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**THE ARCHITECTURAL THEORY BEFORE AND AFTER KANT IN THE
INTERSECTION OF THE PHILOSOPHY AND ARCHITECTURE**
FELSEFE VE MİMARLIK KESİŞİMDE KANT ÖNCESİ VE SONRASI MİMARLIK
TEORİSİ

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Abstract: With the philosophical system he established, Kant has become one of the leading actors that need to be reckoned, overcome, and expounded in the history of philosophy, especially since the end of the 19th century. Kant's significance for Architectural Theory is not only due to his profound influence on 20th Century Western Philosophy. Kant's centrality is maybe due to creating his critical philosophy through synthesising European Continental Rationalism and Anglo-Saxon Empiricism in the Western Philosophy Tradition that precedes before him and underlining the limitations of our knowledge by questioning the preceding Western metaphysics and reversing of some its concepts and principles. Kant's approach found its most competent expression in Neo-Kantian philosophy, and the legacy left by Neo-Kantians played a central role in the formation of 20th-century philosophical approaches. In this context, Neo-Kantians paved the way for the analysis of the ontological character of architectural works within different epistemological constructs, and consequently the theoretical and philosophical character of architectural knowledge. Based on this idea, it is possible to divide the epistemological approaches produced in the field of architecture into two as before and after Kant. The aim of this essay is to underline the importance of Kant's philosophy in terms of architectural theory and philosophy, along with its influence on its contemporary architectural theorists, why it is still valid currently. This article follows a theoretical approach as a method to decipher the storyline of the architectural theory before and after Kant. As the article shows Kant is an important figure not only in western philosophy but also in the development of architectural theory thinking.

Keywords: Architectural Theory, Kant, Neo-Kantianism, Continental Philosophy, Analytic Tradition

Öz: Kant kurduğu felsefi sistemi ile kendinden sonra özellikle 19. Yüzyıl'ın sonlarından itibaren felsefe tarihi içerisinde hesaplaşılması, aşılması, açılması gereken baş aktörlerden biri olmuştur. Kant'ın Mimarlık Teorisi için önemi, yalnızca 20. Yüzyıl Batı Felsefesi üzerindeki derin etkisinden kaynaklanmaz. Kant'ın bu merkeziliğinin belki de en önemli nedeni Batı Felsefesi geleneği içerisindeki kendisinden önce gelen Kıta Avrupa'sı Rasyonalizmi ile Anglo-Sakson Ampirizmini birleştirerek kendi Eleştirel Felsefesini içerisinde bu iki geleneği sentezlemesi, kendinden önceki Batı metafiziğini sorgulayarak insan bilgisinin sınırlılığının altını çizmesi ve bazı kavramlarını ve ilkelerini ters yüz edişidir. Kant'ın yaklaşımı en yetkin ifadesini Yeni-Kantçı felsefe içerisinde bulmuş ve Yeni-Kantçılar'ın bıraktığı miras 20. Yüzyıl felsefi yaklaşımlarının oluşumunda merkezi bir rol oynamıştır. Bu bağlamda Yeni-Kantçılar mimari eserlerin ontolojik karakterinin farklı epistemolojik kurgular içerisinde çözümlenmesini ve dolayısıyla da mimari bilginin kuramsal ve felsefi bir nitelik kazanmasının önünü açmıştır. Bu

düşünmeden hareketle mimarlık alanında üretilen epistemolojik yaklaşımları Kant öncesi ve sonrası olarak ikiye ayırmak mümkündür. Bu denemenin amacı Kant felsefesinin kendi çağdaşı mimarlık kuramcıları üzerindeki etkisi ile günümüz açısından hala geçerliliğini neden koruduğunun mimarlık kuramı ve felsefe açısından önemini altını çizmektir. Bu makale, mimarlık teorisinin Kant öncesi ve sonrası hikayesini teorik bir metotla deşifre etmektedir. Makale göstermektedir ki, Kant sadece batı felsefesi alanında değil mimarlık düşüncesinin gelişiminde de çok önemli bir paya sahip bir figürdür.

Anahtar Kelimeler: Mimarlık Teorisi, Kant, Yeni-Kantçılık, Kıta Felsefesi, Analitik Gelenek

INTRODUCTION

In the Western-centred historiographic reductive framework; the nature mentality of the Ancient Philosophy was replaced examining the mentality of religion and concept of the God in Medieval Philosophy and especially, due to Renaissance, Reforms and Geographical Discoveries some paradigmatic transformations and shifts on the conception of the world based on Ancient Greek Cosmology and attitudes to nature and Christian theology of Medieval Philosophy took place in the 16th century (Mallgrave and Contandriopoulos, 2006).

1. BEFORE KANT: THE ARCHITECTURAL THINKING AND PHILOSOPHY IN THE WESTERN WORLD

The ascending the human-centred universe mentality based on humanism and the scientific improvements and artistic quests as the consequence of this mentality caused to emerge the philosophical movements which emphasise competence of the potentials of the human mind, especially about exploring the mystery of the existence and existing. Artistic productions of Renaissance artists, such as Leonardo da Vinci and Michelangelo, based on sanctifying the human body beyond divinity in the context of mathematical perfection, central position of humanistic sensation even in Renaissance religious arts, the efforts of Francis Bacon (1561-1626) towards the formation of scientific mentality in a modern sense based on information verified by experiments, revolutionary scientific efforts of Copernicus, Giordano Bruno and Galileo Galilei, the crisis in the Classical tradition occurred due to geographic and astronomic discoveries, and queries manipulated thanks to this crises can be mentioned amongst them as the most significant precursors of the Enlightenment.

