Periodization Hierarchy, Organizational Paradigms And Corporate Aesthetics As Fibonacci Section; Golden Angle For Critical Spiral Reflectivity, Probe To Logic And Reason

Rabia Shahzad¹, Syed Fahad Ali², Dr Athar Marwat³

Abstract

Epochs-making events of history escalated the paradigms of pedagogical writings of the organizational realm and served as a heuristic tool for the development of theories. The centre of this paper is to erect the bridge linking all junctures of ancient times and transfigured anatomy of organizational slants. The first segment of the paper seeds the soil of contents to our arguments principally for the readers who are entering the realm of chronological demarcations for the first time. Pithy accounts of organizational theories are delineated regarding how paradoxical pillars of faiths towards all institutions disoriented the entire organizational domains and perspectives and bestow the discourse with three Centrum themes. Scholars spared no effort to expound on the introduction of the Fibonacci family and its inexplicable effects in the patterns of nature, music, architecture, and painting even in the human body. This pedagogical attempt proffers matchless currency by enunciating the expression of golden Fibonacci numbers; golden Fibonacci recursive formula as a metaphorical delineation to modernism, symbolic and post-modernist organizational theories. The golden rectangle comparison to perceptions of four research paradigms; the golden Fibonacci ratio concerning fathoming the ontological and epistemological paradigms; the golden angle exemplification to decipher the reflective organizations; and the golden spiral allegorical attempt at reflective organizations is the eminent pronouncement of this paper. Prestigious contemporary constituent; corporate aesthetic reviews engrossed the contemplation of organizational scientists during the last decade. In this research, we ventured to comprehend corporate aesthetic capital over instrumental capital with the supremacy of organizational "crisis of representation".

Keywords: organizational themes, historical epochs, Fibonacci numerical, reflective organizations, corporate aesthetic

Introduction:

The plethora of scholarly and pedagogical writings of Antiquity, the Middle Ages, the Modern Era, and radical humanist to radical structuralism conferred the literature with notions of Europe history and elevate the discourse of organizational theory (Kipping, 2008). Epochs making events of historic heartland proliferated paradigms of understanding through ages and disparate

perspectives raging all institution's interpretation by chronological demarcations. The paucity of cohesive historical proceedings might construct an adrift and contrived vacuum yet it can hardly be refuted each age adheres to myriad and distinctive ontological tensions and feats to bequeath to posterity. These peculiar notions had influenced and fractured the scholar's pillars of living faith, however, served as a heuristic tool for the

¹MS Scholar, University of Management and Technology (UMT), Lahore. Email: noorrabia1992@gmail.com

²MS Scholar, University of Management and Technology (UMT), Lahore. Email: <u>sfahadali@gmail.com</u>

³Independent Researcher, Peshawar. Email: atharmarwat78@gmail.com

development of theories (Perrow, 2007). Without the eclectic structural edifice given to the world by the diverse occurrences of history in the entire realm the manuscripts, exegesis, translations, epitomes, critical academic disciplines, discourses, commentaries, and theories on the organizational, philosophical and theological debate are mere futility of remembering and complete oblivion to the fact (Hassard, 2014).

In this article, we strived to do justice with enormous facets, salient notions and ontological insights formed by social theorists for historical approaches which have unswerving pertinence to organizational analysis. We have scuffled to provide a structure of language neither out of the ordinary and inaccessible for primary readers nor very naive and oversimplified for readers, who hold a sound degree of intimacy with phraseology, abstraction and spheres of expressions towards the issue at hand. On account of epistemology, scholars employed systematic literature review to present new metaphorical slants in organizational studies.

The first segment of this article is a meagre endeavour to elucidate the system of periodization as a paper of this length cannot delve into the narratives of events moreover intention of the researcher is to concentrate on tangled relations of the organizational world and macro history moments. However, certainly, we set out pithy accounts worth mentioning ages to seed the soil of contexts to our arguments principally for the readers who are entering the realm of the golden the medieval period, renaissance, age. enlightenment era, modernism and postmodernism for the first time. The second place of the paper delineates the classification of organizational theories shortly about how institutional paradoxical pillars of faith disoriented organizational entire domains perspectives. The third place of the paper articulates one of the exceptional metaphors of its kind, the first ever paper in organizational studies to link the Fibonacci golden section in comparison to conventional and contemporary slants of organizational paradigms. Further to exercise the metaphor of the Fibonacci golden ratio to fathom the organizational ontological and epistemological viewpoints, the link of the logarithm spiral of Golden Square as reflective organizations and the use of the golden angle to decipher the anatomy of the uncritical assembled cognitive structure of reflective leaders, gave one of the matchless currencies to this research.

Classification of Organizational Theories

The discipline of Organizational studies is persuaded by the vast malaise shift of time. Sprouting perspectives, emergent schools of thought and diverse factions of scholarly paradigms across ages escalated the discourse; however, it was the nineteenth century when the organizational and management studies embellished and became more compelling in the industrial modern world (Giacomin, 2017). The proliferation of theoretical work nevertheless, commingled with the sense of exhilaration yet on the other hand with constant dejection among conflicted paradigms. There was disconcertment among organizational theorists about whether they should or should not endorse specific paradigms while devising slants of organizations (Hikino, 2018). Over and above what mattered behind confronting the incommensurable prevailing theoretical views of this area of study was, a melancholy in the much-related discipline "sociology" where the issue at hand for all sociological theorists was dedicated to the theme; "what's wrong with sociology history by the time" subjectivity over objectivity or post-modernism over modernism (Hambrick, 2007). Furthermore, the application and generalization dilemma of empirical studies to practice seemed an enduring find to the answer normative engrossment and academic interests had granted more critical themes to organizational studies. The base knowledge responsible for this vast understanding and acknowledgement

organizational analysis or more explicitly would like to refer to it –as organizational theory (Smith, 2018).

