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Epistemological sieve, data mining and the history of philosophy

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Abstract

The author shows theoretical views of classical European philosophers of early Modern times on onto-epistemological problems structured in a table. The article introduces an idea of tabular combinatorial modeling of philosophical onto-epistemological outlook. The working hypothesis is that the tabular method and combinatorics are applicable to visualization and recognition of the incompleteness of onto-epistemological taxonomy in the history of the early Modern philosophy of Europe. Tabular modeling and simulation of philosophical problems are the most likely areas to become the combinatorial, computing philosophy of the near future. Table of philosophical combinations as database can be the basis for cluster analysis, computer simulations of different theoretical aspects of ontology and epistemology.

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Combinatorics, organized eclecticism, interpretive grid, onto-epistemological cell.

Introduction

Very often in academic, scientific or philosophical literature the readers get acquainted with traditional marking of the classical thinkers, i.e. specific and stable characteristic of the philosopher as an objective or subjective idealist, vulgar or dialectical materialist, monist, dualist or pluralist, skeptic, optimist or agnostic, and finally, empiricist, the rationalist or sensualist.

Of course, on the one hand, such ontological and epistemological classification is needed as it represents the ordering of the philosophical schools and views, on the other hand – this philo-

sophical taxonomy, rooted in the Basic Question of Philosophy (BQP – the question of the relation of the consciousness and being, of the spiritual and the material in general), partially came from Marxism and evokes ambivalent feelings among modern researchers.

However, it should be noted that long before lifetime of K. Marx, Plato had already formulated the opposition between idealism and materialism, he wrote in the dialogue the Sophist, what some of the philosophers "are dragging down all things from heaven and from the unseen to earth, and they literally grasp in their hands rocks and oaks; of these they lay hold, and obstinately maintain, that the things only which can be touched or handled have being or essence, because they define being and body as one, and if any one else says that what is not a body exists they altogether despise him, and will hear of nothing but body"; other philosophers, according to Plato, insist that "true essence consists of certain intelligible and incorporeal ideas; the bodies of the materialists, which by them are maintained to be the very truth, they break up into little bits by their arguments, and affirm them to be, not essence, but generation and motion. Between the two armies, Theaetetus, there is always an endless conflict raging concerning these matters" [Plato, 2015].

Despite the fact that philosophy today tries to avoid total schemes and unambiguous, and is often lost in the intricacies of linguistic, for example, especially post-modernism philosophy declares that the construction of the only "correct" system of philosophy is impossible; on the contrary, a fundamental setting of the history of philosophy remains steadfast and consists primarily in the fact that in the history of philosophy is always necessary to look for a certain order, and the regularity of occurrence of any new and progressive views is proved by the fact, what every new philosopher was obliged to "stand on the shoulders" of previous intellectual giant and to see even further than the previous one. Many historians of philosophy were firm and steadfast in their understanding the history of philosophy as an ordered, sequential evolution of ideas from simple to complex.

The desire of researchers, to see a coherent history of philosophy in the chaos of schools and opinions, forces historical and philosophical tradition to construct a conventional classification system, and in textbooks on philosophy to create a certain sequence of formation of World philosophy.

Systematization of philosophy

In our days it is difficult to find a researcher who will dare to write a textbook on the history of philosophy based on the thesis that all history of philosophy is a haphazard conglomeration of conflicting ideas, or the history of philosophy is not classified and have no internal evolutionary relationship.

Thus, both the opponents and supporters of systematization of philosophy, knowing about the principle of "economy of thought", forced to use certain markers or general taxonomy of philosophy and philosophers. Taxonomy of philosophy allows us to assign to each philosopher a label or

marker with a certain degree of error, and, without spending time on in-depth study his philosophical concepts, correlate it with the ontological and epistemological universal "library catalogue" of world philosophy and to establish a "sequence number" of each thinker.

In connection with the aforementioned facts, the theoretical problem is the representation of ontological and epistemological positions of each classical philosopher not as a conventional marker, "sanctified" by tradition, but as dynamic option-combinations in the registry of a certain philosophical matrix-table. Attempt at such representation allows us to assume that in addition to the traditional and generally accepted worldview-markers assigned to classical philosophers, there is a so-called combinatorial set of possible, probable and impossible philosophical positions, "modes" of philosophy. Based on this assumption, we can assume that every classical philosopher hypothetically could take a more advanced variety of possible philosophical positions (actually modes or modifications), than accepted by historico-philosophical tradition. So, for example, working in a specific area of knowledge or changing ideological position at different stages of his work, the thinker may have a different ordinal position in the overall philosophical taxonomy.