Here, at this time in this crisis and questioning environment, the belief on the ambiguity of generation and corruption outside in the world re-occurred systematically in the Cartesian solipsist mentality and the framework of his methodological scepticism and led to the formation of Continental European Rationalism. Cartesian methodological scepticism caused to investigate the approaches of philosophical systems of Plato and Aristotle which dominated the Ancient and Medieval Philosophy, and the architectural ideas and approaches of Vitruvius influenced by Plato's and Aristotle's philosophical systems who influenced architectural theory from Ancient to Renaissance even Enlightenment Era and caused to emerge new philosophical/aesthetical approaches and architectural discourses focussing on these new rising movements. Probably, Cartesian Philosophy of Descartes and his methodological scepticism corresponded 38 years later after his death in 1688 it's equivalent in architectural theory to four volumes book titled "Parallèle des Anciens et des Modernes" written by Claude Perrault against Francois Blondel who was the first administrator of the French Royal Academy opened in 1671 and in his period dealt with placing Vitruvian principles and the Renaissance attitude considered a continuation of these principles at the heart of Academy's training plan. Perrault wrote this text as the criticism to Renaissance attitude which is dominant in France in the 17th Century, and in his book, he tried to demonstrate differences between his period identified modern by him and Antiquity, he associated art with Antiquity and consubstantiated science with his period and he handled architecture under the perspective of new rising science instead of art (Herrmann, 1973).

Another philosopher marked the 17th Century, Spinoza in his Ethics (1677), he transformed Cartesian's emphasis on the particularity of individual to universality and he evaluated the geometric creation as the expression of the representational system occurs activation of God's or nature's/Substance's internal codes and claimed human beings benefit from this representation system during this activation processes (Parkinson, 2000). Robin Evans consubstantiated Spinoza's this attitude with Raphael's Villa Madama and this tradition due to its characteristics based on revealing divine features of life and expressions of substantials by using extreme geometries and passages. Spinoza's philosophy based on universality eliminating the particularity and individuality in itself and architecture

based on modelling universality mathematically by particular human beings became particular human beings' imposition of his/her mental activity on nature in favour of particularity and ways of this mental imposition called experience were sought to formulate ontologically in Leibnizian Philosophy (Costelloe, 2012; Deleuze and Leibniz, 1993; Brewer, 2018).

In Leibnizian Philosophy, space was constructed as the relationships of substances which have no spatiality only in themselves. In Leibnizian Philosophy, time also occurred synchronically with space and space and time relations became the underground of situations of being and being existence (Timmermans, 2006). Relative space and time which occurs because of the relationships of substances, evolves, delays, precedes, runs to infinity, eliminates by losing into a dark metaphysics and it made references to the theoretical background of Baroque Architecture and according to Baudrillard Leibnizian Philosophy and Baroque opens the doors of virtuality to subjects in favour of the seduction of objects (Deleuze and Leibniz, 1993; Baudrillard and Proto, 2003). Christian Wolff who was accepted one of the main leading names of German Rationalism in the 17th century and founder of the classical ontology constructed his art philosophy as a sub-category of his science theory similar to Perrault and he included his analysis on architecture into his encyclopaedia of mathematics. Wolff built aesthetical expression in architecture on pleasure caused the harmony between mind and the perfection of the substance of architectural work and claimed the realisation of this process depends on what percentage the architect/producer reflects his mental image on outside reality, the formal integrity of the structure, the harmony of the decoration and the user's quality of life (Hicks and Asplund, 2017).

The German Jewish Philosopher Moses Mendelssohn took a position against ornamentation with his claim depending on perfection and the idea of beauty on objects can be represented more comprehensively by simplicity and negated Gothic Architecture by claiming extreme details and ornamentation makes the perception of perfection more difficult (Mendelssohn, 1975) and also he categorised architecture under the beautiful sciences which represents ideal ones and placed in the parallel tradition with the claim of his contemporary architect Winckelmann in his book *History of the Art of Antiquity* (1764) that mentality of absolute ideal beauty in Ancient Greek-based on

simplicity and mathematical perfection (Winckelmann, 2006). Gotthold Lessing similar to Mendelssohn underlined that architecture should be away from decoration and make reference to its user's internal harmony and spiritual life and he also stressed accuracy of architecture is directly proportional to how much the essence of architectural work can be perceivable.

Thoughts of art and architecture constructed in the aesthetical philosophy based on the harmony between the mind containing information implicitly and external existence in Continental European Rationalism replaced with approach depends on centralisation of interaction between empty mind (tabula rasa) and aesthetical experience and sensation in Anglo-Saxon Philosophy (Fischer, 2010) John Locke who was accepted as one of the main leader names of Empiricism in 18th Century constructed his aesthetical philosophy focussing on aesthetical experience and habits formed by ideas and pleasures obtained by the consequence of these experiences instead of harmony between inherited mathematical knowledge and nature. Aesthetical Philosophy of Locke built on sensation and experiences themselves, caused to be examined, in addition to beauty, picturesque and sublimity defined the experience of the beauty and the pain at the same time (Spellman, 1997). For instance, Joseph Addison in his book *The Spectator* written in 1712 claimed that the feeling of sublimity on the contrary of the beauty-centred approaches of prior architectural theoreticians is more inviting for divinity and deities. Being considered beauty and sublimity together can be thought as an extension of the approach based on thinking materiality and spirituality as the different categories of the same existence in 18th Century Anglo-Saxon Philosophy (Addison et al., 2004). At that point, Shaftesbury constructed his aesthetical philosophy associated with nature due to his mentality depends on the universe is an existing category operating aesthetically and he constructed his metaphysical ethic philosophy on his claim based on the necessity of the harmony of human beings activities with this system and he qualified architectural and artistic creation as the expression of aesthetical emotion existent internally in human individuality and pushing human to formal beauty intrinsically and pioneered Kantian tradition with his argument that this expression is one of the most significant indicators of the genius (Shaftesbury et al., 2000). Starting from the idea of Shaftesbury as the aesthetical sensation of human beings is one of the internal emotion of human