Three focal sections are a surge of interest in OT classification and we manoeuvre these themes as the centre of debate in the Fibonacci section of this paper; first the upturn of organizations and how changing events of modernism swamped the stagnant dark ages and inclined us organizational societies. The positivist approach with classical organizational theories mainly was much worth where scientific judgments were stated for material affluence (Hambrick, 2005). This mechanical thinking raised the impression of bureaucratic expressions where organizations were ascertained as machines featured by the close system of mingled falsification of hand and brain, less humanistic, routinization, efficient and reliable to accomplish predestined ends in predictable manners. This stream of OT led to scientific management, Taylor's Favol's administrative management theories, Weber's bureaucratic and Frederick's mechanized settings moreover Fordism views structural variables including division of labour, the hierarchy of authority, standardization, centralization, formalized rules and dimensions of organizational social structure were proposed (Taylor & White, 2000). Later the first section of organizational theory and the absolute singular and binary truthfinding perspective of scholars was relocated to system and contingency premises based on the amalgamated environmental analysis. The contour of this theme was how internal dynamics and various actors who had a stake in any capacity addressed while concocting should be contingency, resource-dependent, stakeholder and population ecology theories (Jensen, 2002).

The first part of this section of the paper expounds the Fibonacci effects in the patterns of nature, music, architecture, painting and even in the human body, later part enunciates the expression of golden Fibonacci numbers, golden Fibonacci recursive formula as a metaphorical delineation to modernism. symbolic post-modernist and organizational theories, golden rectangle a comparison to perceptions of functionalism, interpretive, radicalism and radical structuralism, the golden Fibonacci ratio to fathom the ontological and epistemological paradigms of organizational theorists while delineating the structure of three Centrum themes of organizational theory, the golden angle is exemplified layer by layer to decipher the leader's transformative reflective cognitive structure and golden spiral an allegorical attempt to reflective organizations.

Fibonacci and Nature

The Fibonacci numerical expression is epitomized as Follows: where Fo=0, F1=1, F2=1 till Fn is the nth term called n index. Centuries later Fibonacci's duration, the Renaissance period came to the fore where the punctilious and scrupulous revival of secular notions led ways to explore the innate world around people. After fanatical architectural structure study and keen consideration of the anatomy of plants, animals and human mechanisms and patterns, divulged that the string of Fibonacci numbers endured in the calculation of the entire creation (Wille, 2011). From historic and textural stance startlingly, ancient Greek and Rome artistic paragons, classic carvings, congruous paintings, from figurine sculptures to lofty statuettes, stupendous pottery, dazzling mosaic prototypes and architectonic blueprints captivatingly prevail with Fibonacci golden characters, golden spiral and the golden ratio. Numerous natural objects and modernist creators and painters comprehensively applied golden section while constructing ethereal magnum opus, it was scrutinised as a rudiment not only for aesthetic gratification but to augment exquisiteness in all proportions and to enact superlative artist fashion defined as "dynamical symmetry" (Bradley, 2006, p. 120).

Golden Section Properties in Comparison to Organizational Paradigms

> Fibonacci Recursion

Paramount components of this golden family embrace divine ratio; golden rectangle; golden angle, Fibonacci spiral and one more notably imperative element is the Fibonacci recursive mechanism. The intellectual acuity investigation by computer analysts and mathematicians revealed Fibonacci identity is traditional and the most ancient recursive programming formula procured by the rabbit regeneration problem (Knott, 2002). From a pedagogical frame of reference, this recursive function is enormously attentiongrabbing because of its ostensible facile method that allows scores of intuitive remedies utilizing diverse programming paradigms. The denotation of recursion is "defining a problem in terms of itself", uncomplicatedly a function which can solitary be executed on its preceding terms to find succeeding terms hence devising a series of expressions to achieve the n-th term (Koffman, 2004). The recursive tree property of the Fibonacci family is a tremendously persuasive tool in mathematics for mapping arithmetic geometric algorithms where several terms are expressed and fathomed in expressions of themselves. The anatomy of the recursive tree unveiled plentiful sophisticated recursive tactics that operated on Fibonacci identities to lessen the complexities, but these three approaches are more eminent. Among those first is Hosseini's (2005) echelon linear recursion property, without performing a single function F-n term is procured. Second is the linear recursion function executes only one recursive call to its variables, hence it is an iterative single loop algorithm with the naive, non-technical and schematic theme that developed at binary coding (0/1) where two expressions are ample to figure out successive Fibonacci identity until F-n has secured (Basin, 2012). Unless single loop algorithms' third approach forms the nonlinear web of chains named a branched recursive function performs multiple calls to its variables and utilize manifold arrays of expression to attain the n-th Fibonacci product (Miller, 2005) In this segment researcher spare no efforts to narrate these three recursive algorithms with modernism, interpretative and post-modernism organizational slants dexterously and proficiently, an inimitable audacity to add metaphorical notions in organizational studies. In the first phase meticulous presentation is explicated to gauge the values of Fibonacci numbers, based on driven digits second part dispensed the following execution of the organizational Fibonacci recursive program is performed. The recursive equation of Fibonacci integer's relationship is as demonstrated, where F-n denoted the n-th Fibonacci term:

Fibonacci Recursion and Organizational Themes

The second part of the paper has set forth three pivotal themes concerning chronological paradigms rigorously; at this juncture, the above executed single loop and branched algorithms rendition of Fibonacci recursive programming are strongly conducive to taking the metaphorical assertion in coalition to organizational theories recursion on board. Symbolic delineation of modernism organizational theme with Fibonacci's first three numbers where F0=Fib0 as a classical management approach, F1=Fib1 as Bureaucratic Management theories and F2=Fib1 as Scientific Management and Administrative Management is merely on account of irreconcilable antithesis as binary thinking (yes/no or 0/1). The cognitive schema of modernist organizational philosophers have principally surged on hallmarks including; univocity of meaning, scientific presence. centralized authority, linear progress, empiricism; logic and reason, meagre focus on labour productivity and efficiency, standardized policies and modernist mechanistic with truancy of human factor (Harvey, 2003). Consequently, we syndicated all attributes of the first organizational

theme metaphorically at primary echelon recursion where statement 1 is always true $(n \le 1)$. Even a single recursive logarithm to the cognitive structure is not considered in quest of reality as truth is fixed (0/1, yes/no) in this organizational paradigm. The command to run the organization is ended before performing single loop recursion and without sparking other themes. The dexterity to link the manifesto of modernism territory and the echelon programming is markedly on account of empiricist and positivist world conceptions. The comprehension of this realm is enlightened only from logical analysis, a manner for explicating all philosophical dogmas based on the refutation of symbolic logic (Kipping, 2014). Hence the orbits of modernism organizational insights allegorically echelon mechanisms, a negation of executing programs further to probe more realities in organizational themes. The emblematical representation of linear Fibonacci recursion with symbolism theme is drawn with F3= Fib 2 logically attributable to "between" slants of organizations. Notions developed under this stance circumscribed social theories holding impulses that reality is socially constructed, encompass Hegel's myth of the given Clark (2014) where the meaning of cognition is between you (F1=Fib1) and your world (F2=Fib1); F3=Fib2). The centre of attention for organizational scholars of this theme is symbols; the humanist approach and socially embedded interactions mould meanings. Thus essence and main topics formulated by theorists are organizational change, organizational identity, culture and behaviour of the organization, organizational communication and change management (Rowlinson, 2017). The justification and pitfall of why we endorse interpretive organizational convictions with linear Fibonacci recursion is the paucity of critical discourses in this premise. The scanty critical inquisitive credence of interpretive scholars and practitioners heads off their cognition from incredulity and impedes to auscultating postmodernism manifold waves while theorizing organizational variables. Metaphorically analytic programming of these organizational expressions is paused before striving branch recursion to seek more themes. The quintessence of selecting Fibonacci 2 for this tilt is over again "betweenness" and symbolic logics where truth (1) accompanying with social construction (1) derives meanings (Fib1+Fib1=Fib2), exclusion of Vienna circle prior empiricism versions (0/1). Narratives inside narratives attributed with devoid of truth finding yet scepticism, shaken pillars of faith, existentialism, and nihilism with heterogeneous layers of beliefs and language over logic had ruptured the linear recursive mechanism and orchestrated the post-modernist organizational stage (Morgan, 1999). Mise-en-abyme and Dostre effect or Chinese boxes convictions are a surpassingly pure manifestation of branched organizational Fibonacci recursion Abadi (2009) where multiple calls are being run to execute the same function. The analytical reasoning behind equating Fibonacci 3, Fibonacci 5, and Fibonacci 8 and goes on (elongated programming till n-th organizational term,) to the third sphere is a refutation of traditional management theories echelon and linear recursion interpreted by rationalism and symbolism. Webs of notions, grand narratives and encyclopedic arrays with postmodernism synthesis of the manifold are allegorically attempted to depict with branched recursion in this paper. In the quest for truth literature of this realm is being stuffed with the recipes of typologies under post-modernism organizations grounds as post-bureaucratic organizations, carnival, virtual, reflective, selfdesigning, intellectual and flexible organizations without any standardized and unified strategies what we call echelon metaphor. These postmodernist organizations Bell's (2002) are small, organic, decentralized and informal "end of industrialization" with no more game of raw muscle or energy but competition for information and professionalism. It is the sphere of knowledge capital over material capital; "we now mass

produce knowledge in the way we used to mass produce cars" (Masuda, 2006).

Fibonacci Golden Rectangle

Throughout the historical discourses, a unique rectangle venerable: because distinguished gratified proportions, neither too hefty, lengthened nor too scrawny and squat. This idyllic-shaped rectangle is considered a golden rectangle in which proportion from length to width is flawlessly at a golden ratio (1:1.618, 38:62) under the w/l= l/w+l formula (Henderson, 2007, pp. 1-2). The scholar ventured to present a golden rectangle in collation to research a rectangle with four quadrants (Functionalism, Interpretive, Radicalism and Radical structuralism) another metaphorical exertion. Firm credence and ascendancy of these meticulous research quadrants confer contemporary modernism, interpretive and postmodernism organizational theories. The enormity of the research paradigm will proficient the scholars to adhere to fastidious viewpoints and being consumers of organizational research the cognizance discernment of different research paradigms is indispensable. The outcome of one specific framework is not reposefully interpretable for other quadrants (Rehman, 2015). Ontological and epistemological organizational theorists deduced amplification is conducive to importing and establishing psychometric properties of organizational findings. The surfeit literature of classical, neo-classical and critical organizational theories is the creation of Patton (2002) particularly deeply rooted ideologies and misconstrue of terminologies or indecorous theoretical underpinnings of other research paradigms. The ignorance of the entire research rectangle epitome is a substantial obstruction to eulogising organizational research performed under other ideologies. Finally, the paper set out golden rectangle deftness with research rectangle an allegorical call for the researcher's mental configuration while proposing organizational ideas.