So, a tabular multitude of ontological and epistemological positions is the aim of this paper. The basic method of constructing this set was – combinatorics, elements of combining were – different fundamental parts and elements of the theory of knowledge and theory of being, way of presentation – table.

Before proceeding to the construction of a combinatorial table of philosophical positions, let us briefly examine the most known attempts of creating a universal worldview and application of taxonomies, as well as special cases of the intersection of philosophy and combinatorics. It is no secret that even ancient philosophers were actively using combinatorics: Xenocrates (396/5 – 314/3 BC) identified the number of syllables from letter combinations to each other; Aristotle listed all possible types of three-membered syllogism; Aristoxenus of Tarentum (375–335 BC) defined alternation of long and short syllables in verse; stoic Chrysippus of Soli (279 – 206 BC) counted how many effects you can get from 10 axioms. In turn, the medieval scholastics were arguing about the relationship between the members of the Holy Trinity, the hierarchy of angels, archangels, Cherubim and Seraphim, the theologians were forced to consider the various relationships of order and hierarchy.

Despite all this, the idea of an integrated applications of combinatorics to philosophy was first proposed by Leibniz, who wrote: "If controversies were to arise, there would be no more need of disputation between two philosophers than between two accountants. For it would suffice to take their pencils in their hands, to sit down to their slates, and to say to each other: ... Let us calculate" [Russell, 1937, 170].

Unconditional belief in the possibilities of reason allowed the philosophers to admit at least the hypothetical possibility of building a unified system of reasonable description, explanation and prediction of all. Karl Popper described this epistemological setting as follows: "an irrational faith in reason" [Popper, 1965, 231].

The tradition known as "to embrace the unembraceable" was intended to classify all phenomena and processes in the tables of identities and differences, and to see objects in a certain global tabular coordinate system, especially manifested itself in the philosophy of Early Modern times. This desire of early modern European philosophers and scientists to establish general table-matrix of all phenomenon was later called "cellular power" [Foucault, 1995, 194] by Michel Foucault.

In our time, morphological analysis or so-called "morphological box", "Zwicky box"¹ plays an important role in the development of heuristics. Heuristics is a methodology for the creation of new inventions.

The essence of this method lies in the fact that a new phenomenon is often a combination of known elements or known to unknown. Matrix approach allows us to analyze new connections and relationships that occur in the process of combinatorial analysis. Zwicky method is based on the so-called eschatological system. Concluding the brief historical overview of the use of combinatorial philosophy, we turn to the construction of the onto-epistemological table declared as the goal of our research. It should be noted that the method of constructing the table in this case is essentially deductive, and therefore schematic and theoretical, but nevertheless, it is a way of saving time.

Combinatorial table of philosophical positions

So, combining philosophical markers, we will try to build a combinational table including fundamental ontological and epistemological categories of classical European philosophy.

a) We must start with a simple combination of epistemological categories such as empiricism (Em), rationalism (Ra), sensationalism (Se), epistemological optimism (Eo)², skepticism (Sk) and agnosticism (Ag). As a result, we have epistemological matrix combinations consisting of 9 pairs (Table 1).

Table 1. Epistemological combination

	Em	Ra	Se
Eo	Em Eo	Ra Eo	Se Eo
Sk	Em Sk	Ra Sk	Se Sk
Ag	Em Ag	Ra Ag	Se Ag

b) Next set of mandatory combinations, without which it is impossible to imagine the classic philosophical point of view, as follows: monism (Mo), dualism (Du) and pluralism (Pl). Three philosophical positions on the number of substances are necessary to summarize with the ontological positions of the Basic Question of Philosophy (BQP): OI and SI – objective and subjective

1 Fritz Zwicky (February 14, 1898 – February 8, 1974) was a Swiss astronomer. He worked most of his life at the California Institute of Technology (USA).