beings, his student Francis Hutcheson, synthesised Shaftesbury's moral aesthetics with Locke's metaphysics based on goodness and harmony and drew attention on picturesque (it is a manner between the ideas of beauty and sublimity defined rationally, intermixing of beauty and sublimity) in architecture and caused the emergence of romantic thought (Hutcheson, 1990).

Berkeley rejected Shaftesbury's and Hutcheson's absolute beauty ideas and the foundation of aesthetics as the internal sense of human beings and followed Locke's experience-oriented (in empirical sense) philosophy and expressed his thoughts on aesthetical pleasure as the production of mental processes emerged due to experience and perception. In this context, he claimed aesthetical expressions can be grasped through experiencing the proportions based on the human body which is the perfect expression of nature itself and contributed to spreading of Palladianism which is one of the movements of Renaissance, against Baroque in his time in USA (Pitcher, 2009). Hume took Berkeley's relative subjective logical aesthetics further in favour of the mental processes of the subject. Hume claimed architectural works have no beauty on themselves and argued they are beautiful due to taking viewer/producer subject pleasure by them also claimed the selection during architectural creation process based on the beauty-sensation of producer subjects. Hume's emphasis on subjective pleasure and sensation were argued by the artists and architects of his period and aesthetical sensation due to artistic/architectural creation whether subjective and relative in the context of solipsism or objective and universal were debated (Phillipson, 1989).

Hume's relative and subjective aesthetics was reformed psychologically by Irish Edmund Burke accepted as the founder of conservatism and examined things causing aesthetical pleasure in human beings triggers which internal mental processes. Burke influenced by the ideas of Addison claimed the sense of sublimity in architecture is more effective than the sense of beauty and asserted architectural components create aesthetical pleasures through their effects on eye and sense of sight (Fasel et al., 1999). Ideas of Burke was tied to be applied on art, architecture and especially on landscape architecture by some thinkers such as Uvedale Price and R. Payne Knight, and they led the formation of wild romanticism movement. Edmund Burke's aesthetical attitude became an alternative opposite to the aesthetical approach of European Continental rationalism and

adopted by some significant thinkers of French Enlightenment such as Voltaire, Diderot and Condillac and architecture was examined socially, culturally and historically (Brewer, 2018).

To sum up, aesthetics in German tradition examined under the perspective of metaphysics and mathematics and expressed as the sister of the logic by Baumgarten and aesthetics in Anglo-Saxon and Francophonie based on subjectivity, uniqueness of sensation influenced Kantian aesthetics and sublimity and picturesque obtained importance, as well as beauty, artistic and architectural creation, was seen as the expression of individuals, societies, cultures or historical periods, relationships between artistic creation and genius were investigated (Schwarzer, 1995; Garber and Nadler, 2006).

2. KANT'S PHILOSOPHY AND ARCHITECTURAL THEORY

While Rationalism in Continental Europe and Empiricism in the Anglo-Saxon world continuing, Kant criticised these two traditions ideas on existence, knowledge, value and synthesised, differentiated and constructed his Critical Philosophy tradition on these ideas. Especially, his epistemology improved by synthesising Rationalist and Empiricist epistemologies influenced a lot of philosophers after him and played an important role in the formation of different philosophical schools. Leibniz and Wolff founders of German Rationalism School in Rationalism tradition and Hume in Empiricism tradition of Anglo-Saxon played important role in the formation of Kantian epistemology. Kantian aesthetics developed due to the legacy of Baumgarten and the power of the judgment were an important point on the synthesis of these two powerful philosophical traditions. Before Kantian aesthetics, we should mention the position of Kant in the rationalist tradition of Leibniz-Wolff and Hume's influences on Kant. In this context, it would be appropriate to examine the space and time issues developed through inheriting from Leibnizian Philosophy and the analytic/synthetic propositions issue which occupies in the philosophical tradition from Ancient Philosophy to Leibniz and also in Leibnizian Philosophy and influencing deeply Kantian Philosophy and continuing in neo-Kantian Philosophy after Kant and became the focal point of Analytic Philosophy in 20th Century and also it would be appropriate to examine Hume's criticism of causality and emphasis on sensation. The roots of the issue why analytic and synthetic propositions so much immanent and long-termed in throughout the

history of philosophy are because the prolific source of philosophical thoughts based on tensions and speculations between ontology and epistemology and in Kantian philosophy, they were probably firstly systematised which had been expressed fact and reason truths in Leibnizian Philosophy (Rockmore, 2006; Schwarzer, 1995; Mallgrave, 2009).