> The Golden Ratio

One more exciting exposition from Fibonacci identities is the astounding appearance of the golden ratio in plenty of objects. The liaison between dimensions of a line is Posamentier (2009) expressed as L/S=L+S/L where L is the protracted segment and S is the miniature portion of the entire line segment. The numerical expression to track down the value of divine proportion is; let the value of x = L/S, where x = 1 + L/S ultimately by applying the quadratic equation for x, golden ratio value customarily symbolized by Greek expression $\phi = L/S = x = 1 + \sqrt{5/2} = 1.618033$ (Lehmann, 2007). We stop at nothing in this segment of the paper to exemplify the incomparable metaphor of the golden ratio to fathom the ontological and epistemological paradigms of organizational theorists while proposing three Centrum themes of organizational theory, based on the four quadrant research rectangle deftly and adroitly.

> Developing the Research

In most organizations and organizational research, ideas are similarly central. Ideas drive change, and therefore organizational performance and survival (Amabile, 1988; Kanter, 1988). Since Guilford's (1950) seminal paper on the psychology and measurement of creativity, ideas have become a central unit of analysis in organizational creativity, and inquiry for many areas of organizational research. The sub-disciplines of research on brainstorming, creativity, innovation, knowledge creation, design, networks, entrepreneurship, and creative work, all of which aim to study how something new comes to exist in the world, have grown around understanding the role and

consequences of ideas, and the processes through which ideas arise (e.g., Guilford, 1950; Amabile, 1988; Sutton & Hargadon, 1997; Burt, 2004; Nonaka, 1994; Fleming, Mingo & Chen, 2007; Grimes, 2018). However, it is not always clear what scholars mean when they use the word 'idea' (cf. Inie & Dalsgaard, 2017; Sukhov, Magnusson, & Netz, 2019). Ideas are understood as the outcome of a creative process (Amabile, 1988)—that is, the result of purposeful effort towards generating some form of novelty (Ford, 1996; Lingo & Tepper, 2013; Grimes, 2018). However, the concepts of 'creativity' and 'ideas' are often used interchangeably, where creativity is a process that produces ideas, and ideas are, tautologically, the products of a creative process (e.g., Litchfield, Gilson, & Gilson, 2015; Unsworth, 2001). Research has often taken an 'I know it when I see it' approach, deeming it self-evident when and whether something is an idea (e.g., Runco & Chand, 1995: 252). Researchers typically explain what they mean by a high-quality or highly creative idea (often one high in novelty and usefulness, e.g., Litchfield et al., 2015), without defining what they mean by an idea in the first place.

Research Methodology

Developing organization theory

Studies have been intricate over deductive and inductive dichotomous research approaches (Miller, 2000). **Functionalist** "crisis representation" took inspiration from theoretical validation consensus (Worden, 2009a). On accounts of ontological slants the methodology of this research traces the "subjectivism approach." Subjective quadrum paradigms empathize with socio-humanistic theories (Ericson, 1970). These approaches deposited colossal prominence on human consciousness (Morgan and Smircich 1980). The interpretive approach constructs reality through the mind process. Interpretive ontology is anti-foundationalist (Grix, 2004, p. 82). As to functionalism hegemonic identity results in alienation and false recognition (Morrison, 2007, p. 7). Hence model of humanity is thoroughly dismantled in objectivism approaches (Khalid, 2016).

Conversely, it is the process of transcending the limitations of existing social arrangements. The social world is negotiated, controlled and created by our interpretations (Luckmann, 2000). Words, events and actions all are transported by symbols. Socially constructed reality constructs and sustains social orders. Berger's (2003) externalization, objectification and internalization mechanism of interpretive paradigm combined with Weick's cognitive reification. Subjectivity domination is upon "structural" notions through symbols and verbosity. Intersubjectivity is grounded in our context. "Understanding" of human beings, their consciousness and their emotions is a defining attribute of the subjectivism paradigm (Patton, 2002, p. 134). Symbols and language create meaning to express feelings outwardly.

The radical realm of subjectivism transmits fastidious meanings to reinforce a new name to p. consciousness (Grix, 2004, 32). representation of language divulges what is the thinking of the dominant structure. The way people dialogue gets a notion of others' consciousness about their ontological inclinations (Burrell, 1979). Taking account of epistemology, Foucauldian discourse analysis will be employed in the current investigation. Patton's (2002) discursive analysis is to descry how an institutional power, articulated by meanings influences free human consciousness. Purposive sampling will be utilized with a dyadic unit of analysis to fathom the untested feasibility both consciousnesses. Semi-structured of interview method of the subjectivism paradigm will be deployed to the holder and learner of knowledge from Hassan Murrad School of Management, Lahore. Where is the central phenomenon of "how to decolonize one's banking method of consciousness through dialogical discursive power"? will inquire with subsequent queries. Initial themes will be generated at NVIVO from collected data. Final codes will be used to draw conceptual results of the construct under study. To rule out the possibility of biases the researcher will finalize the initial codes after discussing them with two other scholars. The purpose is to establish inter-rater reliability and to improve the trustworthiness of the data gathered (Bazeley and Jackson, 2013; Podsakoff et al., 2003). A reflective analysis will be used further to manage biases and prejudices Polit and Beck, (2004) in the study's finding.

