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Highlights

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# Unique Buddha, Unique Christ

By Kuang-ming Wu

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Abstract- This short essay has three sections: One, motherly no-do in Ecclesiastes supports us. Two, Christ self-empties to accept us all to give us his all. Three, Buddha also self-empties in Nirvana in Mercy. Buddha and Christ are unique, not equal not combinable, but each to be committed to with openness.

Key terms: christ's cross, buddha's nirvana, no-do, ecclesiastes.

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UNIQUEBUDDHAUNIQUECHRIST

*Strictly as per the compliance and regulations of:*

# Unique Buddha, Unique Christ

Kuang-ming Wu

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本文提供三段.第一,母愛及傳道書的「無為」維持人生.第二,基督完全接受我們的一切賜予祂的一切.第三,佛祖涅盤之獨特,並不相斥相當或合同,而各自歸依互動互學.

關鍵詞: 基督十字架, 佛祖涅盤, 無為, 舊約傳道書.

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## I. ONE: NO-DO IN MOM, IN ECCLESIASTES

Let us begin with an elusive yet quite common practice of love in family affairs, called in China, "wu wei 無為, no do." Tommy *yells*, loudly and repeatedly, "No nap, Mom!" Now Mom sees how ready he is for nap, but she does no "do 為"—pushing him into bed into WWIII, nor does Mom "not do 不為"—letting him go out into serious accidents. Instead, Mom softly tells him, "OK, Tommy. Don't nap. Just sit here next to your pillow so soft so warm; I'll tell your favorite story. But do no nap, OK?" Tommy nods, no more yelling. Slowly Mom comes in, "once, upon, a t . . . ," and Tommy hits his pillow, all so happily ever after. Mom smiles, and softly tucks him in.

Now, isn't this a fabulous loving "wu wei, no do," but not "non-purposive" (Mom loves) not "action" (Mom acts nothing),[1] just lovingly trailing Tommy along? And Tommy is now happy napping, as Mom is happy tucking him in. Such a magic "no do 無為" is elusive and concrete this ordinary way, wholly beyond logic to systematically parse, for how can anything be neither "do" nor "not do"?

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[1] Donald J. Munro calls "wu wei" a "non-purposive action" in his *The Concept Of Man in Early China*, CA: Stanford University Press, 1969, pp. 142, 144. The phrase is meaningless, showing Munro's desperation.

"This is interesting, pal. But does all this no-do in trifle family squabble have any cash value in our serious adult-living?" O, yes! Mom's loving "wu-wei, no-do," not "do," not "not-do," is pivotal and indispensable in our daily living—I fully assure you, pal. Let us look at the serious Ecclesiastes in the Bible that urges us on this no-do policy. This book is the most un-Jewish and unchristian of all the Bible books. It says that life-gusts keep blowing, now to A, now to not-A, and then to B, to not-B, etc., all without rhyme or reason (chapter 2). We all desperately try to capture A ("do"), which goes elsewhere at once. What we catch is our own sighs, our own breath (*hebel*, vanity).

Description so vivid here is a beautiful poetry of life of dynamic emptiness; the poetry is composed of vigorous capturing of actuality, a definite "do," plus empty winds nowhere specific. Should we then give up and do nothing, in a "not do" act, drifting with dead leaves in winds indifferently blowing? This "not do" is silently set aside in Ecclesiastes, not recommended at all.

Instead, Ecclesiastes urges me to grab whatever happens to come my way, as what happens to come to me is what is meant to come for me. Make the most of what comes, and that is my portion (*heleq*) given me by the Beyond above (5:18-20, 7:13). Such activity is not capturing ("do"), not giving up ("not do"), but to enjoy indwelling at the crest of uncertain waves of winds, a "no-do."

Thus Ecclesiastes urges us all to practice a no-do policy of daily living. We must always be trailing along the blowing of capricious winds ephemeral unsuspected, and take and enjoy what *happens* to "come my way." We will be living happily ever after, as Tommy hitting his pillow sleeping his needed nap he did not want, happily ever after. Failing to no-do so, my portion for me will be enjoyed by someone *else* (chapter 6).[2]

The notion of "portion" here is extremely important. Let us dwell on it for a while. We must let

[2] All this is my coherent elucidation of "hebel" (pp. 101-102, 225, 295, 401) and "heleq" (151, 176, 306, 371, and 402) in Choon-Leong Seow, *Ecclesiastes*, Anchor Bible, 1997. Ecclesiastes 1:2 (12:8) is rendered "Breath of a breath! The slightest breath! All is a breath!," by R. B. Y. Scott, in *Proverbs, Ecclesiastes*, Anchor Bible, 1965, p. 209.

Commentators are usually piecemeal without synthetic vision, and in addition loaded with usual impressions *out* of line with the original. "Hebel" as breath is cumbered with "ephemeral, empty, meaningless, unexpected," all needless extras to turn the down-to-earth urging of Ecclesiastes into empty pessimism. My synthetic vision, in line with the thrust of Ecclesiastes, coherently elucidates with caring no-do, to bypass all such baseless accretions.

God be God, high above, unknown to us. All this while, we must allow ourselves to be human "under the sun," as the Ecclesiastes keeps saying, as we receive what is allotted to us from on high unknown, and enjoy our portion as much as humanly possible. My portion is mine alone to enjoy and to share.

Such is what Ecclesiastes said. Now let us extrapolate. Sharing is joy ultimate; we can and must share our portions together to enjoy life together. Such sharing applies also in the realm of religion, since Ecclesiastes is part of the Old Testament. In order to share, I must first have my portion all my own. My portion is uniquely mine alone, one and only.

If I am a Christian, my unique portion that no other religion can have is "Christ and him crucified" (1 Corinthians 2:2). This is my unique bliss, one and only, that I cherish absolutely, and so I cannot help but share my exclusive joy with you. It is completely up to you to accept or reject my offer. But my joy-responsibility remains. It is to offer you to share with you my exclusive portion, one and only.

We call this, my joy-responsibility to share, "Christian mission." By the same token, *you* have received your unique portion from the ultimate on high that is unknown. You have your joy-responsibility, then, to also show and offer me your unique portion, one and only. And it behooves me to accept your joy-portion into my joy-portion. We can then enjoy our life together.

## II. Two: Christ all-Accepting, Self-Giving

And that is what has happened in Christianity, and is still happening now. We see even the most abominable practices in other religions were accepted into, of all places, the very center of Christianity. Three examples suffice. One, offering of precious first-borns to ferocious Moloch[3] is accepted and digested into God in love offering his Only Son on the cross, to woo us back into his fold.

Two, gruesome cannibalism[4] to eat the victim for his life-vigor is accepted, and digested into Christ's offer of his flesh and blood to us to partake of his life-vigor (John 6). Three, sexual union with Baal the divine husband[5] is accepted and digested into Yahweh as husband wooing his unfaithful wife the Israelites back into his divine-human love, and Christ giving himself to win back his wife the church.

Mind you, however. "Digestion" here amounts to putting upside down the meanings of the original offers from these other religions. Our offering of our

first-borns to appease Moloch is now changed to God's offering of his Only Son to woo us back. Our pursuit of sexual union with Baal our husband is now reversed to God our husband pursuing us his unfaithful wife. Our pursuit of victims for their life-vigor is turned into Christ the Victim pursuing us to "eat and drink *him*" (John 6).

All these revolutionary reversals show the special uniqueness of Christianity; it is thus that the Christian's very acceptance and digestion of other religions show how special Christianity is. It is the Christian theology of the sacraments. Now we must notice what this "sacrament" amounts to. "Sacrament" twists and turns meaning, and such twist is beyond logical analysis to parse. The Christian sacraments are entirely bodily, offering of the first-born, sexual union, cannibalism, in the revolution of orientation from other religions to Christian.

Finally, to culminate all above, Christ goes to the lowest the most painful. Ugly pain of death on the most abject cross *is* Christian theophany, religious hierophany[6] (Philippians 2:6-11, 1 Corinthians 1:-2:). This oxymoron, the lowest as the highest, is the absolute special in Christianity. The Bible is the humanly ugliest made the divinely most beautiful, by Christ on the cross. Christ in love of us picks up our ugliest to show us how much he loves us. When we meet our ugliest our lowest, we meet him the highest, right at our lowest ugliest, and the most painful. And then he lifts us up to joy the highest.

What is incredible is here. All religions soar up to the highest. In contrast, Christ turns to the lowest and accepts the lowest to turn it into the highest; after all, Christ is the Creator. Everything begins here (Genesis 2). "Down" is steady, earthed, and cannot go any lower. Christ is with Chinese tyrants and German Hitler. Thus Christianity supports from beneath all religions. In fact, Christ has been doing so as described above. That is the special uniqueness of Christianity, seen nowhere else.

Christian mission is here, urging other religions to inter-support as Christianity does them. They must concur on this inter-support, their passionate ideal, with their own different reasons. Meanwhile, Moloch, Baal, and Hitler vanish. Christ's cross now has no Christ, and the cross itself vanishes into history. Babies powerless are dawning parent care, and the new Heaven and the new Earth dawns on us. Such Christian sacramental theology is body thinking fully at work in this ultimate realm of religion.

"So, what is so big about all that? What is so unique about *Christ* himself? The apostles' daring, self-

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[3] This horrible "passing through fire" was extremely popular in ancient Israelites with surrounding races.
[4] Gruesome cannibalism is satirically depicted in a pamphlet titled, "A Modest Proposal" by Jonathan Swift, 1729.
[5] This is temple prostitution, "hierodule" in ancient Greece, on a massive scale; it was euphemized as sexuality made sacred.

[6] On hierophany, see Mircea Eliade, *The Sacred and the Profane*, NY: Harcourt, Brace & World, 1959.

serving declaration in the strongest possible wording,[7] simply floors me; they say that we are not given under heaven any other savior than Christ (Acts 4:12)! Can you explain *that*?" All right, pal. Let us begin here. We are impressed by how the apostles risked their lives declaring it. But what is "it"? Paul said, "I determined not to know anything among you except Jesus Christ and him crucified." (1 Corinthians 2:2) Let us then unpack Christ's cross, to wit, Christ on the cross.

In Christ's cross, his deathly pain meets our deadly pain; we in pain meet him in pain. Christ is ultimately concerned with us to enable us to be ultimately concerned with him.[8] In his cross, Christ gives his all, the totality of his self, all divine all human. This total gift "saves" us all. His cleansing our sin, by his cross, prepares our total acceptance of him totally accepting us. Total acceptance implicates ultimate concern, of course. In Christ, we are now "new creation" (2 Corinthians 5:17). Our very breaths puff out brand new Christ. Thus it is that *his* total offering "saves" us totally.

All other religious leaders and advocates stand aside to counsel us. In contrast, Christ on the cross plunges right *into* our heartfelt inside. He in all his totality comes into "me"; he in pain comes into me in pain. Inside me, he in pain powerfully grips me; he would never let me go until he gives all his very best. "In my Father's house, there are many mansions," and he is preparing a reserved place just for me (John 14:2). It is in this way that he gives his "all" to grip my "all," so as to give me the very ultimate best in all heaven and all earth, and far beyond heaven and earth, he the Son of God, and God himself. Nothing greater than this gift can be imagined.

His total giving here amounts to this exchange no one has ever heard of. Christ all-wealthy turns all-empty on the cross, so that we all-poor can turn all-rich in him, in his total grip of love, the Love that is beyond all loves everywhere. He first loves us, so we can love him and love our neighbors in him. This is how "there is no other name given us under heaven to save us" (Acts 4:12) but Jesus Christ on the cross.

In all, we simply can never get over this drama totally unheard of anywhere in world history. In offering on the cross all of himself to us, Christ wants us to all-accept his all-acceptance of us. All-acceptance is pain, expressed on the cross, and all-acceptance is joy, expressed in the Eucharist[9] of joyful thanksgiving for his gracious offers that are no less than he himself in all his totality. By Christ's all-being, we are invited to all-accept,

with ultimate concern, the joy of pain of Christ's heavenly offers of his all-acceptance, in his ultimate concerns of his ultimate Love.

The paschal Lamb, Agnus Dei, is now offered (1 Corinthians 5:7), total and intact, not a single bone broken. Accepting this Lamb is called "eating and drinking" at the Last Supper and the First Supper into new Heaven and new Earth (John 6). This is how we are "saved" by the Savior, one and only, given us under heaven (Acts 4:12). "Any one is challenged to cite any religion even remotely paralleling such extraordinary explosive drama of salvation, so empty so full, intimately human, vastly cosmic," so would the Christian apostles shout.

We admire their sheer goodwill risking their lives declaring it. Still, our reactions differ; we may or may not agree with them totally. The Christians would throw all of themselves into their blusters, while the Buddhists may generously applaud these apostles—with the Buddhist own goodwill to concur with Christian goodwill, with their own Buddhist reasons.

Looking back, we realize that the "arrogant" Acts 4:12 shows the following. The apostles felt in their bones the fiery Breath of the Beyond gusting "from heaven," and they saw the Gust Pentecostal in Jesus as the Christ, and they had to declare it. Sounding "self serving," it was divine-serving on which they risked lives. Their "daring" audacity "floored" some folks, and caught Pentecostal fire in others. Christianity was born there.

Later, Kant the pious Christian sighed awed at the starry heaven and intimate conscience. Still later, Hegel a theology-student saw the Geist the mind-spirit gush through history, and Western philosophy followed as their footnotes, naively assuming human logic as cosmic reason.[10] The apostles' vision of Christ all-accepting all-giving was consigned to "theology." Such is how religion *uniquely* fared in Judea and the West.

## III. THREE: BUDDHA, UNIQUE, THREE CAUTIONS

"Are you not arrogant in saying all this, though?" Well, I am not arrogant if what I assert is a self-*emptying* Christ all-*dead* on the cross, right? No one can be accused of arrogance in asserting emptiness, can he?

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[7] On grammatical niceties on how strong the wording is, see *A Grammatical Analysis of the New Testament*, Roma: Editrice Pontificio Istituto Biblico, 1996, p. 360.

[8] Neither Schleiermacher nor Tillich has gone far enough to the Christ himself.

[9] "Eucharist" is literally, grace, gratitude, and joy, all three in one. See *Merriam-Webster's Collegiate Dictionary*, Eleventh Edition, p. 430.

[10] Thus even the "sober" empiricist, the likes of G. E. Moore, confidently examine theories, to betray their own Hegelian naivete that the rational (their own) is the real. But the West has another strain of thinking in Plato who, disillusioned at wayward actuality, takes flight to the lucid Sun of Ideas, as told in the Myth of the Cave in Plato's *Republic* (514a-521b). So, A. N. Whitehead claims, "Western philosophy is a series of footnotes to Plato" (in his *Process and Reality*, NY: Free Press, 1978, p. 39).

The West thus wanders back and forth between Plato and Hegel, and Kant's *First Critique* shows how lost the West is. This is, I think, because the West takes "reasoning" as separate from actuality, ever without body thinking, and so neither Plato nor Hegel can understand Christianity, much less Buddhism. But pursuing this line of thinking, my line, would take us too far away from our concern here.

"Now, how do you compare Christian emptiness with Buddhist emptiness?"  I can smile and offer Christ's emptiness to Buddha in *Buddha's* total emptiness, and both can shake hands.  Mind you.  Shaking hands requires standing *opposite* one to the other.  Buddha and Christ can have a long delightful dialogue on "emptiness," can they not?

Such dialogue would bring out the uniqueness of Buddha with the uniqueness of Christ.  "Isn't 'uniqueness' one-only?  You cannot have more than one 'one only,' now can you?"  A good protest you raised, pal.  My response is simple, just following each case as it arises.   Buddha's uniqueness is Buddha's only; Christ's uniqueness is Christ's only.  There is no other uniqueness of Buddha except for Buddha's.  There is no other uniqueness of Christ except for Christ's.  Uniqueness is "one only" in each one-only case!  Isn't all this fair enough for "uniqueness"?

"What do you mean?  I don't understand."  Let me be concrete, then.  The major point of this short essay is to specify the special uniqueness of Christianity, in the form of its strongest possible declaration, "There is no other savior under heaven given us!" (Acts 4:12) This essay has tried to show how reasonable such unreasonable declaration is, *in the midst of* august world religions.

After all, "religion" means how we all-human in Mother Nature aspire toward the Beyond-human.  Therefore, our thinking mode appropriate to religion should be motherly no-do, to *allow* us all Tommy's to gain what we all need, often even against our explicit wishes, as all mothers always do to all their dear Tommy's.  Religion is a no-do affair of our gentle Mother Nature.

Now, this motherly allowing includes self-emptying other-acceptance, solely for the sake of others, and here is how "uniqueness" can be unique to each case, each in its unique way.  Motherly allowing is radically practiced by the Christ on the cross, as passionately described above.  But we must notice.  In his own unique way, Buddha did so as well as Great Mercy *Mahakaruna* in the all-emptying Nirvana all blown-off, all-death beyond death beyond life, all-calm.

Focusing on Christianity, this essay tried to show how the Christian "no other" means "special and unique," in a deathly accepting way in an idiosyncratic Christian manner.  The same can be said of Buddhist uniqueness, but in the Buddhist own way and no other in the whole world—can it not?  We remember the monk Ta-chih who sacrificed himself on the pyre 大志焚身, to cause Yang Ti of Sui dynasty to withdraw his order for dispersing the monks.[11]

Christ's death on the cross is matched by monk Ta-chih's death on the pyre.  Ta-chih moved the dynasty to take away its ban on the monks; Christ moves people to accept his acceptance. So, both are alike; both self-empty to move people. But their contexts and their meanings are quite different, and the ways they moved people also differ considerably. Importantly, Christ accepts all our ugly practices; Ta-chih does not.

Christ died in much pain; Buddha calmly vanished in Nirvana beyond death beyond life. They both dwell in emptiness, but they differ.  For Buddha, "nothing" is the be-all and end-all of all, including Buddha himself, in Nirvana. For Christ, "nothing" begins to yet to begin, as he embraces all, in creation.  When I am empty, so lonely or so ashamed or so much in pain, Christ is here gazing at me, whispering, "I am here," while Buddha is nowhere, beckoning me silently from nowhere.  "With Christ, warm in pain" differs from "Buddha-calm, in clean snow."  But, warm in pain or calm and clean, both are empty, all empty, each uniquely.   And the list of contrasts and similarities continues.

"Are you sure Buddha's calm is unique in all religions?" Well, many religions are noisy, such as Islam. People say the "grave-garden" is absolutely calm, and Buddha's calm is beyond grave-calm, because grave denies life while Buddha alone denies *all* denials.[12] Buddha's calm is unique because he *alone* denies all denials, denying even itself denying; no other religion does such radical total denial.  It is Nirvana no other religion in world history has.

In some such manner as this, the uniqueness holds for Buddhism, differently from how the uniqueness holds in Christianity. Calm pervades all by ending all in Buddhism. Calm pervades all by beginning all in Christianity. Whether what is said here has been successfully described above or not, and how far the present essay has succeeded in doing all this, if it has, must be left to the reader to judge.

Now, lastly, three practical cautions on uniqueness are in order. *One*, you ask, "You put Buddha and Christ side by side.  Are Christ and Buddha equal, then?" O, No.  Uniqueness implicates difference, not equality. Buddha and Christ are differently precious; we are ultimately the richer for being blessed differently by both differently uniquely. *Two*, you ask, "Can we have them both, then?" O, No. Uniqueness is uncombined. Claiming to be a Buddhist Jew, Boorstein bypassed key features in Judaism (judgment, obedience, etc.).[13]  Still, uniqueness can do dialogue, shaking hands from

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11 For details, see 丁福保編纂, *佛學大辭典*, 北京市文物出版社, 2002, p. 197.

12 So many schools and literature on negativism in Buddhism in China are countless.  See, e.g., Junjiro Takakusu, *The Essentials of Buddhist Philosophy*, Honolulu: The University of Hawaii Press, 1956, and Wing-tsit Chan's survey in his *A Source Boiok in Chinese Philosophy*, Princeton University Press, 1963, pp.336-449.  For convenience, I follow the line of Nagarjuna and such.  See Chan, pp. 343-369 and Takakusu, pp. 96-107.