Analytic/synthetic proposition distinction systematised through the approach based on Leibnizian reason truths were necessary and fact truths were possible, were expressed equally whether or not the subject includes the predicate in Kantian Philosophy and starting from Leibnizian reason truths, analytic propositions were defined empty, descriptive, necessary and accurate and in contrast to this, synthetic propositions were defined full, informative, possible and including true or false in Kantian Philosophy. While Kantian was constructing his synthetical propositions, he synthesised Leibnizian principle of the sufficient reason and Hume's criticism of causality and he continued to construct his mental categories on this synthesis. The gap between the outside reality and mental categories is another significant issue in Kantian philosophy and Kant formulated noumenon/phenomenon distinction for examining the limits of human knowledge which would be the key point of some philosophies such as Phenomenology. Noumenon identified with transcendental and unknowable which was one of the main issues of Kantian Philosophy and consist of information of experience and the structure of the assessing the experience given us systematised under the concept of the phenomenon and in this context, consequently, the approach based on ability to control mentally the experience progress from beginning to the end brought about to construct mental categories and space and time mentalities differently from prior philosophical attitudes. Starting from that point, space and time constructed associated with the relationships of monads in Leibnizian Philosophy became mental a priori principles and non-real in outside the world in Kantian Philosophy. Kant, as well as space and time issues, problematised the mind categories such as quality, quantity, relation and modality and focussed on the concepts such as perception and sensation and at that point, he comes closer to Anglo-Saxon tradition and he constructed his aesthetics under the influence of this approach. Kant developed Leibnizian follower Wolff's distinction between consciousness and sensation, defined conscious as the ability of understanding outside and inside the world and

characterised sense as the ability to make judgements about our experiences and starting from this point of view, he made the concept of mind too abstract consequently made its meaning blank through defining it as the deducing-centre using ideas obtained from judgements attained from sensation ability and he achieved a paradigmatic shift named Copernician Revolution in a philosophy based on eliminating the mission of mind, transferring its mission to consciousness (Bencivenga, 1987; Mallgrave and Contandriopoulos, 2006; Mallgrave, 2009).

Certainly, Kant's deep analysis on notions such as mind, consciousness, sensation and perception directed him to analyse the philosophy of Baumgarten based on emphasising the sensation in rationalist tradition and defining aesthetics as the ability of sub-mental ability besides defined mind-understanding-consciousness as the supra-mental abilities and constructing aesthetics as the issue of sensation. Undoubtedly, Hume's "Criticism Science" built between mind and sense, Shaftesbury and Hutchesons' doctrine on the immediacy of the taste of judgment and non-mental attribution of it, ideas of philosophers such as Berkeley and Addison about relative and subjective aesthetics had a great influence on Kant's this inclination. At this point of view, Kant developed a very prolific and sophisticated aesthetic philosophy by benefiting from two traditions and paved the way for philosophers investigating aesthetics after him. Kant systematised his aesthetical approach as the linking principle between Pure Reason and Practical Reason in his book named "Critique of Judgment" through integrating relative aesthetical approach in Anglo-Saxon Philosophy with his critical philosophy tradition and re-built the concept of beauty as an independent, systematic and limited/defined value through terminating the vague relationships between good and beauty. Due to the identification of Kant's aesthetics as the third domain of human life between these two mind domains (additionally necessity/causality-freedom/goodness, nature-morality laws), Kant coped with the gap between theory and practice and built his epistemology on three ontological principles; nature, freedom and art and examined a priori principles of these three ontological principles and abilities enabling us to establish relationships epistemologically between these three ontological categories (Kant and Bernard, 2007; Rosenberg, 2005; Kant et al., 2017; Guyer, 2010; O'Sullivan, 2017).

At that point, Kant in his *Critics of the Judgment* examined emotion in mental abilities, the idea of beauty in ideas, purposiveness principle in principles and focussed on establishing validity and universality of our judgments about beauty and sublimity. Starting from this point, Kant analysed our judgments about beauty under the framework of quality, quantity, relation and modality categories. According to Kant, beauty is pleasing disinterestedly in terms of quality, pleasing everyone in terms of quantity, pleasing without any purpose except itself in terms of relationships and pleasing necessarily in terms of modality. Kant systematised beauty as the pleasure gained the harmony between the operation of mental categories and nature did not stipulate this harmony for sublimity and sublimity was constructed on the inconsistency between our imagination and power of thinking. While pleasure obtained from the idea of beauty is directly perceptual, pleasure attained from sublimity can be obtained activation of different abilities integrating with pain felt in the face of incomprehensible in mind after perception and in this state, it is more complex than the idea of beauty and whereas the idea of beauty has a form, in sublimity, formlessness is the trigger of the sensation. Kant in his aesthetics claimed aesthetical expression in arts affects disinterestedly and creates aesthetical judgments in human beings and claimed even nature thought without its internal purposiveness as a form and creating an aesthetical judgment can be accepted as an art. In this context, Kant associated the beauty with the thing which has not been purposed in object's ontological structure but existing on the formal structure of the object in terms of being the subject of aesthetical judgment and purposiveness based on subjectivity. Purposiveness purpose existing on the formal structure of the object allows the formation of free-game between the object and our knowledge abilities and aesthetical judgments occurs at this interaction and for Kant, beauty is the form of one object's fitness for purpose in terms of perception without intending any purpose. Kant established non- representational arts in his fine art theory on the free-game of categories of mind and his formal aesthetics and due to this free-game, the idea of free beauty can be gained (Kant et al., 2017; Muchnik et al., 2008; Mallgrave and Contandriopoulos, 2006).