2 Epistemological optimism is the direction in epistemology, insisting on the infinite possibilities of cognitive abilities.

idealism; VM and DM – vulgar and dialectical materialism. It should be noted that the classical quantitative position regarding the substance (Mo, Du, Pl) can be understood as a methodological and ontological sense.

The number of combinations is equal to 12 (Table 2).

Table 2. Ontological combination

	Mo	Du	Pl
VM	Mo VM	Du VM	Pl VM
DM	Mo DM	Du DM	Pl DM
OI	Mo OI	Du OI	Pl OI
SI	Mo SI	Du SI	Pl SI

c) The third step is to move to a complex combining onto-epistemological position of philosophy. Let's consider combining two versions: simple (C1) and complex (C2).

C1. Simple version

This table is formed by multiplying the number of combinations (9 and 12) obtained in embodiments "A" and "B", and eventually consists of 108 combinations (Table 3).

Table 3. Onto-epistemological table (Simple version)

		Em									Ra									Se																																	
		Eo			Sk			Ag			Eo			Sk			Ag			Eo			Sk			Ag																											
V	M	Mo	Du	Pl	Mo	Du	Pl	Mo	Du	Pl	Mo	Du	Pl	Mo	Du	Pl	Mo	Du	Pl	Mo	Du	Pl	Mo	Du	Pl	Mo	Du	Pl																									
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.	31.	32.	33.	34.	35.	36.	37.	38.	39.	40.	41.	42.	43.	44.	45.	46.	47.	48.	49.	50.	51.	52.	53.	54.
55.	56.	57.	58.	59.	60.	61.	62.	63.	64.	65.	66.	67.	68.	69.	70.	71.	72.	73.	74.	75.	76.	77.	78.	79.	80.	81.	82.	83.	84.	85.	86.	87.	88.	89.	90.	91.	92.	93.	94.	95.	96.	97.	98.	99.	100.	101.	102.	103.	104.	105.	106.	107.	108.

If you use this table as the classifying methodological sieve, you can easily recognize the "cells" of traditional philosophies with its own serial number and a brief description. For example, Descartes (skeptical, dualist, rationalist, objective or subjective idealist №95 and №68). Therefore, some famous philosophers can be placed in specific cells of the table: Descartes (Sc., Du., Ra., OI (№95) or SI (№68)), Leibniz (Eo., Pl., Ra., OI (№93)), Spinoza (Eo., Pl., Ra., OI (№91)), the French materialists La Mettrie, Holbach (Eo., Mo., Se, VM (№19)), Hegel (№91).

It is noteworthy that some philosophers, changing their worldview position, were in the so-called "Nomadic State of Mind" ie, thinkers traveled through different cells of the table, while others philosophers held several positions (cells), which leads on the one hand the complexity and contradictions of their systems, on the other hand makes them more flexible and interesting. For example, the teachings of Kant at the same time is on epistemological mutually exclusive positions. Violating classical logical law of non-contradiction, Kant wrote: "There can be no doubt that all our knowledge begins with experience.... But though all our knowledge begins experience, it

does not follow that it all arises out of experience" [Kant, 1929, 41]. Therefore, we must assume the existence of a unified system of Kant in different cells of the table. Kant's philosophy in relation to the nature of Pure reason can be described as follows: (Ag, Du, Ra, SI (№71)), in relation to the objective world as the source of all experience (Ag, Du, Em, OI (number 89)).

It should also be noted limitations of the method of combination, so according to the table, for example, the position of Plato, Hegel are almost identical in the same cell, and this identification is true only in the form or formal logical result of these philosophical systems, but this nearness of philosophers in the same cell is absolutely incorrect in their content and influence on the history of philosophy in general.

Also, sometimes it is impossible to accurately determine the markers that define the main features of different philosophers. For example, we know that David Hume was an agnostic and a sensualist, but his philosophical position in relation to the number of substances (monism, dualism, pluralism) and shades of idealism (objective or subjective idealism) remains unclear and controversial (Ag, [Mo or Du or Pl?], Se, [OI or SI?]). Tabular description of the philosophy of John Locke would be as follows: ([Ag or Sc], [Mo or Du or Pl?], Se, [OI or SI?]).