13 Sylvia Boorstein, *That's Funny, You Don't Look Buddhist*, HarperSanFrancisco, 1997.

opposite ends, as Mr. King tried for Buddhism and Christianity.[14]

*Three*, you ask, "*What* can we do, then?" "Commitment with openness" is required of us. Mutual reach-out (open) needs reaching out *of* different positions (committed); loving others (open) is by "me" each different (committed). "*How* can we be committed?" We cannot specify how. We have no argument on taste—because taste is personal—that is a tip of commitment personal and unique. As we innately choose our mates who choose us, so we converge to what is constitutionally congenial to us. We have no manual of commitment as we have no manual of mate-choosing. *We* have the final say on commitment that finally decides us.

These three cautions on uniqueness—no equality, no combination, but commitment with openness—point to three more areas *beyond* this essay, to explore in three more essays and three more books. Religion is in the ultimate, and ultimacy is the vast horizon unlimited. We take a deep breath to soar breathlessly high on and on, even beyond our short life-span.

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[14] Winston L. King, *Buddhism and Christianity*, Philadelphia: Westminster, 1962. How far he succeeded in it remains to be seen. I have not seen anyone else who seriously tried the project.

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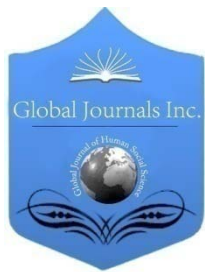
# Metaphoric Spaces and Wildean Narrativity

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# Metaphoric Spaces and Wildean Narrativity

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## I. INTRODUCTION

In "Oscar Wilde as a Temporal Designer: A Case Study of *The Picture of Dorian Gray*", Behin and Khiabani investigated the temporal structure of Wilde's only novel. The results indicated a sophisticated underlying temporal design in the narrativity of the work. Conducting a similar procedure, the present study aims at investigating the spatial structure of this novel. In the recent narrative analysis, spatiality has gained a very significant status for narratologists due to the awareness of its grave role in a narrative structure. This study aims at applying the most influential theories on spatiality, proposed by Mark Johnson, and Hilary Dannenberg on this novel. The paper attempts to identify the implications of spatial narrativity on this work. Discovering the novel from such spatial perspective heavily reveals the existence of a spatial structure in the narrative that constructs its abstract level, and indicates numerous spatial components that do not come into sight on the surface level.

Mark Johnson's *The Body in the Mind* is basically an attempt to prove what has been regarded as the separation of 'mind' and 'body', and 'imagination' and 'reasoning' as completely different concepts is no more than allusion. As an oppositionist to such a separation resulting from an "objectivist viewpoint", Johnson maintains that human body is not simply a machine to transfer perceptions to the mind for analysis,

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but rather it is an existent in a complicated interaction with other bodies. This attaches a much higher position to 'body' as an existent 'space'. Mark Johnson and later Mark Turner indicated that human experience "is structured metaphorically in terms of the bodily experience of space" (Dannenberg 65). Johnson writes human mind in its very abstraction needs a kind of imaginary, or what he calls "metaphorical map" for its analysis and reasoning; this implies a mental need for 'a metaphorical space' achieved through the spatial experience man gains through his body.

According to Johnson, human inevitably experiences innumerable spatial maps in the physical life, experiencing paths from "your bed to the bathroom, from the stove to the kitchen, from your house to the grocery…" (113). In addition, there also exist so many other paths, which do not belong to this physical world, but merely inhabit in our imagination, "such as the path from Earth to the nearest star outside our solar system" (113). Or, one may talk about a metaphorical path, for example, a path indicating a traverse from a point A in time to a point B in time, in which "a linear spatialization of time" (114) helps the mind grasp the abstract nature of temporality by associating it with the concreteness of space. Creating a mental image of such abstract notions like 'time', Johnson believes, indicates the role embodiment plays in man's mental conception, and the inevitable interrelation of 'body' as a space and 'mind' which necessitates imaginary or metaphorical spatialization of notions in order for making them comprehensible and assessable for mind.

Regarding the new approaches, the study of space in literary works can be categorized into two major branches:

1. The representation of space in narrative texts

   This refers to the employment of space, representing itself in the narrative as setting that dynamically changes itself in order to correspond to the events taking place within it.

2. The spatialization of abstract notions

   Space stands as a concrete entity whose comprehension stands much feasible for human mind than abstract notions like death, life, love, and time. According to Johnson and Turner, human mind gets aid from concrete notions, such as space, for its analysis of these abstract ideas. Death might be spatialized by undertaking the body, life by physical activities, and love by flowers. Among other important spatializations, stands the case of time and temporality. Time as an abstract concept stands highly allusive for human mind

to comprehend, especially in case of reading in which the reader needs to experience it not through direct perception but within the channel of a fictional experience that is indirect. In such indirect fictional experiences, the apprehension of time, its passage and significance turns out to be complicated and unfathomable. In such cases, "human mind often resorts to the more concrete parameters of space to grasp it" (Dannenberg 65). For instance, in visual narratives, the green trees may represent the passage of time from one season to another by gradually getting pale and bare in which they, as existent bodies, function as concrete spaces for the conceptualization of time and its passage.

Space and spatialization, referred to as metaphorical maps or "image schemata", have been classified by Johnson, and were later adopted and completed by Hillary Dannenberg in her book *Coincidence and Counterfactuality*. She believes what Johnson provides is a basis for "a cognitive exploration of fictional space" (75). She identifies six image schemata taken from Johnson's "orientational feats" (Johnson 30) "performed by the human body in the normal real-world spatial environment [that] are of particular relevance for the exploration of the simulation of space" (Dannenberg 75) in narrative texts. These schemata are introduced by her as *containment-boundedness* (in-out), *paths* (from-to) and links, *center-periphery* (inner-outer), *verticality* (up-down), *horizontality*, and *portal* or window.

Teresa Bridgeman in her chapter entitled "Time and Space", in a selective method, refers to Mark Johnson and Hillary Dannenberg's 'three dimensionality of narrative space' namely *path*, *container*, and *portal*, as the most important and central spatial concepts in which 'path' and 'container' are taken from Johnson, and 'portal' is a concept additionally proposed by Dannenberg. In the present paper, I will also exclusively work on these three spatial image schemata, since they construct the most essential (and common) part of the spatial plotting of narratives. I will also employ *fork metaphor* and its grave application in the narrative. These four selected spatial notions might be defined as:

*Path:* already briefly discussed above, paths might be physical (i.e. from London to Dublin), non-physical or imaginary (i.e. from a lover's heart to the beloved's heart), or temporal (i.e. from today to tomorrow). Every path always contains three similar parts: "1. a source, or starting point; 2. A goal, or endpoint; 3. A sequence of contiguous locations connecting the source with the goal." (Johnson 113).

*Container:* "[T]his schema is used to evoke surfaces as walls containing or enveloping further areas of space and their contents" (Dannenberg, 75). Houses, cities, countries, and specifically "movements in and out of rooms, clothes, [and] vehicles" (Johnson 21) all are

containers that refer to bounded spaces which separate one from other containers. Each container inevitably implies certain features and characteristics imposing certain circumstances on the character who is bounded within it. Consequently, each container not only writes specific qualifications on a character, but also it hinders the enforcement of different traits offered by other containers. It should be reminded that containers, as paths can, might refer to a physical boundary or a nonphysical one. A cell a prisoner inhabits in refers to a physical container, while a person who fights for the sake of a personal belief is bounded in his faith as a nonphysical container imposing its specific conditions and demands on the believer. Human body is also considered as a 'container' from which one hears, listens, and evaluates the out world. Johnson refers to this container as "center-periphery".

*Portal:* This term is what Dannenberg added to Johnson's image schemata. She believes that while Johnson refers to containers as "the most experientially salient sense of boundedness" (Johnson 21), such containment can be most acute through windows or portals by which the interiors and exteriors can be perceived. In fact, what Dannenberg proposes is to differentiate one specific container from another specific container by identifying the gate in and out of these containers. This highlights the particular characteristics defined by each container that impose themselves each time a character enters it through a portal, and fade away as he gets out of it. Portals may also metaphysically open gates to different worlds, or provide windows to past, or future in surreal narratives. Bridgeman, taking these notions directly to narratives, provides successful examples for these three notions as below:

*Path […]* can be more directly be associated […] in pilgrimage narratives […] *container*s maybe rooms, houses, vehicles, or entire cities [… associated with] narratives of exile[…]. Dannenberg's *portal* maybe a doorway through which characters can enter or exit a room, or it may be a window through which characters can observe or be observed by others in adjacent spaces. In novels of the fantastic, portals between different worlds, such as mirrors, take on particular significance as privileged sites of power (55-6).

*Fork Metaphor:* Fork metaphors are employed in either diverging roads of physicality or non-physicality. Characters who stand in doubt on the crossings of paths leading to different geographical places, two different countries, cities, or even houses are in fact experiencing a fork metaphor forcing them to opt one of the paths leaving the other behind; some other fork metaphors may propose non-physical or abstract diverging paths. According to Dannenberg, an abstract fork metaphor is "sometimes used to describe two

different stages of a decision-making process"(71). Employing this spatial technique in narratives creates suspense for the readers, and more importantly testifies the characters' mentality and nature by letting them decide on which path they are apt to take, when free will is there.

Besides the new perspectives of space, the importance of place and space from its traditional definition still stands undeniable. Looking at narratives from such classical angle can still be a revealing instrument in the analysis of narrative texts. Amy Watkin in *How to Write about Oscar Wilde* writes in every chapter of this novel, one enters or exits one room, and these frequent movements, rooms and their probable significance are a good case of study for researchers who are interested in this narrative text (129-30). For this reason, I would start the spatial analysis of the novel by traditional considerations of space as part of the setting. The novel opens with a delicate space/place description of the studio, in which the characters are introduced to the reader. Setting the initial chapters of the novel in summer, as the most favorite season for Londoners regarding its more sunshine and less rain, must have had a strong effect on the Londoners just starting to read the novel. "The rich odour of roses", "the heavy scent of the lilac", the more "delicate perfume of the pink-flowering thorn", "the gleam of the honey-sweet and honey-coloured blossoms of a laburnum", whose "tremulous branches seemed hardly able to bear the burden of a beauty so flamelike as theirs", and "the fantastic shadows of birds in flight" (*CW* 169) take the reader's imagination to the fascinating virginal beauty of nature where every single creature stands for transcendence. The fantastic *natural* vision enforces the reader to expect an incredible upcoming. The fantasy, the luxurious curtains, and Persian saddle bags, hand in hand create a fabulous and elevated space for the readers. Still busy with the visualizations of this spatial greatness, readers are introduced to the characters staged one by one in a manner as significant as the surrounding already presented to them.

In all chapters, these spatial elements function differently, but all aim at one common destination: conveying issues that are not pointed at directly by the narrator. For instance, we hardly come across descriptions or elaborations on characters' social class or financial strength; but surprisingly, we all find them socially high and financially remarkable. This certainty results from a spatial visualization that gives us the sense of high rank Lord Henry Wotton, Basil Hallward, and Dorian have. In contrast, Sibyl Vane appears a poor and lower class character from the very beginning of her presence, since she is firstly presented in an isolated, dark, and "absurd little theatre" (*CW* 211). The reader's interpretation simply generates from spatializations that provide a basis for the characters presented in them. Space descriptions continue their same role in the rest

of the novel prior to every incident presented to the reader. When Dorian meets Sibyl, firstly a gloomy space is represented; when he meets Basil at the night of the murder, a foggy description of London is given first; when Dorian trying to get rid of the portrait stabs himself, a calm night is described prior to it.

Another significant issue in the analysis of space in this novel is the remarkable number of rooms in which characters frequently meet and dine. The word 'room' has approximately been repeated a hundred times, and has frequently been compounded to make places like 'morning room', 'dining room', 'school room', 'dressing room', 'music room', 'play room' and 'drawing room'. This wide range of specialized rooms partially indicates the aristocratic nature of the characters who inhabit in them. The diversity, as discussed above, adds to the height of social class, and consequently implies a high estimation of the three major characters of the novel. But surprisingly, as the narrative goes by, and as the readers gradually make a nearly high estimation of these characters, they may notice one odd matter; the rooms are frequently malfunctioning. For example, in chapter XII when Dorian is to meet Lord Henry Wotton for dinner, Lord Henry is waiting for him in a "morning room", while it is about nine o'clock at night (*CW* 265). In chapter VIII, Dorian gets up in the morning and passes to the library for breakfast (*CW* 248). The usual room for Dorian to rest is library; his meetings and eating usually take place there. No hint is given of Dorian reading a book in that room except for the yellow book with its various copies wrapped in different colors.

As already noted, readers never find Lord Henry Wotton or Dorian reading in their libraries, for an instance, and these rooms remain in their malfunctioning manner rooms for other purposes. Recognizing this in the upcoming chapters of the novel gives an impression different from the initial appreciation of these characters not only for their specified rooms, but also for the existence of libraries in their houses that create an elevated and educated image of the characters who have already graduated from Oxford. All these spaces and the spatial descriptions which are always there in the novel before any incident is to come up shows that spatial setting is an inseparable element in the construction of the novel.

According to current notions of space, one of its employments in a narrative relates to making abstract notions understandable and comprehensive for the reader; this is what theorists refer to as 'concretization', 'spatialization', or ' spatial visualizations'. *The Picture of Dorian Gray* has largely benefited from this 'spatial property' in its plotting. The novel revolves around a centrality of a wish coming true, in which after unveiling Basil's portrait, Dorian wishes that the portrait would bear the burden of time while he himself remained as young as the portrait everlastingly. Surprisingly, his wish comes true, and the portrait not only writes the passage

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of time on itself, but also it bears the burden of sinful and dreadful deeds of him. His wish coming true, the readers are confronted with an eternally young man for whom time stands motionless, but the point is that its passage stands contradictorily inclusive to all characters, the readers, and Dorian's conscience (soul). In this regard, the portrait acts as a space employed for the indication of temporality that acts in a double-fold manner: dynamicity in its fixity, or fixity in dynamicity. Both Dorian and the portrait stand as two spaces (regarding their physical spaces) and their unnatural temporal capacities of fixity and dynamicity, respectively stand as sources of spatialization of time and its two-folded capacity. Such spatialization creates the opportunity to help the reader grasp the unnatural incident of an abstract transference of the passage of time from man (as being condemned to it) to an object (with an unchangeable nature) through concretization of its abstract nature by the spatialization of time in both Dorian and the portrait as symbols of temporal fixity and temporal dynamicity, respectively. So, the portrait turns out to be a spatialization of time, which reminds the readers of its passing nature, despite its motionlessness for Dorian.

Moreover, the portrait stands as the spatialization of "conscience" that plays a great role as a confronting source against Dorian and his cruel and guilty ambitions. Roswitha Mueller refers to this portrait as "visualizing the moral turpitude of Dorian in the form of an ever increasing ugliness" (176). Dorian enjoys an eternal youth, the fascinating theories of Lord Henry Wotton, the excitement of copying the hero of the yellow book and even Londoners' appreciation despite his disfavored acts and manners. Dorian's life simply suffers from one important thing: his conscience; So conscience stands as a crucial antagonist in the novel. It is the only force against Dorian that never leaves him alone and gets aware of his deeds even prior to him. For instance, after his argument with Sibyl, which resulted in her bitter suicide, the portrait starts its hideous changes before Dorian hears of this incident. The portrait repeatedly warns him, and gradually turns into a deeply serious threat for him; after any cruel act of him, the only thing Dorian thinks about is the probable changes in the portrait. This means what threats Dorian, or in other words the only thing Dorian finds threatening is an abstract entity, whose function, importance, and revealing nature cannot be estimated in its abstraction. The spatialization of Dorian's conscience in the portrait provides a concrete, understandable, and evaluative entity for the reader. Here, the application of spatialization of abstracts helps both the author and the reader to convey and comprehend, respectively, such an abstract notion by having it spatialized in the portrait as a concrete space.

Shifting to path as another spatial category, the characters of the novel stand as the most convenient samples of spatialization. Basil and Lord Henry stand as two metaphorical paths, which invite Dorian towards the destinations each one has in store for him. Meeting Basil Hallward and Lord Henry Wotton provides Dorian with two dissimilar paths which gradually prove to be contradictory and symbolizing the roads to salvation and corruption, respectively. When Dorian meets Basil and gets closer to him, the readers perceive a pure young man whose innocence highlights his personality. During Dorian's short period of intimacy with Basil, Dorian is no more than an immature getting-to-know beautiful boy. Later, this closeness and intimacy turns from Basil to Lord Henry, and alongside this change of path from Basil to Lord Henry, Dorian starts experiencing newer affairs and practicing new theories proposed by him. Stepping on Henry's path unlocks a new gate to a new world of sensation, pleasure, and hedonism[1]. This path not only opens new layers of life for Dorian, but also unveils additional aspects of his personality to the reader. The interesting point is that Dorian can never make up his mind between these two paths. Basil always invites him to a moral life; Lord Henry to a life style he himself has never lived but has always theorized about. Applying fork metaphor provides a more comprehensive method to elaborate on these two paths broadly regarding the fluctuations Dorian shows between Lord Henry and Basil who are spatially regarded as paths in the present study.

Fork metaphor also stands completely influential in the plotting of the narrative, through which many of the events of the novel have the capacity for analysis. When Dorian meets Basil and consequently Lord Henry who is an Oxford friend of Basil, the roots of a fork situation starts cultivation and grows more complicated when we learn that Dorian is no more than an immature imitating pupil standing in dilemma between two tutors: Basil at one side and Lord Henry at the other. The first visit of Lord Henry and Dorian stands as the origin of the fork situation. In the studio, while Lord Henry wishes to stay and chat with newly-met Dorian, Basil insistently wishes him go and not to dictate his "bad influence" on Dorian. In that situation, Dorian stands trapped between Basil's recommendations on Lord Henry's poisonous talks, and the charming lectures of a man who has no doubt been interested in him at first sight as the point of fork metaphor for Dorian. Dorian, fascinated in Lord Henry and regularly warned by Basil Hallward, repeatedly experiences the great divide of Basil's fashion and that of Lord Henry who moving further posit much more differences of ideologies and manners. Although in practice Dorian proves a graver taste in following Lord Henry rather than Basil, he can never come up with a final decision of abandoning one of them for the sake of the other. In the

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[1] For more information, refer to Gillespie (1995; 2007); Shusterman; and Murlanch

course of the novel, Dorian repeatedly finds himself on the division of the two paths of Basil and Lord Henry, which later veritably stand as the path of the heaven and the hell, respectively.

Following his argument with Sibyl after her 'bad act', Dorian returns home and identifies the first changes in the portrait. Contemplating on the issue, once more he stands in a fork situation: Lord Henry who knows women and believes he should not trouble himself for Sibyl who "was nothing to him now" (*CW* 245); on the other hand, immediately realizing the change in the portrait, he decides to get rid of Lord Henry's poisonous theories and return to Basil in whom he believes as the path to goodness and salvation. He realizes that "he would not sin. The picture, changed or unchanged, would be to him the visible emblem of conscience. He would resist temptation. He would not see Lord Henry any more (*CW* 246).While it seems he makes up his mind for choosing between the two paths of "temptation" and "goodness", the moment he meets Lord He nry once more invites him to the path of pleasure and experience. He simply forgets Sibyl's suicide as a wonderful play, and to the reader's shock steps on the path Lord Henry invites to by his fascinating lecture.

Basil's murder, as a loving, caring, and moral-seeker character, is also a case of study in this regard. From the very beginning of the novel, Basil proves a true nature with a father-like caring attitude towards Dorian. Frequently he tries to keep him away from Henry's poisonous theories, and when he hears of the rumors in London about Dorian and that his friendship "is so fatal to young men" (*CW* 293). Growing with anger and as a reply to all these questions, Dorian unveils the secret of the painting to Basil, and to the reader's surprise, stabs him with a knife. After Basil's murder in chapter XIV, Gillespie (2007) writes, "Dorian articulates arrange of responses […] with different- and, in some cases, conflicting- ethical precepts […]. His initial reaction to the recollections of the murder shows a mixture of anger, self-pity, and revulsion over the circumstances" (389). Gillespie continues Dorian shows no regrets, and later remembering what Basil has done to him which resulted in his murder brings passion back to him. The two divergent feelings of "self-pity" and "passion" which Dorian feels after the murder, once more, indicate two divergent paths of ethics and anti-ethics, as the fork metaphor having its depth and breadth all over the novel.