On the contrary, he identified arts that purposiveness is necessary for establishing formal beauty because of their ontological structures, as representational arts and architecture were handled

under this category. Based on Kant's fine arts theory, there is also the issue that how re-constructed the position of the intentionality of the artist and the position of the necessary technical conditions to produce artistic production in terms of purposiveness. Kant tried to cope with this issue through his claim that artist reveals the purposiveness including his/her genius in an inexplicable, non-repeatable, differentiated, original way while transforming his artistic work's conceptual aspects to the reality area. By becoming actual, artistic works, on their ontological structure contains their artists' genius and a spiritual sphere emerging because of integration of this genius with the existence of artistic creation. In this context, Kant constructed the hierarchy in fine arts associated with their relationships between the principle of purposiveness, from farthest to closest, in other words, arts requiring purposiveness to emerge from the least to the most. Kant divided pictorial arts contained in his art classification into two as painting and plastic and positioned architecture and sculpture in the plastic division and he made some comparisons. Kant, besides the relationships between the idea of beauty and architecture, examined connections between the idea of sublimity and architecture and claimed architecture have the strongest relationship between the idea of sublimity amongst the other arts. In his aesthetics, he divided sublimity into two as mathematical sublimity and dynamic sublimity and he associated architecture with mathematical sublimity. Architectural works exceeding human dimensions encourage us to grasp and we try to interact with these monuments anthropomorphically but in the face of extreme magnitudes of these works, anthropomorphic dimensions became meaningless and absurd and this manner causes to emerge the judgement of sublimity and the feeling of exhaustion in human beings. It is associated relationship between architecture and the Kantian judgment of the dynamic sublimity emerged due to formal dynamism of immaterial things in nature with features architecture based on its becoming shelter, including dynamic structure in itself internally, the potential of constructing more complex connections in this relationship, the potential of integrating with this dynamism in nature (Kant et al., 2017; Rockmore, 2006).

Besides Kant's analysis on tensions between functionality and beauty and content and form in his Critique of the Judgment, the issue that how the consistency would be eliminated between space forming

the ontological ground of architecture and spatial experience of the subject with this space, and the structure of experience based on subjectivity and uniqueness and Kant's construction transcendently space as an a priori form of mind categories played an important role on establishing theoretically architectural space and spatial experience in architectural work. From this point of view, it is necessary to examine the transcendental and empiric space approaches handled in Transcendental Aesthetics in Critique of Pure Reason of Kant. Here, space was built as an a priori form of outside sensation of mind, namely the content of the subject of phenomenon can only interact with the mental categories through becoming space as an a priori frame of the forming principle of the form of phenomenon. From this point, Kant divided space into two categories as empiric and transcendental concerning experiencing it as the content of phenomenon and its characteristic as the a priori and transcendental background for all mental experiences and anatomised attributions of metaphysical and transcendental space. For Kant, space is an ontological principle of the foundations of relations of objects without subjectivity and space is conceivable as an a priori and pure principle without requiring object as its subject. At that point, Kant deepened his distinction between transcendental and empiric space and spatial variation emerging as the consequence of the interaction between objects and space as a transcendental a priori and subjective principle constructed as limited parts of one and same union space and spatial variations of architecture and the diversity of the experiences can be analysed under the light of sensational and transcendental tensions of this space. Thus, different spatial manifestations, by Kant's expression, placed "in" the one same space (Gilly et al., 1994; Kant et al., 2017; O'Sullivan, 2017).

Starting from the Kantian aesthetics, some architectural theoreticians such as Etienne-Louis Boullée, Claude- Nicolas Ledoux, August Schegel and Friedrich Gilly coping with the purposiveness issue and representational relationship between architecture and aesthetics, played an important role on transferring Kantian Philosophy to architectural theory. Kant, due to both the systematisation of the aesthetics and theoretical ideas on fine arts and also analysing tension between beauty-functionality in architectural practice, influenced romantic and idealist philosophers after him such as Schelling, Fichte, Hegel, Schopenhauer and he led to beginning the romantic period in

Germany and caused the formation of the fields of art philosophy and art history (Dallery et al., 1990; Tournikiotis, 2001; Krufft and Taylor, 2014).

3. AFTER KANT: NEO-KANTIANISM AND ARCHITECTURAL THEORY IN THE 19TH CENTURY

Since the second half of 19th Century, the decline of idealist attitude of German Idealism especially Hegelian idealism in Germany due to the philosophies of materialist philosophers such as Feuerbach, J. Moleschott, L. Bucher, Karl Vog and Left Hegelians' re-interpretation of the Hegelian system under the perspective of materialism and also Marx's developing dialectic materialism through re-constructing Hegelian dialectic in materialistic context caused German Idealism especially Hegelianism to be questioned due to preparing the ground aspects for the formation of materialistic approaches. Especially explanations reducing the existence to the only matter of philosophical ideologies gained wide currency by Industrial Revolution such as Positivism and their aspects based on exalting natural sciences and gaining wide currency of Darwinism brought about to be argued the position of philosophy in the face of science. Against increasing materialistic tendencies and positivistic ideologies, especially in the last quarter of 19th Century, emerged neo-Kantianism movement to survive the honour of philosophy under the danger of elimination within the science through developing and dealing with Kantian epistemology and critical philosophy.