> Paradigms of organizational theorist

> It is the ontological assumptions beget the

literature organizational with formal organizations, contingency approach, open systems, humanistic notions and critical slants (Richards, 2009, p.134). Modernist singular reality ontological canvas of a scholar and leader throngs the academia and practitioners with the centralized structural organization; a belief behaviour is formulaic and subjugated. Symbolic ontological viewpoints inclined the organizational world towards socially constructed organizational patterns whereas multiple realities assumptions annex the recipes of critical conjectures in organizations 2016, p.155). Epistemological (Patton, speculations of research mechanisms are adherent to ontological credence. Singular truth predisposition posture the objectivity (modernism) constituent to ascertain how organizations are and how organizations work (Guba, 2004). Conversely subjectivity (interpretive/post-modernism) epistemological facets negated the intuition human should be measured as objects of organizations; here leaders and theorist Grix (2004) tangled with subjects and decipher the

trend in conformity to their contexts. The intact crux of this metaphorical representation is concealed in the S portion of the whole line segment until the ontological assumption of 1 has not inclined to another paradigm the L section of the theorist cognitive structure 1.618 will not dispose of. The disorientation of 1 will be a climacteric phase for 1.618, hence we articulated that theories developed by scholars of organizations have close ontological and epistemological tendencies to Fibonacci golden ratio.

The Golden Angle

The most spectacular constituent among Fibonacci units is the golden angle, which segregates the whole circle 360 degrees into the middle segment in parallel to the golden mean of 1.618 (Livio, 2000). The gratified coalescence of both Fibonacci integrants has been discerned in the domains of architecture and artistic masterpieces since antiquity. The underlying principle for aesthetically gladdening plants and human body parts is obscured in confederated relation of the golden angle and the golden ratio. The numerical representation to find the golden angle is Lehmann (2012) $\Psi = 360^{\circ}$ $-(360^{\circ})(1/\Psi) = 137.5077^{\circ}.$ It is contemplated that most arrangements among leaves and petals of numerous plants exhibited golden angle, as the growing apex of stem moves upwardly leaving tiny primordia behind at 137.5° in phyllotaxis the perfect angle for the utmost amount of indispensable light, air and moisture (Adam, 2005). The absolute rationale and the logic nature has chosen for 137.5° is; if the petals were inclined to grow at 360° or ½, 1/3, ¼ and so on loop pattern repeatedly then the primordia will raise one directly above the other and avert the light for lower ones

(Akipedia, 2008). The most tempting metaphorical analysis of this paper is the comparison of golden angle sagacity and the cognitive composition of reflectivity in organizations. An emerging amount of post-modernistorganizational and management disciplines' pedagogical writings formulate the tacit approaches in mainstream research theories to find the most effectual means and specified ends for critical reflection. Critical reflection contributes to the thought process of leaders by making an insistence probe to reason and logic, interrogating questions on predefined imputes, tackling the forgranted attributes, and unveiling concealed ideologies and predispositions (Askeland, 2006). It is more attached to unearthing impenetrable assumptions which directly or indirectly allied to unquestioned cultural or sub-cultural presuppositions held dear previously (Vince, 2001). The context in which these uncritical deep norms are practised is the unconscious part of cognitive structure and Fook (2004) managers never find the audacity to raise the question about the uncritical assembled value system about culture, reality and life. The valour to reflect on deep-seated uncritical beliefs is what we call a "double-edged sword". At one periphery of this competition reflective organizations will experience the disorientation dilemmas to make a shift in their preceding paradigms and at other edges will face unbearable anxiety, self-examination and assessment assumptions. Mezirow (2000) for critical reflective organizations it is decisive to discriminate between bias and reality, estimations and evidence, and beliefs and legitimate inferences which require a transformative learning process. How we attempted to bond the golden angle and critical reflection route is not only attention-grabbing yet thoughtful for reflectivity in organizations. Both in radical and incremental transformations organizations need Payne (2002)tempered radicals that cause a butterfly effect by small yet systematic reflective practices to un-critical substance. We propose that reflective organizations possess analytical philosophy with a 360° reflection mechanism which blocks the reassessment of questioning at logic and reason. As in the case of flowers requiring a golden angle to avoid overlapping, a similar phenomenon is entailed in reflective practices where ½ angular intervals throughout the loop will overlap the behaviour and block the critical reflection process of lowering un-critical assembled beliefs seated in unconscious. The blockage with 360° is threatening as hidden assumptions remain buried in the subconscious due to the overlapping periodic cycle of visible behaviours at the conscious level until the golden angle worked as a transformative learning process and unveiled the uncritical thoughts of cognitive patterns. In this paper, we dispensed the inspiration of the golden angle 137.5° as the key to reflectivity which succours to control the inward part of the self as well as the outward part to manage self-hungers at work. The suggested angle furnishes the prospect of reflective dialogue resulting in self-discipline, knowledge sharing, tenacity to face feedback, value employee voice, welcome innovations, respect provide diversity and a candid communication platform in the 2007). organization (Fook, Hence reflection in action and reflection on action Schon (1983) provides critical gallantry to question the frame of

references and lead the organizations at double loop learning instead of modernist or traditional single loop organization theories.

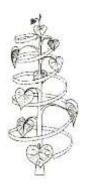
> The Golden Spiral

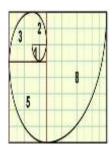
Logarithm spirals or golden spirals are mystifying and inexplicable curves that appeared from Fibonacci golden rectangles and squares also famous as an equiangular spiral. The most enthralling attribute of these spirals is; they hold the same dimensions and proportions even constantly the radius enlarges in size

(Segerman, H. 2010). Application of the golden angle in the reflective organization gives a call to the transformative learning process and uncovered deeply rooted values. The critical organizational theories fabricate the bewitching and vigorous outcome of critical reflection which we call "spiral reflectivity", where every action is reflected at a golden angle and results in larger reflected action, holding the same proportion of curves while increasing the radius of questioning the deep-rooted assumptions (Winer, M. C. 2013).