As another example, in chapter XIX, Dorian tells Lord Henry that he is not going to continue his pleasure-seeking acts anymore, and that he has started his "good actions" the day before. Lord Henry, surprised at this statement asks him where he was yesterday, and Dorian replies "In the country, Harry. I was staying at a little inn by myself." (*CW* 346). By asking this question, Lord Henry tries to convey to Dorian that his goodness in the country was simply because of the location (container)

he was in, and that Dorian should not mistakenly attribute it to himself and becoming good. Then, Lord Henry theorizes on the two places of "town" and "country", as two containers which engage in two completely different basis of demands. He believes, what "the town" demands is being civilized, no matter by which one of its two ways: being "cultured" or "corrupted", while, the country does not have such demands, so countryside people remain pure and unsinning since their container does not demand being civilized or its necessities, as the town does. By this theorization, Lord Henry attempts to dissuade Dorian from the goodness he tries to achieve. But Dorian insists on the goodness which has started the day before, and looking from a spatial point of view, this means that he has experienced a change of path from 'Henrian sensation' to 'Basilian goodness'. He decides to examine the portrait with the presupposition that his attempts for being good must have brought positive changes in the portrait. Dreaming about the possible positive altering of the portrait, he decides to be good in order to have the portrait return to its initial form. To his shock, "he could see no change, save that in the eyes there was a look of cunning and in the mouth the curved wrinkle of the hypocrite." (*CW* 355). He recognizes that his goodness might not be more than a new experience of playing the role of a good man that is simply in line with his shocking thirst in playing variety of roles; realizing this, he urges to return to the path of Henry Wotton forever.

All these examples stand among so many other pieces of evidence which indicate the fluctuations Dorian repeatedly experiences between following either Basil or Lord Henry. As the last example shows, even in the last moments of his life when he decides to be good and bring the portrait to its previous state, he suddenly changes his mind and remembering that all his deeds including the murders would never be unfolded to the public decides to get rid of the portrait as the only evidence. This sudden return from the path of goodness to Henry's poisonous path at the moment of this fork metaphor ends in his death.

In the course of the story, Dorian receives three presents from his friends: the portrait, the yellow book and the mirror that are also explainable within spatialiaty. After his argument with Sibyl, Dorian realized the magic nature of the portrait that acts as his conscience. This implies that the portrait works as a portal, which takes Dorian away from the veiled world to a metaphysical one where he can see the consequences of his deeds. Through his portrait, Dorian is magically given a chance to travel to the metaphysicality of his existence, his choices, his deeds, and their consequences transfigured and presented to him through the portrait as a portal.

The second portal to Dorian's life is a mirror given to him by Lord Henry Wotton that is normally used as a reflector of one's appearance, particularly the face.

Beauty stands among the central concerns of Lord Henry. He must be the only character in the novel who invites Dorian to get the most out of his youth and beauty, which turns out to be Dorian's single purpose for the rest of his life. In fact, in his process of becoming, Dorian benefits from every bit of joy by means of his youth, beauty, and seemingly eternal energy. Keeping these in mind, this mirror signifies the blessings bestowed upon Dorian, and each time he looks at it, he is taken to a world that is completely in contrast with the world Basil's portrait opens to. The mirror acts in the role of a window which opens to a world of hedonistic beauties, beautiful experiences of the most joyful senses which are available to him by the very hand of the beauty and youth that are reminded to him each time he looks at the mirror.

Metaphorically, this means that Dorian has the opportunity of having two portals opening the window to the consequences of his deeds in both physical and metaphysical sense. Referring to the portrait and the mirror, Christopher Craft believes that they provide Dorian with two reflections in which "can Dorian's enjoyment counterpose images of his enduring beauty against those of his emerging ugliness. Only thus can Dorian perpetuate the fascination that comes to anchor his body and disperse his character" (109). The portrait proves how dreadful his deeds are in their metaphysically embodied sense; the mirror proves him that no guilt can alter the innocence and youth lying on his face.

As the third key portal, Lord Henry Wotton, also sends Dorian a yellow book, which absorbs Dorian as, "the strangest book he had ever read" (CW 274). Reading this novel, Dorian gets immediately absorbed in it. "Things that he had dimly dreamed of were suddenly made real to him" (*CW* 274). Through the book, Dorian gets familiar with a world of senses, exquisite and fantasized. For years, Dorian remains under the control of the book, and never tries to free himself from it. Purchasing different copies of the first edition, wrapping them in different colors allowing him the chance of variety, he finds the hero a Dorian Gray, and, "indeed, the whole book seemed to him to contain the story of his own life, written before he had lived it" (*CW* 274). The yellow book not only works as a portal teaching Dorian the possibilities he had never thought of, but also it makes him eager in his path to new sensations by reminding him the eternal youth he has been bestowed upon. The eternal youth Dorian feels assured of through the yellow book's portality gives him a greater joy in watching his consequences of his deeds configured to him in both the mirror and the portrait as two portals revealing his outer beauty and inner flagrance. In chapter XI, we read that often after long absences in search of feeding his mysterious pleasure-seeking nature, he crept upstairs to examine the changes on the portrait, and he heightened his joy by turning repeatedly

to the mirror and the portrait, which were unbelievably distinct from one another. All of these adventures, joys, and ways to get fresh senses are to great extent presented to Dorian through the yellow book as a portal, which opens to the world of the life of a fictional hero who has an inviting adventurous life.

Dorian as the innocent and immature youth of the beginning of the novel gradually grows into an immoral creature whose principle is merely to experience the inexperienced. He extremely changes in the course of the novel, and this change is initially triggered by Lord Henry. In an earlier section, Lord Henry was analyzed as a path, whose dangerous road always remains inviting for Dorian. It has also been discussed in both sections on path and fork metaphor that Dorian can never come to a resolution regarding his fluctuations between what is moral and what is immoral. This means that any time Dorian gets distance from Lord Henry, he gets one step closer to morality. For example, in Sibyl's death, knowing the fault he has in her suicide, Dorian decides to get free from Henry and never approach him again. Nevertheless, as soon as they meet, Dorian returns to the same immorality proposed by his fascinating lectures. Now, it can possibly be so that spatially Lord Henry is a container; any time Dorian is put in this container his philosophy changes. As soon as he visits Lord Henry, he believes that he has had no role in Sibyl's death whose suicide was the reminder of a fine tragedy in which he had participated but fortunately was not hurt by.

Unlike Lord Henry, Basil cannot be considered as a container; although both Basil and Henry were, figuratively speaking, paths for Dorian, Basil loses his influence on him to a great extent. He remains a path for him, but he cannot be considered as a container in which Dorian becomes someone else. He simply remains a path, a second choice for Dorian that is almost never chosen, due to the highlighted presence of Lord Henry Wotton not only as a path but also as a container in which Dorian becomes a weaponless practitioner. This indicates an unequal power portioned between these two sources of good and evil that explains why Lord Henry obtains an authoritative position for Dorian. He, as a container, completely encircles Dorian's mentality, attitudes, and desires. Surrounded by this container no space is left for Basil as a path to salvation. Besides Lord Henry, there is also another important container which never takes its influence away from Dorian. In chapter XIX, visiting Lord Henry, Dorian mentions,

"No, Harry, I have done too many dreadful things in my life. I am not going to do any more. I began my good actions yesterday.""Where were you yesterday?""In the country, Harry. I was staying at a little inn by myself.""My dear boy," said Lord Henry, smiling, "anybody can be good in the country. There

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are no temptations there. That is the reason why people who live out of town are so absolutely uncivilized (*CW* 346).

The extract shows how significant the role of space can be on man's manners and even on his goodness or evilness. The two spaces of "town" and "the country" standing for "corruption" and "goodness" respectively, not only refer to the presence of 'space' in the narrative, but also indicate the significance of each space, in which each one determines a particular personality for man. Both town and the country stand as two distinct containers that impose their particular characteristics and exclusive properties on man. The absorbance in aristocratic life, as well as Lord Henry's theories, and living in London all stand as crucial factors in Dorian's corruption. So the more Dorian engages in these containers the more he feels attached to the demands of each container. Looking at the issue from this perspective indicates that Dorian almost remains the same immature character of the initial chapters of the novel. The difference is that the containers he is imprisoned in, especially the civilizing demands of London and Lord Henry Wotton, as "a dandy, with a contempt for the drab conventional costumes of the nineteenth century"(Nethercot 836), dictate their own necessities to this blindly imitating character, and lead him to the final reverse. The new-born desire for luxury is no doubt a yes-reply for what town imposes on its insiders as a powerful container. For this reason, "Dorian too apes all the graceful, though to him only half-serious, fopperies of the dandy-neckties, canes, jewels, flowers, and all the rest" (Nethercot 836).

A third important container to be discussed is the room in which Dorian locks the portrait in. Before revealing its extraordinary feature, the portrait was on the wall in the library, later it was transferred to the large room at the top of the house as the most distant container in the house. This room and its having contained the portrait stand metaphorically very significant. The readers are told that this large room was arranged for Dorian as a playroom, and was later used as a study as he grew. It is also noted that Dorian had not stepped in the room for five years since he was a teenager. Being a teenager reminds us of the innocence and purity, which was still there before Dorian had met Lord Henry. What is considerable is that the portrait, as an embodiment of Dorian's conscience, is transferred to a room which reminds us of conscientious days, or at least childhood purity. Therefore, in Dorian's house the only room proper for placing Dorian's conscience is only the study. Here one spatial issue is also assessable. With a change taking place in the portrait, Dorian (as container) realizes that his conscience has departed from his body and has become concretized in the portrait. So his conscience becomes equal to his portrait. This dislocated entity embodies itself in another

container that resembles the former innocent Dorian. In other words, the conscience being departed from its container (Dorian) transfers to another container (portrait) which is still in line with it. The room proves its significance in the final moments of the novel, when Dorian's death takes place in it. Dorian, disappointed with any probable positive changes in the portrait, tries to get rid of the only evidence of his corruption by stabbing it. The moment he stabs the portrait, the reader realizes that he has actually stabbed himself. In fact, Dorian's conscience transfers to the portrait in the initial chapters of the novel, but exactly the moment he tries to stab it in the last chapter, it returns to his own body as its original container; consequently stabbing the portrait entails stabbing his own body ends in his death.

After documenting the spatial construction of the novel, my focus will be on the significance of these constructions and their employment in the novel. The analysis identified two main functions for such spatial narrativity, 1. Concretization, and 2. Primacy effect. The first function of spatiotemporal employments in the novel refers to the concretization of abstract notions. The novel revolves around key abstract concepts namely *beauty*, *conscience*, and *time*. Evidently, these notions can be identified among the vague, abstract, and subjective notions whose nature turns them into difficult-to-grasp entities. Referring to Dannenberg, one of the most reliable strategies in order for the clarification of abstract notions is to concretize them through notions that are feasible to comprehend. The same strategy has been applied in the narrativity of this novel for the comprehensibility of these key abstract notions. Wilde has successfully attained this concretization through a kind of spatialization, in which the readers receive these concepts wrapped up in concrete spatial containers.

When the narrative opens, beauty represents itself both in Dorian and the portrait; soon, the portrait starts fading away and beauty displays itself only in Dorian as a symbol of beauty for long years. Metaphorically speaking, the abstract concept of beauty turns into a body which is both seeable and examinable. The concretization takes place such dexterously that the reader no more distinguishes between Dorian and beauty; both stand correspondent. Another key term of the novel which is also a completely abstract notion is *conscience* which has repeatedly been mentioned in the narrative, especially by Dorian Gray himself. He soon realizes that his portrait can act like his conscience and guide him wherever he is misled. When he first realizes the changes in the portrait, he calls it his own conscience that exactly indicates the embodiment of his conscience. In fact, through the spatialization of conscience as an abstract notion in the portrait, the readers are given the chance of an easy access to an *inaccessible* notion. This not only provides them with a concrete understanding of the notion, but also allows them to investigate the effects of evil deeds on one's

soul by looking at it as a representative or the container of a completely unseen and untouched notion of conscience or soul. In fact as two opposing sources, beauty and conscience stand face to face in this novel; the struggle is of such high importance that stands among the key themes of the novel. Based on the discussion above on concretization, we ascertain that these two struggling sources manifest in the visible opposition of Dorian Gray who carries the symbol of beauty and the portrait that carries the notion of conscience. This means that the readers have an easy access to both vague opposing sources in a very physical and visible way each time they perceive Dorian and the portrait.

Primacy effect refers to the psychological aspect of human by which the one keeps faith in what he already knows although it is shattered and proved wrong later. As already discussed, in the first chapter of the novel, the readers construct elevated, educated, and appreciable assumptions about the main characters. However, it does not take long that they find out the poisonous theories of Lord Henry, the unspeakable love of Basil Hallward, and the misdeeds of Dorian Gray. The considerable point is that despite such deficiencies readers find out soon about these characters, they still keep faith and do not retreat from their early assumptions. It is not long after the beginning of the novel that they are alerted by Basil's unspeakable love (Whitaker, 2006), but roughly speaking this does not interfere with their evaluation of Basil at all. Lord Henry Wotton soon reveals his poisonous assumptions, and dreadful theories, but he remains as elevated as the initial pages of the novel. Dorian Gray, as the most central character, initially appears to be an innocent pure young boy; he later engages in the most dreadful deeds possible, from breaking a loving heart causing a suicide, to murdering Basil, a harmless creature whose murder was "one of the most demonic of Dorian's acts" (Oates, 421). It is strange that knowing these all, the readers still believe in Dorian, or let's say, trust him approximately from the beginning to the end of the novel. Such strange trusts in a character who engages in almost any dreadful practice can be clarified by primacy effect. The narrator of the novel intended to created a completely adorable depiction of these main characters; to do so, the characters were richly presented in elevated locations, aristocrat costumes, and educated manners. This is exactly what the readers construct in their imaginary world; although later these assumptions are completely questioned by the very deeds and manners of the characters, they still stick to their own early definitions which prevent them from reconstructing a truer portrayal of these characters who definitely suffer from deficiencies and immoralities.

According to primacy effect, readers scarcely get free of their initial evaluation even after they are told or shown something in contradiction with that. Through spatiotemporal contextualization, the readers are persuaded that Dorian Gray is an innocent pure boy; this has so strongly been conveyed to them that even after hearing of this apparently innocent boy's amoral deeds, they do not or *cannot* change their view to an abhorrent creature. This results from the initial high evaluations they have had rooted in the spatiotemporal organizations of the scenes in which the beauty and appreciation of the spaces and the time have mentally been attributed to Dorian Gray, too.

The present study aimed to analyze the spatial structure of *The Picture of Dorian Gray.* Getting help from both traditional and current notions of space, it reconsidered selected key incidents and elements from the novel. A traditional concept of space demonstrated an absolute presence of spatial settings for all the incidents in the novel, and it proved the presence of an organized atmosphere prior to presentation of characters and events. The long descriptions given on the spaces characters inhabit, meet, talk, or experience things in are all intended to provide the readers with authentic visualizations of these places. Moving further to the current studies of space, and getting aid of Mark Johnson and Hillary Dannenberg's theorizations of space, the study identified a profound spatial structure in the narrative that indicates the author's awareness of figurative spatialization that moves and carries the story to its resolution.

*Works Cited*

1. Behin, Bahram, Mahdiyeh T. Khiabani. "Oscar Wilde as a Temporal Designer: A case study of *The Picture of Dorian Gray*". *IJALEL*, Vol 4.2 (2015). 199-206.
2. Bridgeman, Teresa. "Time and Space". *A Cambridge Companion to Narrative*. David Herman, ed. Cambridge: Cambridge University Press, 2007.
3. Craft, Christopher. "Come See about Me: Enchantment of the Double in *The Picture of Dorian Gray*". *Representations*. 91. Summer (2005): 109-136. JSTOR. Web. 21 Jan. 2013.
4. Dannenberg, Hilary. *Coincidence and Counterfactuality: Plotting Time and Space in Narrative Fiction.* Nebraska: University of Nebraska Press, 2008. *Bookfi.* Web. 09. Feb. 2012.
5. Johnson, Mark. *The Body in the Mind.* Chicago: University of Chicago Press: 1987. Print.
6. Mueller, Roswitha. "The Mirror and the Vamp". *New German Critique*. 34: Winter. (1985): 176-193. JSTOR. Web. 12. Dec. 2012.
7. Nethercot, Arthur H. "Oscar Wilde and the Devil's Advocate". *PMLA*. 59. 3 (1944): 833-850. JSTOR. Web. 02. Dec. 2012.
8. Watkin, Amy. *How to Write About Oscar Wilde*. New York: Chelsea House Pub, 2000.

# Mining the Cloud of Witness: Inferring the Prestige of Saints from Medieval Paintings

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Abstract- This paper explores the possibility of applying the concept of distant reading to visual culture. Using a corpus of medieval images of St. Francis, the study incorporates data mining and network analysis to infer the prestige of saints. In turn, these measurements provide the basis for testing and exploring themes related to the artwork. Despite some methodological issues, the approach produces results consistent with our historical understanding of this artwork and its context.

Keywords: *networks, data mining, medieval painting, iconography.*

GJHSS-A Classification : *FOR Code: 410199*

MININGTHECLOUDOFWITNESSINFERRINGTHEPRESTIGEOFSAINTSFROMMEDIEVALPAINTINGS

*Strictly as per the compliance and regulations of:*

# Mining the Cloud of Witness: Inferring the Prestige of Saints from Medieval Paintings

Thomas Lombardi

*Abstract-* This paper explores the possibility of applying the concept of distant reading to visual culture. Using a corpus of medieval images of St. Francis, the study incorporates data mining and network analysis to infer the prestige of saints. In turn, these measurements provide the basis for testing and exploring themes related to the artwork. Despite some methodological issues, the approach produces results consistent with our historical understanding of this artwork and its context.

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## I. Introduction

The communion of saints presents a view of the Christian community that spans space, time, life, and death. Medieval iconography captures and preserves the evolution of the communion by documenting the integration of new saints with the established imagery of saints in the communion. In the development of the iconography of Saint Francis (1182 - 1226) in the Thirteenth and Fourteenth Centuries, artists and their patrons exerted great effort to associate St. Francis with this rich tradition of imagery. In fact, the associations of saints in medieval paintings provide a basis for studying the development of iconography as a network of saints who appear together in an image. In other words, networks and data mining techniques can provide insight into the communion of saints as well as the iconographic tradition that visualized the communion in the Middle Ages.

Researchers have already used co-occurrence networks to study iconography (Birnbaum et al; Lombardi, 2013; Lombardi, 2014) and the breadth of subjects addressed with such networks is breathtaking (Veling & van der Weerd, 1999; Alberich et al., 2002; Saito et al., 2007; Rabbat et. al., 2008; Araújo et al., 2011; DeScioli et al., 2011). Suffice it to say that scholars have developed many techniques for constructing and analyzing networks of people from digital images (Golder, 2008; Kim et al., 2010; Kim et al., 2012) and that these techniques can be applied to the images of saints in medieval paintings. The resulting co-occurrence networks have structural properties similar to those of other networks including hubs (nodes of high degree), high clustering coefficients and short average path lengths between nodes. Furthermore,

these networks provide compelling examples of preferential attachment, whereby the network evolves by attaching new nodes, in this context recently canonized saints, to those nodes with high degree such as Christ and Mary. In a sense, therefore, the network structure captures the intercessory function of these images by showing the frequent juxtaposition of lesser known saints with those of enduring prestige.

The current study extends these approaches by modeling the interaction of saints as directed networks. After outlining the theological, artistic, economic and technical background motivating this research, the paper outlines a technique for inferring the relative prestige of medieval saints in a corpus of artwork. Using a corpus of early images of Saint Francis of Italian production (Cook, 1999), the paper demonstrates how to use the confidence metric commonly found in association rule mining to construct a directed network. Directed networks provide many ways to estimate structural prestige (popularity) in a network. By studying the directed structure of these networks over time, art historians will have a set of powerful tools with which to analyze the traditions of medieval iconography.

After providing the details of the technique, the study verifies the technique for effectiveness with some baseline tests. First, we expect the popularity of Christ and Mary to be consistently high across the corpus given the important theological role their images played in the artwork. Second, the prestige figures should register important historical events such as the canonization of saints. The study also employs the prestige measurements to test art-historical claims related to this corpus. In particular, the study evaluates the claim that non-Franciscan houses chose to portray Francis differently from the compositions chosen by other patrons. Finally, we assess the popularity metrics as a tool for exploratory analysis to gauge their utility in discovering interesting trends for further research.