Especially, Kant researches of Eduard von Hartmann and Helmholtz, also works of Otto Liebman who said the motto of Neo-Kantianism (Back to Kant) and searches of Friedrich Albert Lange re-dealt with Kantian epistemology made great contributions to the formation of Neo-Kantianism. The most significant attributions of Neo-Kantianism is the effort to form nature philosophy-science based on Kantian epistemology against Positivism and the effort to exceed the distinction between Kantian noumenon and phenomenon and these efforts brought about the emergence of the longest-term philosophical attitude in the history of philosophy and played a key role to begin being dealt with philosophical searches by academic circles. Neo-Kantianism due to its being an academic philosophy caused the emergence of different approaches in different academic schools. According to Bochenski, Neo-Kantianism can be classified into seven

different schools (Bochenski, 1982). These are; physiologist school including some philosophers such as Friedrich Albert Lange and Hermann Helmholtz assessing Kantian a priori forms as physiological acquisitions, the metaphysical school emerged as a result of efforts of Otto Liebman and Johannes Volkeit trying to construct metaphysical theory, realistic scientific monistic school represented by some philosophers such as Alois Riegl and Richard Honigswald accepting the reality of noumenal existence, sociology tradition influenced by Hegelian Idealism and life philosophies and emphasising the relativity of Kantian a priori by asserting it is a psychological aspect, psychology school represented by Hans Cornelius objecting to all metaphysical explanations in psychology and including materialistic tendencies. Although these schools were under the influence of Kant's epistemology and critical philosophy, Marburg and Baden neo-Kantianism having significant effects on the emergence of a distinction between Analytical and Continental Philosophy were accepted as the most significant schools in Neo-Kantianism (Bochenski, 1982; Thoenes and Evers, 2003).

Marburg School especially negated objective reality itself by focussing on epistemology and logical analysis and dealt with the objectifying problem of the information obtained by senses through mathematics and logic and they tried to cope with increasing Positivism by this attitude. Baden School, instead of Marburg School's scientific and epistemological analysis, focussed on axiology and adopted the historical method and dealt with individualistic developments of cultural values, scientific comprehensions, and socio-economic events under the perspective of the history of metaphysics. Some neo-Kantians such as Hans Vaihinger, Bruno Bauch trying to synthesise and to develop the approaches of Baden and Marburg Schools, tried to synthesise Kantian Idealism and Positivism and contributed to the emergence of Analytical Philosophy and Vienne Circle by influencing some philosophers such as Ernst Mach, Moritz Schlick, Richard Avenarius. Neo-Kantianism, besides these schools, also influenced Max Weber, Wilhelm Dilthey, Emil Lask, Rudolph Otto and Nicolai Hartmann in Germany and caused to be dealt with Kantian Critical Philosophy in different dimensions and caused to continue in different philosophical movements such as Phenomenology, Existentialism, Structuralism and Hermeneutics and different domains such as Sociology and Psychology. As well as German Philosophy, Neo-Kantianism influenced British

Idealism and some philosophers such as C. Cantoni, G. Barzelotti, A. Chiappeli in Italy, H. Hoffding in Denmark, J. Lachelier, E. Boutroux, H. Bergson, H. Poincare, P. Duhem in France (Mallgrave, 2009; Mallgrave and Contandriopoulos, 2006).

We can summarise general attribution of Neo-Kantianism as this; Neo-Kantian thought adopts transcendental method instead of the psychological method and negates metaphysical idealism. Also, Neo-Kantians similar to Kant, negate intuition based on the understanding and construct their epistemology to make information obtained from senses logical or objective. Also, Neo-Kantians in their epistemology deals with the possibility of ontological construction and the type of construction instead of an explanation of ontology. Except these, there are some points of Neo-Kantians differentiated from Kant's Philosophy. For Instance, due to negating the existence of thing-in-itself, they become closer to solipsism vice versa of German Idealism however they assert there is equal of the situation based on the existence becoming the subject of conscious immanently, in outside world transcendently and had closer tendencies with rationalism through their mentality based on the original root of knowledge is not sense data (Thoenes and Evers, 2003; Mallgrave, 2009; Mallgrave and Contandriopoulos, 2006; Otero-Pailos, 2010).

4. KANTIANISM IN 20TH CENTURY AND ARCHITECTURAL THEORY

Neo-Kantian approach by these three schools led to form of different schools in 20th Century Western Philosophy. Marburg School contributed to the formation of some philosophical schools such as Vienna Circle, Analytical Philosophy, Pragmatism and Structuralism and Gottingen School led to occur of Transcendental Phenomenology and Psychoanalysis. Baden School caused Transcendental Phenomenology to obtain Existential and Hermeneutical content namely more ontological and semantic character. Vienne Circle (Logical Positivism) emerged due to the influence of Marburg School contributed to background of modern architecture and enriched the ideas of schools such as Bauhaus, DeStijl through parallel philosophical attitudes to architectural attitude providing realisation of technical and mathematical perfection ideal. In this context, close relationships between Carnap and Neurath with Bauhaus, Wittgenstein and Adolf Loos, mathematician Mathieu Hubertus Josephus Schoenmaekers and

DeStijl are the most typical examples indicating contributions of Vienne Circle on modern architecture (Mallgrave, 2009; Thoenes and Evers, 2003).

