An Investigation of World-System Theory and Globalization in the Rama Novels by Arthur C. Clarke and Gentry Lee

Zohreh Ramin[1], Hooshmand Hedayati[2]

1. Assistant Professor of English Language and Literature, University of Tehran, Tehran, Iran (Corresponding author) (zramin@ut.ac.ir)
2. PhD in English Language and Literature, University of Tehran, Tehran, Iran (hedayati@ut.ac.ir)

Abstract

Noam Chomsky argues that only a meager percentage of the world, consisting of mainly large corporations and developed nations, prosper from globalization. As stated in Immanuel Wallerstein's World-System Theory, the modern system of the world, which is constructed according to the economic status of nations, can be divided into three levels: the core, the semi-periphery, and the periphery. While extensive research have been conducted on Immanuel Wallerstein, Noam Chomsky, and Arthur C. Clarke separately, no published work has exclusively studied Wallerstein's and Chomsky's theories in Arthur C. Clarke and Gentry Lee's science fiction novels—Rama novels. This paper first aims to illustrate the relevance of Immanuel Wallerstein and Noam Chomsky and to argue that globalization, enjoyed by the core states, can be a new wave of colonization. Then, it is discussed that in the globalized world imagined by Arthur C. Clarke and Gentry Lee in their Rama novels, the semi-periphery and the periphery nations, with only a marginal role in vital space expeditions, are exploited by the core, which runs and regulates the world in the way it desires. Moreover, the paper investigates the way in which the core states in the Rama novels try to ensure a lofty role in the world, the result of which is rape, disease, bankruptcy, and murder.

Keywords: Globalization, Exploitation, Rama novels, Science Fiction, World-Systems theory

1. Introduction

Literature on science fiction and interplanetary stories revolves around establishing human territories and empires on remote planets, and the related criticisms mainly focus on the colonial side of such fictions. The imperial content of science fiction reflects the time of its emergence. John Rieder (2008, p. 3) argues that the heyday of imperialist expansionism was in the late nineteenth century, which is "the crucial period for the emergence of the genre," and that it first emerged in the leading colonial nations – Britain and France – and later became popular in the United States, Germany, and Russia as countries involved in "serious imperial competition".

The criticism on the imperial side of Clarke's science fiction, along with the disparity between the center and the margin of the story have been the core point of the argument in Candelaria's (2002a, p. 427) article discussing whether this genre is "the glorification of historical imperialism". He argues that *Rendezvous with Rama*, for example, highlights the journey of the "savage periphery" (Candelaria, 2002a, p. 430) to the civilized center, and Rama is the "imperial metropolis," as it works similar to "a harmonious machine" and is an ordered and disciplined residence (Candelaria, 2002a, p. 431). In another article, Candelaria (2002b, p. 38) considers the colonial aspect of Clarke's novels and concludes "Clarke's work is not merely subject to the prejudices of colonialism; colonialism is at the core of Clarke's novels". Referring to Clarke's life stages, Oliver Dunnett (2019, p. 10) contends that Clarke was not entirely an imperialist author; he presented global exchange, internationalism, and world cooperation, and helped "break down the borders and rivalries of nation-states". No work of this kind, however, has looked at the

globalization aspects of Clarke's Rama novels as a possible way of imperialism.

Certain critics discuss the human-nonhuman relation in Clarke's works. Thomas Clareson (1984, p. 217), for instance, believes that Clarke's science fiction is concerned with "man's encounter with alien intelligence," and his works open new insights into the future, "freeing mankind from the short-sighted prejudices and limitations of earth-bound, modern civilization". Similarly, Zoran Živković (2013, p.152) discerns anthropomorphism, that is, the possibility of alien superiority over human intelligence and human-nonhuman "confusion" in five stories written by Clarke. Kilgore (2003, p.133) mentions the expectation of human-alien encounter in *Rama II* and the *Garden of Rama* and emphasizes that Clarke maintains optimistic views toward internationalism and "explore[s] the adequacy of human relationships and knowledge" for "creating a better future".

