has all the chances to be cast aside on the margins of society.

About the Pyramid of Human Evolution

Florentin Smarandache

Indeed: material, intellectual, spiritual. The difference between cultures. Each culture is distinct; the strong impose theirs. However, no culture is superior to another, only different. A cultural dialogue is necessary to understand these differences. Then, the dualism of Material-Spiritual, and the trialism of Material-Psyche-Spiritual.

The author's analysis in "The Pyramid of Human Evolution"[63] is an objective, concise, and professional approach, categorizing evolution into material, intellectual, and spiritual dimensions. Each of these dimensions contributes uniquely to the overall growth of humanity.

He emphasizes that every culture is unique, with its own set of values, traditions, and worldviews. While dominant cultures may impose their practices and ideologies on others, this does not imply superiority. For a harmonious coexistence, the author advocates for cultural dialogue.

The scandal is a method of making yourself known

Florentin Smarandache

Scandalul este o metodă de a te face cunoscut, mai ales pentru artiști și literați, mult mai eficientă decât ne-scandalul (forma pașnică).

Reclama operei artistice sau literare prin șoc, pornografie și anti-curent principal.

Săracii... nu mai știu ce să facă pentru a atrage atenția asupra creațiilor lor...

[63] Nicolae Dima: "The Pyramid of Human Evolution", presented (on Zoom) at the "Destine literare" Circle, Montreal, Canada, December 9, 2023.

Order and Chaos

Florentin Smarandache

Deoarece lucrez în domeniul logicii fuzzy și al logicii neutrosofice, vă spun că amândoi aveți dreptate. Există și ordine și haos, într-un anumit procent fiecare. Iar legile, chiar și în știință, nu sunt întotdeauna 100% adevărate, ci într-un procent mai mic, de la caz la caz. Am putea vorbi și de ordine în haos și haos în ordine... Aceasta se întâmplă din cauza imperfecțiunii reale. Lucrăm cu aproximații, nedeterminări, cu informații incomplete și chiar contradictorii. Doar în științele pure avem spații exacte, perfecte, și legi ori axiome 100% adevărate. Dar în științele aplicate nu.

În artă, cultură, știință – decide (din păcate) politicul

Pentru că în artă, literatură, cultură, știință, întotdeauna a decis, decide, și va decide... POLITICUL...

Din (foarte) pacate! În rest, să ne fie de bine.

Marionete la Teatrul de Păpuși

Bancuri din vremurile grele de ieri, de azi și de mâine

Nu e vorba de un teatru real de păpuși, ci de o metaforă (teatrul de păpuși la figurat).

Când lumea citește titlul "Marionete la Teatrul de Păpuși" și vede pozele lor, face imediat legătura (cine sunt adevăratele marionete!).

Conducerea prin Frica

Toți sunt paralizați de frică. Fiecare își păstrează propriul scaun.

Se conduce foarte ușor prin frică în ziua de astăzi.

Täuschung naiver Bürger

Florentin Smarandache

Wo ist die Demokratie?

Stefan Spaarmann

Weg, Demokratie ist ein Begriff zur Täuschung naiver Bürger.

Structure, NeutroStructure, AntiStructure in any field of knowledge

1) A *classical Structure* is a structure whose all elements are characterized by the same given Relationships and Attributes and Laws.

2) A *NeutroStructure* is a structure that has at least one NeutroRelation or one NeutroAttribute or one NeutroLaw (i.e. there are some elements that do not satisfy it), and no AntiRelation and no AntiAttribute and no AntiLaw.

3) An *AntiStructure* is a structure that has at least one AntiRelation or one AntiAttribute or one AntiLaw (i.e. no elements satisfy it).

Florentin Smarandache

ISBN 978-1-59973-786-7

9 781599 737867 >