It is likely that the philosopher never studied the theory of knowledge, the problem of substance, or the question of the relationship of ideal and material, and in this case, It will be very difficult to clearly find his "legitimate" cell in the table of probability philosophical positions.³

Thus, Table 3 shows that the set of 108 combinations of possible options include 9 "mastered cells", which can be labeled by names of historical philosophers.

C2. Complex version

The complex version is a logical continuation of the simple version and is based on the assumption that the constructing of a coherent taxonomy of philosophy at the ontological and epistemological sense, we can decompose the findings of the Basic Question of Philosophy (VM, DM, SI, OI) in more atomic components: dialectical (D) vulgar (V), materialistic (M), an idealistic (I) (and), subjective (S), an objective (O).

It should be noted that, by combining this series, we have to mix the methodological and ontological categories. But this confusion does not violate the rules of classification, because this combination is not pure classification and this procedure can be called an "organized eclecticism". We offer to decompose and combine similar in status of the subjects and predicates of main ontological concepts of the Basic Question of Philosophy (OI and SI – objective and subjective idealism; VM and DM – vulgar and dialectical materialism). Mixing in this case is justified only by technical curiosity and theoretically highly controversial.

3 In both cases (Locke, Hume and others), many of the indicators characterizing the onto-epistemological position of philosophers, remains uncertain, so these philosophers cannot be clearly defined on the table. But the problem of fixing the philosophers on the cells of the table can be solved in the future due to computer visualization of the table in the form of a multidimensional tables or databases. For example, cells of the table corresponding to different philosophers, may intersect and overlap. Computer visualization in this case will show the intersecting cells, for example, the cells may be automatically presented with a special color or blinking.

To calculate the number of combinations we use the standard formula of combinatorics:

$$A_n^k = n(n-1) \cdot \dots \cdot (n-k+1) = \frac{n!}{(n-k)!}$$

?	?				
D	V	M	I	O	S

$$A_6^2 = \frac{6!}{(6-2)!} = \frac{6 * 5 * 4 * 3 * 2}{4 * 3 * 2} = \frac{720}{24} = 30$$

Figure 1. Number of combinations

If we list all combinations of the total number of words (dialectical (D), vulgar (V), materialistic (M), idealistic (I), subjective (S), objective (O)) that make up the main pair categories of fundamental question of philosophy (BQP), eventually we get to 30 pairs, ie, in addition to traditional options VM, DM, SI, OI, the new options will be formed: VD, VI, VS, VO, DV, DI, DS, DO, IV, ID, IS, IO, IM, SV, SD, SO, SM, OV, OD, OS, OM, MV, MD, MI, MS, MO. As a result, variations in the final number will increase to 810.

The first letter in the pair plays the role of the subject, the second – the predicate. It should be noted that the availability of new combinations is not proof that they reflect the real state of affairs in general practice of philosophical thought.

New combinations can be in opposition to the content of the famous philosophical positions.

The combination described above is merely a scheme of thinking.

In the combination process, six concepts are combined with each other in order to obtain pairs, the subjects and predicates of every pairs change their places with each other finite number of times. This variation leads to very stable philosophical pairs, for example, DM – dialectical materialism and MD – materialist dialectics are virtually identical in terms of its meaning, although we can say that the traditional DM is a philosophical approach to reality, MD is method of knowledge, the core of DM.

Pair VM – vulgar materialism and MV – materialistic slang (materialistic vulgarity) are generally synonymous, but on closer examination are semantic differences. For example, a VM is clearly associated with the philosophical materialism over within the middle of the XIX century (K. Vogt, J. Moleschott) and MV – rather vulgar literary theory, studying the massive infusion of vulgarisms (words used in common parlance) in the literary language.

As a result, the ratio of components may produce different pairs:

- 1) Stable combinations – VM and DM, SI (VS) and OI, VD, ID and MD, OD and SD;
- 2) Paradoxes – SO, OS, MI, MI, IM, for example, materialistic idealism (MI), idealistic materialism (IM);
- 3) VS, SV, IV, MS, IV – phrases that are not common or used in philosophical discourse, for example, materialistic subjectivism (MS), idealistic vulgarisms (IV).