Earlier criticisms on Rama series represented the impossibility of human understanding of the aliens and aliens' culture. To Slusser (1977, p. 61), for instance, the world of Rama is too mysterious for the humans to comprehend and "man has become the stupid tourist before the mysteries of the universe". In his view, human beings are helpless "before the mysteries of the universe," and put "the blame for that helplessness back on man as well" (Slusser, 1977, p. 60). Accordingly, Rabkin (1980, p. 52) believes that *Rendezvous with Rama* pictures the human attempt to communicate with and understand the universe, which does not care "to be understood" by the humans whose "curiosity" (Rabkin, 1980, p. 51) is thwarted. This indifference was first detected by Thorn (1977, p. 81), asserting the impossibility of human communication with aliens as the Ramans "could not contact

humanity just as humanity could not contact the alien". On the other hand, more recent critics have a more optimistic view. Miller (1988, p. 341), for example, argues that this frustration of human-alien communication and human understanding of the universe might stimulate "an energy of mind," encouraging the characters to "think in new ways" and developing "newly conditioned responses" (Miller, 1988, 337). Engler (2007, 112) considers this lack of comprehension as an inevitable fact of the future, as human beings "use technology … to act like gods"; this explains the reason for which Clarke's use of science in Rama series is developed to a point that it is similar to magic, which can be called the convergence of "religion and science".

Detailed discussions about the human-alien relations seem to be limitless in Clarke's Rama novels. However, a significant aspect of these narratives has been overlooked: the human-human, the developed-undeveloped, and core-periphery relations, as they come to close contact in a globalized world. Thus, the main objective of this study does not concern the mysteries of human-alien encounters, which are far from being relevant to the concerns of the world today. In an interview, Clarke himself once revealed that the primary function of science fiction is addressing "real problems and possibilities" as it is a "concerned fiction" (Clarke in McAleer, 2003, p. 113). The focus of our study is to address the predicted result of the integration of nations in the Rama novels, and the colonial aspirations of superpowers in the shadow of globalization.

The assumption of globalization as a new wave of colonialism favoring world's core states has provoked considerable debates in recent literature. Most of the recent works written in the field of postcolonial literature condemn globalization as, they argue, the global economy and the division of labor only favor the centers,

while the peripheries are reduced to the workplaces of the developed nations (Greven, 2007; Antonio, 2003). Dirlik (2002, p. 442) argues that globalization, as a form of modern colonialism, both imposes the "Euro-American dominance over the globe" and "spread[s] globally the ideologies of development generated by capitalism". Other critics focus on Alderson, who maintains that the core nations are reluctant to have "trade" and "investment relations" with the periphery nations. In his view, "Globalization has preeminently been a process of deepening, of the thickening of economic relationships among core countries (and a handful of East Asian NICs). It has been a process in which the 'periphery' has become progressively irrelevant" (Alderson, 1998, p. 1544).

Edging on the discussions above, this research mainly seeks to answer a) how Wallerstein's World-System and Chomsky's globalization are related, b) how the periphery and the semi-periphery exploitation is reflected in the Rama novels and c) what the picture of a globalized world is in the novels in question. In addition to the above questions, this research further aims to illustrate that the world imagined by Clarke and Lee is controlled and regulated by the core states, and the result of this globalization, as pictured in the novels, is core-centric, favoring the privileged – not all the states equally.

2. Wallerstein's World-Systems

Developed by Immanuel Wallerstein, the theory of World-Systems maintains that the world economy has been divided into three categories: the "core," the "semi-periphery," and the "periphery," where the economically powerful states are in the core, and the labor in the other two groups. The core countries, on which the semi-periphery and the periphery nations depend, are industrially-

active and economically and politically developed, as a result of which surplus-value[1] "flow[s] from the weaker countries (the periphery) to the core" (Wallerstein, 2004, p. 12). The periphery states, with a small share of the world wealth, are at the mercy of the core and the semi-periphery, and the nations of this level have unstable governments, "are militarily weak" and "have low per capita GNP" (Jaffee, 1998, p. 163). Semi-peripheral states are "in the most difficult situation[2]" (Wallerstein, 2004, p. 29), with the feature of both core and periphery states, but are neither core nor periphery. Moreover, they can be either the core nations declining to a periphery or the periphery nations rising to the core level. Therefore, it can be concluded, the semi-peripheries could be both exploiters of the periphery, and exploited by the core states. Wallerstein argues that the economy of the world would not suffer much without the semi-periphery nations, but "it would be far less politically stable for it would mean a polarized world system…. The middle strata is both exploited and exploiter" (Wallerstein, 1979, p. 23).

This paper is structured more emphatically around the economic and the political dimensions of the World-Systems theory in the selected science fiction novels of Clarke and Lee. It contests to claim that globalization (see below) does not enrich the semi-periphery and the periphery as, for Wallerstein (2004, p. 28), this "unequal exchange" is a way of transferring "capita from

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1. Wallerstein himself defines the term: "a large part of the real profits from multiple local productions" (2004, p. 18).

