Al-Biruni's Ethical System Compared to Aristotle's, Which Went to the Arab World

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Article Info	ABSTRACT
	This study aims to compare the ethical systems of Aristotle and Al-Biruni. The former was built in the 'West', but the latter was on the 'Middle' toward the 'East'. Reviewing their literature and introducing the new concepts, this study found that while Aristotle's system influenced Al-Biruni's in the application of a scientific frame to ethical issues, the two systems shared a concern not for the moral judgment but for the moral agent. However, they differ from each other in the conceptualization of the agents. Aristotle's model is the person of virtue evaluated by the golden mean, but Al-Biruni's is the person of manliness rated by the reversibility of others. This comparison advanced the differentiation that the moral pragmatic is devoted to Aristotle's and the moral practical to Al-Bruni's. The study would contribute to resolving the current moral confusion and would demonstrate a model to integrate the systems of the western and eastern worlds.

Intruduction

In the current days, the conflicts between Western and Eastern systems are swelling. By the advent of 'Postmodernism', the Western system had been deconstructed, and the Eastern way was adopted to rebuild the new one (Derrida, 1992, 3-67; Vincent, 1996, 27). Some Western philosophers attempted to import the Eastern as found in A. Schopenhauer's system (Schopenhauer, 2004, 23).

To detect a potential chance to integrate worlds of the western and eastern, it is suggestive to investigate the figural scholars who lived in the Middle world, the Arab region. This study has an insight into whether some links could be worked by the Chorasmian scholar, Al-Biruni, who is respected by the Arab world as both a natural scientist and a philosopher much like Aristotle. While Aristotle lay largely dormant in the West, his system flew to the Middle East in the advent of the translation of his book into Arabic (Gutas, 1998), promoting his tradition in Islamic scholars' society (Admin, 2017; Alwishah & Hayes, 2015).

In the middle Asia, even if unnoticed in Western culture, Al-Biruni's system is expected to pose a middle position to make integration between the West and the East. The ethical issues are a fundamental over all human societies, posing a terminal praxis through the diverse philosophies and sciences. This study to compare the ethical systems between Aristotle's and Al-Biruni's would contribute a bridge to integrating the two worlds, the West and the East, resolving the limitations of each world, and finding an alternative that has been requested with the advent of deconstruction in Postmodernism.

Along with Lee et al.'s (submitted), the dimensions to compare Aristotle and Al-Biruni in the ethical systems are analyzed as follows: At first, it is questioned whether each system concerns the moral agent or the moral judgment. At second, the question is to draw what moral agents are figured and look into how they are personalized. At last, it is to converge on how the moralities are realized.

1. Aristotle and Al-Biruni

1.1. Aristotle's and Al-Biruni's Orientation to Ethics

1.1.1. Aristotle's

Aristotle lived from 384 to 322 BC, living in Ancient Greece, and there followed the Academy of Athena, guided by Plato, from whom at last he was discriminated in almost scholastic views, insofar as he set up another institute, the Lyceum rivaled Plato's (Humphreys, 2009, for review). He denied the existence of a universal form of species, but the multiple forms, each of which exerts function to accomplish each purpose, approached 'Universal Telos', which works the inverse-causality, insomuch as the future purpose causes the present action. He grounded his system of philosophy in the natural sciences of physics, biology, and others that he was absorbed in, extending metaphysics and logic to humanities such as politics and economics, all of which converged on his ethical system.

He traveled out of Greece, perhaps to the ancient Arab world, during his exile from anti-Macedonian sentiment or under the influence of the conquest wars of King Alexander, an

ex-student of his (Filonik, 2013). His scholastic works were lost for a long time when Plato suppressed them in the after-Roman era when they waited for revelation for another century until St. Boethius translated them into Latin around 500 (Kaylor & Phillips, 2012, 4-5) and T. Aquinas integrated the two systems (Spalding & Gagné, 2013). Until then, it was thought that his system was distributed and popular in the Islam world (Barnes, 1995, 9).