In concluding remarks, the paper reflects on the role these techniques might play in more ambitious art-historical research projects. The conclusion assesses the prospects of applying distant reading to visual culture. We explain some current shortcomings that challenge this vision including several kinds of bias researchers encounter in this kind of data. Despite such shortcomings, we believe that these techniques may shed light on one of the most persistent problems in the interpretation of fourteenth-century Italian art: the

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influence of the Black Death. Finally, the paper summarizes some promising directions for future research in this topic.

## II. BACKGROUND AND PREVIOUS WORK

In many ways network analysis and data mining approaches to the content of artwork are unconventional choices requiring justification. The approach taken in this paper relies on three motivating ideas. First, medieval theology, specifically the concept of intercession, suggests a process for the formation of networks of saints. Second, art historians widely recognize the intercessory function of much medieval artwork and have begun recently to interpret these functions in networking terms. Third, the complex interactions between patrons and artists, as defined by contract, drove the market for intercessory images in the Middle Ages. Network analysis and data mining provide particularly useful ways to capture the iconographic trends resulting from these theological, artistic and economic forces.

The medieval notion of intercession implies a kind of network process linking Christ to saints and saints to the faithful. The epistles of the New Testament outlined the biblical origins of this idea clearly: "For there is one God, and also one mediator between God and men, Christ Jesus" (I Timothy 2:5-6). Over the course of the Middle Ages, this idea grew into an elaborate architecture of ideas and images. Brian Patrick McGuire traces this development, its formal description as the communion of saints, and its connection to the growing importance of purgatory. McGuire summarizes the medieval notion of the communion of saints in terms of "reciprocal contacts" among the faithful on earth, the suffering in purgatory and the saved in heaven (p. 67). Artistic production in the Thirteenth and Fourteenth Centuries captured these reciprocal contacts in the intercessory images produced for individual and institutional patrons.

Art historians have long recognized the intercessory function of medieval religious art and recently have started to express these functions with network terminology. In his recent analysis of deësis composition and intercessory imagery, Sean Gilsdorf has applied the formal terms of social anthropology to the interpretation of medieval artwork. Specifically, he argues that intercession constitutes, borrowing the language of anthropologist Philip Gulliver, "triadic interactions" (p. 133). This insight demonstrates a strong convergence with the terms and tools of network analysis including important processes driving link formation in social networks such as triadic closure (Easley & Kleinberg, p. 44) and typical ways of describing the results of these processes like triadic census (DeNooy et al., pp. 234-243). Gilsdorf's study highlights the deësis group as one such important triad, "in which Christ was depicted flanked by the Virgin Mary on one side and John the Baptist on the other" (p. 134). Network analysis provides a well-understood set of tools for evaluating such artistic motifs in medieval art.

The tastes, interests and wealth of patrons in Italy in the Thirteenth and Fourteenth Centuries drove the demand for intercessory images including those in the corpus used in this study. In her study of painting in Siena after the Black Death, Judith Steinhoff refers to art patronage during this period as "a vital instrument of cultural expression" (p. 29). Governments, religious institutions, and individuals contributed to the development of iconographic images by expressing and defining their tastes via contracts for specific works of art. In this market for imagery, some iconographic trends became more or less popular as individuals and groups responded to the complex interactions of popular devotion, theology, artistic skill and regional preferences. These differences over time resulted in changes in the selection and preference for saints in artwork. Data mining techniques provide a basis for analyzing the selection of saints in specific works that supports and augments the network analysis of these market-driven iconographic trends.

Scholars have already started to explore medieval visual and devotional culture with network models. For example, a group of researchers have recently used a social network analysis of Orthodox saints in medieval manuscripts "as a tool for clustering manuscripts and formulating hypotheses about textual transmission and diffusion" (Birnbaum et al., 2013). Network analysis has also been applied to the study of Franciscan iconography specifically (Lombardi, 2014). In the latter study, two saints were considered to be connected if they were depicted together in an image. Moreover, each additional image including both saints increased the weight of the link between those saints. In treating the co-occurrence of saints like a social network derived from images (Golder, 2008), researchers have been able to identify some interesting structural properties of such networks. Figure 1 presents the entire network derived from the co-occurrence of saints in a corpus of early images of St. Francis. Popular saints, known by their high degree, such as St. Francis, St. Clare and St. Anthony of Padua appear just below Christ and Mary.
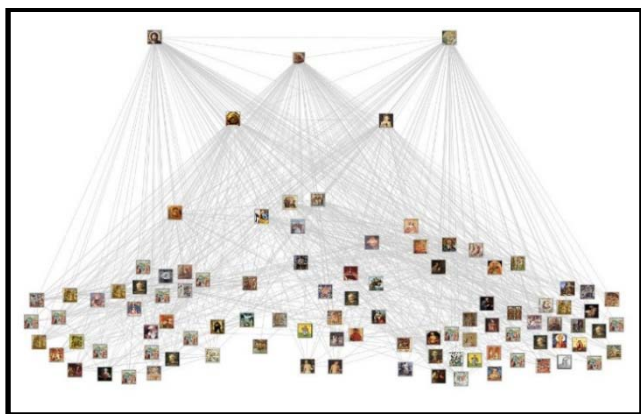
*Figure 1 :* Co-occurrence network of saints

Unfortunately, these kinds of networks do not easily capture the known ranks in such iconography. For example, the presence of St. Anthony of Padua, a Franciscan saint, depends on the presence of St. Francis in two ways. Historically, St. Francis was the head of the Franciscan order and therefore Anthony depended on the institution named for Francis. Artistically, St. Anthony does not appear without Francis in imagery at this time (Cook, pp. 262-263). In order to capture the development of this imagery in more detail including the hierarchical aspects of the organization of these saints, the technique must capture the direction of links to represent these dependencies. The Data and Methods section of this paper outlines an approach for constructing a directed network from co-occurrences.

Directed links offer interpretive advantages over the undirected links in previous studies for several reasons. First, directed links capture the hierarchical relationships in the iconography more naturally. For example, a directed link from St. Anthony of Padua to St. Francis captures the historical and iconographic dependence between the two saints. Second, directed links provide several techniques for calculating structural prestige. In other words, by adding direction to the links connecting saints we can estimate a saint's relative popularity (prestige) in a number of ways. In order to achieve this, however, the undirected co-occurrence network must be converted to a directed network.

Association rule mining from data discovery research is one such technique for accomplishing this. Association rules were originally developed to process sales transactions by performing market basket analysis (Kotsiantis & Kanellopoulos, 2006; Agrawal et al., 1993; Chen et al., 1996). In such studies, researchers glean the purchasing habits of shoppers by identifying items commonly purchased together. Given that medieval patrons and artists chose compositions with specific arrangements of saints and symbols, this study treats each work of art as a basket filled with iconographic images. This technique provides several metrics for determining the strength and direction of these associations. In particular, the confidence

measurement, explained in detail below, establishes a basis for inferring directed relationships between saints. In other words, by identifying the saints commonly presented (purchased) together, researchers can model the relative prestige of saints over time to understand better the economic, artistic and theological processes driving the development of these images.

By combining association rule discovery and network analysis researchers can capture the relationships between saints in images in greater detail. Directed links offer some additional analytical power pertinent to the analysis of iconographic trends. First, directed networks allow for the calculation of prestige. Given the nature of medieval iconography, inferring the prestige of saints can help to compare regional and temporal trends. Second, directed links, and the prestige measurements they make possible, provide a useful framework for testing art-historical hypotheses and even performing exploratory analysis. Therefore, the combination of these techniques offers us insights into the complex interactions of theology, art and economics that influenced the production of these works.

## III. Data and Methods

The corpus, compiled by Cook, includes 236 images of Saint Francis of Italian production from 1230 to 1330 (1999). Cook's catalogue serves as an excellent starting point for this study because it solves many technical and practical problems. The catalogue provides information about dating, provenance, authenticity, style and documentation. More importantly, the iconography of Francis provides a dramatic example of a transition from regionally-venerated to internationally-venerated saint. The techniques outlined in this section along with previously developed networks (bipartite, time-event) provide powerful ways to model and analyze these iconographic transitions and trends.

The technical process of building the directed network involves standard techniques in data mining and network analysis. Cook's corpus was converted into a matrix for association rule mining in RapidMiner. The data were denormalized to capture the presence or absence of a saint in each painting. The resulting matrix includes 236 rows representing the paintings and 102 columns representing the saints. After preparing the data, support and confidence metrics for each pair of saints were calculated. The rules produced directed weighted networks which were exported and analyzed in Pajek. The confidence metrics capture the strength of the relationship between saints in each direction, providing a basis for inferring rank in the relationships (Figure 2). For example, the thick pink link from Anthony to Francis is represented with a confidence of 1.0, meaning that every time Anthony appears in an image we can be certain that Francis will appear as well. The thin blue link from Francis to Anthony on the other hand

has a confidence of 0.122, signifying that Francis appears without Anthony in many paintings. Cytoscape was used to produce network visualizations like those in Figures 1 and 2.
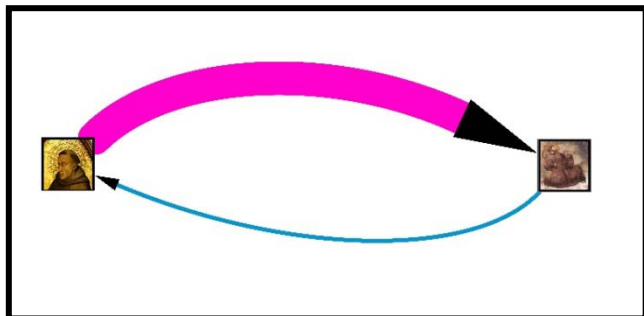


*Figure 2 :* Directed links between Anthony of Padua (left) and Francis

For the purposes of demonstrating the proposed technique, we will outline the technique with three of the earliest images in the catalogue including the *Pescia Dossal* (Figure 3). The painting includes three recognizable figures: St. Francis, the Seraph, and Bartholomew of Narni. Each painting, listed by its catalogue number, constitutes a row of data. The columns record a saint's presence in the painting with a 1 and a saint's absence in the painting with a 0. For

instance, the first row of Table 1 captures the co-occurrence of Francis, the Seraph and Bartholomew of Narni in the *Pescia Dossal* (Cook, p. 141). For the purposes of this demonstration, Table 1 also includes the data associated with two other early paintings from the Cook catalogue.

*Table 1 :* Denormalized Painting Data

| Cook # | Narni | Seraph | Francis | Gregory IX |
|--------|-------|--------|---------|------------|
| 141 | 1 | 1 | 1 | 0 |
| 193 | 0 | 0 | 1 | 1 |
| 10 | 0 | 0 | 1 | 0 |

After compiling the data in denormalized format, support and confidence metrics provide a basis for constructing a directed network. For each saint individually, the support is the number of times a saint appears in an image divided by the total number of images which in this case is three (Table 2). For each pair of saints, the support is calculated by counting the number of times the two saints appear together in an image divided by the total number of images in the data set. For example, Seraph and Francis appear together in 1 of 3 images yielding a support of .3333. RapidMiner uses the FP-Growth algorithm for generating support metrics (Han et al., 2000).

*Table 2 :* Support Calculations

| Saint | Appearances | Support |
|-------|-------------|---------|
| Francis | 3 | 3/3 (1.0) |
| Seraph | 1 | 1/3 (0.33) |
| Narni | 1 | 1/3 (0.33) |
| Gregory IX | 1 | 1/3 (0.33) |
| Francis,Seraph | 1 | 1/3 (0.33) |
| Seraph,Narni | 1 | 1/3 (0.33) |
| Francis,Narni | 1 | 1/3 (0.33) |



*Figure 3 :* Bonaventura Berlinghieri, Pescia Dossal, 1235 (Cook 141). Photo Credit: W. R. Cook.

The support metrics serve as the basis for computing the confidence of each directed link between saints. Table 3 summarizes these calculations for the sample data. Unlike the support metrics which have no inherent direction, confidence metrics are directed because the confidence of A→B is not necessarily the same as the confidence of B→A. For example, the confidence of Francis→Seraph is 0.3333 whereas the confidence of Seraph→Francis is 1.0. In other words, in this set of sample data, every time a painting includes a Seraph it also includes Francis. On the other hand, observing Francis in this data set does not guarantee that the Seraph will also be in the image. The absolute value of the difference between the confidence of the arcs between Francis and Seraph determines the weight and direction of the link between the two nodes in the network.

*Table 3 :* Confidence Calculations

| Antecedent→Consequent | Confidence | | |
|---|---|---|---|
| Francis→Seraph | 0.33/1.0 | = | 0.33 |
| Seraph→Francis | 0.33/0.33 | = | 1.0 |
| Francis→Gregory IX | 0.33/1.0 | = | 0.33 |
| Gregory IX → Francis | 0.33/0.33 | = | 1.0 |
| Francis → Narni | 0.33/1.0 | = | 0.33 |
| Narni → Francis | 0.33/0.33 | = | 1.0 |
| Seraph → Narni | 0.33/0.33 | = | 1.0 |
| Narni → Seraph | 0.33/0.33 | = | 1.0 |

Table 4 demonstrates the final calculations required to construct the network. In the case where the link weights are not equal, the link direction is that with the highest confidence. In the case of the Seraph and Francis, the Seraph→Francis link is preserved. The weight of the link is the absolute value of the difference between the links. In cases where the link weights are equal, the link is a bi-directed link with the confidence serving as the weight. For example, the Seraph and Bartholomew of Narni have the same confidence in both directions therefore this relationship is represented as a bi-directed link with a weight of 1.0.

*Table 4 :* Link Weight Calculations

| Link | (A→B) | (B→A) | Weight |
|---|---|---|---|
| Seraph→Francis | 1.0 | 0.3333 | 0.6667 |
| Gregory IX→Francis | 1.0 | 0.3333 | 0.6667 |
| Narni→Francis | 1.0 | 0.3333 | 0.6667 |
| Seraph←→Narni | 1.0 | 1.0 | 1.0 |

When these directed and bi-directed links are combined (Figure 4), they produce a directed weighted network well-suited to determining popularity. Directed networks provide several straight-forward and intuitive techniques for estimating prestige (DeNooy et al., 2011, pp. 215-228). The input degree is the number of links pointing to a particular node in a directed network. In the sample network, Francis has an input degree of 3 while Gregory IX has an input degree of 0. Although input degree is often illuminating, this measure of prestige only addresses direct connections. The influence domain is the proportion of all other nodes connected by a path to a particular node. Three saints can reach Francis while Seraph and Bartholomew of Narni can only be reached by one other saint. The input proximity prestige divides the influence domain of a particular vertex by the average distance from every node in the influence domain. Table 5 summarizes the calculations required to compute the input proximity prestige in a directed network. Each of these measurements highlight Francis as the most prestigious saint in this simple network.
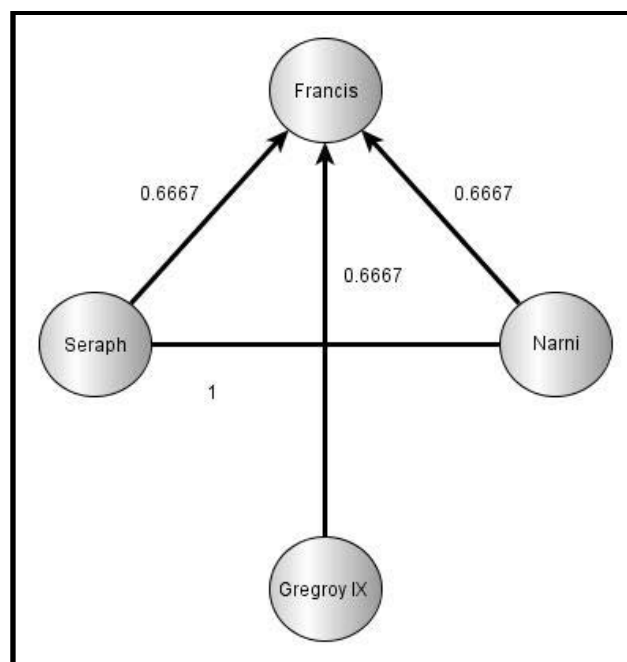


*Figure 4 :* Directed, Weighted Network of Saints

*Table 5 :* Input Proximity Prestige Calculations

| Saint | Influence Domain | Prop. Distance | Avg. Dist. | Prestige |
|---|---|---|---|---|
| Francis | 3 | 1.00 | 1.00 | 1.00 |
| Seraph | 1 | 0.33 | 1.00 | 0.33 |
| Narni | 1 | 0.33 | 1.00 | 0.33 |
| Gregory IX | 0 | 0.00 | Undefined | 0.00 |

The process outlined above was performed for each saint in each decade of the corpus. The raw results of this analysis are available in spreadsheet format from the author. The data mark saints who do not appear in any artwork during a particular period with a value of -0.1 to distinguish them from those saints who appear in the artwork of the time with prestige values of 0. This data supports several kinds of analysis performed in the next section including correlation of prestige figures, hypothesis testing and exploratory analysis.

## IV. RESULTS AND ANALYSIS

In order to evaluate the results, the technique had to be validated with some baseline tests. First, we

expect the prestige of Christ and Mary to be consistently high across the corpus given the important theological role their images played in the artwork and the society that produced it. Somewhat surprisingly, the painters and patrons of the earliest surviving images of Francis from the 1230s and 1240s did not seek to juxtapose Francis with Christ, Mary or other globally-recognized saints. Instead, the early promoters of Franciscan iconography chose to portray Francis by himself or with other prominent figures in Francis's hagiography such as the Seraph. As the cult of Francis grew, however, the prestige of Christ and Mary jumped from nil in the 1240s to 0.97 and 0.79 respectively in the 1320s (Figure 5).

Second, the prestige measurements should register important historical events such as the canonization of the saints. As expected the prestige of St. Clare and St. Louis of Toulouse peaked during the periods of their canonization. For example, Louis of Toulouse was canonized in 1317 and his prestige in this period rose to 0.33 from nil in the previous decade. During the same time period, the prestige of Anthony of Padua, another male Franciscan saint, plummeted to 0.0 from 0.45 (Figure 6). As a popular new saint, Louis displaced Anthony for about a decade as the preferred male Franciscan to balance compositions with Francis. We found similar results for St. Clare, canonized in 1255. During the decade of her canonization, her popularity (0.53) outstripped even that of Anthony of Padua (0.47). She would not attain this level of prestige again until the 1300s.

Having performed some basic verification of the technique, we wanted to use the prestige metrics to test art-historical claims related to this corpus. For example, Cook argues that non-Franciscan houses, such as those of the Dominicans and Benedictines, adjusted their images of Francis to reflect more modest views of the saint's iconography (p. 103). In particular, non-Franciscan houses often portrayed Francis without the stigmata, the wounds of Christ. The prestige trends provide some support for this assertion. We observe a negative correlation between the prestige of the Seraph and both St. Benedict (-0.49) and St. Dominic (-0.58). In other words, as the prestige of Benedict and Dominic increased, the prestige of the Seraph, the agent of Francis's stigmata, decreased. On the other hand, a negative correlation was also found between the Seraph and prominent Franciscan saints: Clare (-0.79) and Anthony of Padua (-0.39). Therefore, the prestige metric may be identifying differences in the composition of these works in a fairly broad way. While the Seraph features prominently in the hagiographical traditions related to Francis and often appears in artwork focused on those traditions, patrons focusing on non-narrative intercessory images might have excluded the Seraph for compositional rather than theological reasons. In this case, therefore, our model retains too much ambiguity to provide for definite support of the claim.

The prestige metrics demonstrate interesting trends worthy of further exploration. Perhaps the most interesting trend relates to the growing popularity of female saints around 1300. Four of the five most popular saints in the corpus are female in the 1320s: Mary (0.79), Clare (0.49), Mary Magdalen (0.45), and Catherine of Alexandria (0.42). Given the close relationship between Clare and Francis, their frequent pairing, and the growing complexity of the panel compositions at the time, artists and patrons would certainly have sought out additional female saints to achieve balance.

And yet, some documentary evidence suggests that something more fundamental may have been operating. Shortly before his death in 1302, Cimabue was commissioned to paint a *Madonna and Child* that included Francis and Clare, and most likely Peter and Paul. Cook recognizes this as an extraordinary composition for the time:

Francis paired with Clare is common enough for panels designed for houses of Poor Clares. However, the figures of Peter and Paul in a Franciscan context are traditionally paired with Francis and Anthony of Padua; hence, they are the old and new apostles, the builders and rebuilders of the Church. Here, if Clare was substituted for Anthony, this is a bold claim for Francis and Clare as institution builders but also as apostles. (Cook, 1999, pp. 263-264).