Fig1: (Golden spiral and Critical organizational Reflectivity)







Critical reflectivity in organizations is also proposed in this paper with a comparison to golden ratio effects where the unconscious as the invisible part of cognition is depicted as the divine ratio S segment and the conscious visible component of mental composition as the L part. L segment remained unquestioned until the Uncritical assumptions S component is challenged to experience disorientation dilemmas in organizations.

Corporate Aesthetics, Organizational Themes and Fibonacci Identities

"Art is your emotions flowing in a river of imagination", (Austin, R. 2017). Art persuades

societal transformation through diverse attitudes, ingraining beliefs and knowledge dimensions of time. It is the established vehicle for communication and a treasure trove of any cultural portrayal memory (Heath, 2010). Aesthetics provoke ardour considerate to pursue a rally for revolution and Taylor (2009) demonstrates a viable correlation between art and the human brain. Renaissance aesthetics, in historical retrospect, is debatably a preeminent gateway for such behavioural inclinations. Metaphysical humanistic models of audacity to innovate what no one has achieved formerly were nonetheless by the renaissance artistic movement (Chanlat, 2004). The inherent attitude of art brings tranquillity,

serenity, leisure, a confession to articulate sensation, and a therapeutic tool attuned to harmony in all roles. Every step of our lives confronts us with undecipherable endearing artefacts; that are not the diurnal grind of existence yet articles that are conjured in the minds aside from daily errands and slogging (Hatch, 2010). The continuation and gratitude balance between mechanical human capital and aesthetic human capital at organizations also intrinsically shaped our behaviours, transport ingenuity, hone aptitude to think out of the box and compose the workplace extremely competent (Gherardi, 2017). The capacity of aesthetics in organizational life is the contemporary notion that copes with the persuasion of art at an individual's impulses, aspirations, cravings, expertise and passion. The comprising spheres of aesthetics (i) archaeological, (ii) empathic-logical, (iii) artistic manner scrutinizes how art wrought working mode, leadership approach and symbolic artefacts to augment connections among groups (Chytry, 2018). The dimensions of corporate aesthetics that governs Warren (2009) at the workplace are; the collision of archaeology at individual's morale, the connection between organizational culture and contiguous articles, and business edifice configuration with corporate DNA. We illustrated in this part how chronologically corporate aesthetics materiality transpire and recast working environment edifies employees' beliefs to contemplate peculiar setup as cultivation of creativity while others as a repellent and strived to these transformed patterns knot organizational themes. The enlightenment era dissects organizational existence into three realms; (i) instrumental, (ii) moral and (iii) aesthetic (Wilber, 2003). This segregation empowered scientists to delve into Witz (2012), how instrumental and corporeality organizational philosophy tangled with modernism theme as the emphatic concern of this objective paradigm is efficiency and labour productivity. Organizational aesthetic literature emerged in the last decades of the twentieth century with a critical wave of postmodernism perceptions, why businesses should care about exquisiteness? Why the productivity ascendancy of the instrumental organizational epoch was fruitless? The answer is conspicuous and discernible. Aesthetic is the comprehension, ambience, effects and reasoning our cognition gleans from our surroundings. The contemporary heave and evolution of corporate aesthetics are on the back of critical theories and organizational "crisis of representation" (Lichtenstein, 2000). Mundane aesthetic inquisition intensifies organizational mapping and magnetizes academia practitioners proffering good epistemology manner to gauge individual verdicts, decision making and behavioural shifting (Koivunen, 2009). The Fibonacci section of this paper answers the interrogative quest of why corporate aesthetic capital over instrumental capital captures attention. Presumptive alluring patterns of Fibonacci identities in nature have engrossed the intellectual world for three millennia. Moreover, psychologists, scientists, biologists and scholars have consensus upon the golden ratio, golden rectangle, logarithm spiral and golden angle as aesthetic tools for hedonic evaluation. Nature and ancient people acclimatized perplexing dazzling proportions and angles to contrived breathtaking artefacts (Horniak, D. 2013). Studies demonstrated nature identified beauty responses to behaviours likewise studies revealed corporate aesthetic impressions amplified employee satisfaction and productivity (Rhodes, G. 2006).

Concluding Thoughts

The paper is embarked to delineate philosophical epochs and their intertwining alliance with organizational discourse. Three Centrum chronological impressions manifested at the stage of the organizational world with mechanistic, humanistic and critical concepts. The exceptional allegorical presentation of the first three Fibonacci digits with Weber, Fayol and Taylor's classical

organizational slants Fib 2 as neo-classical and Fib3 to onwards as critical theories is an unparalleled pronouncement of this study that would accurately tactful to comprehend the descriptions of the entire organizational history. The eminent product of paper is modernism as an echelon, symbolism as linear and post-modernism theories as branched Fibonacci recursion. Further, the realization of Fibonacci family metaphors; golden rectangle and golden ratio endow with fundamental research considerations. approach to proclaim the golden angle and golden spiral in this paper as critical reflection progression in organizations poses a sequence of confrontations to deep-rooted predispositions entrenched in diverse cultures. In conclusion, we would like to accentuate for organizational "crisis of representation" our suggested golden angle is professional indispensable for critical intensification and the cultivation of reflectivity in organizations. The contemporary assertion of our paper showed a correlation between Fibonacci's fascinating string and corporate aesthetic as enhanced behaviour inclinations. The current study extends the organizational conviction and momentous insights that have been prepended in literature yet the conclusion of our research has paved novel ways to additional scholarly cognizance. Firstly the Fibonacci digit string (Fib0, Fib1, Fib2, Fib3....) can confer the literature with the first, second, third and fourth wave of feminism, which is yet again an attentiongrabbing impression amongst "crisis of truth". The second future recommendation is, research conducted on reflective organizations' progression with transformative learning theory stages in connection to the quantum theory stance for the golden angle and golden spiral depiction would carry a crucial contribution.

