A COMPARISON OF THE DEVELOPMENT OF DEVELOPMENT
AND THE DEVELOPMENT OF UNDERDEVELOPMENT
APPROACHES

THESIS

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This study concerns a comparison and contrast of two development approaches to determine their applicability in dealing with the global problem of unequal development.

Chapter I introduces the purpose and the significance of the study, and the selection of one representative model for each approach. They are W. W. Rostow's model and Samir Amin's model.

Chapter II elucidates Rostow's model.

Chapter III explains Amin's model.

Chapter IV presents a comparison and contrast of the two models both methodologically and conceptually.

Chapter V contains the conclusion that Rostow's model cannot be a universal development model due to its methodological shortcomings, whereas Amin's model should be accepted for its analysis in explaining the reasons for today's unequal development on a world scale.
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CHAPTER I

INTRODUCTION

Unequal development has continued throughout the world in the Twentieth Century. The categorization of developed, developing, and less developed countries has been merely a reflection of unequal development on a global scale. In order to deal with this global problem, development economics emerged during the 1940's. In the ensuing years economic development has moved into the forefront of economic discussion.

Today, an examination of the history of development economics reveals that the field has gained a multidimensional feature. That the study of unequal development cannot be usefully pursued very far within one single discipline is widely agreed. This recognition is a fact in its own right, as witnessed, for instance, in the interdisciplinary nature of journals in the field. Development and Change, Economic Development and Cultural Change, Finance and Development, Journal of Development Studies, Studies in Comparative International Development, and World Development are among those expressing this viewpoint.

Despite its multi-disciplinary nature, development economics tends to converge toward a wide acceptance of two
modes of approaching the problem of unequal development. These are the development of development approach and the "development of underdevelopment"\(^1\) approach. In the development of development approach, varying degrees of traditionalism characterize unequal development. Therefore, abandoning these characteristics and adopting those of the developed countries leads to development. In general, unequal development manifests itself as a question of timing. In particular, at what point in time do different countries overthrow their yoke of traditionalism? As a result, this approach uses the historical experience of the developed countries to interpose stages into the gap between development and underdevelopment. In contrast, in the development of underdevelopment approach the seeds of unequal development are planted during the Colonial era. Colonization obstructs the development of colonies, whereas it helps colonial powers to develop at the expense of their colonies. Because colonies are faced with both economic and social distortions from without, it is a mistake to consider that today's underdeveloped countries are in a stage through which the now developed countries passed long ago. "The now

developed countries were never underdeveloped, though they may have been undeveloped."^2

The purpose of this study is to compare and contrast these two strikingly opposing views on development. The driving force in undertaking such a study is beyond a mere academic inquiry. Since the application of these two approaches is not confined within theoretical models but is seen around the globe, a comparison is useful in measuring their applicability to the unequal development problem. The procedure of the study is first to elaborate on each approach, and then to compare and contrast them. Following the comparison a conclusion is given. For purposes of comparison one epitome is selected for the development of development approach and one for the development of underdevelopment approach.

Epitomes of Development of Development and Development of Underdevelopment Approaches

W. W. Rostow's *The Stages of Economic Growth: A Non-Communist Manifesto* has generally been accepted as the

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^2 A. C. Frank, "The Development of Underdevelopment," *Monthly Review*, XVIII (September, 1966), 18. The difference between underdeveloped and undeveloped should be compared with the difference between two immature persons of the same age; one is in a retarded state and cannot function even in regular activities (eating and walking) by himself, whereas the other is normal and does not need any help in those activities.
epitome of the development of development approach.\textsuperscript{3} One observer has stated, "it is surely the most widely known model of development, both within the profession and beyond."\textsuperscript{4} The source of such a broad diffusion of the Rostovian development model has been twofold. The support of Rostow's academic eminence combined with his reputation as an "architect of the United States"\textsuperscript{5} foreign policy in the 1960's has played an important role in the world-wide circulation of his work. Rostow also has employed an easily understood approach in his analytical framework which has given his book an additional stimulus toward being read by the layman. Therefore, this study has considered the Rostovian model as the epitome of the development of development approach to explaining the gross inequality found among the countries of the world.

The development of underdevelopment approach is a product of Third World economists.\textsuperscript{6} Beginning in the early


1970's, they have worked toward explaining unequal development by employing similar techniques. Among them, due both to his wide reception and to his global analyses rather than more frequent regional analyses, Samir Amin, Director of the Institute of African Economic Development and Planning since 1970, is preeminent. Despite the new emergence of his model, "it was a major theme at the 1972 Conference of the British Sociological Association on Sociology and Development."  

Therefore, this study takes the Amin model as the epitome of the development of underdevelopment approach to explaining the gross inequality found among the countries of the world.

\[7\text{Carter, p. 174.}\]
CHAPTER II

THE ROSTOVIAN MODEL: DEVELOPMENT OF DEVELOPMENT

The Nature of the Model

The essence of the Rostovian model is that the identification of stages of development and the classification of societies according to those stages is logically and practically possible. Further information is gained by "breaking down the story of each national economy,"¹ because when combined together, the varied stages of many societies form "both a theory about economic growth and a more general, if still highly partial, theory about modern history as a whole."²

Primarily by deduction from the historical experiences of the developed countries,³ Rostow distinguishes five stages: traditional, preconditions for take-off, take-off, maturity, and high mass-consumption. Each stage is marked by a number of characteristics and is determined by some developments

²Ibid.
³References are made to Britain, the United States, Japan, Russia, Sweden, and less frequently to Canada, Germany, and India.
that have occurred in a previous phase. Since each stage is predetermined, every succeeding stage is predictable by reference to its predecessor. The Rostovian model is both deterministic and predictive.