If we compare Clare's previously stated prestige (0.53) during the period of her canonization in the 1250s to that (0.61) at the time this artwork was commissioned, we have some additional support for the bold claims of this panel's composition. Furthermore, we can see from the metrics that during the 1300s Clare's prestige outstripped Anthony's for the next two decades as well. As a final indicator of her prestige in this imagery, she maintains this high value even during the period of Louis of Toulouse's canonization. In this case, the prestige figures highlight a number of potential research areas including both specific research into the Poor Clares and their imagery and more general research themes such as the effect of the cult of Mary on the artwork of the period.
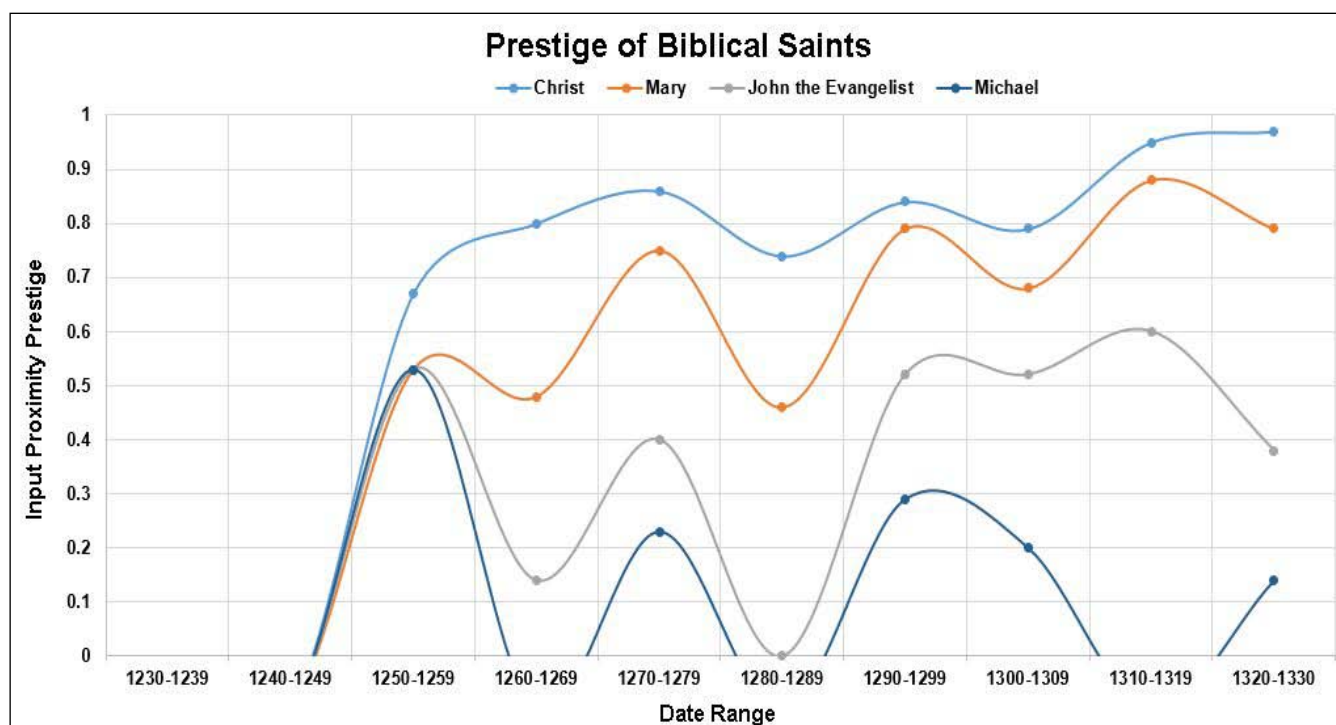
*Figure 5 :* Input Proximity Prestige of Biblical Saints
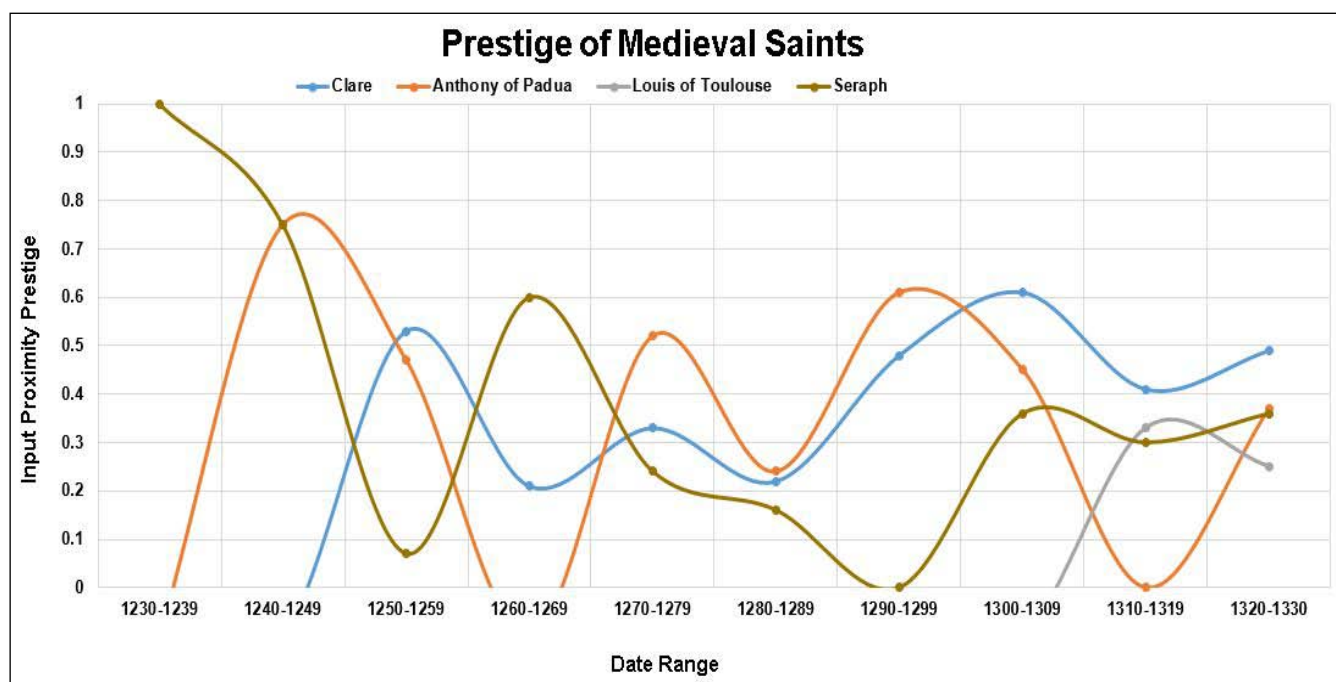


*Figure 6 :* Input Proximity Prestige of Medieval Saints

## IV. CONCLUSION AND FUTURE WORK

In general, the results of this study are encouraging and suggest that the techniques of distant reading currently applied to literary texts (Moretti, 2000; Michel et al., 2010) have a role to play in the study of iconographic images as well. Given the exciting possibilities of this approach, it makes sense to outline a few of the challenges of it particularly as it applies to medieval artwork before exploring its potential. In order for this type of research to make progress, researchers will have to address two different kinds of challenges. Studies of this kind suffer from several kinds of bias which can easily frustrate attempts to interpret data properly. Even if these issues of bias can be satisfactorily addressed, researchers will have to grapple with the persistent difficulty of data mining

research in the arts and humanities (Sculley & Pasanek, 2008).

The field of data analysis often struggles with bias in data. Any common text in data mining or analysis will discuss items such as degrees of freedom, data standardization, random sampling and normally distributed data. These common issues, however, become worse when dealing with data sets derived from medieval artwork. For example, the survival rate of medieval paintings during this period was extremely low meaning that Researchers do not know if they have a representative sample of the artwork that was produced. Moreover, when this survival bias leaves only a few hundred works for study, the data derived from these surviving images will frustrate researchers' efforts to produce statistically significant results. Yet another technical challenge to working with such data revolves around the precise dating of medieval artworks (Polzer, 2005). In some cases, medieval artworks such as the *Pescia Dossal* are dated. In other cases, however, the dates are extraordinarily difficult to deduce specifically. It is not uncommon for dates to be expressed as a range spanning as many as 30 years. For the purposes of this study, we used, quite arbitrarily, the later date of any such time spans. We can foresee a good deal of future work in addressing these issues for data with these characteristics.

The broader issues of data mining in the arts and humanities so well articulated by Sculley and Pasanek (2008) are perhaps more serious than the specific issues with data. The results section of this work attempted to validate the technique in a number of ways and even attempted some hypothesis testing based on art-historical claims. Although we found a decent correspondence between the measures of structural prestige we used for our model and the questions we sought to address, the model demonstrated some ambiguity in our assessment of non-Franciscan portrayals of Francis. The ambiguity in the result of this test underscores Sculley and Pasanek's point that the standards for data mining in the humanities should be more difficult to meet than those in the sciences (2008, p. 422). We believe that their advice for adapting data mining to the needs of humanities research applies equally to research in the arts. Therefore, it seems reasonable for future research to attempt to replicate these results with other models and techniques (Sculley & Pasanek, 2008, p. 422). For example, we hope to replicate the results using different assumptions about the date ranges of paintings, i.e., rely on the early estimates of painting dates.

The most exciting way to address the issues of bias and data mining interpretation is to expand the scope of the study to include a broader cross-section of medieval art thematically, temporally and spatially. The images included in this study focus exclusively on Franciscan themes and iconography which necessarily limit its scope. In other words, Francis has an input proximity prestige of one in every period because his image is in every work. By expanding the scope of the study to include a more general corpus of medieval iconography researchers can validate the approach and expand their pool of research questions: Does the communion of saints as expressed in artwork with Dominican themes resemble that observed in Franciscan art? Do the saint pairings differ significantly from region to region? Does the popularity of a saint rise and fall in predictable patterns? With appropriate care, researchers may be able to answer such questions. In particular, we plan to expand the study by applying the technique to a large range of iconographic images selected from the Index of Christian Art (http://ica.princeton.edu/).

In our view, this approach may also contribute to a lively debate in the interpretation of medieval Italian art: the role of the Black Death in artistic production in Italy. With the publication of Millard Meiss's *Painting in Florence and Siena after the Black Death*, researchers have struggled with interpreting the artistic developments in Tuscany in the third quarter of the Fourteenth Century. Over 50 years after its publication, Meiss's work still inspires and challenges art historians to wrestle with the apparent discontinuity in artistic production before and after 1350 (Steinhoff, 2006). Given the results of this study, we believe that this technique could be adapted to bear on this debate. Our data reveal rapid swings in the relative prestige and pairing of saints that capture many salient points of development of the iconography of St. Francis. The Black Death and its devastating effects in Italy may well have forced patrons and artists negotiating intercessory imagery to search for new saints and arrangements of saints to meet their spiritual needs. The techniques outlined in this paper should make testing this hypothesis possible.

## References Références Referencias

1. Agrawal, R., Imieliński, T. & Swami, A. (1993). Mining association rules between sets of items in large databases. *Proceedings of the 1993 ACM SIGMOD international conference on Management of data - SIGMOD '93*. 207-216.
2. Alberich, R., Miro-Julia, J. & Rossello, F. (2002). Marvel Universe looks almost like a real social network. arXiv:cond-mat/0202174.
3. Araújo, M., Rozenfeld, A., Rahbek, C. & Marquet, P. (2011). Using species co-occurrence networks to assess the impacts of climate change. *Ecography* 34(6): 897-908.
4. Birnbaum, D., Borovsky, Z., Danowski, J. & Vakareliyska. (2013). Orthodox Saints as Facebook Friends: Social Networking and Medieval Manuscripts. <http://www.academia.edu/6220095/Orthodox_saints_as_Facebook_friends_Social_networking_and_medieval_manuscripts>

5. Brooke, R. (2006). *The image of St. Francis: Responses to Sainthood in the Thirteenth Century*. Cambridge: Cambridge University Press.
6. Chen, M.S., Jan, J., Yu, P.S. (1996). Data mining: An overview from a database perspective. *IEEE Transactions on Knowledge and Data Engineering*. 8(6) 866-883.
7. Cook, W. R. (1999). *Images of Saint Francis in Painting, Stone and Glass from the Earliest Images to ca. 1320 in Italy: A Catalogue*. Italian Medieval and Renaissance Studies 7. Leo S. Olschki.
8. De Nooy, W., Mrvar, A. & Batagelj, V. (2011). *Exploratory Social Network Analysis with Pajek*. 2nd Edition. Cambridge: Cambridge University Press.
9. DeScioli, P., Kurzban, R., Koch, E. & Liben-Nowell, D. (2011). Best Friends: Alliances, Friend Ranking, and the MySpace Social Network. *Perspectives on Psychological Science* 6(1).
10. Easley, D. & Kleinberg, J. (2010). *Networks, Crowds and Markets*. Cambridge: Cambridge University Press.
11. Gilsdorf, S. (2012). Deësis Deconstructed: Imagining Intercession in the Medieval West. *Viator*. 43(1):131-174.
12. Golder, S. (2008). Measuring social networks with digital photograph collections. In *Proceedings of the 19th ACM Conference on Hypertext and Hypermedia*, 43-48.
13. Han, J., Pei, J. & Yin, Y. (2000). Mining frequent patterns without candidate generation. *Proceedings of the 2000 ACM SIGMOD Interational conference on Management of data*: 1-12.
14. Kim, H-N., Jung, J-K. & El Saddik, A. (2010). Associative Face Co-occurrence Networks for Recommending Friends in Social Networks. *The Second SIGMM Workshop on Social Media in Conjunction with ACM Multimedia 2010*.
15. Kim, H-N, El Saddik, A. & Jung, J-K. (2012). Leveraging personal photos to inferring friendships in social network services. *Expert Systems with Applications* 39(8), 6955-6966.
16. Kotsiantis, Sotiris, & Kanellopoulos, Dimitris. (2006). Association Rules Mining: A Recent Overview. *GETS International Transactions on Computer Science and Engineering*. 32(1), pp. 71-82.
17. Lombardi, T. (2013). The Communion of the Saints: Networks and the Study of Iconography. Presented as a contributed talk at *Arts, Humanities, and Complex Networks – 4th Leonardo Satellite Symposium at NetSci2013*. <http://artshumanities. netsci2013.net>
18. Lombardi, T. (2014). The Communion of Saints: Networks and Iconography. *Leonardo*. 47(3).
19. McGuire, B. (1989) Purgatory, the Communion of Saints, and Medieval Change. *Viator*. 20. 61-84.
20. Meiss, M. (1951). *Painting in Florence and Siena after the Black Death*. Princeton: Princeton University Press.
21. Michel, J-B, Shen, Y, Aiden, A., Veres, A., Gray, M., The Google Books Team, Pickett, J., Hoiberg, D., Clancy, D., Norvig, P., Orwant, J., Nowak, M. & Aiden, E. (2010). Quantitative Analysis of Culture Using Millions of Digitized Books. *Science* 331(6014), pp. 176-182.
22. Mrvar, A. & Batagelj, V. *Pajek - Program for Large Network Analysis*. Home page: http://pajek.imfm.si
23. Polzer, J. A Question of Method: Quantitative Aspects of Art Historical Analysis in the Classification of Early Trecento Italian Painting Based on Ornamental Practice. (2005). *Mitteilungen des Kunsthistorischen Institutes in Florenz* 49: 33-100.
24. Rabbat, M., Figueiredo, M. & Nowak, R. (2008). Network Inference from Co-Occurrences. *IEEE Transactions on Information Theory* 54 (9): 4053-4068.
25. RapidMiner Studio. Home page: <http://rapidminer. com/products-2/rapidminer-studio/>
26. Saito, H., Kawai, H., Tsuchida, M., Mizuguchi, H. & Kusui, D. (2007). Extraction of Statistical Terms and Co-occurrence Networks from Newspapers. Proceedings of NTCIR-6 Workshop Meeting, May 15-18. Tokyo, Japan.
27. Sculley, D. & Pasanek, B. (2008). Meaning and mining: the impact of implicit assumptions in data mining for the humanities. *Literary and Linguistic Computing* 23(4).
28. Smoot, M., Ono, K., Ruscheinski, J., Wang, P-L., & Ideker, T. (2011). Cytoscape 2.8: new features for data integration and network visualization. *Bioinformatics* 27(3): 431-432. <http://www.cytos-cape.org/>
29. Steinhoff, J. (2006). *Sienese Painting after the Black Death*. Cambridge: Cambridge University Press.
30. Veling A. & van der Weerd, P. (1999). Conceptual Grouping in Word Co-Occurrence Networks. *Proceedings of the Sixteenth International Joint Conference on Artificial Intelligence*: 694-701.

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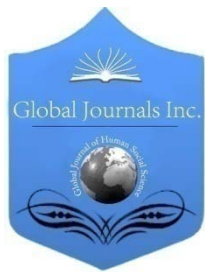
# Orature: A Strategy for Socio-Religious Harmony in Yorùbáland

By James Bode Agbaje

*Obafemi Awolowo University, Nigeria*

*Abstract-* Before the advent of Christian and Islamic religions, African Traditional Religion was solely practised among the Yorùbá without any interference or hindrance. However, in the 19th century, when Christian and Islamic religions emerged, there was a marriage of inconvenience initially, but later, these religious practitioners found a way of peaceful co-existence among one another. In this paper, we evaluate the importance and use of Yorùbá orature in relation to the spread and peaceful co-existence of Christianity, Islam and African Traditional Religion in the Yorùbá society and argue that one of the ways adopted to ensure peace and unity among the three groups is the use of Yorùbá orature and that during the advent of Christianity and Islam, the Yorùbá manipulate proverbs in various degrees to also enhance the spread of the two religions in the Yorùbá society. We further argue that, since all the adherents of the three religions have the same cultural background, they find it very easy to adjust to the prevailing religious situations. It is also observed that the deadly wave of westernization has not been able to do any havoc to the socio-cultural unity, peaceful co-existence and religious harmony in the Yorùbá society but instead, it has helped to boost the use of Yorùbá orature and the effect is that socio-religious harmony is noticeably waxing stronger and stronger among the adherents of the different religions in the society. Finally, we conclude that the use of the Yorùbá orature in churches, mosques and shrines has paved way for the socio-cultural unity, peaceful co-existence and religious harmony in the Yorùbá society.

*Keywords:* proverbs, folksongs, adherence, harmony, society.

*GJHSS-A Classification :* FOR Code: 440299

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*Strictly as per the compliance and regulations of:*

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*Abstract-* Before the advent of Christian and Islamic religions, African Traditional Religion was solely practised among the Yorùbá without any interference or hindrance. However, in the 19th century, when Christian and Islamic religions emerged, there was a marriage of inconvenience initially, but later, these religious practitioners found a way of peaceful co-existence among one another. In this paper, we evaluate the importance and use of Yorùbá orature in relation to the spread and peaceful co-existence of Christianity, Islam and African Traditional Religion in the Yorùbá society and argue that one of the ways adopted to ensure peace and unity among the three groups is the use of Yorùbá orature and that during the advent of Christianity and Islam, the Yorùbá manipulate proverbs in various degrees to also enhance the spread of the two religions in the Yorùbá society. We further argue that, since all the adherents of the three religions have the same cultural background, they find it very easy to adjust to the prevailing religious situations. It is also observed that the deadly wave of westernization has not been able to do any havoc to the socio-cultural unity, peaceful co-existence and religious harmony in the Yorùbá society but instead, it has helped to boost the use of Yorùbá orature and the effect is that socio-religious harmony is noticeably waxing stronger and stronger among the adherents of the different religions in the society. Finally, we conclude that the use of the Yorùbá orature in churches, mosques and shrines has paved way for the socio-cultural unity, peaceful co-existence and religious harmony in the Yoruba society.