2. Wallerstein maintains that being a semi-peripheral state is a challenge as the country in this category is struggling not to fall into the periphery and desires to advance to the core. To Wallerstein (2004, p. 29), these states need to be serious competitors in the market in order not to be defeated by the core and can do more competently than the peripheral states.

politically weak regions to politically strong regions". The following section of the paper appraises the globalization mantra and the repercussions of these two sides (Wallerstein's World-Systems and Chomsky's globalization) in Clarke and Lee's novels.

3. A New Wave of Colonization

The second side of this triangular study is a different look at globalization[1], proposed by Noam Chomsky, the American scholar known as a left-wing globalization theoretician. Historically, colonization and invasion have undergone severe changes over time. Globalization for Chomsky is a new way of colonization and imperialism. The supporters of this phenomenon, however, aspire to retain the world's largest market, because of which the power of individual countries declines considerably. Chomsky advocates that globalization only favors the superpowers and suppresses the third-world countries. For America, Chomsky asserts, globalization means little more than having one language, one culture, one flag, and one way of life, all of which would be ruled, principled, and governed by the core states (Chomsky, 2010, pp. 169-172). To preserve its leading role, America is even prepared to employ military force (Chomsky, 2010, p. 181).

Chomsky argues that globalization, as a continuation of capitalism, is "incapable of meeting human needs that can be expressed only in collective terms", and the main aim of globalization is for someone who "seeks only to maximize wealth

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1. The phenomenon of globalization does not carry a long history, and its new concept, which is the center of attention in this dissertation, has been only formed in the late 20th century. The first bell of globalization first went off in the 1990s when Gorbachev resigned, the Soviet Union was dissolved and much of its wealth was absorbed by western countries. This paper will examine the colonial side of globalization, which is a new face of exploitation.

and power, who subjects himself to market relationships, to exploitation and external authority" (2003, pp. 403-404). Moreover, Winston Churchill once asserted that the leader of the future world and the president of the world-government, if any, would be a "rich man" and a wealthy state because "if the world-government were in the hands of hungry nations, there would always be danger" (Churchill, 1952, cited in Chomsky, 1997, p. 5). Chomsky, rejecting Churchill's statement, maintains that affluent men are ambitious and would propose new ways "to enrich" themselves even more "and dominate others" (Chomsky, 1997, p. 5). He then concludes, "the rich men of the rich societies are to rule the world, competing among themselves for a greater share of wealth and power and mercilessly suppressing those who stand in their way, assisted by the rich men of the hungry nations who do their bidding. The others serve, and suffer" (Chomsky, 1997, p. 5).

Before proceeding to explore the Rama novels by Clarke and Lee, it is necessary to consider the way in which Chomsky's view on globalization and Wallerstein can be related. The core countries, both in the globalized world and the World-Systems theory of Wallerstein, are the most developed states: their armies are highly advanced and their economy is greatly improved, and, as their name suggests, they are believed to be the center of the globe and are dominant in terms of the privileges offered by the core. The states of this category are favored by different sources of economy and are capable of – or characterized by – diverse independent political decisions. The colonial side of this "core" is high as the core receives goods, natural resources, and essential materials from the weaker nations that are dependent on the core states. However, Chirayath and De Zolt (2004, p. 151) argue that globalization does not fulfill the promises it makes for the periphery nations and can result in "global capitalism" because of the "low wage labor"

absorbing the multinational, i.e. globalized, corporations. They believe that the result of globalization is a "global division of labor," and, referring to Wallerstein, they conclude, "the Core of world-systems theory consists of more developed, technologically sophisticated nations that control the global economy and of Periphery nations that supply raw materials and labor to the Core nations. The transfer of these resources occurs on terms set by the latter" (Chirayath & De Zolt, 2004, p. 153).

4. World Systems of Rama: The Future of the Globe

Thus far, this paper has argued that the theory of the World Systems has divided the globe into three different classes of force, and the inevitable flow of globalization has made various countries become closer to each other, as a result of which these three levels of World-Systems theory have somehow overlapped. In the section that follows, this study attempts to illustrate the despondent results of this unity in *Rendezvous with Rama* (1990), *Rama II* (1990), and *The Garden of Rama* (1992), the first of which is written by Arthur C. Clarke and the latter two are co-authored by Gentry Lee.