Although sometimes encountering difficulty in finding a general pattern in each stage, the Rostovian model defines the conditions to attain a higher stage\(^4\) inferring that the stages through which the developed countries have gone will be copied by other states. One can then analyze what is required to move from one stage to another and can prescribe what a nation must do to accelerate its process of development.

The Traditional Society Stage

Prior to the onset of marked growth in Western Europe, the world consisted of traditional societies.\(^5\) They differed in detail from one region to another but exhibited a core of common features conducive to technological and socio-political conservatism.

\(^4\)"Perhaps the most important thing to be said about the behavior of these variables in historical cases of take-off is that they have assumed many different forms. There is no single pattern." Rostow, *The Stages of Economic Growth*, p. 46. "There is, clearly, no one sectoral sequence for take-off, no single sector which constitutes the magic key." However, to achieve the take-off "four basic factors must be present." *Ibid.*, p. 57.

Existing in a "pre-Newtonian" age, traditional societies engaged in agricultural activities. The land occupied a very high proportion of the work force—greater than 75 per cent. In addition to the vicissitudes of agricultural output, a lack of scientific and technological applications generated a ceiling which the output level could not exceed. A hierarchical social formation allowed very little mobility or social change. In the traditional society social structure "the range of possibilities open to one's grandchildren was just about what it had been for one's grandparents."

The Rostovian traditional society functioned as an independent political unit. "Those who owned and controlled the land" generally exercised control over political power even under instances of central political rule. The landowner's civil servants and soldiers maintained the political system and provided the landowner with the means to exert a significant influence over central political rule when in existence.

The traditional society did not allow man to alter nature to his economic advantage. Unless he was a landlord,

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6 Newton symbolizes the time "when men came widely to believe that the external world was subject to a few knowable laws, and was systematically capable of productive manipulation," Ibid., p. 4.

7 Ibid., p. 18.

8 Ibid., p. 5.

9 Ibid.
man lived in a static milieu where no social mobility existed, and the landowner maintained political independence from any central rule.

The Preconditions for Take-off Stage

The transition between the traditional society and the take-off stage was the preconditions for take-off stage. As far as historical experience is concerned, this stage assumed two forms. The first form or the "general case" occurred in Africa, Asia, the Middle East, and most of Europe. The preconditions for take-off in these areas required a series of structural changes, because a deep-rooted traditional society existed. The second form occurred in Australia, Canada, and the United States. Non-conformist groups populated these regions. These groups came from Britain where the transitional process had almost been completed, and the natural potentialities of the regions allowed the acceleration of the transition period by "offering extremely attractive incentives to get on with economic growth."

Nevertheless, when investigated closely, the divergence between the two forms became narrow. For example, the Southern United States maintained its traditional character for a long time, indicating that it should belong to the first rather than to the second form. A similar case occurred

10 Ibid., p. 17.
11 Ibid.
in Canada, where Quebec entered the take-off stage only recently. Despite its location, Latin America followed the pattern of the European transitional stage. Therefore, the general case, which covered the largest part of the world and began with a traditional society, constituted the analytical base for the preconditions to take-off in the Rostovian model.

To meet the primary economic requirement in the transition, the level of investment should be raised to at least 10 percent of the national income to ensure self-sustaining growth. The direction of investment should be "in transport, communications, and in raw materials." The transition stage will take the role of building up society's social overhead capital upon which the take-off can be realized.

Social overhead investments have three characteristics—long pay-off times, lumpiness, and indirect benefits. Compared with an agriculture-oriented investment, a highway construction investment yields its fruits in a longer period. Unlike other forms of investments that may be carried out by piecemeal accumulation, infrastructure building requires a complete effort. By virtue of its nature, social overhead capital benefits not only the entrepreneur, but also the whole society, as in the case of a lighthouse. Considering these characteristics of social overhead capital, Rostow concludes that

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12 Ibid., p. 18.  
13 Ibid., p. 7.  
14 Ibid.
governments should perform a substantial share in the formation of infrastructure as observed in the United States by the major role of local and state governments in the construction of extensive railroad networks. Government, as a necessary agent in the creation of social overhead capital, builds transport, communication, and raw-material networks which form the economic aspect of the preconditions for take-off.

On the social front, a new elite must emerge to create the industrial society. The previous elite of the traditional society must be superseded in authority. The new elite prepares an environment where there will be a willingness of people to lend risk capital, an availability of men willing and able to be entrepreneurs and to innovate, and a willingness of society at large to operate an economic system geared to manufacturing activities. To accomplish these goals, the new elite must build "ports, docks, roads, and later, railways." If colonies exist, the colonies' exports must be channeled "to produce what the colonial power wishes to export," or "the opportunity for a Western education" must be provided.

15 Ibid., p. 25.
16 In the Rostovian sense, manufacturing is the "processing of agricultural products or raw materials by modern methods." Rostow, The Stages of Economic Growth, p. 39.
17 Ibid., pp. 27-28.
18 Ibid.
19 Ibid.
A "reactive nationalism" against foreign intrusion has been the most successful stimulus in the rise of the new elite of the transition stage. A nationalist sentiment as a powerful motive to create "an independent modern state" has occurred in Turkey. Although in some cases nationalism has emerged from a dissatisfaction with the regionally based power, to Rostow the resultant elite has generated the social conditions for the take-off.

The preconditions for take-off include both economic and social changes. A rate of investment above 10 per cent of national income is the principal economic condition. Investment allocation should provide for the building of social overhead capital which generally consists of transport, communication, and raw material outlays. At the same time, a new elite should arise to overthrow the old order and to devote local talent, energy, and resources to modernization. The combination of these economic and social changes forms the platform for take-off.

