

A critical relation between deduction and family resemblances in Wittgenstein's philosophy

Introduction

Family resemblance is the concept described in the analytical tradition of Wittgenstein who exercised this concept in order to understand the nature of language. He said that language is like a game i.e. chess, having its rules and family resembling items. If we take the form of language similar to the game, we could find common things which resembles each other like; player, out, not out, strike, non strike, etc. Every game has its own rules. The rules of one game won't correspond to others that is why Wittgenstein used the idea of family resemblance. He was known of the fact that languages have same logical form but resembles and match up different things diversely.

Regarding deduction Wittgenstein followed a rule system to explain his analytical philosophy. It seems from his philosophy that arguments based on rules, axioms and laws are expressed deductively.

Wittgenstein regards that cause is a family resemblance concept (Glock, 1996) because same cause can produce same effect. The oil extracted from the nuts where nuts are the cause and oil is the effect which means that the family resemblance concept of this process involves nuts, nut oil, extraction, machine, extractor etc. Wittgenstein claimed that we classify things or objects together not on the basis of noticing that the objects of a similar kind satisfy a certain fixed set of necessary and sufficient conditions, but on the basis of perceived similarities among them for which he coined the phrase "family resemblances". He asked what it is, for example for something to be a game. And told us to reflect on the fantastic variety of things we range together under the description 'is a game'. Wittgenstein implied that games form the family, like 'mason, brick, build, cement, rocks', and 'numbers, rational numbers, irrational, integers, whole numbers' etc. shows the resemblances between members of a family. He supposed that many things were getting connected in a thread or things are conjoined together and constitute a network. These things are identified by their resemblances or from the game. Wittgenstein said about family resemblances as;

I can think of no better expression to characterize these similarities than "family resemblances" for the various resemblances between members of a family build, features, color of eyes, gait, temperament etc. overlap and criss- cross in the same way – and I shall say: games, form a family. The concept of number is a logical sum of the individual interrelated concepts like: cardinal numbers, rational numbers, prime numbers, real numbers and similarly language is the logical sum of a corresponding set of sub-concepts like utterances, exclamations, questions, answers, greetings etc. Frege compares a concept to an area and says that an area with vague boundaries cannot be called an area at all. This presumably means that we cannot do anything with it but it is senseless to say "stand roughly there". Family resemblance is also called perceptual projection or recognition theory.

The term 'family resemblance' is used by Wittgenstein to show that there is no defining feature, no one essence, of a concept but rather there is a criss-crossing and over-lapping of features. This term 'family resemblance' was later used by cognitive psychology to support an approach in the concept development, namely the prototype view. Interestingly, while the cognitive theorist *Eleanor Rosch* used Wittgenstein's

term family resemblance to develop the prototype view in cognitive psychology, we are using Rosch's term 'participatory' to support the argument that Wittgenstein considered that concepts are participatory in any language-game.

Wittgenstein's metaphor of a language-game is used so that we understand using language as an analogy for playing games: using words and playing games are a human activity, a form of 'behaviour'. He is asking us to look at the uses of words and to observe the over-lapping and criss-crossing of family resemblances.

Wittgenstein's notion of a 'family resemblance' argues that there is no one defining feature to the meaning of a word:

I can think of no better expression to characterize these similarities than 'family resemblance'; for the various resemblances between members of a family: build, features, colour of eyes, gait, temperament, etc., etc. overlap and criss-cross in the same way.—And I shall say: 'games' form a family.

Deductive truths

In Wittgenstein's philosophy; deduction or deductive truths signify a fundamental role in the description of defining family resemblance. Wittgenstein claimed that games form a family then it is a matter of fact that rules, axioms and truths indefinitely form a family. Family resemblance concept implies to games as well as deduction. According to Wittgenstein, All deductions are made a priori (Wittgenstein, 2001). The propositions of logic say nothing "they are the analytic propositions". It is the unique mark of logical propositions that one can recognize that they are true from the symbol alone and this fact contains in itself the whole philosophy of logic. The fact that the propositions of logic are tautologies shows the formal logical properties of language and the world.