*Keywords:* *proverbs, folksongs, adherence, harmony, society.*

## I. Introduction and Theoretical Background

Some scholars have written on religious practices among the Yorùbá people of Southwestern Nigeria. Such scholars include Abdullahi (1922), Ìdòwú (1962), Webster (1968), Peel (1968), Ọmọyajowọ (1971), Awólàlú (1981), Fálọlá (1982), Ọláyíwọlá (1989), Adéjùmọ (1989) , Babalọlá (1991), Adédèjì (2002) and Adéníji (2002). For example, although Abdullahi (1922) writes on Islam in Yorùbá land he does not discuss the place of Yorùbá oral literature in the co-existence of Christian, Islam and traditional religions. In the work of Ìdòwú (1962) titled "Olódùmarè in Yorùbá belief"' also, Ìdòwú (ibid.) only explains in full the concept of Olódùmarè in Yorùbá culture he does not discuss the relevance and importance of orature in the promotion of Christianity and Islam vis-à-vis the Traditional religion.

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While Webster (1964) bases his work on the Christian churches in Africa only Peel (1968) concentrates on the activities and spread of Aládùúrà movement among the Yorùbá people. However, none of the two discusses the functions of Yorùbá oral literature in the harmony of the three religions. Ọmọyájowọ (1971) deals with Cherubim and Seraphim in Nigeria only at the exclusion of Islam and traditional religions while the focus of Awólàlù's (1979) work is traditional religion in West Africa without discussing the relationship between traditional religion, Islam and Christian religions. Besides, Fálọlá (1982) bases his work on religion, rituals and the Yorùbá pre-colonial domestic economy without discussing the impact of Yorùbá oral literature as a means of harmonizing Christian, Islam and traditional religions in Yorùbá society.

Similarly, Ọláyíwọlá (1989) concentrates on the social impact of new religious movements on contemporary Yorùbá life using the Aládùúrà as an example. The main thrust of Adéjùmọ's (1989) work is Ọṣun festival and fertility without discussing the issue of Islam and Christian religions. Babalọlá (1991) also discusses the economic impact of indigenous religions on the Yorùbá society at the exclusion of the place of Yorùbá orature in the co-existence of Christian and Islamic religions. Adédèjì (2002) too bases his work on the impact of acculturation on African music, using Yorùbá music to buttress his explanation while Adénìyì (2002) concentrates on Islamic values in relation to the political and socio-religious systems of the traditional Yorùbá community at the exclusion of Christian and traditional religions. Agbájé (1995) focuses on the literary study of the folksongs of the Èkìtì people of Nigeria without relating it to any religion while Ọmọle (1998) concentrates on the collection of African proverbs and usages not minding the impact it has on the harmony of Christian, Islam and Traditional religions in Yorùbá society. From the foregoing, none of the authors discusses Yorùbá orature as a means of good relationship among the practitioners of Christian, Islamic and traditional religions. Therefore, this work sets to fill the academic vacuum created by the previous works or reseachers. In this paper, the use of orature as a means of promoting peace, unity and cultural co-existence among the Yorùbá people who share different religious beliefs is our concern. We will show that the use of orature among the adherents of Christianity, Islam and African Traditional Religion has helped immensely in

promoting a good understanding and harmony among the adherents of the three religions in the Yorùbá society.

## II. Proverbs

In Yorùbá culture the value of proverb is immeasurable. It helps in the process of expressing ideas such that when an elder wants to capture the mood of a prevailing situation clearly and sufficiently, he takes recourse to an appropriate proverb. For example, a Yorùbá proverb which says '*Ojú òrun téye ẹ́ fò láìfara gbára*' (The sky is wide enough for birds to fly without any obstruction) when used shows that the world is big enough to accommodate everybody. Therefore, the significance of proverbs in the process of socialization among Yorùbá cannot be over- emphasized. The Yorùbá child is exposed to proverbs from the early age and throughout life he comes across and masters their use. When he is old, he would have become a repertoire of proverbs and collective wisdom of the people expressed in orature. In addition to the above, Ìdòwú (1966:10) says,

> There are those gems of Yorùbá language- the proverbs adage, and epigrams-which have become the sine quo non of Yoruba speech and often convey deep theological or metaphysical meaning.

During the advent of Christianity and Islam, the Yorùbá manipulate proverbs in various degrees to enhance the spread of the religions in the society. The use of proverbs among the adherents of Christianity, Islam and Africa Traditional religion has helped immensely to promote a good understanding and harmony in the society as will be discussed below:

a. *Bí Ọlórun bá páni lórí yóò firùgbọ̀n dí i* (If God makes you a bald headed man,
b. *it will be compensated with heard)*
c. *Ọlórun àdàbà náà ló dá ẹyẹlé*
(God that created dove also created pigeon)

The above proverbs are frequently used by the Christians to sink religious ideas into the hearts of their followers. For instance, the first proverb indicates that God is a God of compensation while the second proverb connotes that God is the creator of all things. Some proverbs are also commonly used by the Muslims to enhance their religious practice, thus;

a. Ìmọle sọrọ tán ojó kù, ó ní Ọlórun jérìí sọrọ òun
(After a Muslim's speech, the rain rumbles, he then confirms God's sanction of his speech).
b. Bí Ọlórun bá fẹ́ ṣe ìdájọ́ Lèmọ́mù, kò ní ṣojú ọmọ ilé kéwú
(If God wants to judge an Iman, it is not going to be in the presence of Quranic students).

Going by the above proverbs, the first one simply means that Islam is a true religion from God. The second proverb indicates that God will judge individuals accordingly no matter the status.

The adherents of African traditional religion are not left out in the use of proverbs. For example;

a. *Òrìsà bí ò bá le gbè mí, fi mí sílẹ̀ bí o se bá mi*
(Divinity if you cannot help me, leave me as you met me)
b. *Ẹní bá ran ara rẹ̀ lọ́wọ́ ni Òrìsà òkè ń ràn lẹ́rù*
(The divinity helps those who help themselves)

From the foregoing, the first proverb says that 'Òrìsà' (divinity) can render some help or do otherwise. While the second proverb connotes that, if you want any assistance, you then have to help yourself first. Generally speaking, all the above proverbs are coined around the three religions. The totality of the aforementioned proverbs is socially, religiously and culturally used to enhance good morals and peaceful co-existence among the religious practitioners in the society.

It could be deduced easily that proverbs are universal phenomena because Jesus Christ spoke to his followers in proverbs. Even there is a section of the Holy Bible devoted mainly to biblical proverbs. Proverbial sayings are very common also in the Holy Qur'an. It has been known from the time immemorial that great people of the world including the religious people, spoke in proverbs to plant their socio-religious and cultural ideas into the minds of their followers. In Yorùbáland also, Ifá is well known with proverb use. Ifá as a divine divinity in Yorùbá society often speaks in parables for the consumption of wise adherents. Therefore, the Yorùbá are always at home with the use of proverbs in socio-religious and cultural environments they find themselves. In short, proverbs could be regarded as a means of promoting harmony among the religious adherents in the society.

## III. Folksongs

Folksong is a universal phenomenon which cuts across cultures. Folksong permeates the Yorùbá life. That is, folksong is made use of in everyday life in the society. Folksong is socially, religiously and culturally relevant in the contemporary Yorùbá life. Any talented person can compose folksongs which can easily get disseminated in the society. Like other African folksongs that are effectively used by the adherents of religions in Yorùbá society to enhance socio-religious and cultural harmony, Ìdòwú (1966:10) has rightly said;

> The Yorùbá are a singing people in their singing, which comprises song, lyrics, ballads and minstrelsy they tell stories of their past, the circumstances of their present and their hopes and fears of the future. If all that a Yoruba clan has ever sung could be collected, there is no doubt that a fairly accurate history of the clan could be built up. And their songs are permeated with their beliefs.

What Ìdòwú is saying in essence is that folksongs of the Yorùbá serve as a reservoir for their socio-cultural and religious practices. Let us see the exemplifications below:

1) Mo dé yá ṣopé (2ce)
   Ọni kàn-an ṣe lórire ké è mọ̀, olubi ọni
   Enikan-an ṣe lorire kọ́ mọ̀ ọ́n, déyá ṣopé ò e.
   (I come to show appreciation (2ce)
   He who does not appreciate good deeds is a wicked person
   I appreciate good deeds
   I come to show appreciation)

The above song is a Yorùbá lyric specially used by the religion adherents in Christian churches to show appreciation to God for the good He has bestowed on them.

But initially, the above song is used socially and culturally among the traditional people before the advent of Christianity. When this religion was established in Yorùbá society, the above song was acceptable to the Christians and it is being used in their churches up to day. The adoption of the above song was due to its non-connection with any divinity. Also, the Christians often use the above song to woo the adherents of the traditional religion to their fold.

2) Aṣọ tó dára ni ma rà fọ́mọ́ mi (2ce)
   Bí mo lógún ẹrú
   Bí mo ní ìwọ̀tà ọgbòn
   Ọjọ́ tá bá kú o ọmọ làdèlé,
   Orí jé ká rọ́mọ selé dè wá
   Nítorí ọmọ laṣọ, ọmọ laṣọ,
   Ọmọ laṣọ ọ ayé, ọmọ laṣọ

I will buy good cloth for my child (2ce)
If I have twenty slaves, If I have thirty maids/servants,
The day we die, child is our survival
Creator grant us children that will succeed us
Because children are clothes, children are clothes,
Children are clothes in life, children are clothes

The foregoing is another Yorùbá lyric often used by Christians during children thanksgiving service in appreciation of God's protection and affection over the children. It is to be noted that the above song was inherited from the traditionalists and later coined around Christian worship. The above song like song (1) above is used as strategy to conquer the minds of the indigenous people. These then show that they are well at home since some of their songs are well acceptable in the Christian churches without any alterations. This means that their (indigenous) cultural interest is not being jeopardized being members of the Christian body.

3) Ibi omi ti í sun
   Àkùrọ̀ ni mọ̀ ni
   Ibi oòrùn ti í ràn
   Èlùjù keríke
   Kí mè rólóri ẹgbé ò

Eré mọ̀ yá o kookò
The source of water
It is called marshy ground,
Where the sun rises,
It is called a desert
If I don't see the group leader
The ceremony will not start

b) Ọ̀nà táyé fi yẹni
   Ọ̀nà ìyè ni
   Ọ̀nà t'áduúrà fi í gbà
   Ọ̀nà ìyè ni
   Kí mọ bá ké pe Bàbá ò
   Á dá mi lóhùn ayọ̀ o

The way to success
Is the way to salvation
The way our prayer is granted
Is the way to salvation
If I call on Almighty God
He will answer me with happiness

Songs (3a) and (3b) above are known as acculturation of Yorùbá folksongs into Christian churches. For instance, song (3a) is purely Yorùbá folksong without any alteration. But song (3b) is the acculturated version of song (3a) to suit the Christian worship. The socio-cultural and religious messages as conveyed in both songs remain the same.

In song (3a) and (3b), it is clear that the acculturation is done line by line. For instance, (3a), line 1 and (3b), line 1 differs in meaning but have the same tune. The same occurs in (3a), lines 2, 3, 4, 5, and 6; and (3b) lines 2, 3, 4, 5, and 6 respectively. The adaptation is in rhythm and not in meaning.

4) Ebi í pa mí
   Mo wí an yèyé mi
   Ọmọ í rè mí,
   Mo wí an rìṣà
   Ojú mè i mọ́ kẹrun mọ́ jiyọ̀
   Ayé rẹ í rè mí Balọ́jà Ìgèdè
   I feel hungry
   I turn to my mother
   I want children
   I turn to Òrìṣà (divinity)
   There is no day that mouth will not taste salt,
   I appreciate your life, Balọ́jà Ìgèdè.

b) Ebi í pa mí
   Mo wí an 'lúwa
   Ọmọ í rè mí
   Mo wí an Jésù
   Ojú mè i mọ́ kẹrun mọ́ jiyọ̀
   Ayé rẹ í rè mí Baba wa lókè
   I feel hungry,
   I turn to God
   I want children
   I turn to Jesus
   There is no day that mouth will not taste salt
   I appreciate the way of Almighty

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Song (4a) is purely Yorùbá folksong, while song (4b) is the acculturated version of song (4a). It is often used by Christians in their churches to suit their religious purposes.

A cursory examination of songs (4a) and (4b) reveal that (4a) line I and (4b) line 1 have the same meaning and tune. In (4b) line 2, Olúwa is substituted for Yèyé in (4a) line 2. Both lines have the same tune but with different meaning. Also, (4a) line 3 and (4b) line 3 have the same tune and meaning respectively. But in (4b) line 4, Jesus is substituted for *Òrìṣà* in (4a) thus making them to have the same tune but different meaning. Lines 5 of (4a) and (4b) have the same meaning and tune while lines 6 of (4a) and (4b) have the same tune but differs in meaning because Baba wa lókè in (4b) line 6 is substituted for Balójà Ìgèdè in (4a) line 6.

It is worth of note that Islamic adherents are not left out of either adaptation of Yorùbá folksongs into Islamic worship or Muslim social activities.

5) *Káàbò sé dáadáa lo dé?*
   *Káàbò sé dáadáa lo dé?*
   *Ó pé tá a ti ń retí rẹ o*
   *Káàbò sé dáadáa lo dé?*
   Welcome, do you arrive safely?
   Welcome, do you arrive safely?
   It is a long time we have been
   awaiting you.
   Welcome, do you arrive safely?

The above song is often used by adherents of Islam to welcome both Alhajis and Alhajas on their arrival from the Holy pilgrimage to Mecca every year.

6) *Báaríkà rẹ ò e! (2ce)*
   *Alhaji tó re Mecca to o bò*
   *Báaríkà rẹ ò e*
   *Alhaja tó re Mecca to o bò*
   *Báaríkà rẹ ò e!*
   Congratulations to you! (2ce)
   Alhaji who has gone to Mecca
   and returned
   Congratulations to you!
   Alhaja who has gone to Mecca
   and returned.
   Congratulations to you!)

Like song (5) above, song (6) is also used to mark the safe arrival of adherents of Islam from holy land in Mecca. Holy pilgrimage to Mecca is one of the pillars of Islam that any good Muslim who can afford it must fulfill once in his or her lifetime. This is to say that the above songs serve a significant function in the religious life of Muslims in Yorùbá society.

7) *Ohun mẹta là ń jẹ 'gbádùn láyé*
   *Òkan lowó*
   *Òkan lomọ*
   *Òkan làlàafià*
   *Eni tí ò lówó,*
   *Kò sẹni tí yóò mọ*

*Eni tí ò bímọ*
*Wón á fiwòsí lọ ó*
*Eni tí ò gbádùn,*
*Ilé ayé á sun.*
*Elédàá mi jé n lóhun mẹtèèta*
*Kí n rílé ayé ṣe*
*Jé n lóhun mẹtèèta*
*Kí n rílé ayé ṣe*
Three things are used to enjoy life
One is money
One is children
One is good health
Whoever is poor will not be recognized
Whoever is childless
They will make jest of him
Whoever is not healthy,
The life will be meaningless to him
My creator grant me those three things
that I may enjoy life let me have those three things
that I may enjoy life.)

From the foregoing song, one will see that the three major essential blessings important to Yorùbá are embedded in the song. That is, the blessing of money, the blessing of children and the blessing of good health. The Yorùbá usually or seem very comfortable wherever those three major blessings of life can be achieved.

8) *Bá mi gbádùrá mi gòkè lọ (2ce,)*
   *Òkè tówó osó ò lè tó*
   *Bámi gbádùrá mi gòkè lọ*
   Help me carry my prayer high up (2ce)
   The place where the hands of wizards and witches will not reach
   Help me carry my prayer high up

The song (8) above shows that the adherents of Islam believe that wizards and witches are enemies of progress. Therefore the Muslim pray to God not to allow these enemies of light to obstruct their prayer.

Just like Islam and Christianity, African religion has its own special songs for the purpose of ritual worship. These liturgical songs are strictly confided into the shrines. This is to say that there are taboos associated with their use. Below are few of such songs.

9) *Iwin igbó ewéle e e*
   *Ìrókò Ibòrìṣà*
   *Ẹ mà pèlé o o*
   *Bá a bá ṣèyì tán*
   *A ó sàmódún o*
   *Ire wa ti dóde ọgbèrì ò mọ*
   *Tiwa n tiwa o, ti wa n tiwa*
   *Àmódún ká gbómọ béèyí pòn o*
   *Ìrókò o igi re o*

Fairies of ewele bush
Ìrókò of the shrine
Greetings to you
Thank you very much
If we finish this year's celebration

We will do next year's celebration
Our fortune has come,
The uniniated does not know
Ours is ours, we, we
Next year we will mount children like this
Ìrókò year we will mount children like this
Ìrókò the favourable tree

From the above song, it is shown that the worshippers are praying to their divinity to provide them with children before the next celebration. This major request of their indicates that the issue of child bearing is very paramount in minds of the adherents of the three major religions

10) Lílé:     Ọ̀rin olúayé ò mọ̀ dù mí o
    Ègbè:     Ayé, Ayé mi ọ̀ mọ̀ dù
    Lílé:      Líjọ́ mẹ̀ ẹ́ ràjò
              Líjọ́ mẹ̀ ẹ́ roko
    Ègbè:     Ayé, ayé mi ọ mọ̀ dù
    Lílé:     Líjọ́ ọ̀tẹ̀, líjọ́ ogun
    Ègbè:     Ayé, ayé mi ọ mọ̀ dù
    Lílé:     Ọ̀rin olúayé ò mọ̀ dù mí o
    Ègbè:     Ayé, Ayé, mi ọ̀ mọ̀ dù

    (Solo)    Ọ̀rin olúayé you must protect me
    Chorus:   It I my life that you must protect
    Solo:     When I', on a journey
              When I'm on my way to the farm
    Chorus:   it is my life that you must protect
    Solo:     During revolt, during the war,
    Chorus:   it is my life that you must protect
    Solo:     Orin Oluaye you must protect me
    Chorus:   it is my life you must protect

The foregoing song simply connotes that the devotees of Ọ̀rin olúayé (divinity) pray for security of their lives. This shows that the above devotees are keenly interested in their life's security as it is also applicable to their other religious counterparts in the society.

Going through all the above songs, one will clearly see that individual religious sects are aiming at the same goal but in different ways. Since all the religious adherents have the same cultural background, they find it very easy to adjust themselves to the prevailing religious situations. The timely adjustment of those followers often helps immensely to achieve socio-religious and cultural co-existence in the society.

## IV. Social Changes in the Society

It is worth to note that the wind of westernization known to blow heavily in the Yorùbáland has not made any appreciable impact on the use of Yorùbá orature in the Christian churches and mosques hitherto. According to Yorùbá wise saying 'ìjì kì í jà kó gbé ọmọ odó' (No wave can blow a mortar). The deadly wave of westernization has not been able to do serious havoc but instead, it has helped to boost the use of Yorùbá orature. The effect is that, socio-religious harmony is noticed and waxing stronger and strong among the religious adherents in the society. It is often noticed that during the socio-political gathering in the society, series of songs are rendered to grace such occasions. Such gathering often encompasses members of the three religions. The songs rendered during such occasions have dual functions to enhance socio-political and socio-religious harmony.

Sometimes in the year 2000, at Ọ̀sogbo, Ọ̀sun State Capital, people of different religious categories converged to celebrate one year anniversary of democracy in the state. During the occasion, one religious personality each from Christianity, Islam and African traditional religion is called upon by the state Governor to offer prayers in accordance with the individual's religious leaning or camp. After the prayers, songs of grace that cut across the three major religions were rendered to mark and grace the remarkable occasion. Also, at Ìbàdàn, Ọ̀yọ́ State capital, on the first of January, 2001 people of various religious statuses converged at the instance of the state governor to commemorate the New Year celebration. During this occasion prayers were offered by a religious personality each from the main religions to mark the occasion.

Religious songs and socio-cultural activities were rendered to boost the August ceremony. The crowd was seen socializing, marrying and jubilating together. Since such gathering usually has socio-religious undertone, hence, all these types of socio-political and religious gatherings are the order of the day across the Yorùbá country. The main focus of such occasion is to foster unity, good understanding, peaceful co-existence and socio-religious harmony. Hitherto, the Yorùbá orature is often employed as a strategy for socio-religious harmony in the society.