As for the "non-standard" combination of world view, which appear in the combination process, they are, in general, organized eclecticism (interpretive grid), the use of which is purely

Table 4. Onto-epistemological table (Complex version)

		Em						Ra						Se					
		Eo		Sk		Ag		Eo		Sk		Ag		Eo		Sk		Ag	
		Mo	Du	PI	Mo	Du	PI	Mo	Du	PI	Mo	Du	PI	Mo	Du	PI	Mo	Du	PI
V	M	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.
D	M	28.	29.	30.	31.	32.	33.	34.	35.	36.	37.	38.	39.	40.	41.	42.	43.	44.	45.
S	I	55.	56.	57.	58.	59.	60.	61.	62.	63.	64.	65.	66.	67.	68.	69.	70.	71.	72.
O	I	82.	83.	84.	85.	86.	87.	88.	89.	90.	91.	92.	93.	94.	95.	96.	97.	98.	99.
V	D	109.	110.	111.	112.	113.	114.	115.	116.	117.	118.	119.	120.	121.	122.	123.	124.	125.	126.
V	I	136.	137.	138.	139.	140.	141.	142.	143.	144.	145.	146.	147.	148.	149.	150.	151.	152.	153.
V	S	163.	164.	165.	166.	167.	168.	169.	170.	171.	172.	173.	174.	175.	176.	177.	178.	179.	180.
V	O	190.	191.	192.	193.	194.	195.	196.	197.	198.	199.	200.	201.	202.	203.	204.	205.	206.	207.
D	V	217.	218.	219.	220.	221.	222.	223.	224.	225.	226.	227.	228.	229.	230.	231.	232.	233.	234.
D	I	244.	245.	246.	247.	248.	249.	250.	251.	252.	253.	254.	255.	256.	257.	258.	259.	260.	261.
D	S	271.	272.	273.	274.	275.	276.	277.	278.	279.	280.	281.	282.	283.	284.	285.	286.	287.	288.
D	O	298.	299.	300.	301.	302.	303.	304.	305.	306.	307.	308.	309.	310.	311.	312.	313.	314.	315.
I	V	325.	326.	327.	328.	329.	330.	331.	332.	333.	334.	335.	336.	337.	338.	339.	340.	341.	342.
I	D	352.	353.	354.	355.	356.	357.	358.	359.	360.	361.	362.	363.	364.	365.	366.	367.	368.	369.
I	S	379.	380.	381.	382.	383.	384.	385.	386.	387.	388.	389.	390.	391.	392.	393.	394.	395.	396.
I	O	406.	407.	408.	409.	410.	411.	412.	413.	414.	415.	416.	417.	418.	419.	420.	421.	422.	423.
I	M	433.	434.	435.	436.	437.	438.	439.	440.	441.	442.	443.	444.	445.	446.	447.	448.	449.	450.
S	V	460.	461.	462.	463.	464.	465.	466.	467.	468.	469.	470.	471.	472.	473.	474.	475.	476.	477.
S	D	487.	488.	489.	490.	491.	492.	493.	494.	495.	496.	497.	498.	499.	500.	501.	502.	503.	504.
S	O	514.	515.	516.	517.	518.	519.	520.	521.	522.	523.	524.	525.	526.	527.	528.	529.	530.	531.
S	M	541.	542.	543.	544.	545.	546.	547.	548.	549.	550.	551.	552.	553.	554.	555.	556.	557.	558.
O	V	568.	569.	570.	571.	572.	573.	574.	575.	576.	577.	578.	579.	580.	581.	582.	583.	584.	585.
O	D	595.	596.	597.	598.	599.	600.	601.	602.	603.	604.	605.	606.	607.	608.	609.	610.	611.	612.
O	S	622.	623.	624.	625.	626.	627.	628.	629.	630.	631.	632.	633.	634.	635.	636.	637.	638.	639.
O	M	649.	650.	651.	652.	653.	654.	655.	656.	657.	658.	659.	660.	661.	662.	663.	664.	665.	666.
M	V	676.	677.	678.	679.	680.	681.	682.	683.	684.	685.	686.	687.	688.	689.	690.	691.	692.	693.
M	D	703.	704.	705.	706.	707.	708.	709.	710.	711.	712.	713.	714.	715.	716.	717.	718.	719.	720.
M	I	730.	731.	732.	733.	734.	735.	736.	737.	738.	739.	740.	741.	742.	743.	744.	745.	746.	747.
M	S	757.	758.	759.	760.	761.	762.	763.	764.	765.	766.	767.	768.	769.	770.	771.	772.	773.	774.
M	O	784.	785.	786.	787.	788.	789.	790.	791.	792.	793.	794.	795.	796.	797.	798.	799.	800.	801.

cognitive interest. Also, it should be noted that some of these combinations are already provided in modern philosophical discourse: vulgar subjectivism (VS) [Beiser, 2002, 246], subjective dialectics (SD) etc.