There is no possible way of making an inference from the existence of our situation to the existence of another entirely different situation. There is no casual nexus to justify such an inference we cannot infer the events of future from those of the present. Superstition is nothing but belief in the casual nexus. The connection between knowledge and what is known is that of logical necessity. (A knows that p is the case, has no sense if p is a tautology. A proposition is neither probable nor improbable. Either an event occurs or it does not there is no middle way. Negation, logical addition, logical multiplication; are operations what makes logic or priori is the impossibility of illogical thought. Logic is prior to every experience, that something is so; it is prior to the question 'how' not prior to the question 'what'. We cannot think what we cannot think, so what we cannot think we cannot say either.

According to Wittgenstein mind carries out the special activity of logical inference as per laws of induction and deduction. Logic is a kind of ultra physics, the descriptions of the logical structure of the world which we perceive through a kind of ultra experience. Logical inference is a transformation of our expressions for e.g. the translating one measure into another. One edge of a ruler is marked in inches, the other in centimeters.

Eleanor Rosch has used Wittgenstein's term family resemblance in many of her studies on concepts and categories. According to Rosch, for Wittgenstein 'the referents of a word need not have common elements in order for the word to be understood and used in the normal functioning of language'⁴⁰ but rather there

was a family resemblance, an over-lapping of features, that linked the referents of a word. Rosch describes the family resemblance relationship as consisting of a set of items of the form AB, BC, CD, DE. That is, each item has at least one, and probably several, elements in common with one or more other items, but no, or few, elements are common to all items.

Investigating a network of family resemblances has developed into a theory about the shared nature of language, something common to all language users and linguistic communities. This, however, raises the question of how can we communicate (i.e. talk) if we do not agree on everything about the words and concepts that we use?

Objectives

The objectives of this study are

1. To describe the quintessence of family resemblance
2. This problem describes the validity of family resemblance
3. It investigates the role of deductive truths, syntax, semantics, and rules and also the relation of these concepts with the family resemblance.
4. To show the relation between deduction and family resemblance.

Literature review

A review of literature is a text of a scholarly paper which includes the current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic. Literature reviews are the secondary sources and do not report new or original experimental works.

D. L. Medin and W. D. Wattenmaker: Categories are constructed according to family resemblance principle. Family resemblance categories are fuzzy categories where the members are generally similar to each other (Wattenmaker, 1987).

Mark Haugaard: Power constitutes a ‘family resemblance concept’, with family members forming complex relationships within overlapping language games. Members include, among others: episodic power, dispositional power, systematic power, power to, power over, empowerment, legitimate power and domination (Haugaard, 2010)

Hilary Putnam (1988): Even at the ordinary language level, it is strange to say that all games “have something in common”, namely, being games. For some games involve winning and losing, others “Ring a Ring O Roses”) do not; some games are played for amusement of the players, others (gladiatorial games) are not; some games have more than one player, others do not; and so on. in the same way, when we examine closely all the cases in which we would say that someone has “referred to” something, we do not find anyone relation between the word and the thing referred to (Putnam, 1988)

Hjalmar Wennerberg (1967): Wittgenstein introduced family resemblance concept in *The Blue and Brown Books* and in his *Philosophical Investigations*. Wittgenstein introduced the concept of family resemblance concept in order to attack the traditional doctrine that all the entities which fall under a given term must have some set of properties or features in common, the presence of which makes it correct to subsume an entity under this term. According to this doctrine, all men, for instance, are “rational animals”: each man is rational and each man is an animal and nothing which is not a man is both an animal and rational. There are, however, animals which are not men (e.g. angels). The property of being rational is common to all men, but the property of being a rational animal is not only common to all men, but also common and peculiar to all men (Wennerberg, 1967) .

Methodology

The methodology adopted in this study will be descriptive, historical and empirical which requires information that will be collected from different books, magazines, journals, research papers which discusses Wittgenstein. The methodology of this study includes the collection of material from libraries, seminars, conferences and workshops. This study is based on qualitative research and the methods which I have used in this research includes philosophical method, mostly analytical method as well as other methods like dialectic method, inductive method, deductive method, hermeneutical method, phenomenological method and empirical method.