   Since Aristotle's humanities are based on his natural sciences, insomuch as he is called the father of natural science, he seemed to think that ethical problems should be approached by models of natural science. Following him, B. Spinoza attempted to build the ethical axioms, modeling geometry (Scruton, 2002, 31–32; Spinoza, 1982, for review), and E. Durkheim claimed to apply scientific methods to ethics (Collins, 1975, 539; Durkheim, 2004, 50). His ethical term, 'Golden Mean' is derived from statistics, one of the scientific models, insomuch as the statistical mean confers on balancing between the high extremes and the low ones. The golden mean is reviewed by R. J. Wahing (2021) as follows:

> To be virtuous, the agent should strike the mean and avoid the two vices:
> excess and deficiency.

The golden mean is contrasted to Plato's ideal form of morality but paralleled to 'Unitarianism' that is proclaimed by J. Bentham (1780, 1-6) and J. S. Mill (2010, 33), respecting most people's consensus to hold most happiness. However, Aristotle does attempt to fix what is moral as concerned by Unitarianism, but who is moral as propounded by his system. Aristotle's moral personality, called 'Person of Virtue' (Frede, 2018; Irwin, 2019), is shared both by the cultivated and the lay, insofar as to calculate the golden mean, which in daily life is illustrated as four cardinal virtues in 'Nicomachean Ethics', and reviewed by J. Humphreys (2009) as follows:

> Prudence is mean between rascality and simpleness. temperance between
> profligacy and insensitiveness, courage between rashness and cowardice,
> and justice between greed and loss.

The virtues of the golden mean were commented on by the Greek contemporary, Phocylides (born BC 560), reviewed by C. H. Toy and S. Krausas (2018) as follows:

> In many things, the middle has the best. ---- Be mine a middle station.

Aristotle's system does not focus on moral judgments but on moral agents questioning who is moral. However, he does not disregard what constitutes moral judgment but presuppose the primary question of who is moral. His system postulates that moralities are imbedded in moral personalities. Since moralities should be internalized into a personality, it is said that morality is psychological. Thus, it is proclaimed that Aristotle's 'Person of Virtues', is qualified by the golden mean, directing to the Universal Telos.

1.1.2. Al-Biruni's

Abū Rayḥān al-Bīrūnī (abbreviated as al-Biruni) was born in 973 in modern Uzbekistan and died in 1050 in modern Afghanistan. He was interested in the natural sciences of physics and mathematics, and the humanities such as ethics and religion (Bladel, 2018; Boilot, 2018,

1236-1238). His scholastic life is similar to that of Aristotle, whose systems enlightened the Arab world.

As historians' comment about the time, European systems tilted toward Plato's and Neo-Plato's contributions to Christianity, alienating Aristotle's. However, since the intellectual burgeoning of the Abbasid, Aristotle's works were translated into Arabic (Gutas, 1998). His ethical philosophy and natural science ignited the minds of early Islamic scholars, (Admin, 2017; Alwishah & Hayes, 2015). While Aristotle's system put the Greek tint in Middle Asia, Al-Biruni had a missionary in the core to integrate systems between Greeks and Arabs (Senin, et al., 2019).

Since Al-Biruni was influenced by Aristotle, rejecting the eternal universe as presupposed by Plato and modeling his system on Aristotle, he was a proponent of natural science to calculate stars' orbits and axis forces in movement, and to show the anatomy of some living creatures. However, in contrast to most philosophers, he was so close to God that he seemed to be in a dilemma arguing how he matched religions to the natural sciences. He was a sincere theologian of Islam that was another base to reproduce his ethical and political system, and his culturology. Therefore, he might hold a solution, insomuch as he elected his religion as a comparative criterion (Kamaruzzaman, 2003) and liked to investigate multi-cultures through his traveling studies of Indian religion and culture (Lawrence, 1989, for review). As commented, his doctrine is not to set aside the uniqueness of 'Moslem', but to afford multi-cultures. Al-Biruni, (1989) confessed in his book 'India' as follows:

> Influential in his own right, Al-Biruni was himself influenced by the scholars of other nations, from whom he took inspiration when he turned to the study of philosophy.