The Take-off Stage

The characteristics of take-off are difficult to discern from the characteristics of the transition stage. Nonetheless, since the preconditions of take-off have been met in the transitional stage, the take-off stage is a short stage of

21 Ibid., p. 29.
22 Ibid., pp. 29-30.
development, predetermined by the conditions established by
the preceding stage. In the take-off stage growth becomes
self-sustaining during "that decisive interval in the history
of a society when growth becomes its normal condition."\(^{23}\)

As a first requirement, investment exceeds 10 per cent
of national income so that per capita income may rise
sufficiently to guarantee adequate future levels of savings
and investment. If this cannot be accomplished, the country
falls under one of four "underdeveloped"\(^{24}\) categories.

In "pre-take-off"\(^{25}\) countries, the savings-investment
ratio, including capital imports falls below 5 per cent of
the net national product\(^{26}\).

In countries "attempting take-off,"\(^{27}\) the savings--
investment ratio--including capital imports, averages above
5 per cent of the net national product\(^{28}\).

In growing countries the savings-investment ratio,
including capital imports reaches 10 per cent of the net
national product\(^{29}\).

Enclave countries separate into two subcategories;
countries engaging in export activities where the savings

\(^{23}\) Ibid., p. 36. Take-off is defined as "an industrial
revolution, tied directly to radical changes in methods of
production, having their decisive consequence over a
relatively short period of time." W. W. Rostow, "The Take-off
into Self-Sustained Growth," *Economic Journal*, LXVI (March,
1956), 47.

\(^{24}\) Rostow, *The Stages of Economic Growth*, p. 43.

\(^{25}\) Ibid., p. 44.  
\(^{26}\) Ibid.  
\(^{27}\) Ibid.  

\(^{28}\) Ibid.  
\(^{29}\) Ibid.
investment ratio, including capital imports totals 10 per cent or more of the net national product, but, the domestic social and political structures are not ripe for take-off; and countries where capital exports constitute a large share of the net national product.\(^{30}\)

Also important in the take-off phase is the establishment of a leading sector or sectors.

At any period of time it appears to be true even in a mature and growing economy that forward momentum is maintained as the result of rapid expansion in a limited number of primary sectors whose expansion has significant external economy and other secondary effects.\(^{31}\)

The sector or sectors which led to the take-off have varied from country to country. Nevertheless, in many countries including the United States, Germany, Russia, Sweden, and Japan, railway building has been the most decisive element of take-off. The improvement of the internal means of communication and transportation has been crucial to expand markets and to facilitate exports, apart from any direct impact on such industries as coal, iron, and engineering.\(^{32}\)

Historically, domestic finance for the leading sector or sectors came from three sources. Reform or other means diverted a part of the agricultural income to the leading sectors, as in Tsarist Russia and Meiji Japan, where

\(^{30}\)Ibid., pp. 44-45.  \(^{31}\)Ibid., p. 53.  \(^{32}\)Ibid., p. 55.
government bonds were substituted for the landlords' claim to the flow of rent payments. The bonds then depreciated, and the exchange of government bonds for land became a "less attractive arrangement than had first appeared to be offered." Exemplified by China and India, enterprising landlords involuntarily or voluntarily plowed back rents into commerce and industry. In other regions, including Britain, Japan, and the United States, the state favored profits over rents by an inflationary redistribution of income.

The development of major export industries has also led to take-off by permitting substantial capital imports. Enlarged foreign-exchange proceeds have financed the import of capital equipment. Exports of grain from the United States, Russia, and Canada; timber from Sweden; and textiles from Britain have provided financing for substantial capital imports.

The take-off in many countries has developed from a sharp stimulus emitted by the leading sector or sectors. Although there have been various forms of development, railway construction has played the role of that sharp stimulus in a large number of countries. The funds for the

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33 Ibid., p. 47.  
34 Ibid.  
leading sectors have arisen from both internal and external sources. Internally, the funds have been generated either by transferring agricultural surplus to the leading sectors or through an inflationary income redistribution policy to concentrate money income for the purposes of the leading sectors. Externally, major export industries have earned foreign exchange which has led to the expansion of exports through the import of capital goods.

The Drive to Maturity Stage

About sixty years after the take-off begins or forty years after the take-off ends the economy matures. In the maturity stage an economy has the ability to "produce not everything, but anything it chooses to produce." The economy may lack the necessary raw materials or other supply conditions for the matrix of domestic production to be economical. However, this is due not to a technological or institutional matter, but to an economic choice or political priority.

This stage witnesses an essential change in the working force. Before take-off, the percentage of labor in agriculture is 75 per cent or more. In the drive to maturity, agricultural labor declines to 40 or even 20 per cent of the working force. The remainder of the labor force is employed to "design or

37 Ibid., p. 10.
38 Ibid.
handle complex machines, keep office records, and manage big businesses." The direction of the shift in the labor force is from agriculture towards industry and service sectors.

The essence of leadership takes a different form. The new elite that emerges in the take-off seeks mobilization of the country's resources on the road to modernization. To achieve this goal, the leadership assumes the form of "the efficient manager of a highly bureaucratized and differentiated machine."  

A change in the structure of the economy characterizes the drive to maturity stage. The economy moves toward embodying more service activities, as evidenced by changes that take place both in the working force and the leadership. These preliminary developments give rise to the high mass-consumption stage in which they become realized.