The story of the Rama series is a clear depiction of the World-Systems theory on a universal scale, in which nations are closely linked to each other with the superiority of the core to other categories. Clarke and Lee's Rama novels predominantly present globalized planets, not specific nations and governments, using phrases such as "the United Planets Headquarters," "and "United Planets," yet the earth "would be the cultural and economic overlord of the solar system for centuries to come" (Clarke, 1990, p. 19). Clarke portrays a globalized universe in the 23rd century, a time when not only all nations, but also all planets are

interconnected[1]. Examples of such phrases can be found in *Rendezvous with Rama* where there are "UP representatives for Mercury, Earth, Luna, Ganymede, Titan and Triton" (Clarke, 1990, p. 20) rather than the current UN; each planet, accordingly, has its ambassador, but all the committee meetings are governed and controlled by earth representatives who are exclusively from core states (Clarke, 1990, p. 22).

To assess the impact of globalization on the sample planets formulated by Clarke, the core-semi-periphery-periphery relationship must first be examined. Watson (2004, p. 13) defines core societies as "economically diversified, rich, and autonomous" and peripheral nations as "economically specialized, weak, and subject to direct intervention and manipulation by the core". This categorization ultimately leads to "an unequal global division of labor" (Knoke, 1994, p. 183) as the core, using its power and economy, depletes, exploits, and dominates the semi-periphery and the periphery states. This core dominance can be exemplified in the Rama novels where, in the investigating team, there are only representatives from the wealthy states, and no economically less developed countries have been given a chance to be chosen as the leader or even a mere member of this globally important mission. To the committee, ruled and regulated by the rich, there is "an encounter between two cultures—at very different technological levels. Pizzaro and the Incas. Perry and the Japanese. Europe and Africa. Almost invariably, the consequences have been disastrous—for one or both parties" (Clarke, 1990, p. 24).

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1. This is not to say that there should be a viable parallel between the three levels of Wallerstein and the individual planets in the 23rd century universe, but it can be noted that in Clarke's novels earth is the center of the universe, and all other planets have a marginal, dependent role. Clarke, thus, might acknowledge the priority of the center, that is, earth, over the entire universe. For this, see *Rendezvous with Rama* (1990).

4.1. The Core as an Exploiter

Clarke's *Rendezvous with Rama* is an appropriate instance of core-periphery division in a globalized world. This novel is utterly about the journey of people from the centers of wealth, or the core, to an unknown spot in the universe. At the outset, as mentioned earlier, the readers encounter that many nations are seen not to be included in this space exploration. The periphery countries, i.e. the Middle East and African states, for example, have been entirely left out of this circle, and the roles are only distributed among certain nations such as America and Britain and a few preferred countries in Europe together with Japan (Clarke, 1990, pp. 20-21). On the second level, there are semi-peripheral nations allowed to participate in life-and-death missions, as seen in Rama works, with countries like Russia, Hungary, and Italy[1] but not permitted to make decisions, and all their suggestions must first pass through core nations. These European states in the Rama odyssey are, in Clarke's (1990, p. 62) words, only "anchors" supporting America and Britain to win more on the duty. The third group consists of core nations, including Great Britain and America, which are in charge of the entire mission. It is America that makes and modifies decisions; Norton, the American commander, accordingly, is pictured as knowledgeable, brave, and adventurous, considering himself responsible for the entire World. America's importance, both in economic and political issues, is also probably the main reason for which the spaceship "Endeavour" has an American history behind:

> He had been captain of Endeavour for several months before
> he realized that it was named after one of the most famous

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1. For a classification of countries based on Wallerstein categories, see Wallerstein (1974, pp. 387-415).

ships in history. True, during the last four hundred years, there had been a dozen Endeavours of the sea and two of space, but the ancestor of them all was the 370-ton Whitby collier that Captain James Cook, RN, had sailed round the world between 1768 and 1771. (Clarke, 1990, p. 81)