It is estimated by his comments that all things could be known to people in the case of God's illumination, which was revived by J. D. Scotus, who stood on the stream of T. Aquinas' scholar (Pasnau, 2011 for review; Scotus, 1982 for review). Al-Biruni's ethics in reference of his book 'Kitab al-Jamahir fi Ma'rifat al-Jawahir (i.e., the precious stones)' (Biruni, 2001), was reviewed by S. H. Nadvi (1974) as follows:

> No religion is without ethical commandments: Do onto others as you would have them do unto you.

Along with the above book, Al- Bruni suggested humans as being of a partial nature, but at the highest level compared to 'Gemstones', and taking missions to become 'Person of Manliness (futuwwat)', who is always in relation to God. The personality was paid tribute by the contemporary, al-Ghazali (1058-1111), reviewed by J. Parrott (2017) as follows:

> What is wanted is a balance between extravagance and miserliness through moderation, with the goal of distance between both extremes.

The character of manliness is elaborated as complying not with the sensual but with intellectual pleasure, taking charge of responsibility, and offering help to others for God's sake. Those are what attribute to 'Reversible Perspective', exchanging with others. What

Al-Biruni postures is one of the influences on him from the Quran (49:13) as "human creation purposes to knowing one another" and also in (16:125) as "interact with others with wisdom and good exhortation". The reversible perspective was reviewed by N. Senin et al (2019) as follows:

> Al-Biruni's approach to understanding others --- eventually, to promote a harmonious coexistence within a highly polarized cultural and religious context.

Al-Biruni's ethics is as similar as Aristotle's, not focusing on the moral doctrine but on the moral person. The precept is developed not only from his interests in Aristotle's but also from his indulgence in his religion, Islam, to shape Al-Biruni's moral model. His model, person of manliness, is similar to Aristotle's person of virtue but differentiated. The former is a religious person, but the latter is a layman, so they are differentiated in levels of religion. The former is faithful to God, but the latter is good in daily life. Most of the personality for Al-Biruni's moral model follows Quranic words. The person of manliness regarded by Al-Biruni is to conserve both obedience to God and compassion for people.

1.2. Comparison of Aristotle and Al-Biruni

1.2.1. The Moral Agent is concerned by both Aristotle's and Al-Biruni's

Aristotle's system is set to expound on who is virtue, while he conferred on what is virtue since moral personalities are not independent of personal function. His concept of individual function is fateful for his approach to the Universal Telos, which is internalized to person, working along the inverse causality from the Universal purpose to the personal action (Black, 1956). Thus, what Aristotle propounds for human functions would be inevitable to illustrate the person to act according to the virtues.

Al-Biruni' system centered on who is virtuous, while he was interested in the question of what is virtuous since his attempt to analyze the right doing purports to define the person who has morality subjected to God. His concept of God declared that God is a unique one, much like Christians, who control all human life to consist of social personalities and moralities. The person who is right in his evaluation of God's purpose is regarded as a model in morality and faith. His system is to dedicate himself to his religion, Islam, while accepting other religions (Senin et al., 2019), so to expound that morality is grounded in embracing others' shoes (Ataman, 2008).

Aristotle and Al-Biruni, since the former influenced the latter, have commonalities in focusing on who is qualified as a moral person, assuming ethical properties consist of personality. In comparison between the two systems, the moral personalities of the two are similar but don't lodge at the same level of continuity between humans and God. Al-Biruni's is more toward God, indulged in 'Islam' than Aristotle's rounding a natural God termed as 'Telos', so to comment that God in Al-Biruni's is over the Universal Telos in Aristotle in degree of religious life.

1.2.2. Aristotle's Person of Virtue and Al-Biruni's Person of Manliness

Since both Aristotle and Al-Biruni set up a model of who is moral in each system, it is required that each expatiation be so suggestive in comparison. Aristotle elaborates on who is a moral agent, which is termed as 'Person of Virtue' (Frede, 2018), who has tolerance in daily situations with the control potential. To control things is not only for outer situations but also for the inner self (Humphreys, 2009 for review; Sytsma, 2021).