The Age of High Mass-Consumption

In the last stage of the Rostovian model, "the leading sectors shift towards durable consumers' goods and services." Besides each country's unique experiences, the age of high mass-consumption begins with the introduction of the cheap mass automobile, as occurred in the United States and later in Germany. In addition, the international demonstration effect plays an important role in the diffusion of the high

39 Ibid., p. 71.  
40 Ibid., p. 72.  
41 Ibid., p. 10.  
42 Ibid., p. 11.
mass-consumption philosophy, as illustrated by American soldiers who spread their consumption patterns around the globe in the Second World War.\textsuperscript{43}

Although it does not form a stage in the Rostovian model, "beyond high mass-consumption"\textsuperscript{44} is examined as a conjectural matter. Rostow predicts that high mass-consumption will move on of its own dynamics. Due to the international demonstration effect, he sees "similar patterns of structural evolution in different societies as they go through the high consumption phase."\textsuperscript{45}

Summary of the Rostovian Model

The Rostovian model employs an inductive approach which takes the historical experiences of several developed countries as a sample, and by deducing from them, arrives at five stages in which the process of development occurs and through which the other countries should pass to develop. Despite the difficulty in finding "a single pattern of evolution"\textsuperscript{46} in the traditional society, high-mass-consumption leap forward, the pattern "did, at each stage, pose a similar set of choices for each society."\textsuperscript{47} This view gives the Rostovian stages a generality that applies to any and all

\begin{itemize}
\item[\textsuperscript{43}] Ibid., p. 87.
\item[\textsuperscript{44}] Ibid., p. 90.
\item[\textsuperscript{45}] Ibid., p. 91.
\item[\textsuperscript{46}] Ibid., p. 90.
\item[\textsuperscript{47}] Ibid.
\end{itemize}
economies. The classification of any and every country relates only to that country's level of movement through a series of steps.

Concerning the essence of the five stages, the model characterizes a deterministic and predictive approach. Each stage gains its momentum from the previous one and prepares the preconditions for the next phase. As in the emergence of a new elite or a necessary investment ratio, each stage embodies both social and economic factors in giving rise to the succeeding stage. Once the required conditions are realized, the model predicts which stage will be attained at what point in time.

The five Rostovian stages are traditional, preconditions for take-off, take-off, drive to maturity, and high mass-consumption. The traditional society, an independent political unit engaged in agriculture, suffers limitations imposed on the output level due to lack of scientific and technological applications, and on social mobility due to a hierarchical social formation. The transition stage is marked by two developments. Social overhead capital arises in the form of transport, communications, and raw materials. As a reaction to foreign intrusion a new social elite emerges to take the necessary steps in forming overhead capital. Having received its impetus from the transitional phase, the take-off progresses either through railway construction or through major export industries. The funds
for these leading sectors come internally from the transfer of agriculture surplus to leading sector locations or through an inflationary income redistribution policy of the state. External funds come from foreign exchange proceeds of major export industries. In response to changes occurring during take-off, the drive to maturity stage witnesses a structural shift in the labor force from agriculture to industry and service enterprises. The economy continues to incorporate more service activities as evidenced by the bureaucratic form that the leadership assumes. The last stage of the Rostovian model, the age of high mass-consumption, materializes the stimuli given by the preceding phase. The economy becomes a myriad of mass production of services and consumers' durables. On the global scale, an international demonstration effect diffuses mass-consumption.
CHAPTER III

THE AMIN MODEL: THE DEVELOPMENT OF UNDERDEVELOPMENT

The Nature of the Model

The Amin model finds the origins of unequal development in the colonial epoch. The fact that many countries were colonized and integrated into the world capitalist system forms the phenomenon of unequal development. A loss of traditional character and a subjugation to the demands of the colonizing power result from the grafting of new economic and social institutions onto the colonized society.

The model takes a holistic view in analyzing the unequal development problem. The wholeness and interconnectedness of countries in forming a global system constitutes the fulcrum of that holistic view. No region or nation appears as an abstraction having no ties with the whole. The meaning of a country depends upon the role it has within the system of which it is a part.

The global system which was structured during the colonial era embodies two elements. One element is the center of colonial powers, and the other is the periphery or the colonies. Each has specific functions to carry out
and is an inseparable part of the "center-periphery system."\textsuperscript{1} Within the center-periphery framework, the relationship between the center and the periphery is dialectical.\textsuperscript{2} The center and the periphery function in an opposite pattern creating one phenomenon. In the functioning of the system, the periphery causes development at the center which generates underdevelopment at the periphery. Viewed from a different perspective, development of the center results in underdevelopment at the periphery, reflecting the phenomenon of unequal development. The center develops at the expense of the periphery, because the center shapes and adapts the periphery to meet the needs of the center.

Unequal development appears as an outcome of the colonial epoch. Colonization brings about a system in which the periphery is structured to respond to the demands of the center. The periphery helps the center to develop while development of the center dialectically mirrors underdevelopment of the periphery. The center and the periphery become two dialectical units of the center-periphery system.

\textsuperscript{1}Samir Amin, Accumulation on a World Scale; A Critique of the Theory of Underdevelopment, translated by Brian Pearce, Vol. II (New York, 1974), pp. 2-4.

\textsuperscript{2}Ibid., p. 603. The term dialectics refers to relationships between things of the natural and social world. The relationships are so structured that there exists an essential conflict or opposition which generates changes when they are resolved, e.g., action and reaction, the combination and dissociation of atoms. A useful analysis on dialectics may be found in M. M. Mussachia, "On Contradiction in Dialectical Materialism," Science and Society, XLI (October, 1978), 257-280.
The Amin Model and the Analysis of Unequal Development

Paradoxically, the model suggests that the world has been divided in the process of its unification, divided into spheres of influence, and divided into the center and the periphery. In the process, both the center and the periphery are transformed. The center emerges as developed by gaining its momentum from the periphery, whereas the periphery shoulders the transformation of the center by leaving itself as underdeveloped. An analysis of the characteristics of the periphery reveals how the transformation to peripheral societies was realized and points out three characteristics, "extroversion and disarticulation," "hypertrophy of the tertiary sector," and the refutation of the traditional character.

3 It is difficult to find a clear-cut definition of "developed" in Amin's works. Despite his frequent references to the center countries as developed, Amin is critical of the development pattern of the center. He claims that the central development is in "economistic" but not in social terms. As will be elaborated soon, in the Amin model the term "underdeveloped" contains the characteristics of the periphery, namely "extroversion and disarticulation," "hypertrophy of the tertiary sector," and the refutation of the traditional character. Amin considers "North America, Western Europe, Japan, Australia, New Zealand, and South America, on the one hand; Russia and Eastern Europe, on the other" as the center, and the rest as the periphery. Amin, Accumulation on a World Scale, p. 4.


