Roads & Railways' Knowledge to Philosophy, A Next Generation Graph Theory

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ABSTRACT

From Roads & Railway's Knowledge to Philosophy -- A Next Generation Graph Theory, it is a maiden attempt in the philosophical thought exclusively without using at least once the word of Network throughout the philosophical treatment and discourse in this short Paper, to derive the rudimentary Graph with Loop and Edge as the two philosophical organs. This is not the case with the commonly available College & University syllabus-materials to study the Graph Theory usually appreciated by and known to scholars and students of Graph Theory as has been introduced into this World of Education by the then famous Swedish Mathematics teaching assistant, His Excellency Leonhard Euler for the very first time marking the beginning of Graph Theory & Applied simultaneously in the then 18th Century's World of Philosophy, Mathematics and Biology of which he himself was a keen Student & Professor hailing from the University of Basel , Switzerland.

This Research Paper, no one can dispute, justifies and fills the space that Euler was natural philosopher of the 18th century but expired having left a secret gap in philosophizing non-geometrical liberal Graph Theory.

INTRODUCTION

The Oxford Lexicon defines Knowledge as information and skills gained through Education. It also defines Mathematics as the branch of knowledge concerned with not only ideas of Number, Quantity and Space in their abstract sense-net but also in their applied-sense-net of Engineering, Physics & other Subjects while Philosophy being defined to be in the aggregate of study of the theoretical basis of any branch of Knowledge.

We all know that in the Degrees of the MPhil & the PhD in Sciences, it is the Philosophy which is the lever to eulogize the nature of Knowledge. Each Degree creates and adds to the already known contents in a particular school of thought the newest ingredients with relevance to the reality quoting examples from the present and those pointing to arrive from future testifying to the existence of Philosophy as the mother of all Sciences. Hence the Degrees of Knowledge are conferred in terms of Master of Philosophy and Doctor of Philosophy as terminal education which are like the marksmen leading the torch in the domain of emerging trends in science and technology handed down from generation to generation of Researchers .

A Gist of Philosophy via Roads & Railways onto Graphs Knowledge

The events of the First World War and the Second World War were largely attributed to the then built-up of huge physical systems of airlinks, sealinks, railways and highways comprising of roads, railways, canals and airways with Junctions, Ports, Centres, Links and Paths

connecting areas and places of thick population possessions. This kind of knowledge of real physical systems in the 19th Century ((from 1 January 1801 – 31 December 1900) and in the 20th Century (period between January 1, 1901 and December 31, 2000, inclusive) increased activity that led to the World Wars during the 20th Century is a verifiable fact . Transformation of knowledge of real physical systems such as the above until after the two giant World Wars did not appear and wide interest was not glanced even. Research Papers and Books were unknown on the abstractions of the real physical systems, forms of the real systems and their functions and properties. When a situation like this was prevailing, perhaps-ism is often reasonable to assume that a separate field of knowledge to study systems which depend on forms alone, systems which depend on functions alone , systems which depend on foms and functions both, common characteristics, representations, similarities and dissimilarities, merits and demerits was not imagined and unheard of in those war-inspired expired times during which one did something to something and then pushing the result onto the result obtained from doing the same thing to something else or something else to the same thing. But then, general populations all in all are not creative individuals in thoughts and emotions. For scientific purposes, creativity may be like risk-taking of establishing a new order

leading to new research with the help of very highly placed some-things and same -things of creative genes resulting into direct influences on creativity. Then only in this World of yours, ours and hours, there can be novel approaches requiring cognitive processes that are different from prevailing modes of thought and expressions. Newer thoughts and emotions imply necessary and essential hallmarks in cognitive and emotional processing indicative of genetic predisposition towards thinking differently which when combined with available knowledge throws light on the length and time to traverse to desired destinations in Science called the mankind's development in knowledge. Thus, man pursues knowledge with projections of peoples' ideas on forms of real systems which are of interest and curiosity to them along with the properties of real systems depending only on form and information with data management about the system which depends on form alone precipitating into newer connections with knowledge at hand . This gives sense to see the marks of Philosophy at the helm of affairs and its meaningfulness to begin with, halfway-through and at the terminal stage of progressive course of knowledge day and night self-directed by mankind !