Another school formed around Gottlob Frege re-interpreted approaches of Marburg School based on re-construction of existence by logic and mathematics under the perspective of his new developed logic and G.E. Moore isolated Hegelian idealistic character and metaphysical speculations of British Idealism was Analytic Philosophy and in the field of architecture focussed on how our synthetic propositions about architecture can be transformed to analytic propositions through mathematic and logic and made a mathematical and linguistic analysis of formal existence of architecture in syntactic level. By using similar attitudes, Structuralism and Pragmatism focussed on semiotic systems and content-form relations in architecture under the perspective of semiology and assessed architecture like a linguistic code system similar to Cassirer's Symbolic Forms Philosophy. Application of Structuralism as a method in architecture realised through studies of TEAM 10, emerged after the 1950s due to disintegration of CIAM, based on applying anthropologic structuralism of Levi Strauss to forms theory. Especially in the 1960s, in France, the formation of urban semiology emerged as a result of analysis of some theoreticians such as F. Choay, R. Ledrut, R. Barthes and A. J. Greimas based on dealing with urban as a linguistic code system was one of the major contributions of Structuralism to the field of architecture. Except those, many architects and theoreticians such as C. Jencks, J. Pablo Bonta, G. Baird, L. Hjelmslev, K. Lynch, J. Rykwert and members of design schools in Italy such as I. Gamberini, G. Klaus Koenig, C. Brandi, R. De Fusco, U. Eco, G. Dorfes, S. Bettini benefited from approaches of structuralism and semiologic analysis from the 1950s to 1980s (Mallgrave, 2007; Gallagher, 2012).

Instead of Structuralism's bilingual semiologic system, Pragmatist Philosophers developed a trilingual system by including the usage dimension of language and dealt with architecture in this trilingual context and tried to analyse the usage dimension of architecture through linguistic codification method. In this context, many architects and theoreticians such as C. S. Peirce, C. W. Morris, G. Kepes, O. Aicher, M. Bill, T. Maldonado, I. Richards, C. K. Ogdan, M. Riffaterre and T. Sebeok made some semiologic analysis on architecture and usage of architectural work benefiting from

Pragmatism. Pragmatism contributed architecture not only through its semiologic analysis but also through Behaviourism psychological approach based on activity and praxis. Especially, owing to the transformation of experimental psychology emerged due to the studies of Willhelm Wundt, a pupil of Kant, to discipline focussing on behaviours (especially on animal behaviour) instead of using introspective methods due to the influence of Pragmatism on psychologists escaped from Nazi persecution in Germany to the USA contributed to the emergence of Behaviourism as a psychological approach. And beginning with Kurt Lewin's idea based on behaviour is a function of the person in their environment and continuing to Nehamow and Lawton's idea based on behaviour is the function of both the person and environment made great contributions on considering the relationships between human psychology /sociology and its relation with the environment, specially designed environment (architecture or city). These philosophical developments and interactions caused the emergence of Psychology of Architecture dealing with architectural work's psychological effects on humans from 1960s to 1980s. And after 1980, due to adding the searches on psychological effects of non-designed environments to theories of Architectural Psychology, these theories began to be called Environment-Behaviour Theories instead of Architectural Psychology (Hass, 2008; Hale, 2000).

Husserl, due to the influence of another neo-Kantian School, Gottingen School, founded his transcendental phenomenology based on we can make transcendental essences of objects the subject of our knowledge without any distortions through using a phenomenological method created by synthesising Brentano's intentionality concept with the concepts noema and noesis associated with the phenomenal dimension of the obvious object obtained due to intentionality, made his significant contribution to architecture by his concept life world created due to the influence of Paul Natorp who was one of the most significant names of Marburg Neo-Kantianism. Husserl paved the way of analysis on architecture expressing the forming space where the life itself continues in it through his approach based on paying attention to daily life and human experience itself by symbolised as the concept "Life World", he transformed his epistemology based philosophy to the more ontological ground in the later years of his life. Husserl's this paradigmatic shift in favour of ontology ones found its match in Heidegger and Sartre's Philosophy as positioning ontology ones in the

centre of philosophy against epistemology and characteristics of Fundamental Ontology and Phenomenological Ontology/Existential Phenomenology came into prominence in Phenomenology Philosophy to cause to occur an architectural theory in the context of Phenomenology. In this context, Ponty's approach positioned between Husserlian transcendental Phenomenology and Sartre's ontological phenomenology focussed on the issue of perception and made some phenomenological analysis on body and perception and paved the way of architectural theoreticians to analyse architectural perceptions and body-space relationships. Phenomenology Philosophy caused to be dealt with space and subject relationships subjectively to be investigated the relationships between individual's perception and cognition with spatial meaning dimension to the efforts to appear/to be visible of interaction between presence in spatiality and being existence and influenced some architectural theoreticians such as C. N. Schulz, J. Pallasmaa, S. Holl, P. Zumthor, E. Relph, D. Simon, E. Casey (Otero-Pailos, 2010; Gallagher, 2012; Hass, 2008; Hale, 2000).

Post-Structuralism and its special form Deconstructivism emerged to exceed Phenomenology and Structuralism by synthesising them assessed architecture as a text and tried to reverse its immanent usual metaphysical dichotomies of this textual construction and influenced some architectural theoreticians such as D. Libeskind, R. Koolhaas, P. Eisenmann, Z. Hadid etc. Kant's formal analysis on the epistemological relationship between human consciousness and ontological structure outer world and Marburg School's approach based on re-constructing this formal analysis by transforming in the mathematical and logic system creates the fundamental logic of software systems. Software and software grounded designs and productions have had more effects on architecture especially on experimental architecture lately and its effects have increased more and more nowadays. In this context some scenarios based on future of architecture will be an architecture of informatics, even generated (Ballantyne, 2005; Braham et al, 2007; Otero-Pailos, 2010; Hight, 2008; Gallagher, 2012; Hass, 2008; Hale, 2000).