5 Ibid., p. 239.
Extroversion and Disarticulation of the Periphery

The integration of the periphery into the world capitalist system made specific distortions upon both economic and social structures of the periphery. Being shaped to respond to the needs of the center molded the periphery into an "extroverted" organism. In many cases the center introduced new export sectors to the periphery that would accelerate the development of the center. Becoming an appendage of the center, subjected the peripheral society to a new series of external influences as reflected in the introduction of new production techniques, religion, language, and political rule. These new developments played an important role in depriving the periphery of its traditional character. Moreover, external articulation or extroversion of the periphery becomes intensified in its internal disarticulation. Through the construction of extensive transport and communication networks between export locations and agriculture and mineral resources, inter-sectoral relations of the periphery are minimized. Internal

6 In the Amin model, the pre-peripheral societies live in a feudal system where society consists of two classes i.e., landlords and serf-tenants, domination of the landlord is a matter of right of "dues" and production is not for the market. Amin, Unequal Development, p. 15. Having been integrated into the world capitalist system, social relations may still be maintained in a feudal form. However, now the direction of production is to the center countries where the market is capitalistic and international. Amin, Accumulation on a World Scale, pp. 20-22.

7 Amin, Unequal Development, p. 203.
disarticulation exists in abnormal economic concentration in a few cities where export activities are located. The rest of the periphery is ignored. Consequently, due to a well-established link between the center and the periphery, any progress in the peripheral export sectors is not diffused into the periphery but emits to the center.

Accumulation in central capitalism is "autocentric" or "introverted," or external trade is subordinated to the conditions of the local market. The economic structure of the center forms a coherent whole, the different sectors of which are intertwined, so that the flow of progress in any sector can spread throughout. Internal articulation of the center eliminates extroversion. This is done by imposing "unequal international specialization" for the benefit of the center. The center disarticulates and extroverts the periphery from which it receives simultaneous gains. Exports of the periphery accelerate the accumulation process at the center, and any scientific or technological improvements that are realized in the peripheral export sectors are transferred to the center. While the center is internally articulated and, as a result, introverted, the periphery becomes internally disarticulated and, as a result, extroverted.

8 Amin, Unequal Development, p. 76 and Amin, Accumulation on a World Scale, p. 28.
9 Amin, Accumulation on a World Scale, p. 28.
10 Amin, Unequal Development, p. 191.
Furthermore, the Amin model combines extraversion and internal disarticulation of the periphery and concludes that the parts of the peripheral economy are juxtaposed and independent of each other. Unlike the central economies, the peripheral inchoate structure separates into its elements without any serious effect on the whole. This is the source of the "weakness of national cohesion" in the periphery, and "is also the source of micronationalism: the area interested in the export economy has no need for the rest of the country, which rather constitutes a burden upon it." 12

The Amin model suggests that colonial expansion gave rise to the extroversion and disarticulation of the periphery, whereas the center became self-oriented. The periphery was so structured that it not only exported whatever the center commanded, but also the peripheral export activities were carried out in wide isolation from the economy. The raw material-transport-port link that connected the periphery with the center had no connection with the rest of the periphery. This led to very little intercourse among the sectors within the peripheral economy. The periphery was disarticulated internally; it was articulated only externally or extroverted. In this sense, the periphery was made up of independent sectors, as reflected in a weak national structure. The quantitative change that extraversion

11 Ibid., p. 238. 12 Ibid.
brought was the subjugation of the peripheral societies to the center economic, religious, and political institutions.

Hypertrophy of the Tertiary Sector

Examination of the structure of the distribution among the sectors of both the product and the occupied labor force in the periphery reveals a very marked distortion toward services, toward tertiary activities.\textsuperscript{13} Insofar as the emergence of the tertiary sector is concerned, Amin claims that the center and the periphery represents two different modes. At the center tertiary activities are inevitable outcomes of an integrated industrial economy, whereas at the periphery they signify one characteristic of under-development.

Amin proposes that the development of the tertiary sector in the center has not been linear. The tertiary sector develops only after the industrial sector emerges. First, there is a movement from agricultural to industrial, and then industrial to tertiary activities. In this connection Amin cites the United States where between 1820 and 1890 the agriculture occupied population dropped from 72 per cent to less than 50 per cent, as labor shifted into consumers' and producers' goods sectors. In the Twentieth Century, the

\textsuperscript{13}In the Amin model, the tertiary sector in general refers to "transport, commerce, services, administration." \textit{Ibid.}, p. 242. In particular, it contains the professions in banks, governments and of doctors, teachers, lawyers. Amin, \textit{Accumulation on a World Scale}, p. 182.
decline in the agricultural population proceeded even faster, but it was more and more the tertiary sector that gained from this population transfer.\textsuperscript{14} The periphery varies from the center, however, in that the agricultural population went directly into the tertiary sector rather than the other sectors. In 1958 in Maghreb\textsuperscript{15} the tertiary sector employed 55 per cent and in the Ivory Coast in 1955, 66 per cent.\textsuperscript{16}

The Amin model of the central economy is an introverted, articulated, coherent structure where growth has an integrating effect. Growth is self-reinforcing, and cumulative due to the extraordinarily rapid advance of scientific and technological innovations. Central economies have a tendency to create an output level above and beyond the consumption capacity of their societies. In the internal dynamics of the economy, there exists a surplus in the center indicating the difference between production and consumption. Amin claims that this is a built-in feature of the central economies, and, in response to this tendency, the tertiary sectors arise to absorb the surplus. Absorption of the surplus takes various forms, including government expenditures, military outlays, and selling costs.\textsuperscript{17}

\textsuperscript{14}\textit{Ibid.}, p. 186.
\textsuperscript{15}The Maghreb covers the area extending from Libya to the Atlantic and embracing Libya, Tunisia, Algeria, Morocco, and Mauritania. Amin, \textit{Unequal Development}, p. 37.
\textsuperscript{16}\textit{Ibid.}, p. 240.
\textsuperscript{17}\textit{Ibid.}, pp. 244-245.
Regarding the periphery, Amin states that the reasons behind the hypertrophying trend of the tertiary sector in the periphery should be sought in the circumstances dominating the integration of it into the global capitalist system. The Amin model points out three consequences that gave rise to an abnormal concentration of tertiary activities at the periphery upon the formation of the center-periphery system. They are the pressure from the center industries, "marginalization of the masses,"¹⁸ and the spending of the peripheral ground rent.