## V. Conclusion

Our disquisition connotes that the application of the Yorùbá orature in Christian churches, mosques and shrines has paved way for socio-cultural, unity, peaceful co-existence and religious harmony in Yoruba society. The Yorùbá orature is well blended that it oscillates between the foreign religions and African traditional religion. An exploration into the Yorùbá orature proves that the effective manipulation of proverbs among the adherents of the three major religions of Islam, Christianity and African Traditional Religions has helped immensely to enhance good understanding and harmony in the society. Also in this work, it is crystal clear that the folksongs are socially, culturally and religiously relevant in the contemporary Yorùbá life. Hence, the appropriate manipulation of folksongs has helped to promote the needed socio-religious and cultural harmony in the society.

It is further observed that the Yorùbá orature has developed a tough skin towards westernization. This is an attempt to sustain the culture of the people.

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Besides, the Yorùbá orature which encompasses songs, lyrics, ballads and mitrels are used to tell stories of their past, the circumstances of their present and their hopes and fears of the future to achieve the needed unity, peace, understanding and religious co-existence in the Yorùbá country.

## REFERENCES RÉFÉRENCES REFERENCIAS

1. Abdullahi, A. (1922) "Islam in Yorùbáland". University of Lagos, Lagos.
2. Adejumo, A.B. (1989). "Osun Festival and fertility: A Celebration in Yoruba mythology" AFRICANA MARBURGENSA. XXII, 2pp 45-5
3. Agbaje J.B. (1995). 'The Literary study on the Folksongs of the Ekiti people of Nigeria', Ph.D Thesis University of Ilorin, Ilorin, Nigeria.
4. Adedeji Femi (2002). "The Effect of Acculturation on African Music. A music of the Yoruba as a case study, in Theology and Sociology of Yoruba Indigenous Religion. Babalola E.O. (ed) pp89-99. Concept publication (Nig) limited.
5. Ajibola, J.O. (1976) OWE YORUBA, Oxford University Press, Ibadan Onibonje Press, Ibadan.
6. Babalola E.O. (1991). "The Economic Impact of Indigenous Religious upon the Yoruba Society; The Owo Example 'Asia Journal of Theology: Volume 5 No 1pp 163-175.
7. Bada, S.O. (1973) Owe Yoruba ati Isedale Won Oxford University Press, Ibadan
8. Dopamu, O.P (2000). ESU: The Invisible foe of Man Shebiotimo Publications 72, Araromi street, Ijebu-Ode.
9. Falola T. (1982) 'Religion, Rituals and the Yoruba Pre-colonial Domestic Economy: Myth and Reality, Ife Journal of Religions Vol II P. 33
10. Idowu E.B. (1966), Olodumare: God in Yoruba Belief. Longmans, London.
11. Olayiwola D.O. (1989), 'The Social Impact of New Religious Movements on contemporary Yoruba life: The Aladura as a case in point? AFRICANA MARBUGENISA XXII, 2PP 33-34.
12. Omojajowo, J.A. (1971) "Cherubim and Seraphim Church in Nigeria' Ph.D. Thesis, University of Ibadan, Ibadan.
13. Omole W. (1998), A Collection of Africa Proverb and Usages. Molley Publishers Ltd,, P.O. Box 3980, Akure
14. Parrinder, G. (1953), Religion in an African City. Oxford University Press, Oxford.
15. Peel, J.D. (1968), Aladura: A Religious Movement among the Yoruba. Oxford University Press, Oxford.
16. Webster J.B. (1964). The African Churches Among the Yoruba. Clarendon Press, Oxford.
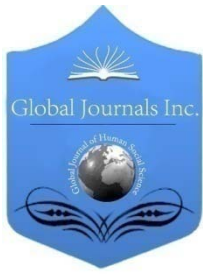
# Does Science Replace Religion?

By Trudy Myrrh Reagan

Abstract- We can go far on the virtues I observe in the scientific enterprise: A commitment to truth; humility about one's theory in the face of contervailing data; recognition that every living creature is our relative (especially other humans); and imparting a sense of wonder. Is it enough? I share what I have learned from religious practice that supplements the scientific outlook and has enriched my life.

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# Does Science Replace Religion?

Trudy Myrrh Reagan

*Abstract-* We can go far on the virtues I observe in the scientific enterprise: A commitment to truth; humility about one's theory in the face of contervailing data; recognition that every living creature is our relative (especially other humans); and imparting a sense of wonder. Is it enough? I share what I have learned from religious practice that supplements the scientific outlook and has enriched my life.

## I. Introduction

I straddle two worlds. My scientific family and studies have given me a closeup view of the scientific endeavor. Its work, driven by curiosity and belief in logical methods, and conducted with an obedience to truthfulness, have inspired me to incorporate science ideas and images into my art since 1967. Here I examine scientism and secular humanism, which propose that the methods of science and logic are the single best basis for knowledge and personal conduct. My other world is that of a practicing Quaker. Quakerism is an experiential religion rather than one of doctrines. It grew out of the political and religious turmoil of 17th century England. It is a Christian sect, and has several branches. Some congregations are very Christ-focused. Others, like the one I attend, allow one to seek wisdom from Buddhism and other sources. Through my engagement with the world through Quaker service, and a stunning experience years ago of the Inner Light (as well as my intuitive work as an artist), I am moving toward an amplified view of how to move through the world. I share this here.

## II. The Virtues of Science

Scientists who are hired to promote industry agendas are shills. Fortunately, they are the exception. One of the key values of science is truthfulness. This makes it possible to create an edifice of reliable data that new discoveries build on. And truthfulness is a way of being, of creating trust with others.

Researchers are acutely aware of the possibility of being later proved wrong, and of great unanswered questions. It instills in them a kind of humility. My geologist father embraced evidence of the movement of continental plates in the 1970s, in spite of having written a book on mountain-building based on an earlier theory.

New tools permit us to see astonishing images, taking us down to the atomic level, as well as so many light years distant that we approach beginning of this universe. It excites a humbling sense of wonder.



*Fig. 1 :* *Number Governs Form,* 1994, acrylic on .95 cm Plexiglas,114.3 cm, engraved white areas, backlit

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Science is developing a picture of where we are in space and time that humans very much need. All over the world, all through history, humans have woven creation stories. Now, our ideas of where we are in space and time has been redefined by scientific discoveries, many of them quite recent: The antiquity of the universe; its hundred billion galaxies, with dark energy beyond; Earth as a whole system, with its oxygen created and recreated by innumerable bacteria in the oceans; and what DNA shows us about ourselves. DNA studies have revealed that all humans have a common set of ancestors in Africa that spread out and populated the earth. Yet in war, humans tend to see enemies as less than human. All through human history, people have been bounded by tribalism How differently will we treat each other when DNA facts become common knowledge?

## III. METAPHYSICS

It was because of his religious upbringing that Michael Faraday believed in a great underlying unity in nature. He believed God's creation would be orderly throughout. It was he who discovered that a moving magnet could induce an electric current, thus uniting two of the great forces of nature. This led him on a long search for proof that magnetism influences light, which he ultimately found.[1]

I myself harbor a drive to identify what is always true in nature outside of ourselves. Science has informed my search.

I confess that I have trouble believing in a personal God. In relation to humans and the size of the universe, physicist Richard Feynman has said, "The stage is too large for the play." Yet, I have had uncanny events happen to me. It seems that events outside my control do come to my rescue upon occasion. More often, as I pray over a problem, a unique solution suggests itself. A Quaker saying is "Way will open." (fig: 2)

The movie *Pi* concerned a young man who drove himself crazy seeing numerical significances where none existed. Such is the propensity for humans to see patterns in chaos. Yet, how astonished was I when my physicist husband told me that the discovery of antimatter and black holes had been anticipated by physicists' mathematical calculations! And more recently—the Higgs boson.



*Fig. 2 :* *Way will Open,* 2013, 76.2 cm diameter on .32 cm Plexiglas, backlit

*Number Governs Form,* (fig. 1) part of my Essential Mysteries series of paintings, celebrates the formal mathematics found even in everyday patterns in nature.

Physicist and mathematician Roger Penrose said in 2003,

I view the mathematical world as having an existence of its own, independent of us. It is timeless. I think, to be a working mathematician, it is difficult to hold any other view. It's not so much that the Platonic world has its own existence, but that the physical world accords with such precision, subtlety, and sophistication with aspects of the Platonic mathematical world. … This idea is central to the way we do science. Science is always exploring the way the world works in relation to certain proposed models, and these models are mathematical constructions…. And it's not just precision. The mathematics one uses has a kind of life of its own."[2]

All of this satisfies a need we have for "eternal verities" in the midst of a tempestuous world of societal and climatic changes. Spinoza felt it. Einstein felt it.

The entomologist, E.O. Wilson, in 1998 wrote a book, *Consilience,* attempting to prove that all knowledge is one, uniting not only the various sciences, but social sciences and the humanities (even aesthetics and religion) as well. This has been somewhat controversial.[3] In 1975, I intuited a related idea. From my observation of the scientists, artists, and religious people I knew, I sensed that their driving quest was to somehow achieve a deep sense of the world we live and move in.



*Fig. 3 : A Vast Consilience,* 2004, acrylic on .95 cm Plexiglas, white engraved lines: 121.9 cm square

The disciplines I chose were:

- The astronomer (who probes the farthest reaches of the universe)
- the biologist and others who explore the extremely small
- the artist or composer, who delights in new pattern configurations within the basic order

- and the mystic, striving for an emotional appreciation of the Whole.

The center of *A Vast Consilience* (fig. 3) shows an eclipse, because the total pattern is unknowable—not by us, not by the culture as a whole, nor by future thinkers. It is interesting that both the Greek words logos and cosmos have imbedded in them the idea of an underlying order of the universe. When I learned that

ancient Greeks also had thought about this, I realized that this quest extends not only laterally, across disciplines, but vertically, through history. In my art, I have treated this theme several times. The latest iteration I named *A Vast Consilience.* I thank Wilson for bringing me this wonderful word.

## IV. My Religious Life

Still, for helping us through our lives, science, mathematics, and awe of nature provide only half an answer. In my seventy-eight years of experience, religious practice has brought me illumination, greater compassion, support of a community, and, I hope, wisdom.

This is hard to say because I am from a family of mostly hardheaded materialists. It makes it hard for me to utter the word "God." It is even harder for me to dismiss the idea of God after being surprised by grace with an experience of what Quakers call "the Inner Light." I learned that Mother Theresa had such an experience in a railway carriage when she was young, and declared that she spent the rest of her life hoping for its recurrence. Whether, as some say, certain areas of the brain are involved in this is irrelevant when my experience half a lifetime ago brought me an awareness of a path of goodness through life, and the energy to pursue it.

Not everyone is blessed with this vivid response. Nor did it remain vivid for me. It is like falling in love in that way. However, we can draw close to it with music, poetry, meditation, or heart-lifting worship. I was privileged as a teenager to visit many black churches that powerfully invoke the spirit. When I encountered Catholicism in college, I could feel the power of ritual for people. It can be called forth, say, on a vision quest in the desert, full-immersion baptism, Sufi dancing, or any number of practices from religions around the world.

The discussion of my personal religious life that follows will mirror, I am sure, personal experiences from many different faiths.

Regarding compassion: It is not easy. It forces me to take seriously my own conduct and, more importantly, Gandhi's Seven Deadly Social Sins: Politics without principle—Wealth without work—Commerce without morality—Pleasure without conscience—Education without character—Science without humanity—Worship without sacrifice. [4]

With the Quakers, I did service work in Philadelphia slums in the 1950s. Through them I developed a willingness to look under the facade of my society, analyzing what structures in the system protect some people and ignore or abuse others—another kind of truth-seeking. I have found especially valuable Quakers' special trainings in listening to people very unlike myself. Respect for truth is very allied with respect for each person. Quakers base respect on their belief in the Inner Light.

Since then, I have come face-to-face with refugees from Central America, and homeless people—learning where I am—as part of a society. In both cases, I was somewhat fearful at first. I had to push myself to get started. Because my Quaker Meeting (church) was involved, it was far easier. We helped each other make a difference, each individual exceeding what he or she thought themselves able to do—and made friends across societal boundaries along the way.

Even meditation, either with the Quakers or with Buddhists, is easier for me with other people than alone. The mutual support of a congregation is more comfort the older I get. My twice-weekly practice, midweek with Buddhists and on Sundays in silent Quaker worship, let me experience deep stillness, which some have called the Ground of All Being. The palpable effect on my life is an equanimity and magnanimity that I have long sought.

For this reason, I can say that science has not replaced religion. Science provides a floor for knowing where we are in beyond-human space and beyond-human time. As humans, we need this floor. Otherwise, why would each human tribe have a creation myth?

Moreover, I continue to seek wisdom from viewpoints like Buddhism, Taoism and other faiths. Combined with my life experience, it has been a journey of continual surprise, and a joyful one that steadies me.

However, I can say from long experience that any religion that tells me what to believe, whether by creeds, authority of clergy, or the promise of supernatural rewards and punishments, merely stirs the embers of my skepticism.

This is why the work of Buddhist monk, Thich Nhat Hanh interests me. He instructs his community:

"Aware of the suffering created by fanaticism and intolerance, we are determined not to be idolatrous about or bound to any doctrine, theory, or ideology, even Buddhist ones. Buddhist teachings are guiding means to help us learn to look deeply and to develop our understanding and compassion. They are not doctrines to fight kill, or die for. " [5]

My religious practice feels consonant with what science teaches me about the universe.

Things seen and unseen, the universe itself, all are larger than human imagining.

This is the background in my painting, *Paradox.* The white net you see is the human attempt to explain it by religious doctrine or science theory. Like imagining angels dancing on the head of a pin, or the existence of an "ether" in 19th century physics, we stumble on *paradox.* A continual recognition of the majesty and eternal flow of the unbuilt world, or the generous smiles of little children, serves us better.

### References Références Referencias

1. Neil de Grasse Tyson et al., *Cosmos,* episode 10
2. Karl Giberson, "The Man Who Fell to Earth: An Interview with Roger Penrose," *Science and Spirit*

Magazine (March-April 2003) quoted in Plato at the Googleplex by Rececca Newberger Goldstein, Pantheon Books, New York, 2014

3. E.O Wilson, *Consilience:* The Unity of All Knowledge, Knopf, 1998 and interview, "Divisive Ideas on 'Unification'," Los Angeles Times, Thursday, July 9, 1998

4. http://www.jpcarter.com/Spirituality/PDF/SevenDeadlySinsExplained.pdf

5. Thich Nhat Hanh, 1987, *Interbeing,* Parallax Press, the publishing division of the Unified Buddhist Church, Berkeley, CA, p. 76. Thich Nhat Hanh is a Buddhist teacher from Vietnam who founded the Order of Interbeing. His practice of equanimity and compassion have been tested in wartime.



*Fig. 4 : Paradox,* 2014, acrylic painting on .32cm Plexiglas sheet, 76.2cm diameter, backlit.

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The FARSHS can go through standards of OARS. You can also play vital role if you have any suggestions so that proper amendment can take place to improve the same for the benefit of entire research community.

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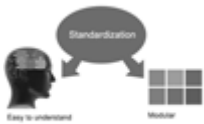
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The MARSHS member can apply for approval, grading and certification of standards of their educational and Institutional Degrees to Open Association of Research, Society U.S.A.

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The "FARSC" is a dignified title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., FARSC or William Walldroff, M.S., FARSC.

The IFOARS institution is entitled to form a Board comprised of one Chairperson and three to five board members preferably from different streams. The Board will be recognized as "Institutional Board of Open Association of Research Society"-(IBOARS).

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The IBOARS can initially review research papers of their institute and recommend them to publish with respective journal of Global Journals. It can also review the papers of other institutions after obtaining our consent. The second review will be done by peer reviewer of Global Journals Incorporation (USA) The Board is at liberty to appoint a peer reviewer with the approval of chairperson after consulting us.

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After nomination of your institution as "Institutional Fellow" and constantly functioning successfully for one year, we can consider giving recognition to your institute to function as Regional/Zonal office on our behalf.

The board can also take up the additional allied activities for betterment after our consultation.

**The following entitlements are applicable to individual Fellows:**

Open Association of Research Society, U.S.A (OARS) By-laws states that an individual Fellow may use the designations as applicable, or the corresponding initials. The Credentials of individual Fellow and Associate designations signify that the individual has gained knowledge of the fundamental concepts. One is magnanimous and proficient in an expertise course covering the professional code of conduct, and follows recognized standards of practice.

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- • This individual has learned the basic methods of applying those concepts and techniques to common challenging situations. This individual has further demonstrated an in–depth understanding of the application of suitable techniques to a particular area of research practice.

## Note :

"
- In future, if the board feels the necessity to change any board member, the same can be done with the consent of the chairperson along with anyone board member without our approval.

- In case, the chairperson needs to be replaced then consent of 2/3rd board members are required and they are also required to jointly pass the resolution copy of which should be sent to us. In such case, it will be compulsory to obtain our approval before replacement.

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The paper should be in proper format. The format can be downloaded from first page of 'Author Guideline' Menu. The Author is expected to follow the general rules as mentioned in this menu. The paper should be written in MS-Word Format (*.DOC,*.DOCX).

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**You can use your own standard format also.**
**Author Guidelines:**

1. General,

2. Ethical Guidelines,

3. Submission of Manuscripts,

4. Manuscript's Category,

5. Structure and Format of Manuscript,

6. After Acceptance.

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Before submitting your research paper, one is advised to go through the details as mentioned in following heads. It will be beneficial, while peer reviewer justify your paper for publication.

**Scope**

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3) Final approval of the version of the paper to be published.

All authors should have been credited according to their appropriate contribution in research activity and preparing paper. Contributors who do not match the criteria as authors may be mentioned under Acknowledgement.

Acknowledgements: Contributors to the research other than authors credited should be mentioned under acknowledgement. The specifications of the source of funding for the research if appropriate can be included. Suppliers of resources may be mentioned along with address.

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Manuscript submission is a systematic procedure and little preparation is required beyond having all parts of your manuscript in a given format and a computer with an Internet connection and a Web browser. Full help and instructions are provided on-screen. As an author, you will be prompted for login and manuscript details as Field of Paper and then to upload your manuscript file(s) according to the instructions.

To avoid postal delays, all transaction is preferred by e-mail. A finished manuscript submission is confirmed by e-mail immediately and your paper enters the editorial process with no postal delays. When a conclusion is made about the publication of your paper by our Editorial Board, revisions can be submitted online with the same procedure, with an occasion to view and respond to all comments.

Complete support for both authors and co-author is provided.

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Review papers: These are concise, significant but helpful and decisive topics for young researchers.

Research articles: These are handled with small investigation and applications

Research letters: The letters are small and concise comments on previously published matters.

## 5. STRUCTURE AND FORMAT OF MANUSCRIPT

The recommended size of original research paper is less than seven thousand words, review papers fewer than seven thousands words also.Preparation of research paper or how to write research paper, are major hurdle, while writing manuscript. The research articles and research letters should be fewer than three thousand words, the structure original research paper; sometime review paper should be as follows:

**Papers**: These are reports of significant research (typically less than 7000 words equivalent, including tables, figures, references), and comprise:

(a)Title should be relevant and commensurate with the theme of the paper.

(b) A brief Summary, "Abstract" (less than 150 words) containing the major results and conclusions.

(c) Up to ten keywords, that precisely identifies the paper's subject, purpose, and focus.

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(e) Resources and techniques with sufficient complete experimental details (wherever possible by reference) to permit repetition; sources of information must be given and numerical methods must be specified by reference, unless non-standard.

(f) Results should be presented concisely, by well-designed tables and/or figures; the same data may not be used in both; suitable statistical data should be given. All data must be obtained with attention to numerical detail in the planning stage. As reproduced design has been recognized to be important to experiments for a considerable time, the Editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned un-refereed;

(g) Discussion should cover the implications and consequences, not just recapitulating the results; conclusions should be summarizing.

(h) Brief Acknowledgements.

(i) References in the proper form.

Authors should very cautiously consider the preparation of papers to ensure that they communicate efficiently. Papers are much more likely to be accepted, if they are cautiously designed and laid out, contain few or no errors, are summarizing, and be conventional to the approach and instructions. They will in addition, be published with much less delays than those that require much technical and editorial correction.

The Editorial Board reserves the right to make literary corrections and to make suggestions to improve briefness.

It is vital, that authors take care in submitting a manuscript that is written in simple language and adheres to published guidelines.