References:

- 1. Acquier, A. (2018). Uberization meets organizational theory: Platform capitalism and the rebirth of the putting-out system. Academy of Management Global Proceedings, (2018), 77.
- 2. Ali, R. U. (2012). Medieval Europe: The myth of dark ages and the impact of Islam. Islamic Studies, 155-168.
- 3. Attia, M., & Edge, J. (2017). Be (com)ing a reflexive researcher: A developmental approach to research methodology. Open Review of Educational Research, 4(1), 33-45.
- 8. Burke, P. (1997). The renaissance. Macmillan International Higher Education.
- Carroll, S. J., & Gillen, D. J. (1984, August). The classical management functions: are they really outdated?. In Academy of Management Proceedings (Vol. 1984, No. 1, pp. 132-136).

- 4. Benavoli, A., Chisci, L., & Farina, A. (2009). Fibonacci sequence, golden section, Kalman filter and optimal control. Signal Processing, 89(8), 1483-1488.
- Bertens, H., &Fokkema, D. W. (Eds.). (1997). International postmodernism: theory and literary practice. John Benjamins Publishing.
- Bradbury, M., & McFarlane, J. (1978). Modernism. Penguin books.
- Bryman, A., &Cassell, C. (2006). The researcher interview: a reflexive perspective. Qualitative Research in Organizations and Management: an international journal.
 - Briarcliff Manor, NY 10510: Academy of Management.
- 10. Childs, P. (2016). Modernism. Routledge.
- 11. Clay, R. A. (2002). A renaissance for humanistic psychology. Monitor on Psychology, 33(8), 42-43.

- 12. Cooper, R., & Burrell, G. (2015). Modernism, postmodernism and organizational analysis: An introduction. In For Robert Cooper (pp. 149-175). Routledge.
- 13. Copenhaver, B. P. (1992). Renaissance philosophy.
- 14. Cunliffe, A. L. (2003). Reflexive inquiry in organizational research: Questions and possibilities. Human relations, 56(8), 983-1003.
- Davies, C., & Fisher, M. (2018).
 Understanding research paradigms. Journal of the Australasian Rehabilitation Nurses Association, 21(3), 21-25.
- Debnath, L. (2011). A short history of the Fibonacci and golden numbers with their applications. International Journal of Mathematical Education in Science and Technology, 42(3), 337-367.
- 17. Dunlap, R. A. (1997). The golden ratio and Fibonacci numbers. World Scientific.
- 18. Entwistle, J., & Wissinger, E. (2006). Keeping up appearances: aesthetic labour in the fashion modelling industries of London and New York. The Sociological Review, 54(4), 774-794.
- 19. Etherington, K. (2004). Becoming a reflexive researcher: Using our selves in research. Jessica Kingsley Publishers.
- 20. Eysteinsson, A. (2018). The concept of modernism. Cornell University Press.
- 21. Falcon, S., & Plaza, Á. (2007). The k-Fibonacci sequence and the Pascal 2-triangle. Chaos, Solitons & Fractals, 33(1), 38-49.
- 32. Jencks, C. (1996). What is post-modernism? (p. 7). London: Academy Editions.
- 33. Karavirta, V., Korhonen, A., & Malmi, L. (2005). Different learners need different resubmission policies in automatic assessment systems. In Proceedings of the 5th annual finnish/baltic sea conference on computer science education (pp. 95-102).

22. Finlay, L. (2005). "Reflexive embodied empathy": A phenomenology of participant-researcher intersubjectivity. The humanistic psychologist, 33(4), 271-292.

- 23. Fook, J., & Askeland, G. A. (2007). Challenges of critical reflection: 'Nothing ventured, nothing gained'. Social work education, 26(5), 520-533.
- 24. Goldman, P. (1994). Searching for history in organizational theory: Comment on Kieser. Organization Science, 5(4), 621-623.
- 25. Gregor, P. (2006). Recursive fault-tolerance of Fibonacci cube in hypercubes. Discrete mathematics, 306(13), 1327-1341.
- 26. Grigas, A. (2013). The Fibonacci Sequence: Its history, significance, and manifestations in nature.
- 27. Hassan, I. (1985). The culture of postmodernism. Theory, Culture & Society, 2(3), 119-131.
- 28. Heller, A. (2015). Renaissance man. Routledge.
- 29. Ilieva, J. (2015). Fashion design using decorative bands based on the golden and Fibonacci forms. ARTTE Applied Researches in Technics, Technologies and Education, 265.
- 30. Indermark, K., &Klaeren, H. (1987). Compiling fibonacci-like recursion. ACM SIGPLAN Notices, 22(6), 101-108.
- 31. Isgur, A., Reiss, D., & Tanny, S. (2009). Trees and meta-Fibonacci sequences. the electronic journal of combinatorics, R129-R129.
- 34. Kellner, D. (1988). Postmodernism as social theory: Some challenges and problems. Theory, Culture & Society, 5(2-3), 239-269.
- 35. Kipping, M., & Üsdiken, B. (2014). History in organization and management theory: More than meets the eye. Academy of Management Annals, 8(1), 535-588.
- 36. Kitana, A. (2016). Overview of the managerial thoughts and theories from the history: Classical management theory to