Al-Biruni discussed who is moral in the evaluation of religious sincerity. He termed 'Person of Manliness' (Al-Biruni, 2001), adhering to a moral personality that is different from the secular. The characteristics of manliness are certified with deepen faith, sustained moralities, and grounded wisdom which are required ultimately as instructed by his religion.

While both Aristotle and Al-Biruni focused on the moral person, but they were differentiated in detail insofar as the former mentioned the person of virtue, who has commonality between the elites and the laymen, and the latter mentioned the person of manliness, who is the religious and moral elite. So, to be contrasted, Al-Biruni's person of manliness is characterized as more religious, but Aristotle's person of virtue is more suited to laymen's characteristics.

1.2.3. The Golden Mean in Aristotle's and the Reversible Perspective in Al-Biruni's

As discussed above, Aristotle's person of virtue and Al-Biruni's person of manliness are moral models. Their personalities are similar in some ways but different in others. Each of them is fidelity-replete with its system. The properties of the person of virtue in Aristotle's are accounted for as 'Golden Mean' (Wahing, 2021), while the features of manliness in Al-Biruni's are disposed of as 'Reversible Perspective' (Senin et al., 2019).

The compound word 'Golden Mean' senses the mean, adjusting the extremes to be best favored. The model is to be shared by those higher and lower in social distribution, accommodating the elites and the laymen in customs since each has a proper function in each daily life, so as to approach the Universal Telos. Realizing Aristotle's spirit of empiricism, the gold mean is afforded by both the upper and lower classes in a society.

The compound word 'Reversible Perspective' means a social view anchored in a position that could be exchanged in time and space. As illustrated, one's views on the other could be exchanged reciprocally in social development. The realization of the reversible perspective is one of the psychological processes related to cognitional development, which was proposed by J. Piaget. He defined 'Formal Operation' as a higher level of intelligence that is developed at a stage of youth to exchange reciprocal perspectives in social relations (Harry, 1992). The reversibility is like an Asian proverb as 易地思之(perceiving reversely between ones and the other's), which is known in the lineage of Confucius (Behuniak, 2011; Lau, 1984, for review).

In comparison, while both of Aristotle's golden mean to draw the person of virtue and Al-Biruni's reversible perspective to feature the person of manliness are to confer on who is moral, the former intends to balancing of the extremes, but the latter inclines to exchanging each other. The former concerned daily life, but the latter extended to religious life.

However, both ways are met if it is thought that the reversible perspective between extremes could be accomplished in a deal by finding the golden mean between oneself and others.

1.2.4. Pragmatic denoted by Aristotle's but Practical by Al-Biruni's

In the discussion of the ethical systems, the focus was on how the moralities are realized in daily life and what models are personalized for people. In their daily lives, ethical codes and models are preparatory to being realized and personalized. The ways in which moralities are put in place in societies and exercised by people tread in two modes: one is termed as 'Pragmatics' and the other as 'Practical'. The former is distinguished from the latter in the discussion of modern scientific philosophy.

The practical refers to how far the ideal morality is realized in real-life, commented by G. F. Mellema (2010) as follows:

> In general, practicing is conducive to attaining the moral ideal---

However, the pragmatic accounts for how much the behavioral habit (Pierce, 1905) is successful in sustaining daily moralities, commented by H. LaFollette, (1997) as follows:

> Moral habits ---show how the notion of habits helps explicate central elements of a pragmatic ethics.

The pragmatic model is posed not for ideals but for existential life. The pragmatic values do not need goals to be practiced in real-life but are evaluated by the measure of effectiveness in daily life. Aristotle accepts the personal functions that, if fully exercised, make up the Universal Telos, reworded as the personal existential fate. So, it is commented that Aristotle's system is about to reach a pragmatic realization, shared by both highly cultivated and lay people. For the stance of pragmatic ethics, J. Dewey regards the successful habits of behavior for moralities in daily life (Backe, 1999; Dewey, 1896).