See the examples here of the Canadian Pacific Railway System in the picture along with the London Metro System given right below it.
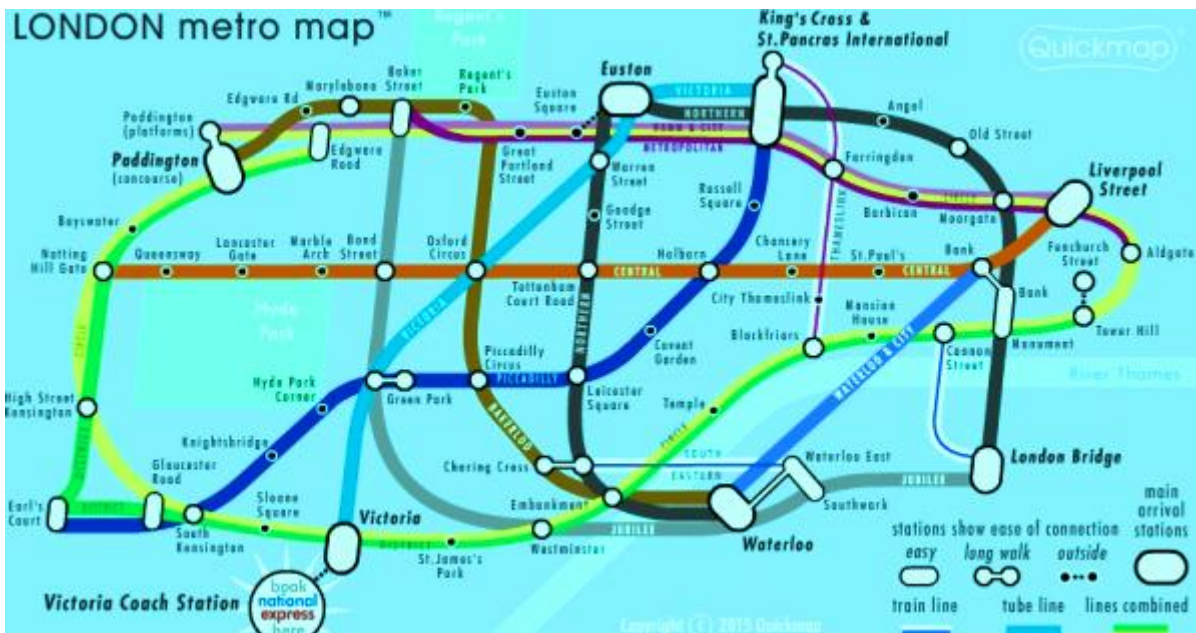

Fig . Canadian Pacific Railway System

Fig. London Metro System

Just as the Roads & Railways are abstractions of real systems, graphs are abstractions of the Roads & Railways as can be seen in the pictures and produced applying the configured settings in terms of nodes , arcs and arrangement of arcs to show the optimal liveliness for human activity with capacity of arcs involved to carry the feasible flows of human activity.

Graph Inherent Simplicity Theory (GIST) or Graphs Knowledge concerns itself with the form of a system, i.e.,

1. The number of nodes,
2. The number of arcs
3. The arrangement of the arcs

as seen in the picture once again above of the physical situation of the Canadian Pacific Railway System as well as the London Metro System.

An Iota of Traffic Loops & Lines Philosophy onto Graphs Knowledge

Known as the famous Detroit People Mover, a traffic loop that connects a number of major employment and activity centers in downtown Detroit is a big one-way loop in clockwise and anti-clockwise directions which can be seen below. This crucial bit of wisdom that it took study to organize 'Loops ' offers a sense of circuitous embrace creating a thrilling sensation of 'Coming back to your Beginning ' as some people are just comforted by loops while others take comfort in the desired-straight-lines during transit needs and travel demands. The latter are anointed as aggressive beings while the former loop lovers as model of the natural being justifiable according to the cycle of 'death- rebirth-death' Philosophy proclaimed in the Buddhism and Hinduism's ancient scriptures describing circular mode of thought in contrast to linear designs of linear mode of thought. Thus, to say human mind is amazing, despite its limited capabilities in the grand scheme of things. While we know for sure our mind can comprehend such schemes and possibilities and while we comprehend such schemes and possibilities, we have to ask ourselves, is there a limit to how much we can understand about? Or is our brain limited to the extent where such schemes and possibilities form further complex concepts, if any, far beyond the capability of our brains?
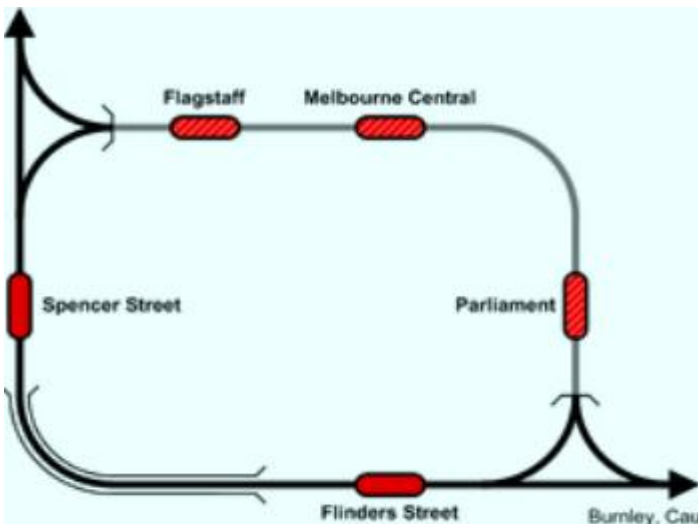
Let's have second example to be seen in the City Loop of Railway Line of the Melbourne City Underground Rail Loop as below for the central business district of Melbourne in Australia.