Pressure from the Center Industries

In the Amin model, the central market is first local, then national, and finally becomes international through colonization. Competitive pressure of the central industries exerts various weight upon the peripheral economy. Such pressure drives the peripheral local capital from making its way into investment in industry towards complementary activities, such as commerce, trade, transportation.¹⁹

Marginalization of the Masses

Another outcome of the competitive pressure of the center is that it eliminates the peripheral craftsmanship marginalizing craftsmen and creating a reservoir of labor supply which is not employed by the development of a local industry.

¹⁸Ibid., p. 194. ¹⁹Ibid., p. 245.
The tertiary sector in the periphery then is "a manifestation of concealed unemployment, resulting from the processes of marginalization that are specific to the development of peripheral capitalism."\(^{20}\)

Spending of the Peripheral Ground Rent

Ground rent persists in the periphery, whereas in the center it has lost its predominant role in favor of capital. Having channeled external trade towards satisfying the needs of local capital accumulation, and due to a competitive environment, ground rent in the center is spent on mechanization of agriculture. In the periphery, however, wherever an unequal distribution of landownership exists, ground rent is a monopolistic income and need not be invested as profit on capital. The peripheral ground rent is spent on imported luxury goods and on leisure services that are distributed by the tertiary sector. This in return strengthens and expands the scope of the tertiary sector.\(^{21}\)

The Amin model views the growth of the tertiary sector in the periphery as a signal of the development of underdevelopment, because the peripheral tertiary sector reflects a lack of industrial outlets, concealed unemployment, and large amounts of luxury imports. In opposition, the evolution of the central tertiary activities is viewed as a necessary outcome of growth in the center, because the central economies

\(^{20}\)Ibid.  \(^{21}\)Ibid., p. 246.
have an inherent proclivity to produce above their consumption level and the growth of the tertiary sector is in response to absorption of the resultant difference.

Refutation of the Traditional Character

The periphery alters its status from a colony to a "nation" when the global capitalist system becomes weak. The weakening of the center-periphery system occurs during periods of international crises. The two world wars played a mitigating effect upon the ties in the center-periphery relations. The deterioration of military establishments in the colony made it difficult for the center to maintain its colonial rule further. While colonialism was on the decline in the interwar years, World War II led not merely to intensified and better organized nation building efforts in the periphery, but a complete reversal of the expansionist tendencies of the preceding centuries. Added to this were the world wide crises of capitalism. During a crisis, the periphery, shaped and adopted to the needs of the center, was

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22 According to Amin the nation "presupposes the ethnic group but goes beyond this. . . . The nation appears when . . . a social class, controlling the central state machinery, ensures economic unity of the community's life—that is, when the organization by this dominant class of the generation, the circulation, and the distribution of the surplus, welds together into one the fates of the various provinces." Amin, Unequal Development, p. 27.

23 Amin, Accumulation on a World Scale, pp. 600-601.
left in isolation. Finding itself in a relative degree of autonomy, the periphery altered its status from a colony to a nation.

However, Amin claims that the emergence of new nations cannot be grasped within its own dimension. Instead, it must be investigated on a global scale, in what social forces were formed by the center in the periphery and which role they assumed after the independence was won.

Extroversion also took a qualitative form. Quantitatively, extroversion meant that the peripheral economy was oriented towards meeting the demands of the center and all its activities were consummated only when the product of these efforts finally reached the factory or the department store in the center. Qualitatively, the extroversion of the periphery exerted insidious social tensions generated within the individual, within the family and between the generations, as a result of the extroversion of the personality. The peripheral traditional character that was dominant before its integration into the global system became subjected to external distortions, and eventually eroded. In this connection, it is worth quoting Amin at length:

The "extroverted" origin of development that perpetuates itself despite the increasing diversification, or industrialization, of the economy, is not external to the model of dependent peripheral accumulation. On the contrary, this model reproduces the social and economic conditions whereby it functions. The marginalization of the masses guarantees to the minority an increasing income that enables them to adopt European patterns of consumption. Extention of this pattern of consumption entails profitability
of the sector that produces luxury goods, and
intensifies the integration--social, cultural,
ideological, and political--of the privileged
classes. 24

Besides extroverting the peripheral traditional character,
the center also reshapes the traditional social structure of
the periphery. 25 In establishing colonial control, the
replacement of old ones with a new set of institutions was
the crucial first step. The apparatus of power had to be
created and its authority established within the hands of
these peripheral institutions. Accordingly, it was during
the colonial era, Amin cites "that Latin America acquired the
main structures that characterize it to this day." 26 They
were based on agrarian capitalism consisting of large land-
ownership, "the labor force of which was supplied by peasants
of degraded status--peons and former slaves. To this was
added a local merchant bourgeoisie of the comprader type, when
monopoly of the center country became overstretched." 27

24 Ibid.

25 As noted earlier, the traditional social structure of
the periphery embodied feudal relations which in general
consisted of landlords and seff tenants. A detailed analysis
on the subject may be found in Amin, Accumulation on a World
Scale, pp. 137-169.