Results and discussions

This study shows the insignificant relation between the family resemblances concepts of games with the family resemblance concepts of deduction. The purpose of this study is to describe the character of family resemblance in the field of language, as well as it indicates the task of rules, axioms and deductive truths in the productivity of family resemblance. As Wittgenstein said that there is no one unique essence of language rather linguistic concepts are overlapping and criss-crossing. Linguistic concepts have their familiarity or resemblance with linguistic concepts and sometimes these linguistic items are overlapping with other concepts outside language. But to know and understand the philosophical nature of language we exactly compare linguistic concepts with linguistic items just like we compare and exemplify the mathematic concepts to obtain and resolve the mathematical problem with mathematical terms. There are two ways in which linguistic terms overlapping and criss-crossing. One is that linguistic concepts resemble with only those items that are having linguistic nature and other case is when linguistic concepts resemble with those items or terms that belongs to new concepts outside language. Here I would quote example of second case in which non-linguistic concepts corresponds to linguistic items. A teacher asked to students; ‘make a sentence made up of four words’. Student answers the question; I ate one apple. These sentences possess

linguistic items but they differ in family; ‘four’ and ‘one’s belongs to the family of mathematics and ‘make’, ‘a’, sentence etc. belongs to the family of language.

Conclusion

Family resemblance concept is implicitly defined in the form of games, rules, theories and pictures in Wittgenstein’s philosophy. The purpose of family resemblance is that language is like a family which corresponds with the state of affairs. Even in Wittgenstein’s tradition, all concepts have family resemblance relation whether some are related to it and others are narrated to other possible state of affairs. All the fundamental concepts of language possess their families which correspond with the world through facts. As Wittgenstein claimed that I

languages pictures the world. Thus it seems to me that even family resemblances picture the world through prototype picture and analogical system.

References

1. Ahmad, A. (2010). *Wittgenstein’s Philosophical Investigations*, New York: Continuum.
2. Alston, W. P. (1964). *Philosophy of Language*, New Delhi: PHI Learning Private Ltd.
3. Arrington, R. L. (2001). *Thought and its Expression*. (S. Schroeder, Ed.) New York: Palgrave Publishers Ltd.
4. Ayer, A. J. (1936). *Language, Truth and Logic*. London: Penguin Books
5. Borchert, D. M. (2006). *Encyclopedia of Philosophy*, (2nd ed., Vol.4.) New York: Thomson Gale.
6. Bova, A. (2009). Interpretation of psychological concepts in Wittgenstein, In V.A. Munz, K. Puhl and J. Wang (Eds.), *Language and World. Proceedings of the 32nd International Wittgenstein Symposium* (pp. 64-65).
7. Budd, M. (1986). “Wittgenstein on Sensuous Experiences”, *Mind, Causation & Action*, L. Stevenson, (ed.), (Oxford: Basil Blackwell).
8. Butterfield, J. (1986). *Language, Mind and Logic*. Cambridge: Cambridge University Press.
9. Carnap, R. (2009). *Logical Syntax of Language*, in ed., Pierre Wagner, Palgrave: Macmillan.
10. Casullo, A. (2003). *A Priori Justification*. Oxford: Oxford University Press
11. Christoffer. G. (1998). *Wittgenstein on Mathematics, Minds and Mental Machines*, England: Ashgate.
12. Copi, I. M, Cohen. C, Jetli. P, Prabhakar, M. (2005). *Introduction to Logic*, 12th ed., New Delhi: Pearson Prentice Hall.
13. Dummett, M. A. E. (1975). *What is a Theory of Meaning, Mind and Language*, Samuel Guttenplan, ed., Oxford, Clarenton Press.