The practical mode prostitutes the ideal goals to be understood as the ultimate ethical codes. The goals are worthless if they are only represented in ideology but not practiced in real-life. Al-Biruni purports to make people develop a reversible perspective on social relations, approaching the person of manliness subset by religion. So, it is implied that Al-Biruni's system is preparatory to practical realization that is reached by the person of manliness to lead the secular people. The proponent of practical ethics highlights I. Kant, who announced the deontological acts (Balanovskiy, 2018).

1.2.5. Table of Comparison

Comparisons of the ethical discussions between Aristotle's and Al-Biruni's are arranged in four dimensions. The first is to fix a question about whether moral agent or moral judgment is regarded primarily. Another is to compare the moral personalities whether the person of virtues or the person of manliness matches, deducted to the ethical principles whether the golden mean or the reversible perspective is accounted, posing another comparison. The last is to confer on how the moralities are realized, differentiating between practical and pragmatic. Now the comparisons are arranged as Table 1:

Table 1. *Comparison of Aristotle's system and Al-Biruni's*

	Common Regard	Moral personality	Ethical principle	Moral realization
Aristotle's	Not on moral judgments but on moral agents	Person of Virtue in daily life	Golden Mean	Pragmatic for the successful life
Al-Biruni's	Not on moral judgments but on moral agents	Person of Manliness in religious life	Reversible Perspective	Practical for the human-life

Aristotle's and Al-Biruni's are common insomuch as they don't concern what are moral judgments but who are moral agents. Thus, each of them has the moral model. Aristotle proposed the person of virtue who functions in daily life to be virtuous, adjusted to the golden mean between the cultivated and the layman. Al-Biruni modeled the person of manliness who is disciplined in religious life, getting the reversible perspective. Aristotle's is to focus on personal functions, guided by the Universal Telos, that are successful in their daily lives and evaluated by pragmatic measures. Al-Biruni's goal is to shape the religious model who is ruled by the Quranic discipline, believed to be the ultimate virtues, which should be progressed to human-life and evaluated by practical realization. It is common that the two great scholars have the same ethical purpose: Aristotle's 'Universal Telos' and Al-Biruni's 'Quran discipline'. However, the two are differentiated since Al-Biruni's is to contribute to the religious god and Aristotle's to the natural gods.

2. Discussion and Application

It is proclaimed that modern times are so suffering from limitations faced by the Western and Eastern worlds that they are required to make pace by pace towards integration. The issues are relegated to ethical systems, inevitable imbedded in human society. The ethical problems are to be one of the purposes approached by human thought since all philosophers attempt to answer how to live, so to be termed as wisdom. So, this study attempts to compare Aristotle's and Al-Bruni's ethics, making a bridge a middle region over between the Western and Eastern worlds. Reviewing this study, Islamic scholars employed Aristotle's scientific methodologies to explore the natural world and even to reinterpret his ethics within the Islamic framework (Fakhry, 2004). The Arab revival was not mere imitation but embraced Aristotle's method while simultaneously challenging his conclusions, which diverged from their own religious beliefs.

This study's discussions focused on how Aristotle influenced Al-Biruni and how much the two systems are common and differentiated each other. Al-Biruni inhaled Aristotle's paradigm of natural sciences and converted it to humanities, insofar as Al-Biruni pretended to work a reversion of Aristotle in Middle Asia. What the two great scholars shared in the ethical system was their concern not with moral judgment but with the moral agent. The problem of virtuous persons, which was concerned as a commonality between Aristotle's and Al-Biruni's, is revived in the history of ethical philosophy. Briefly commenting, the moral agents were followed by F. Nietzsche's Übermensch (Loeb, 2005) and nowadays by A. Macintyre's moral person (Hauerwas & Wadell, 1982; Macintyre, 2007, xii).

The Übermensch has been misunderstood two reasons. One is put out because his figure struggled against the Christian doctrine that has given little answer to why humans are not

free from fateful agony. The other comes from his concern with the national-socialism that makes his figure a Nazi hero. Really, as commented, the Übermensch is not respected as a political elite to rule people, but as a moral model like Aristotle's person of virtue, making up for a perfect god who is construed of 'Will to Power' looked on as a human potential to control human fate insofar as he would wish himself to be.