26 Amin, Unequal Development, p. 296.

27 Ibid. In the Amin model, there are two forms of
bourgeoisie. They both have one feature in common, that is
they control the means of production. Nevertheless, the
central bourgeoisie is introverted and subordinates external
trade to the advantage of his own capital accumulation whereas
the peripheral bourgeoisie is extroverted and his capital
accumulation depends on the growth of the central bourgeoisie.
In India, the "British imposed agricultural specialization, by creating from scratch a pattern of large landed property, reinforced by the exemption of cotton fields from the land tax." 28 In Iraq, 90 per cent of the land was distributed to "a thousand sheikks, the chieftains of seminomadic tribes." 29

The peripheral society was transformed into a type of "provincialism," 30 each of which was independent of the others, disarticulated and extroverted, and converging toward a pattern in which the development of underdevelopment is speeded up by the emergence of a new phenomenon, that is "state capitalism." 31 The purpose of state capitalism in the periphery is "to promote a new local peripheral bourgeoisie." 32 To do so, the periphery continues to be extroverted in that it emulates the central countries either by integrating its economy into the central socialist block or by moving to the central capitalist block. As manifestations of this trend, Amin observes large government and

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28 Ibid., p. 299. 29 Ibid., p. 310.
30 Ibid., p. 345. 31 Ibid.
military expenditures that would ultimately put the periphery in the debt trap. The peripheral educational institutions are copied from the center, and, in some cases, the peripheral students are directly sent to the center for educational purposes.

Overall, the Amin model argues that the peripheral society evolved into a distorted imitation of the central societies. It also suggests that the image that the center formed in the periphery during the colonial era still largely persists. The new development path, namely state capitalism, that the periphery has embarked upon is the expression of that image. Having inherited a latifundia and bourgeois centered social formation from the center, the peripheral state now strives to develop the inheritance through emulating both the economic and social institutions of the center. That is, each peripheral social formation includes a large central government bureaucracy and military establishment. It also includes consumption patterns and educational institutions of the center.

Summary of the Amin Model

The Amin model claims that the colonial era gave rise to unequal development that has since evolved into the

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33 Latifundia is a large landed estate, typically owned by a landlord or latifundero and worked by serfs; as in Latin America. It is used here to denote large landownership.
development of underdevelopment. Colonial expansion, according to Amin, formed an international specialization which finds its expression in the center-periphery system. The system embodies capitalist relations on a global scale to foster the development at the center and the development of underdevelopment at the periphery. The relationship within the center-periphery framework was such that the center molded the periphery in accordance with its (center's) needs.

In analyzing the formation and continuation of the center-periphery system, the Amin model employs a historical approach within a holistic view. The world is not taken as made up of independent elements; rather it is considered as a global unit in which countries are intertwined with certain relations, without which their position cannot be perceived. Moreover, Amin suggests that the phenomenon of unequal development is the result of the dialectical roles that the center and the periphery play. Being shaped and adopted to the requirements of the center, the periphery accelerates the development of the center, whereas the center that shapes and adopts the periphery to its needs generates the development of underdevelopment in the periphery. Thus, it can be said that the methodology of the Amin model implies the features of historical, holistic and dialectical approaches.

The manifestation of the development of underdevelopment can be observed in the three peripheral characteristics.
First, the center, in the process of making the periphery as an additive factor to the central capital accumulation, extroverts and disarticulates the periphery. Through introductions of cash-crops and transport networks, the peripheral production becomes linear in that it is not meant for self-consumption but is exported to the central production units. Lack of inter-sectoral connections at the periphery disarticulates it internally and transfers any sectoral progress to the center. Second, the integration of the periphery into the international market originates a hypertrophied tertiary sector. The competitive pressure of the central industries divert the peripheral capital from industrial investments to complementary activities, and the same pressure eradicates the peripheral craftsmanship driving the resultant labor supply to work at the tertiary sector as concealed unemployed. The way the peripheral ground rent is spent also gives an additional incentive to the tertiary sector. For, in the presence of an unequal distribution of landownership, ground rent becomes a monopolistic income and is spent on the services that are provided by the tertiary sector. Third and lastly, the peripheral societies become distorted under colonial rule until today such traditional societies are only vestiges of their former selves. Today’s peripheral social formation merely emulates the center. After the independence is won,
the periphery reports to either of the two extreme dimensions, capitalist or socialist centers, indicating the incapacity for an autocentric development.
CHAPTER IV

THE DEVELOPMENT OF DEVELOPMENT MODEL VERSUS THE DEVELOPMENT OF UNDERDEVELOPMENT MODEL

An examination of the similarities and differences of the two models requires consideration of both methodological and conceptual aspects. Testing the applicability of the models necessitates some observations on their differing points.

Comparison of the Two Models

Methodologically, both the Rostovian and the Amin models employ a historical approach. Rostow stresses that the process of development is a historical periodization or stages. Despite the absence of periodization, Amin views development and underdevelopment in a historical context also.

Conceptually, both models incorporate economic and social factors as significant conditions for development. The Rostovian model requires the emergence of a new-elite as a necessary but not sufficient condition for take-off. This new-elite builds social overhead capital and channels investments into the leading sectors. Similarly, the Amin model emphasizes that development and underdevelopment are generated by both economic and social variables.