Onto – epistemological table can be a convenient means of combinatorial search and visualization of the conflicts that exist between the various philosophical attitudes (Table №5).

It is also important to note that single matrix is not sufficient to determine the most important philosophical elements. The first step is to create a set of matrices. Philosophical data that is much needed to determine the actual, possible and impossible variants of philosophical positions, should be placed in a series of tables – matrixes №1 – №2 – №3 №n

Each new matrix is organized on the basis of new indicators, will minimize the uncertainty in the description of a philosophical position. Thus philosophical data will serve as a data array, the matrix table will play the role of "methodological sieve". The first matrix will allocate the largest blocks of information on the combinatorial space of the table, the second matrix will atomize them. The process of finding combinations of philosophy resembles the process of gold extraction.

As gold miners use in their work a variety of tools – Concentrators, Pans, Vibrating Screens, Shaker Tables, Slassifiers, Sieves, also researchers of philosophical structures should be able to use the appropriate tools: a system of dynamic tables – sieves to be used in a specific sequence to find new fields of philosophical knowledge.

Historians of philosophy within the framework of this metaphor would become the gold miners of the era of the California Gold Rush.

So in the end, using combinatorics, tabular method and topic modeling, we can see a complete matrix of the onto-epistemological picture of the classical philosophy (17-19 centuries).

It is also crucial that the onto-epistemological position of each philosopher within the table can occupy different cells (1 – 810) or diffuse on the space of tabular structure and perceptible only in the range of a certain field (the collection of cells), it does not provide an unequivocal fixation of philosophical positions for a particular cell.

Conclusion

It is necessary to say a few words about using tables to the practice of teaching philosophy. Combinatorics of philosophy can give a visual and convenient tool for understanding logically existing, possible and impossible conflicts between different philosophical positions. We should also mention the downsides of this method, chief among which is the bulkiness.

Combinatorial transformation of the linear history of philosophy to a table of the variations of philosophical worldview's units allows us to set quite visible incompleteness of the linear narrative history of philosophical ideas.

Taxonomic table shows that the empty cells, conspicuous when using the matrix approach, it is not visible at the linear narrative. Completed space of table eliminates all kinds of defaults and

Table 5. The ontological side of the Basic Question of Philosophy. Modeling of conflicts between the ontological positions.

	VD	VI	VS	VO	VM	DV	DI	DS	DO	DM	IV	ID	IS	IO	IM	SV	SD	SI	SO	SM	OV	OD	OI	OS	OM	MV	MD	MI	MS	MO	
VD																															
VI																															
VS																															
VO																															
VM																															
DV																															
DI																															
DS																															
DO																															
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OS																															
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MV																															
MD																															
MI																															
MS																															
MO																															

C – conflict.
A – addition.