In correspondence, A. Macintyre is one of the advocates of the moral agent in ethical discussions in modern philosophy, while Kantians are more proponents of the moral judgment. He argued that the high moral codes should be provisioned to human society, but those have the effective value if personalized to a virtuous model to realize them in daily life. Thus, it is suggested that modern ethical issues revive the commonalities between Aristotle and Al-Biruni towards West-East integration.

In detail, Al-Biruni's was differentiated for his moral model, the person of manliness, from Aritotle's person of virtue. The former was near his religion, Islam, but the latter to daily life, so to be propertied for the former to the reversible perspective as religious faith, but for the latter to the golden mean as balance between the cultivated persons and the laymen. It is commented that the former purports to realize moralities so as to be evaluated as practical in real-life, but the latter gets the successful ones to be pragmatic in daily life itself.

The consideration of whether the moralities are realized as in practical life or applied to pragmatic life accompanies with the discussion of the truth posits. Insomuch as the truth is evaluated in correspondence between the ideals and the realities (Kant, 1999, 193-194), the ideal morality is embodied as practical in real-life. In contrast, if the truth is accounted by the measure of the successful effect (Dewey & Bentrey, 1949, 107-109), the moral experience is rated as pragmatic in daily life. Therefore, the comparison of ethical systems, accompanied by issues of practicality and pragmatics, is commented on to let this study advance to how truth is defined.

Therefore, this study has positive suggestions. To advance from this study's position of the middle world towards the far East, the integration of the West and East could be accomplished in a challenge to compare the ethical systems between Aristotle' and Confucius (孔子)'. Lee et al. (submitted) inspected the ethical systems between the two great scholars, who are supposed to have no contact in person and so little communication in the old era. Insomuch as moral thoughts are basic to human nature in building a society, Aristotle's person of virtues for the moral personalities shares commonality with Confucius' the great man (君子) (Behuniak, 2011; Wilson, 1996). Confucius' 天理 (heaven's reasons) (Gardner, 1998; Hugan, 2013; Qiubai, 2006) and Aristotle's Universal Telos confer on a natural god (Yi, 2019), which is similarly proposed by Spinoza's 'Nature', which governs mind and matter but is not religious (Spinoza, 1982). So, a would-be study to link Al-Biruni's Middle towards Aristotle's West and Confucius' East is so suggestive in discussion to find a resolution going above the limitation of either West or East, as requested vividly through the advent of Postmodernism (Derrida, 1992, 3–67; Vincent, 1996, 27).

Accomplishing this study, it is recognized that some philosophical pursuits have developed commonalities on some issues, even with the independence and disparity between the Western and Eastern worlds at the beginning. In some cases, the developments are processed through mutual migrations or even without contact with each other. So, to be implied, the philosophical issues hold in commonality between far-away worlds insofar as the primary philosophy might engage inevitably in the ethical problems. Thus, this study suggests that a contribution to what is discussed in terms of ethical problems is the primary problem, which concerns the real-life so critical to the link between the Western and Eastern worlds, suffering from limitations in each frame.

The majority of social struggles, going to the regional and world wars, have backgrounds that are composed by the serious complex and distant disparateness of various cultures (Bates, 2023), different religions (Svensson, 2013), and disharmonized ethical systems (Frowe, 2022). This study, to catch a chance to see the relativism of the Western and Eastern worlds promoted by comparable ethical affordance, would contribute to finding a solution to be free from the human agonies and antisocial personalities that, as commented (Sampath, 2021), are the great issues of modern social philosophy.

The integration between the western and eastern paradigms that is purposed by this study is an ambitious project to overcome the limitation of self-complacency. As claimed by T. Kuhn (Orman, 2016), a paradigm shift is required to approach modern sciences such as physics, biology, psychology, etc. A model of the paradigm integration is suggested by this study, a comparison between Aristotle's and Al-Biruni's system.

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