In *Rendezvous with Rama*, it can soon be discovered that America is the core for several reasons. First, it is America that provides the mission's financial budget, and it is, seemingly, only America that is worried about the future of the earth. Snyder and Kick (1979, pp. 1096-1126) argue that the leading role of a core nation can be parallel to its financial status in the world. While the states in the core grow significantly in terms of economy, the states in the periphery have not succeeded in economic stability. America's wealth in managing and setting such an expensive mission is emphasized in several parts of the novel. For instance, at a "horrifying cost" the team of scientists is to be sent to Mars to explore Rama (Clarke, 1990, p. 9) or, it is emphasized that the space exploration is an "expensive hobby" (Clarke, 1990, p. 5), but as Rama can demolish the planet, America is ready to pay the costs. America in *Rendezvous with Rama* (1990) is, therefore, both capable and wealthy enough to construct spaceships and supergiant space stations, but it also believes that it is its definite right to make crucial decisions for the future of the planet and, through Norton, it establishes "a number of ground rules" for the mission and other participants (Clarke, 1990, p. 71). America gives orders, and other members, accepting the principles without objections, need to perform the duties they have been assigned by the core commander: "His orders were to wait for twenty-four hours, then to go out and explore. Nobody slept much that first day; even the crew *members not on duty* spent their time monitoring the ineffectually probing instruments" [emphasis added] (Clarke, 1990, p. 16), or it is repeated that before taking any actions, all members

need to obtain "Commander Norton's permission" (Clarke, 1990, p. 74). As a core state chooses its labor from the periphery countries (Luxemburg, 2003, p. 341), these "members" do not demonstrate a trace of novelty or individuality and prove to be little more than a laborer fulfilling the missions: "Skipper," reported Mercer, "there were no problems getting down the ladder. *If you agree*, I'd like to continue towards the next platform…." Norton replied without hesitation. "Go ahead" [emphasis added] (Clarke, 1990, p. 44). This is mostly because they all trust a leader from the core, i.e. Norton, for being intelligent and brave, a reliable hero who "knew exactly what he was doing" (Clarke, 1990, p. 45). Moreover, the core states of *Rendezvous with Rama* are gifted and dauntless, determined and hardworking, fast and exact. Their scientists, "in quick calculations," can estimate "[a]t its equator, this tiny world must be spinning at more than a thousand kilometers an hour; it would be rather unhealthy to attempt a landing anywhere except at the poles" (Clarke, 1990, p. 6).

For the people from the Earth, Rama is a place that is potentially new and challenging, like a place representing the Far East or the barren forests of Africa to the core nations. The team of scientists, gathered from different parts of the world and mainly from colonial nations, needs to use "explosives" and "heavy tools" to be able to "break in," as it seems rather impossible to get into Rama without force (Clarke, 1990, p. 68)[1].

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1. This paper does not intend to study the colonial aspect of space exploration, but the imperial purpose of a core nation like America or Britain can be intensely felt in Clarke's novels. The way the team of explorers chooses to enter Rama, immediately suggests invasion and colonization. Clarke himself believes space dominance opens ways for the dominance of earth because the "Interplanetary travel is now the only form of 'conquest and empire' compatible with civilization" (Clarke, 1965, cited. in Kilgore, 2003, p. 51).

4.2. Globalization of Rama: Fantasy of Disaster

The financial world of globalization in the Rama series, as discussed above, seems to be a complete failure, which has terminated in world impoverishment. In *Rama II*, for instance, the *international* banks are bankrupted because of giving "bad loans" (Clarke & Lee, 1990, p. 18). Not only are the global systems of communication working rather disappointingly because of data overload, but they are also highly improbable to be able to manage more requests. The description of the communication shock of the 22nd century depicts the disillusionment caused by globalization:

> Within two days, a panic had spread around the world. More than one billion home terminals with access to the global financial markets were used to dump individual portfolios of stocks and bonds. The communications load on the Global Network System (GNS) was immense. The data transfer machines were stretched far beyond their capabilities and design specifications. Data gridlock delayed transactions for minutes, then hours, contributing additional momentum to the panic. (Clarke & Lee, 1990, p. 18)

Rama II pictures a time when the financial world, affected by economic globalization, is at the brink of destruction mainly because of the "codicils" that do not allow nations to be international (Clarke & Lee, 1990, p. 21):

> By late 2133, most of the newer international institutions had become understaffed and inefficient. Thus the global market crash took place in an environment where there was already growing doubt in the minds of the populace about the efficacy of the entire network of international organizations. As the financial chaos continued, it was an easy step for the individual nations to stop contributing

funds to the very global organizations that might have been
able, if they had been used properly, to turn the tide of
disaster. (Clarke & Lee, 1990, p. 21)

Clarke and Lee call this catastrophe the "Great Chaos," which
happens when a nation decides to be self-sufficient and wants to
stay away from the rest of the world, especially when it feels that
the world economy is close to shatter, and its advantage might
suffer. When a significant number of nations start leaving the
treaty, the Great Chaos is bound to happen, and the result of this
nation-scatter can be catastrophic and devastating: "skyrocketing
unemployment and bankruptcies, both personal and corporate, but
these financial difficulties seemed unimportant as the ranks of the
homeless and starving continued to swell" (Clarke & Lee, 1990,
p. 21).