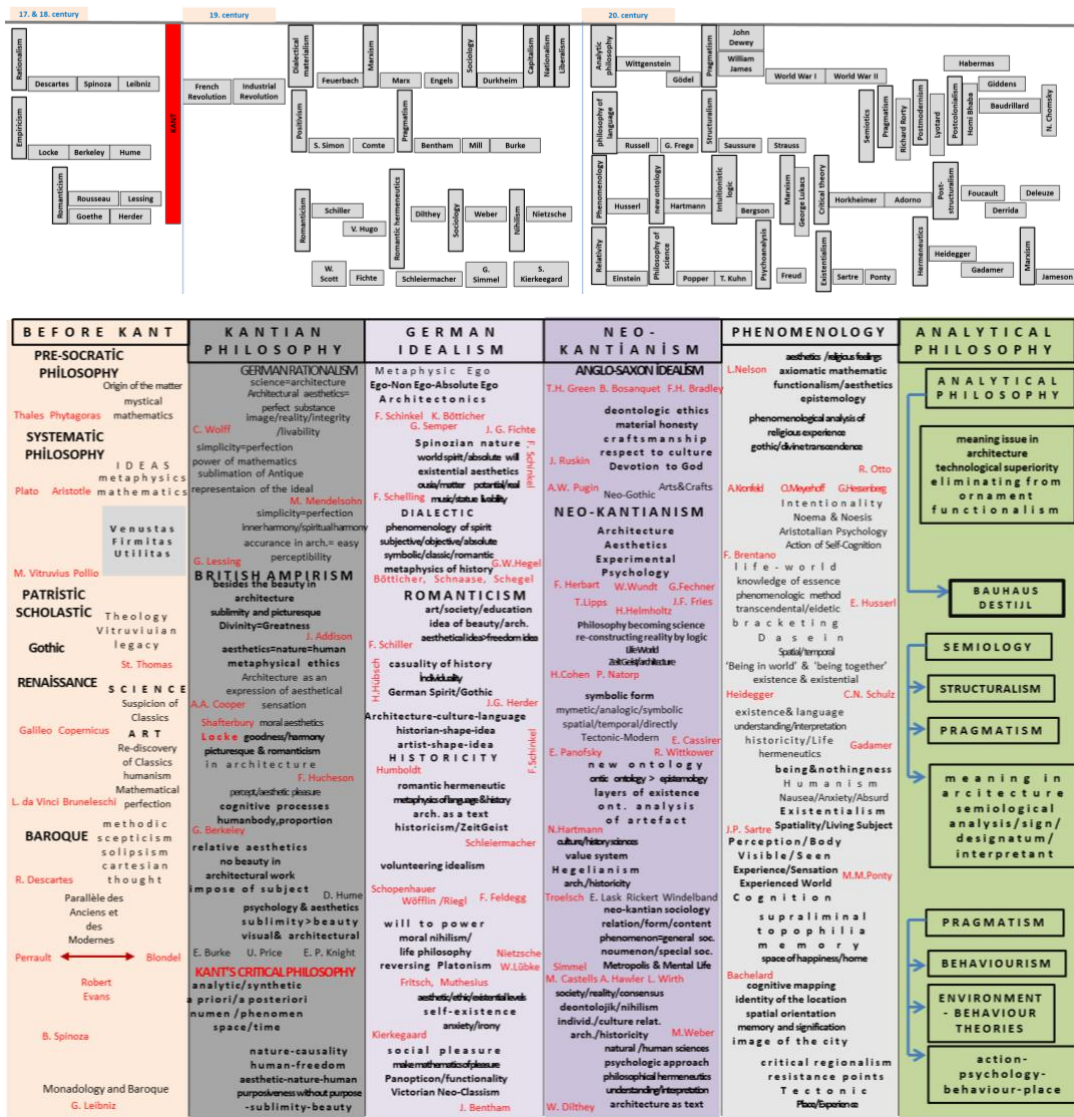


Figure 1: The Figure Shows the Influences of Post-Kantian Philosophical Movements on Architectural Theory

AS A CONCLUSION

Kant's main aim was to examine the limits of human knowledge. For this purpose, he synthesized rationalism of Leibniz and empiricism of Hume and formed his transcendental philosophy. He rejected Aristotelian epistemology continuing from Antiquity based on knowledge is the harmony of object and subject. He re-formulated knowledge through re-conceptualizing object as the product of mental states emerging with a concept in a judgment in mind. Thus, Kant tried to transcend the gap between object and subject by positioning object in mind. According to Kant, object and its concept can correspond to each other thanks to connective attributions of mental categories.

As it can be seen, Kant's Philosophy thanks to neo-Kantianism influenced greatly 20th Century Philosophy. Kant activated a crisis on the tradition beginning from Vitruvius based in the field of architecture. Then, the understanding of the matters of beauty, strength, and functionality changed remarkably. Kant paved the new ways of theories that problematising tensions between the idea of beauty and purposiveness. He re-constructed the relationships between fine arts and architecture in this sense. Kant established arts as an expression of aesthetical judgments. Thanks to him, the relationships between philosophy and architecture became closer. Therefore, new debates and investigations have been done on how architecture carries aesthetical judgements and how intellectuals' ideas structure the background of these aesthetical judgments. Briefly, Kant directly influenced architecture by his successors' schools. His ideas have got a significant impact on the semiologic analysis, software and informatics knowledge and psychological discussions of the human-place relation.

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