14. Eco, U. (1984). *Semiotics and the Philosophy of Language*. Bloomington: Indiana University Press.
15. Eleanor Rosch and Caroline B. Mervis, 'Family Resemblances: Studies in the Internal Structure of Categories', *Cognitive Psychology*, 7 (1975), 573-606 (p. 574).
16. Engelmann, M. L. (2012). Wittgenstein's New Method and Russell's The Analysis of Mind, *Journal of Philosophical Research*, Vol.73.
17. Fodor, Jerry (2001). "Language, Thought and Compositionality". *Mind and Language*.
18. Frege, G. (1956). *On Sense and Reference*. In *Philosophical Writings of Gottlob Frege*, ed. and Trans. M. Black and P. T. Geach. Oxford: Basil Blackwell.
19. Gamut, L.T. F. (1991). *Logic, Language and Meaning, Introduction to Logic*, Vol. 1, Chicago: The University of Chicago Press.
20. Gefwert, C. (2000). *Wittgenstein on Thought, Language and Philosophy*. England: Ashgate publishing Ltd.
21. Gerwert, C. (1998). *Wittgenstein on Mathematics, Minds and Mental Machines*. Aldershot: ashgate .
22. Glock, H. J. (1996). *A Wittgenstein Dictionary*. Oxford: Routledge.
23. Glock, H. J. (2001). *Wittgenstein and Contemporary Philosophy of Mind*. (S. Schroeder, Ed.) New York: Palgrave Press Ltd.
24. Grayling, A. C. (1988): *Wittgenstein*. Oxford: Oxford university press.
25. Hacker, P. M. S. (1990). *Wittgenstein Meaning and Mind*. Vol.3. Oxford: Basil Blackwell Ltd.
26. Hans Sluga and David, G. S. (1996). *The Cambridge Companion to Wittgenstein*, Cambridge: Cambridge University Press.
27. Hark, M. R. M. T. (2006). Wittgenstein, Pretend Play and the transferred use of Language. *Journal of the Theory of Social Behavior*, 36(3).
28. Harward, D. W. (2000). 'Wittgenstein and the character of Mathematical Propositions', *Ludwig Wittgenstein critical assessments*, Stuart Shanker (ed.), Vol.3. London: Routledge.
29. Inesta, R. (2006). 'Human Behavior as Language: Some Thoughts on Wittgenstein', *Behavior and Philosophy*, 34.
30. Johnston, P. (1993). *Wittgenstein Rethinking the Inner*. New York: Routledge.
31. Jolley, K.D. (2010). *Wittgenstein Key Concepts* edited by Kelly Dean Jolley. Durham: Acumen.
32. Keith Gunderson, *Mentality and Machines*, 2nd ed., London: Croom Helm, 1971, pp. 100-105.
33. Kenny, A. (1994a). *The Wittgenstein Reader, (Meaning and Understanding)*. Oxford: Blackwell Publishers.
34. Kenny, A. (1994b). *The Wittgenstein Reader*. Cambridge: Blackwell.
35. Klagge JC (2011) *Wittgenstein in Exile*. Cambridge, MA: MIT Press.
36. Klenk, V. H. (1976). *Wittgenstein's Philosophy of Mathematics*. the Hague: Martinus Nijhoff.
37. L. Wittgenstein, *Philosophical Investigations*, Oxford, 1967, pp. 32-33.

38. Luntley, M. (2003). *Wittgenstein Meaning and Judgment*, Oxford: Blackwell.
39. M. A. Beaney, M. A. (2013). What is Analytic Philosophy, In M. Beaney (Ed.), *The Oxford Handbook of the History of Analytic Philosophy*, Oxford: Oxford University Press.
40. Malcolm, N. (1986). *Wittgenstein on Nature of Mind*, *Ludwig Wittgenstein critical assessments*, S. Shanker (ed.) Vol.2. (*From Philosophical Investigations to On Certainty: Wittgenstein's Later Philosophy*) New York: Routledge.
41. McDowell, J. (1984). Wittgenstein on Following a Rule. *Synthese* 58, 325-63.
42. McGuinness, B. (2002). *Approaches to Wittgenstein, Collected Papers*, New York: Routledge.
43. Mezzadri, D. (2014). Nominalism and Realism. How not to read the Tractatus' Conception of a Name", *Philosophical Investigations*, 3.
44. Monk, R. (2014). The Temptations of Phenomenology: Wittgenstein, the Synthetic a-priori and the 'Analytic a-posteriori', *International Journal of Philosophical studies*, Vol. 22, No.3.
45. Monti, M. M. (2013). The Role of Language in Structure-Dependent Cognition. In Mody. M. (ed.), *Neutral Mechanisms of Language*, New York: Springer.
46. Oberdiek, H. (2009). Wittgenstein's Ethics: Boundries and Boundry Crossings, In P. M. Hacker, & H. J. Hyman (ed.), *Wittgenstein and Analytical Philosophy* (p.178, 191). Oxford: Oxford University Press.
47. Peregrin, J. (2012). *Linguistics and Philosophy*. In T. F. Ruth Kempson (Ed.), *Handbook of Philosophy of Science: Philosophy of Linguistics* (Vol.14, pp. 20-21). Oxford: Elsevier B.V.
48. Pettit, P. (1990). The Reality of Rule Following. *Mind*, 99, (393), 20-21.
49. Putnam, H. (1975). "The Meaning of 'Meaning'," In *Mind, Language and Reality*, Vol.2. Cambridge: Cambridge University Press.
50. Routledge Encyclopedia of Philosophy, Version 1.0, London/New York: Routledge, 1998.
51. Schroeder, S. (2010). A Tale of Two Problems: Wittgenstein's Discussion of Aspect's Perception. In J. Cottingham & P.M.S. Hacker (ed.), *Mind, Method, and Morality: Essays in Honour of Anthony Kenny*, Oxford: OUP.
52. Scruton, R. (1995). *A Short History of Modern Philosophy: From Descartes to Wittgenstein*. 2nd Ed., London & New York: Routledge.
53. See L. Wittgenstein, *Remarks on the Foundations of Mathematics*, In ed., G. H. Von Wright, R. Rhes, G. E. M. Anscombe, Trans. G. E. M. Anscombe, Oxford: Basil Blackwell, 3rd edn., 1998, pp. 31-31.
54. Skorupski, J. (2005). Later Empiricism & Logical Positivism, In S. Shapiro (ed.), *The Oxford Handbook of Philosophy of Mathematics and Logic*, Oxford: Oxford University Press.
55. Soames, S. (2010). *Philosophy of Language*. Princeton: Princeton University Press.
56. Sosa, A. P. (2001). *A Companion to Analytical Philosophy*. Oxford: Blackwell.