Rama II pictures a world where humans attack humans, core
corporations and governments swindle other humans out of their
money and properties, and the systems of management do not help.
In this sense, *Rama II* is remembered not as a technical possibility
of migration to space, but as a minuscule globalized society where
the core-periphery union has ended in an unfair struggle for a better
position on the globe. The economy, even that of the core, has
crashed, and no corporation is immune. The global financial system
has completely collapsed, and the entire world is experiencing
exceptional depression. The "inept" leaders of the world, in Clarke
and Lee's words, are finally forced to accept the crisis, but what
they do in response is inappropriate and insufficient (Clarke & Lee,
1990, p. 20). The global world is close to explode to pieces, and
"the attempts to coordinate international solutions were doomed to
failure by the increasing need of each of the sovereign nations to
respond to its own constituency" (Clarke & Lee, 1990, p. 20).

The failed world of *Rama II* is miles away from the promise of globalization, as states can decide on their own without having to be consistent with other states. In the 22nd century, therefore, the world has experienced globalization, but a major mission, that is, unifying the world, has remained unaccomplished. *Rama II*, more than the two other novels, represents the world after internationalization[1]. This novel represents the time when the "internationalization of the world" has already taken place but, according to Clarke and Lee (1990, p. 20), this "had been flawed in at least one significant way". This "flawed" internationalization, as depicted by Clarke and Lee, happens when all countries accept to comply with the internationalized world, but can have their way later. All social communication agencies including "currency regulation, peacekeeping, information exchange, and environmental protection" have been internationalized, but

> most of the agreements that established these international institutions contained codicils that allowed the individual nations to withdraw, upon relatively short notice, if the policies promulgated under the accords no longer served the interests of the country in question. In short, each of the nations participating in the creation of an international body had the right to abrogate its national involvement, unilaterally, when it was no longer satisfied with the actions of the group. (Clarke & Lee, 1990, p. 21)

The third and last novel discussed in this paper, *The Garden of Rama*, pictures an entropic world of globalization caused by the

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1. According to Held *et al*. (1999, p. 16), globalization, localization, regionalization, and internationalization are relatively different. For the authors, "localization" is a network "with in a specific locale," "regionalization" denotes "geographical grouping of states," and "internationalization" is "interconnectedness between two or more states".

closeness of the core, the semi-periphery, and the periphery states. While *Rendezvous with Rama* pictures a globalized team on a spaceship on a mission and *Rama II* pictures an economically shattered globalized world on earth, the world of *The Garden of Rama* is about a crippled globalized community on space. In *The Garden of Rama*, upon a request from the leaders on Rama, two thousand people, called "colonists," from different parts of the world, are selected by a corporation called International Space Agency, ISA, to move to Rama[1] . "Do you think it is a random event that we are here?" Michael asks, "Or is it a likely event, given all the probabilities and the nature of our species, that some members of the human race would be inside Rama at this moment" (Clarke & Lee, 1992, p. 42)? On space, in *The Garden*, people of different backgrounds and nationalities are now comfortably in touch, but the new world has very little to do with their nations – the world is neither America nor any other countries. Likewise,

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1. The importance of an organization, like ISA in the Rama novels, is also significant in the development of the story. Chomsky asserts that the underdeveloped nations cannot be world leaders as they are not currently managing the world market (Fox, 2001, p. 20). The world geography has been already mapped, and the big corporations have already purchased their position in the world today. Their clerks, many from the less developed nations, are to regulate themselves based on the terms of the core and need to develop fluent English as their official language of communication; accordingly, their working hours must meet those of the core countries. Friedman, for example, describes an Indian company whose clerks, for the comfort of their American customers, choose Western names (Friedman, 2006, p. 23), try to imitate an American or British accent (Friedman, 2006, p. 22), work from night to dawn to adjust themselves with America's time, and "no matter how rude, unhappy, irritated, or ornery the voices are on the other end of the line, these young Indians are incessantly and unfailingly polite" (Friedman, 2006, p. 22). In *The Garden of Rama*, the ISA chooses the subject, or their lab rats, from the criminals and convicts many of whom are from less developed nations or the peripheries.

when Thomas Friedman, the American author, set foot in India for the first time in the 21st century, he felt he was neither in America nor in India: "No," he asserted, "this definitely wasn't Kansas. It didn't even seem like India. Was this the New World, the Old World, or the Next World" (Friedman, 2006, p. 4)?