Fig . Detroit People Mover Loop

>Looping Blue

>Melbourne City Loop

Here again , the feature of loop is the notion of moving through a system step by step, if need be and always ending up back where one started on

the system and thus inviting an infinite loop also. Some philosophers have suggested that the same sort of loopiness, though is a notion that is rather hard to crack a nut-like thing but applies directly to our immediate and nearest consciousness in an attempt to explain why conscious experience is harmless and seems so radically different from everything else the human brain has been able to comprehend such as those given that the structures and operations of mathematics are reducible to the structures and operations of the mind and the structures and operations of atoms are reducible to the structures and operations of mathematics.

Contest between Loop-Graph-Philosophy (LGP) & Edge-Graph-Philosophy (EGP)

In the LGP, 'beginning' is not separable from the 'end 'despite the stretch between them (the beginning and the end), howsoever shorter or longer & narrower or wider it (the stretch) might be. In other words , the end meets with the beginning to end in a given duration and direction of the course of stretching for propagation to be created between them leaving behind the stretch in its fullness highly perceptible and physically relevant but at the end of the duration coalesces into the beginning as if various groups coalesced into a crowd with their ideas coalesced into one theory. On the contrary, the LGP differs and offers in its own interest of being a contradistinc-tive philosophy or the other side of the same coin known as the EGP asserting that the 'beginning' remains the same unchangeable at the end and after the duration never ever allowing the 'end ' to coalesce into it for itself , by itself and of itself in its own interest but stretches retaining its identity to meet with and halt at a different and foreign to itself 'end-destination' in its agency-pre-determined course of systemic events which either be lighter or loaded ones .

CONCLUSION
Researchers are like and denoted by the isolated Vertices of Loop − Graph-Philosophy (LGP) until they come forward with justification

resolving conflicts between ideas , search for their causes, condemnation of mere opinions and discovery of standards of equilibrium in the contents they downpour in Research Papers that make up to their respective Research Degrees of M Phil & PhD. A loop goes to become separated from its beginning and end overlapping state to become an edge and so labeled as an edge of two differential vertices while such Edges made up of the first(beginning) vertex and the last (end) vertex do represent considered Knowledge within Philosophy's context and hence knowledge-embedded vertices giving rise to the Edge-Graph-Philosophy (EGP). Further, various edges' connectivity to other isolated vertices of LGP liberate them from looping-isolation to give us many kinds of complete Graphs of branches of Knowledge. Therefore, the Edge-Graph-Philosophy (EGP) is useful to probe by the next , next and next generations of Students, Scholars and Researchers and thus keeping all generations going on and on tracking their fast-forwardness. Hence the title Knowledge to Philosophy, a next generation graph theory, of course, from Roads & Railways 'Knowledge. This Paper, however concludes with reproduction of the photographs of 18th Century's two competitive mathematical personalities who fought for a place in the universal hall of fame in the then World of Mathematics of that Century, namely Euler and Lagrange while the former had won with the latter coming second .

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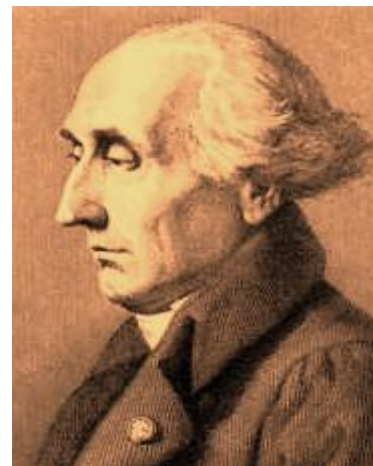
Lagrange.J >

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7. Graphing the history of philosophy | Coppelia www.coppelia.io/2012/06/-graphing-the-history-of-philosophy/Jun 13, 2012 - Here's the whole graph. Each philosopher is a node in the network and the lines between them (or edges in the terminology of graph theory)

AUTHOR PROFILE

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The Author passed his Pre-Ph.D Course with Examination in the field of Graph Theory at the Andhra University, Andhra Pradesh State, in the year of 1981 at the Department of Applied Mathematics Due to financial difficulties on the domestic front and the non-availability of an independent single room for Research Work & Study at the University Research Scholars Hostel for 3 years at the Andhra University, Waltair, in 1981 pending new rooms construction, the author joined the Dena Bank for pay-scale career as an Officer of Banking Statistics in Junior Management in the same year at Bombay (now Mumbai), Maharashtra State , Western India , which being a Nationalized Bank & Government of India Enterprise in the Banking Sector relinquishing the research -career-prospects in teaching line jobs. The interest in Graph Theory & Applied Research prevails. To his credit , the Author has so far published 8 Research Papers in International Journals of Science & Technology besides GRAPH THEORY RESEARCH STUDIES & THE 46TH ANNUAL CONFERENCE @ THE INDIAN MATHEMATICAL SOCIETY CERTIFICATE. RESEARCH CONTRIBUTIONS : REGULAR GRAPHS / MATCHINGS IN GRAPHS , INDEPENDENT SETS IN GRAPHS, RESEARCH SEMINARS & FINAL SEMESTER LECTURES ON GRAPH THEORY: CLASS WORK, SEMESTER EXAMINATION & VALUATION.