57. Stern, D. G. (1995). *Wittgenstein on Mind and Language*. Oxford: Oxford University Press.
58. Tantray, M. A, and Dar, A. (2016). *Nature of Philosophy*. The International Journal of Humanities and Social Studies, 4 (12), 339-42.
59. Tantray, M. A. (2016). *A Study on Proposition and Sentence in English Grammar*. The International Journal of Humanities and Social Studies, 4 (2), 20-25.
60. This view was mentioned in a Ph.D. Thesis, Susan Byrne, B. A., (Ludwig Wittgenstein's Legacy to Cognitive Psychology: Concepts as Participatory), 30th October, 2012, Nui Maynooth.
61. *Tractatus*, Oxford, 2001, pp. 71-72.
62. *Tractatus*, Oxford, 2001, pp.46-68.
63. Wagner, P. (2009). *Logical Syntax of Language*, in ed., Pierre Wagner, Palgrave: Macmillan.
64. Whiting, D. (2010). Particular and General: Wittgenstein, Linguistic Rules, and Context. In D. Whiting, (Ed.). *The Later Wittgenstein*, Palgrave: Macmillan.
65. Williams, M. (1999). *Wittgenstein, Mind and Meaning towards a Social Conception of Mind*. New York: Routledge.
66. Wilshire, B. (2002). *A Critique of Analytical Philosophy*. Albany: State University of New York Press.
67. Wittgenstein, L. (1960). *The Blue and the Brown Books*. Oxford: Blackwell.
68. Wittgenstein, L. (1961). *Notebooks*, Ed. by G. H. Von Wright, & G. E. M. Anscombe, Trans. by G. E. M. Anscombe, Oxford: Basil Blackwell.
69. Wittgenstein, L. (1967). *Philosophical Investigations*. Oxford: Basil Blackwell.
70. Wittgenstein, L. (1969). *On Certainty*, (G. E. Wright, Ed., & D. P. Anscombe, Trans.) Oxford: Basil Blackwell.
71. Wittgenstein, L. (1977). *Remarks on Colour (1950-1951)*, In G. E. M. Anscombe, Trans. by L. L. McAlister & M. Schattle. Oxford: Blackwell.
72. Wittgenstein, L. (1980). *Remarks on the Philosophy of Psychology*, Vol. I & II (1947-48), In G. H. Von Wright, & H. Nyman, Trans. C. G. Luckhardt & M. A. E. Aue. Oxford: Blackwell.
73. Wittgenstein, L. (1998). *Remarks on the Foundations of Mathematics*, In ed., G. H. Von Wright, R. Rhes, G. E. M. Anscombe, Trans. G. E. M. Anscombe, 3rd edn., Oxford: Basil Blackwell.
74. Wittgenstein, L. (2001). *Tractatus-Logico-Philosophicus*. Oxford: Routledge.