Similar to the disastrous globalization in *Rama II*, it can be argued that this unification seems to be more than catastrophic in *The Garden.* To illustrate this, we can refer to a fatally insidious disease called RV-41 going viral from one person to another via semen and blood. This AIDS-like virus, it is reported, attacks the muscles of the heart, as a result of which the "carrier" dies (Clarke & Lee, 1992, p. 364). An infectious disease like RV-41 can be more prevailing and dominant in a globalized world where humans communicate freely and where there are no borders limiting this rapid transmission of the virus. The significant aspect here is that the disease is believed to be the product of Senegal as the continuation of AQT19 in 2107 which was not thoroughly rooted out, and there is also a possibility that "a naturally occurring agent could have a genome similar to AQT19, and therefore my speculation could be wrong. However, it is my belief that all the AQT19 in that abandoned lab in Senegal was not destroyed" (Clarke & Lee, 1992, p. 366). Categorized as "Low-Income Economies" countries by the World Bank Group (2018)[1], Senegal is clearly on the periphery stair and is believed to be the primary source of the virus.

Later, the virus changes its specific meaning and soon becomes the symbol of discrimination and the source of threat for the people

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1. The World Bank Group organization (World Bank, 2018), consisting of five organizations all over the world, has been founded to provide loans for the developing nations.

on Mars. Those carrying the antibody of this virus are forced to wear a red armband at all times to be distinguished from others, as a result of which they become the secluded members of the society and are boycotted by other citizens. Eponine, for example, once thought, "Even being an alien would be better than having RV-41" (Clarke & Lee, 1992, p. 161) by which she emphasized the danger of living in a world affected by a virus such as RV-41. She is rejected by everyone, near or far, and all residents

> in Hakone had made it very clear to her that they didn't want her in their midst—two separate delegations had asked her to leave the village and there had been several nasty notes on her apartment door. But Eponine had stubbornly refused to move. Since Kimberly Henderson was never there, Eponine had much more living space than she would have been able to afford under normal circumstances. She also knew that an RV-41 carrier would not be welcomed in any neighborhood in the colony. (Clarke & Lee, 1992, p. 163)

In terms of what has been discussed earlier, we can conclude that diseases are born and spread in periphery countries like Senegal, and, in the globalized world, this infectious disease is very likely to spread through the entire planet and can be interpreted as the negative view of Clarke and Lee toward this phenomenon. Moreover, this disappointing outlook is also displayed when other serious social unrests happen on Mars. Rape, for example, is committed when the representatives of less-developed nations get in touch with the developed ones. The story begins when Nicole de Jardin, the African-French woman, an offspring of the France invasion of Africa, is informed that "a rape complaint has been filed and the family wants an indictment immediately" (Clarke & Lee, 1992, p. 375). It is later revealed that Pedro Escobar Martinez, a Nicaraguan teenage boy, has raped the Japanese Mariko

Kobayashi in the forest – a core-periphery conflict. However, the rules of New Eden do not allow judges to make fast and serious decisions on the convicts. "We have a judicial system," Nicole revealed to Pedro once she started her investigation, "that may be different from the one you experienced in Nicaragua. Here criminal cases cannot proceed to indictment unless a judge, after examining the facts, believes that there is sufficient reason for indictment" (Clarke & Lee, 1992, p. 377). The result of this different system of judgment is people's riot and Mariko's suicide (Clarke & Lee, 1992, p. 398).

Accordingly, Max Puckett, coming from De Queen, Arkansas, is the representation of a character in a core nation who is not well-suited for a globalized world. The American colonist, Max, feeling quite superior to other people from eastern states, brags about his nationality: He also calls the earth a "funny planet" (Clarke & Lee, 1992, p. 248) and, in a conversation with Japanese Kenji and Nai, or "Japs" in Max's words, he makes fun of their accents:

> 'Passengers only occupy twenty percent of the space on the Pinta and the Santa Maria,' Kenji reminded Nai. '… We will only have a total of three hundred passengers on the Pinta, most of them ISA officials and other key personnel necessary to initialize the colony.' 'E-nish-ul-eyes the colony?' Max interrupted. 'Shit, man, you talk like one of them robots.' He grinned at Nai. (Clarke & Lee, 1992, p. 248)