- modern management theory. Indian Journal of Management Science, 6(1), 16.
- 37. Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. International Journal of higher education, 6(5), 26-41.
- 38. Knott, R., Quinney, D. A., & Maths, P. A. S. S. (1997). The life and numbers of Fibonacci. Retrieved February, 1, 2007.
- 39. Krauss, S. E. (2005). Research paradigms and meaning making: A primer. The qualitative report, 10(4), 758-770.
- 40. Lamb, H. H. (1965). The early medieval warm epoch and its sequel. Palaeogeography, Palaeoclimatology, Palaeoecology, 1, 13-37.
- 41. Luque, A. (2020). Analysis of the Ethical (and Aesthetic) Framework and Its Relation to Corporate Social Responsibility: The Case of the Textile Industry. In Management and Inter/Intra Organizational Relationships in the Textile and Apparel Industry (pp. 325-347). IGI Global.
- 42. Maciá, E., & Domínguez-Adame, F. (1996). Physical nature of critical wave functions in Fibonacci systems. Physical review letters, 76(16), 2957.
- 43. Mack, D. R. (1990). The magical Fibonacci number. IEEE Potentials, 9(3), 34-35.
- 44. McKinley, W. (2010). Organizational theory development: Displacement of ends?. Organization Studies, 31(1), 47-68.
- 53. Parker, L. D., & Ritson, P. (2011). Accounting's latent classicism: Revisiting classical management origins. Abacus, 47(2), 234-265.
- 54. Pater, W. (1980). The renaissance. University of California Press.
- 55. Perrow, C. (2000). An organizational analysis of organizational theory. Contemporary Sociology, 29(3), 469-476.
- 56. Rehman, A. A., & Alharthi, K. (2016). An introduction to research

- 45. Minarova, N. (2014). The fibonacci sequence: Nature's little secret. CRIS-Bulletin of the Centre for Research and Interdisciplinary Study, 2014(1), 7-17.
- Miskell, P. (2018). Reflections on the integration of history and organization studies. Management & Organizational History, 13(3), 213-219.
- 47. Mommsen, T. E. (1942). Petrarch's Conception of the'Dark Ages'. Speculum, 17(2), 226-242.
- 48. Nagel, A., & Wood, C. S. (2010). Anachronic renaissance. Zone Books.
- 49. Nelson, L. D., Simmons, J., & Simonsohn, U. (2018). Psychology's renaissance. Annual review of psychology, 69, 511-534.
- 50. Newton, L. D. (1987). Fibonacci and Nature: Mathematics Investigations for Schools. Mathematics in School, 16(5), 2-8.
- 51. Omotehinwa, T. O., & Ramon, S. O. (2013). Fibonacci numbers and golden ratio in mathematics and science. International Journal of Computer and Information Technology, 2(4), 630-638.
- 52. Parker, L. D., & Lewis, N. R. (1995). Classical management control in contemporary management and accounting: the persistence of Taylor and Fayol's world. Accounting, Business & Financial History, 5(2), 211-236.
 - paradigms. International Journal of Educational Investigations, 3(8), 51-59.
- 57. Reynolds, M. (1998). Reflection and critical reflection in management learning. Management learning, 29(2), 183-200.
- 58. Rhouma, M. B. H. (2005). The Fibonacci sequence modulo π , chaos and some rational recursive equations. Journal of mathematical analysis and applications, 310(2), 506-517.
- 59. Schmitt, B. H., & Pan, Y. (1994). Managing corporate and brand identities in the Asia-

- Pacific region. California Management Review, 36(4), 32-48.
- 60. Schmitt, B. H., Simonson, A., & Marcus, J. (1995). Managing corporate image and identity. Long range planning, 28(5), 82-92.
- 61. Sinha, S. (2017). The Fibonacci Numbers and Its Amazing Applications. International Journal of Engineering Science Invention, 6(9), 7-14.
- 62. Skov, M., & Nadal, M. (2021). The nature of beauty: behavior, cognition, and neurobiology. Annals of the New York Academy of Sciences, 1488(1), 44-55.
- 63. Srinivasan, T. P. (1992). Fibonacci sequence, golden ratio, and a network of resistors. American Journal of Physics, 60(5), 461-462
- 64. Stojmenovic, I. (2000). Recursive algorithms in computer science courses: Fibonacci numbers and binomial coefficients. IEEE Transactions on Education, 43(3), 273-276.
- 65. Strati, A. (2010). Aesthetic understanding of work and organizational life: Approaches and research developments. Sociology Compass, 4(10), 880-893.
- 66. Taylor, S. S., & Hansen, H. (2005). Finding form: Looking at the field of organizational

- aesthetics. Journal of Management Studies, 42(6), 1211-1231.
- 67. Tubey, R. J., Rotich, J. K., & Bengat, J. K. (2015). Research Paradigms.
- 68. Van Woerkom, M. (2010). Critical reflection as a rationalistic ideal. Adult Education Quarterly, 60(4), 339-356.
- 69. Tubey, R. J., Rotich, J. K., & Bengat, J. K. (2015). Research Paradigms.
- 70. Wickham, C. (2016). Medieval Europe. Yale University Press.
- 71. Williams, R. (1989). When was modernism?. New Left Review, 175(1), 48-53.
- 72. Wyatt, T. D. (2020). Reproducible research into human chemical communication by cues and pheromones: learning from psychology's renaissance. Philosophical Transactions of the Royal Society B, 375(1800), 20190262.
- 73. Zadora-Rio, E. (2003). The making of churchyards and parish territories in the early-medieval landscape of France and England in the 7th-12th centuries: a reconsideration. Medieval archaeology, 47(1), 1-19.