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*Language: The language of publication is UK English. Authors, for whom English is a second language, must have their manuscript efficiently edited by an English-speaking person before submission to make sure that, the English is of high excellence. It is preferable, that manuscripts should be professionally edited.*

Standard Usage, Abbreviations, and Units: Spelling and hyphenation should be conventional to The Concise Oxford English Dictionary. Statistics and measurements should at all times be given in figures, e.g. 16 min, except for when the number begins a sentence. When the number does not refer to a unit of measurement it should be spelt in full unless, it is 160 or greater.

Abbreviations supposed to be used carefully. The abbreviated name or expression is supposed to be cited in full at first usage, followed by the conventional abbreviation in parentheses.

Metric SI units are supposed to generally be used excluding where they conflict with current practice or are confusing. For illustration, 1.4 l rather than $1.4 \times 10\text{-}3$ m3, or 4 mm somewhat than $4 \times 10\text{-}3$ m. Chemical formula and solutions must identify the form used, e.g. anhydrous or hydrated, and the concentration must be in clearly defined units. Common species names should be followed by underlines at the first mention. For following use the generic name should be constricted to a single letter, if it is clear.

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Many researchers searching for information online will use search engines such as Google, Yahoo or similar. By optimizing your paper for search engines, you will amplify the chance of someone finding it. This in turn will make it more likely to be viewed and/or cited in a further work. Global Journals Inc. (US) have compiled these guidelines to facilitate you to maximize the web-friendliness of the most public part of your paper.

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- One should start brainstorming lists of possible keywords before even begin searching. Think about the most important concepts related to research work. Ask, "What words would a source have to include to be truly valuable in research paper?" Then consider synonyms for the important words.
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- One should avoid outdated words.

Keywords are the key that opens a door to research work sources. Keyword searching is an art in which researcher's skills are bound to improve with experience and time.

Numerical Methods: Numerical methods used should be clear and, where appropriate, supported by references.

*Acknowledgements: Please make these as concise as possible.*

References

References follow the Harvard scheme of referencing. References in the text should cite the authors' names followed by the time of their publication, unless there are three or more authors when simply the first author's name is quoted followed by et al. unpublished work has to only be cited where necessary, and only in the text. Copies of references in press in other journals have to be supplied with submitted typescripts. It is necessary that all citations and references be carefully checked before submission, as mistakes or omissions will cause delays.

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Preparation of Electronic Figures for Publication

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## TECHNIQUES FOR WRITING A GOOD QUALITY RESEARCH PAPER:

**1. Choosing the topic:** In most cases, the topic is searched by the interest of author but it can be also suggested by the guides. You can have several topics and then you can judge that in which topic or subject you are finding yourself most comfortable. This can be done by asking several questions to yourself, like Will I be able to carry our search in this area? Will I find all necessary recourses to accomplish the search? Will I be able to find all information in this field area? If the answer of these types of questions will be "Yes" then you can choose that topic. In most of the cases, you may have to conduct the surveys and have to visit several places because this field is related to Computer Science and Information Technology. Also, you may have to do a lot of work to find all rise and falls regarding the various data of that subject. Sometimes, detailed information plays a vital role, instead of short information.

**2. Evaluators are human:** First thing to remember that evaluators are also human being. They are not only meant for rejecting a paper. They are here to evaluate your paper. So, present your Best.

**3. Think Like Evaluators:** If you are in a confusion or getting demotivated that your paper will be accepted by evaluators or not, then think and try to evaluate your paper like an Evaluator. Try to understand that what an evaluator wants in your research paper and automatically you will have your answer.

**4. Make blueprints of paper:** The outline is the plan or framework that will help you to arrange your thoughts. It will make your paper logical. But remember that all points of your outline must be related to the topic you have chosen.

**5. Ask your Guides:** If you are having any difficulty in your research, then do not hesitate to share your difficulty to your guide (if you have any). They will surely help you out and resolve your doubts. If you can't clarify what exactly you require for your work then ask the supervisor to help you with the alternative. He might also provide you the list of essential readings.

**6. Use of computer is recommended:** As you are doing research in the field of Computer Science, then this point is quite obvious.

**7. Use right software:** Always use good quality software packages. If you are not capable to judge good software then you can lose quality of your paper unknowingly. There are various software programs available to help you, which you can get through Internet.

**8. Use the Internet for help:** An excellent start for your paper can be by using the Google. It is an excellent search engine, where you can have your doubts resolved. You may also read some answers for the frequent question how to write my research paper or find model research paper. From the internet library you can download books. If you have all required books make important reading selecting and analyzing the specified information. Then put together research paper sketch out.

**9. Use and get big pictures:** Always use encyclopedias, Wikipedia to get pictures so that you can go into the depth.

**10. Bookmarks are useful:** When you read any book or magazine, you generally use bookmarks, right! It is a good habit, which helps to not to lose your continuity. You should always use bookmarks while searching on Internet also, which will make your search easier.

**11. Revise what you wrote:** When you write anything, always read it, summarize it and then finalize it.

**12. Make all efforts:** Make all efforts to mention what you are going to write in your paper. That means always have a good start. Try to mention everything in introduction, that what is the need of a particular research paper. Polish your work by good skill of writing and always give an evaluator, what he wants.

**13. Have backups:** When you are going to do any important thing like making research paper, you should always have backup copies of it either in your computer or in paper. This will help you to not to lose any of your important.

**14. Produce good diagrams of your own:** Always try to include good charts or diagrams in your paper to improve quality. Using several and unnecessary diagrams will degrade the quality of your paper by creating "hotchpotch." So always, try to make and include those diagrams, which are made by your own to improve readability and understandability of your paper.

**15. Use of direct quotes:** When you do research relevant to literature, history or current affairs then use of quotes become essential but if study is relevant to science then use of quotes is not preferable.

**16. Use proper verb tense:** Use proper verb tenses in your paper. Use past tense, to present those events that happened. Use present tense to indicate events that are going on. Use future tense to indicate future happening events. Use of improper and wrong tenses will confuse the evaluator. Avoid the sentences that are incomplete.

**17. Never use online paper:** If you are getting any paper on Internet, then never use it as your research paper because it might be possible that evaluator has already seen it or maybe it is outdated version.

**18. Pick a good study spot:** To do your research studies always try to pick a spot, which is quiet. Every spot is not for studies. Spot that suits you choose it and proceed further.

**19. Know what you know:** Always try to know, what you know by making objectives. Else, you will be confused and cannot achieve your target.

**20. Use good quality grammar:** Always use a good quality grammar and use words that will throw positive impact on evaluator. Use of good quality grammar does not mean to use tough words, that for each word the evaluator has to go through dictionary. Do not start sentence with a conjunction. Do not fragment sentences. Eliminate one-word sentences. Ignore passive voice. Do not ever use a big word when a diminutive one would suffice. Verbs have to be in agreement with their subjects. Prepositions are not expressions to finish sentences with. It is incorrect to ever divide an infinitive. Avoid clichés like the disease. Also, always shun irritating alliteration. Use language that is simple and straight forward. put together a neat summary.

**21. Arrangement of information:** Each section of the main body should start with an opening sentence and there should be a changeover at the end of the section. Give only valid and powerful arguments to your topic. You may also maintain your arguments with records.

**22. Never start in last minute:** Always start at right time and give enough time to research work. Leaving everything to the last minute will degrade your paper and spoil your work.

**23. Multitasking in research is not good:** Doing several things at the same time proves bad habit in case of research activity. Research is an area, where everything has a particular time slot. Divide your research work in parts and do particular part in particular time slot.

**24. Never copy others' work:** Never copy others' work and give it your name because if evaluator has seen it anywhere you will be in trouble.

**25. Take proper rest and food:** No matter how many hours you spend for your research activity, if you are not taking care of your health then all your efforts will be in vain. For a quality research, study is must, and this can be done by taking proper rest and food.

**26. Go for seminars:** Attend seminars if the topic is relevant to your research area. Utilize all your resources.

**27. Refresh your mind after intervals:** Try to give rest to your mind by listening to soft music or by sleeping in intervals. This will also improve your memory.

**28. Make colleagues:** Always try to make colleagues. No matter how sharper or intelligent you are, if you make colleagues you can have several ideas, which will be helpful for your research.

**29. Think technically:** Always think technically. If anything happens, then search its reasons, its benefits, and demerits.

**30. Think and then print:** When you will go to print your paper, notice that tables are not be split, headings are not detached from their descriptions, and page sequence is maintained.

**31. Adding unnecessary information:** Do not add unnecessary information, like, I have used MS Excel to draw graph. Do not add irrelevant and inappropriate material. These all will create superfluous. Foreign terminology and phrases are not apropos. One should NEVER take a broad view. Analogy in script is like feathers on a snake. Not at all use a large word when a very small one would be sufficient. Use words properly, regardless of how others use them. Remove quotations. Puns are for kids, not grunt readers. Amplification is a billion times of inferior quality than sarcasm.

**32. Never oversimplify everything:** To add material in your research paper, never go for oversimplification. This will definitely irritate the evaluator. Be more or less specific. Also too, by no means, ever use rhythmic redundancies. Contractions aren't essential and shouldn't be there used. Comparisons are as terrible as clichés. Give up ampersands and abbreviations, and so on. Remove commas, that are, not necessary. Parenthetical words however should be together with this in commas. Understatement is all the time the complete best way to put onward earth-shaking thoughts. Give a detailed literary review.

**33. Report concluded results:** Use concluded results. From raw data, filter the results and then conclude your studies based on measurements and observations taken. Significant figures and appropriate number of decimal places should be used. Parenthetical remarks are prohibitive. Proofread carefully at final stage. In the end give outline to your arguments. Spot out perspectives of further study of this subject. Justify your conclusion by at the bottom of them with sufficient justifications and examples.

**34. After conclusion:** Once you have concluded your research, the next most important step is to present your findings. Presentation is extremely important as it is the definite medium though which your research is going to be in print to the rest of the crowd. Care should be taken to categorize your thoughts well and present them in a logical and neat manner. A good quality research paper format is essential because it serves to highlight your research paper and bring to light all necessary aspects in your research.

## INFORMAL GUIDELINES OF RESEARCH PAPER WRITING

**Key points to remember:**

- Submit all work in its final form.
- Write your paper in the form, which is presented in the guidelines using the template.
- Please note the criterion for grading the final paper by peer-reviewers.

**Final Points:**

A purpose of organizing a research paper is to let people to interpret your effort selectively. The journal requires the following sections, submitted in the order listed, each section to start on a new page.

The introduction will be compiled from reference matter and will reflect the design processes or outline of basis that direct you to make study. As you will carry out the process of study, the method and process section will be constructed as like that. The result segment will show related statistics in nearly sequential order and will direct the reviewers next to the similar intellectual paths throughout the data that you took to carry out your study. The discussion section will provide understanding of the data and projections as to the implication of the results. The use of good quality references all through the paper will give the effort trustworthiness by representing an alertness of prior workings.

Writing a research paper is not an easy job no matter how trouble-free the actual research or concept. Practice, excellent preparation, and controlled record keeping are the only means to make straightforward the progression.

**General style:**

Specific editorial column necessities for compliance of a manuscript will always take over from directions in these general guidelines.

To make a paper clear

· Adhere to recommended page limits

Mistakes to evade

- Insertion a title at the foot of a page with the subsequent text on the next page
- Separating a table/chart or figure - impound each figure/table to a single page
- Submitting a manuscript with pages out of sequence

In every sections of your document

· Use standard writing style including articles ("a", "the," etc.)

· Keep on paying attention on the research topic of the paper

· Use paragraphs to split each significant point (excluding for the abstract)

· Align the primary line of each section

· Present your points in sound order

· Use present tense to report well accepted

· Use past tense to describe specific results

· Shun familiar wording, don't address the reviewer directly, and don't use slang, slang language, or superlatives

· Shun use of extra pictures - include only those figures essential to presenting results

**Title Page:**

Choose a revealing title. It should be short. It should not have non-standard acronyms or abbreviations. It should not exceed two printed lines. It should include the name(s) and address (es) of all authors.

**Abstract:**

The summary should be two hundred words or less. It should briefly and clearly explain the key findings reported in the manuscript-- must have precise statistics. It should not have abnormal acronyms or abbreviations. It should be logical in itself. Shun citing references at this point.

An abstract is a brief distinct paragraph summary of finished work or work in development. In a minute or less a reviewer can be taught the foundation behind the study, common approach to the problem, relevant results, and significant conclusions or new questions.

Write your summary when your paper is completed because how can you write the summary of anything which is not yet written? Wealth of terminology is very essential in abstract. Yet, use comprehensive sentences and do not let go readability for briefness. You can maintain it succinct by phrasing sentences so that they provide more than lone rationale. The author can at this moment go straight to shortening the outcome. Sum up the study, with the subsequent elements in any summary. Try to maintain the initial two items to no more than one ruling each.

- Reason of the study - theory, overall issue, purpose
- Fundamental goal
- To the point depiction of the research
- Consequences, including <u>definite statistics</u> - if the consequences are quantitative in nature, account quantitative data; results of any numerical analysis should be reported
- Significant conclusions or questions that track from the research(es)

Approach:

- Single section, and succinct
- As a outline of job done, it is always written in past tense
- A conceptual should situate on its own, and not submit to any other part of the paper such as a form or table
- Center on shortening results - bound background information to a verdict or two, if completely necessary
- What you account in an conceptual must be regular with what you reported in the manuscript
- Exact spelling, clearness of sentences and phrases, and appropriate reporting of quantities (proper units, important statistics) are just as significant in an abstract as they are anywhere else

**Introduction:**

The **Introduction** should "introduce" the manuscript. The reviewer should be presented with sufficient background information to be capable to comprehend and calculate the purpose of your study without having to submit to other works. The basis for the study should be offered. Give most important references but shun difficult to make a comprehensive appraisal of the topic. In the introduction, describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will have no attention in your result. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here. Following approach can create a valuable beginning:

- Explain the value (significance) of the study
- Shield the model - why did you employ this particular system or method? What is its compensation? You strength remark on its appropriateness from a abstract point of vision as well as point out sensible reasons for using it.
- Present a justification. Status your particular theory (es) or aim(s), and describe the logic that led you to choose them.
- Very for a short time explain the tentative propose and how it skilled the declared objectives.

Approach:

- Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done.
- Sort out your thoughts; manufacture one key point with every section. If you make the four points listed above, you will need a least of four paragraphs.

- Present surroundings information only as desirable in order hold up a situation. The reviewer does not desire to read the whole thing you know about a topic.
- Shape the theory/purpose specifically - do not take a broad view.
- As always, give awareness to spelling, simplicity and correctness of sentences and phrases.

**Procedures (Methods and Materials):**

This part is supposed to be the easiest to carve if you have good skills. A sound written Procedures segment allows a capable scientist to replacement your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt for the least amount of information that would permit another capable scientist to spare your outcome but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section. When a technique is used that has been well described in another object, mention the specific item describing a way but draw the basic principle while stating the situation. The purpose is to text all particular resources and broad procedures, so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step by step report of the whole thing you did, nor is a methods section a set of orders.

Materials:

- Explain materials individually only if the study is so complex that it saves liberty this way.
- Embrace particular materials, and any tools or provisions that are not frequently found in laboratories.
- Do not take in frequently found.
- If use of a definite type of tools.
- Materials may be reported in a part section or else they may be recognized along with your measures.

Methods:

- Report the method (not particulars of each process that engaged the same methodology)
- Describe the method entirely
- To be succinct, present methods under headings dedicated to specific dealings or groups of measures
- Simplify - details how procedures were completed not how they were exclusively performed on a particular day.
- If well known procedures were used, account the procedure by name, possibly with reference, and that's all.

Approach:

- It is embarrassed or not possible to use vigorous voice when documenting methods with no using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result when script up the methods most authors use third person passive voice.
- Use standard style in this and in every other part of the paper - avoid familiar lists, and use full sentences.

What to keep away from

- Resources and methods are not a set of information.
- Skip all descriptive information and surroundings - save it for the argument.
- Leave out information that is immaterial to a third party.

**Results:**

The principle of a results segment is to present and demonstrate your conclusion. Create this part a entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Carry on to be to the point, by means of statistics and tables, if suitable, to present consequences most efficiently.You must obviously differentiate material that would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matter should not be submitted at all except requested by the instructor.

Content

- Sum up your conclusion in text and demonstrate them, if suitable, with figures and tables.
- In manuscript, explain each of your consequences, point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation an exacting study.
- Explain results of control experiments and comprise remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or in manuscript form.

What to stay away from

- Do not discuss or infer your outcome, report surroundings information, or try to explain anything.
- Not at all, take in raw data or intermediate calculations in a research manuscript.

- Do not present the similar data more than once.
- Manuscript should complement any figures or tables, not duplicate the identical information.
- Never confuse figures with tables - there is a difference.

Approach

- As forever, use past tense when you submit to your results, and put the whole thing in a reasonable order.
- Put figures and tables, appropriately numbered, in order at the end of the report
- If you desire, you may place your figures and tables properly within the text of your results part.

Figures and tables

- If you put figures and tables at the end of the details, make certain that they are visibly distinguished from any attach appendix materials, such as raw facts
- Despite of position, each figure must be numbered one after the other and complete with subtitle
- In spite of position, each table must be titled, numbered one after the other and complete with heading
- All figure and table must be adequately complete that it could situate on its own, divide from text

**Discussion:**

The Discussion is expected the trickiest segment to write and describe. A lot of papers submitted for journal are discarded based on problems with the Discussion. There is no head of state for how long a argument should be. Position your understanding of the outcome visibly to lead the reviewer through your conclusions, and then finish the paper with a summing up of the implication of the study. The purpose here is to offer an understanding of your results and hold up for all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of result should be visibly described. Infer your data in the conversation in suitable depth. This means that when you clarify an observable fact you must explain mechanisms that may account for the observation. If your results vary from your prospect, make clear why that may have happened. If your results agree, then explain the theory that the proof supported. It is never suitable to just state that the data approved with prospect, and let it drop at that.

- Make a decision if each premise is supported, discarded, or if you cannot make a conclusion with assurance. Do not just dismiss a study or part of a study as "uncertain."
- Research papers are not acknowledged if the work is imperfect. Draw what conclusions you can based upon the results that you have, and take care of the study as a finished work
- You may propose future guidelines, such as how the experiment might be personalized to accomplish a new idea.
- Give details all of your remarks as much as possible, focus on mechanisms.
- Make a decision if the tentative design sufficiently addressed the theory, and whether or not it was correctly restricted.
- Try to present substitute explanations if sensible alternatives be present.
- One research will not counter an overall question, so maintain the large picture in mind, where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.

Approach:

- When you refer to information, differentiate data generated by your own studies from available information
- Submit to work done by specific persons (including you) in past tense.
- Submit to generally acknowledged facts and main beliefs in present tense.

Please carefully note down following rules and regulation before submitting your Research Paper to Global Journals Inc. (US):

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- Do not give permission to anyone else to "PROOFREAD" your manuscript.

- Methods to avoid Plagiarism is applied by us on every paper, if found guilty, you will be blacklisted by all of our collaborated research groups, your institution will be informed for this and strict legal actions will be taken immediately.)
- To guard yourself and others from possible illegal use please do not permit anyone right to use to your paper and files.

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| | **A-B** | **C-D** | **E-F** |
| *Abstract* | Clear and concise with appropriate content, Correct format. 200 words or below | Unclear summary and no specific data, Incorrect form<br><br>Above 200 words | No specific data with ambiguous information<br><br>Above 250 words |
| *Introduction* | Containing all background details with clear goal and appropriate details, flow specification, no grammar and spelling mistake, well organized sentence and paragraph, reference cited | Unclear and confusing data, appropriate format, grammar and spelling errors with unorganized matter | Out of place depth and content, hazy format |
| *Methods and Procedures* | Clear and to the point with well arranged paragraph, precision and accuracy of facts and figures, well organized subheads | Difficult to comprehend with embarrassed text, too much explanation but completed | Incorrect and unorganized structure with hazy meaning |
| *Result* | Well organized, Clear and specific, Correct units with precision, correct data, well structuring of paragraph, no grammar and spelling mistake | Complete and embarrassed text, difficult to comprehend | Irregular format with wrong facts and figures |
| *Discussion* | Well organized, meaningful specification, sound conclusion, logical and concise explanation, highly structured paragraph reference cited | Wordy, unclear conclusion, spurious | Conclusion is not cited, unorganized, difficult to comprehend |
| *References* | Complete and correct format, well organized | Beside the point, Incomplete | Wrong format and structuring |

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