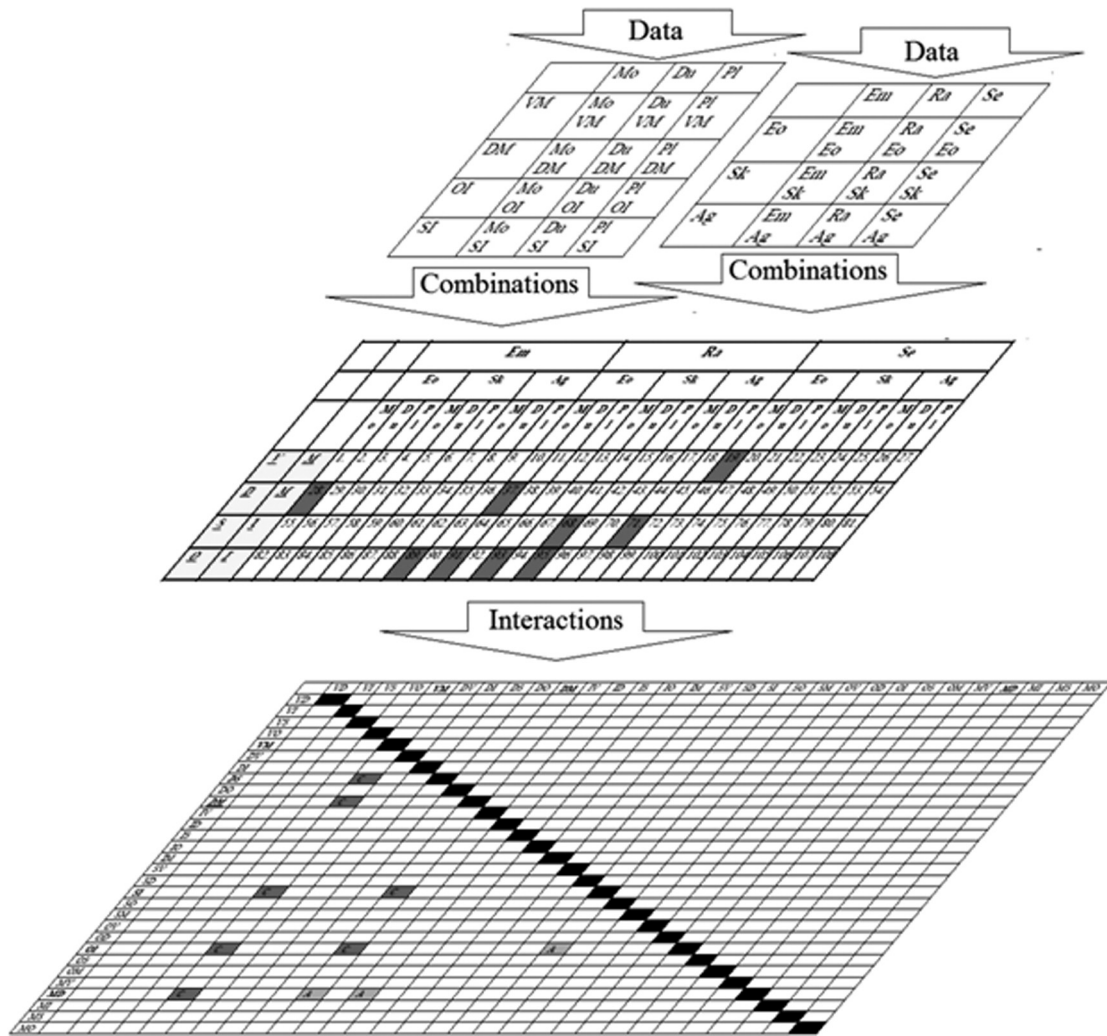


Figure 2. Epistemological sieve

indefinite descriptions in regard to worldview, and previously absent philosophical variations increasingly become available for description and analysis.

Table of philosophical combinations as database can be the basis for cluster analysis (grouping a set of philosophical positions in such a way that positions in the same group (cluster)), computer simulations and visualizations (NodeXL Basic, Gephi) of different theoretical aspects of philosophy, demonstrating the combinatorial incompleteness of classical philosophical positions, with the subsequent use of these models in the teaching of philosophy in Higher Education.

Combinatorial table, supplemented by means of computer programming and visualization, can help quickly identify "empty cells" or the current path of development of philosophical systems.

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Эпистемологическое решето, извлечение данных и история философии

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Аннотация

В статье автор рассматривает теоретические взгляды классических европейских философов Нового времени на онтологические и гносеологические проблемы, структурированные в виде таблицы. В статье вводится представление о табличном комбинаторном моделировании философского онто-гносеологического мировоззрения. Рабочая гипотеза состоит в том, что табличный метод и комбинаторика применимы к визуализации и распознаванию неполноты онто-гносеологической систематики в истории европейской философии Нового времени. Таблица философских комбинаций, как база данных, может стать основой для кластерного анализа, компьютерного моделирования различных теоретических аспектов онтологии и теории познания.

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Ключевые слова

Комбинаторика, организованная эклектика, интерпретирующая сетки, онто-гносеологическая ячейка.