Similarly, he mocks Pyotr Mishkin's first name:

> 'Mr. Max,' Pyotr Mishkin said formally, 'my first name is Pyotr, not Peter. It is bad enough that I must speak English for five years. Surely I can ask that my name at least retain its original Russian sound.' 'Okay, Pee-yot-ur,' Max said,

again grinning. "What do you do, anyway? No, let me guess... you're the colony undertaker.' (Clarke & Lee, 1992, p. 250)

Later, Max takes a gun, shoots at the mob, and laughs "heartily as the people began to scurry out of the square" (Clarke & Lee, 1992, p. 402) – a terrorist act suggesting the intense hatred of a core nation citizen toward those of the periphery. Max does not tolerate those he feels superior to and does not accept his new community to which those un-Americans also belong[1].

Moreover, another sign of core-periphery clash in the globalized world of Mars is the breakdown of family life and innocence, as Dr. Turner reveals how his "loving" wife and two daughters were killed in their sleep. "My wife," Dr. Turner says,

> was lying under a sheet on a cot in the main hall beside the stairway to the second floor. Her throat had been slit. I heard some people talking upstairs and raced up to see my daughters. The girls were still lying where they had been killed—Christie on the floor in the bathroom and Amanda in her bed. The bastard had cut their throats as well. (Clarke & Lee, 1992, p. 389)

The suspected thief and murderer, Carl Tyson, is said to be a black man with African origin, whose motivation was Linda's jewelry, but had been seen by Linda, so he had to murder the

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1. The inclination to be dominant and superior may be an essential stepping stone for the future imperial and tyrannical invasion and that of racism. The belief in superiority may cause cultural disorders. This snobbish feeling has a circular relationship with Nationalism: each produces the other. The national pride is a national disease that leads the American government to leave reason, individual liberty, and humanity to get emotion, mass tyranny, and inhumanity, respectively: it is a critical illness to be cured (Caldwell, 2006, p. 2).

woman and children to run away. The black man was later acquitted, as there was not enough proof – a verdict raging Dr. Turner to the extent that he kills Carl and his Jewish lawyer Irving Bernstein by a shotgun in revenge for the murder. "My violent act of revenge," Dr. Turner said, "did not return my wife and children to me. Nor did it make me happy, except for that sick animal pleasure I felt at the instant I knew that both Tyson and his attorney were going to die" (Clarke & Lee, 1992, p. 392). Turner's life can highlight an entropic globalization, decided and destined by the core, in which the order is continuously going toward disorder and which "moves from dream to nightmare. The destruction of his family is, for him, the destruction of innocence" (Kilgore, 2003, p. 145). In Kilgore's view, Tyson is innocent, but he is accused of murder only because he is black and from a periphery origin; he is therefore expected to be a murderer because of the dominance of "a system that considers him guilty by reason of his color" (Kilgore, 2003, p. 145). From the point of view of our thesis, a pleasant globalized world is not achievable unless xenophobia is rooted out.

5. Conclusion

What this paper has attempted to argue is that globalization paves the way for different levels of the world-system to communicate more freely, but the result favors the core nations while the semi-periphery and the periphery states do not prosper much from this integration. An overarching finding of this paper is that in the Rama novels written by Clarke and Lee, the states are identified based on the financial status of their governments. America, for example, because of its highly regnant economy, is a core state leading the space missions, which are all based in America and conducted by Americans. In the novels studied, America and

Britain strive to dictate their leading role while the semi-periphery countries, as employees and agents, are obligated to follow orders and perform the duties they are assigned to by the core states and under the supervision of the core. In return, the periphery nations are not even allowed to be on life-and-death missions, as they are thought not to have achieved enough to be included in space programs. Moreover, the periphery is a burden in the eyes of the core, passing viruses and diseases to the entire globe. Accordingly, the study concluded that one large corporation conducts the world, and globalization lets the superpowers put themselves at the center and the rest of the world in the margin. Referring to the novels, we also argued that rape, murder, racism, xenophobia, and bankruptcy occurred in the planets where the principles of globalization are followed, as the direct or indirect result of globalization. A further conclusion is that the economic failure depicted in Rama novels, similarly, is due to globalization, unskilled leaders, and the generous international loans given to different states. This suggests that until the world does not learn proper economic management, until racism and xenophobia exist, and until people of the entire universe have not fully practiced patience and receptiveness, globalization does not seem to benefit all nations equally.

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