39
Contrast of the Two Models

Regarding methodological differences, the two models use varying analytical tools within a historical approach. The Rostovian model is predictive and deterministic in that development occurs in five stages where each stage is predetermined by its predecessor and gives rise to its successor. Since the five stages are abstracted from the historical experiences of several developed countries and applied to the world as a whole, the Rostovian model is inductive. Unlike the Rostovian model, the Amin model views development and underdevelopment as a cumulative process. According to Amin, the process of development in the center and underdevelopment in the periphery is cumulative from the time that the world was divided in the era of its unification through colonial expansion. Moreover, the Amin model characterizes a dialectical historical approach in that within the center-periphery framework development and underdevelopment occur as opposite phenomena. Amin proposes that development generates underdevelopment. The methodological difference between the two models is contrasted in Rostow's words: "... The path to maturity had within it the seeds of not its undoing--for this analysis is neither Hegelian, nor Marxist--but the seeds of its own modification."¹

Regarding conceptual differences, despite the use of similar variables in their analyses, both models reach completely opposite conclusions. While in the Rostovian model social overhead capital, leading sectors and a new-elite are the factors of development, in the Amin model they promote the development of underdevelopment in the periphery. Rostow considers the problem of unequal development to be a matter of time: a country should develop when a new-elite and leading sectors emerge, whereas Amin contends that unequal development has its own dynamics and has maintained its existence on a world scale by the application of the Rostovian model to the periphery: the construction of leading sectors and social overhead capital extroverts and disarticulates the periphery, because these elements were designed to meet the needs of the center. When a new-elite emerges in the periphery it is already extroverted, and consequently, maintains the development of underdevelopment by emulating both economic and social patterns of the center.

Applicability of the Two Models

It is unusual to find two theories or models using similar variables to arrive at two different results. The Rostovian and the Amin models present another unique case. Rostow argues that his model should give rise to development thus eliminating the problem of unequal development in the world. In opposition, Amin claims that when used at the
periphery, the Rostovian model widens unequal development on a global scale. Since both models employ similar variables in resolving the issue of unequal development, the source of their conflicting conclusions is sought in their methodology.

According to Rostow, inductive methodology gives his model a universal generality. The five stages, derived from the historical experiences of several countries, are the path that the world follows to develop. Nevertheless, inductive inference has its shortcomings: "... for any conclusion drawn in this way inductive may always turn out to be false: no matter how many instances of white swans we may have observed, this does not justify the conclusion that all swans are white." The possibility always exists that an inductive conclusion may be false; the stages which the developed countries have left behind may not be the development pattern for the greater share of the world population. Furthermore, when several countries are taken as a sample and five stages are deduced to make a universal inference, then the first stage must exist in that universe. It is only upon a uniform base that the inferred universe, in this case the underdeveloped countries, can begin to realize the following four stages. If the Rostovian first


stage, the traditional society, is absent from the inferred universe then the Rostovian model neither applies to the inferred universe nor explains unequal development in the world.

It is impossible . . . to find in the world of today any country or society which has the characteristics of Rostow's first, the traditional stage. This is not surprising, since the construction of Rostow's stages takes account of neither of the history of the new underdeveloped countries nor of their crucial relations with the new developed ones over several centuries past . . .

. . . This long relationship . . . did not effect only the export enclave in the under-developed countries. . . . On the contrary, this historical relationship transformed the entire social fabric of the peoples whose countries are now underdeveloped. 4

The Rostovian model takes the traditional society as a given and assumes that it existed throughout the world. 5

This conclusion is difficult to justify. Nevertheless, considering the essence of the Rostovian model--stages and

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5 This weakness of the Rostovian model has produced a great deal of criticism. Kuznets seems to be calling into question the whole of Rostow's scientific method and criticizing as unscientific the all too common practice of observing phenomena, developing stages on the basis of that phenomena, and using the same phenomena to support the stages. S. S. Kuznets, Economic Growth and Structure: Selected Essays (New York, 1965), pp. 219-222. Frank stresses that Rostow's model "attributes a history to the developed countries, but denies all history to the underdeveloped countries." Frank, Latin America, p. 40. Inspired by the title of Rostow's book, Baran and Hobsbawm claim that "Rostow is, on his own admission, primarily concerned not with arriving at a theory of economic development, but with writing a 'non-communist manifesto.'" P. A. Baran and E. J. Hobsbawm, "The Stages of Economic Growth," Kyklos, XIV (1961), 238.
inductive approach—the model obviously requires a beginning with some type of first stage which was present in the Rostovian sample of developed countries and which is assumed to be present in the rest of the world.

To place these infinitely various, changing societies in a single category /traditional society/, on the ground that they all shared a ceiling on the productivity of their economic techniques, is to say very little indeed. But we are, after all, merely clearing the way in order to get at the subject of this book; that is, the post traditional societies. . . .

Amin asserts that in the process of attaining preconditions for take-off, the Rostovian sample distorted both the economic and the social structure of the remaining part of the globe. The center established its leading sectors, and built its social overhead capital at the expense of extroverting and disarticulating the periphery. The leading sectors and social overhead capital that were grafted onto the periphery had one feature in common; adaptation to the needs of the center. Moreover, the design of the aforementioned investments minimized intercourse between various

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7Note the magnitude of colonial expansion by several nations starting from the Fifteenth Century. By 1800, colonial land holdings reached 28,000,000 square miles of the world's 51,100,000 square miles. This figure reached 34,500,000 square miles or 67 per cent of the earth in 1878. At the beginning of World War I, 84.4 per cent of the world's land had already been colonized. Grover-Clark, *The Balance Sheet of Imperialism* (New York, 1936), pp. 5-6.
sectors of the periphery. The periphery was disarticulated internally and articulated externally.

As shown in the following illustrations, the railway networks in several peripheral regions in 1911 and 1920 are very different from the railway network of the United States in 1890. The difference manifests itself in whether the region in question forms a coherent structure both economically and socially. If, as were in Africa and Latin America, the railway system is linear and does not connect different parts with each other, then extroversion and disarticulation are inevitable. That is, in the absence of an integrating railway network, parts of a region become linked to the outside, or extroverted, and their relationship with each other becomes minimized, or disarticulated. Economically, production activities within the region are isolated from each other while they are joined to the outside activities to which exports are directed. Socially, the extroverted and disarticulated part becomes independent of the region and subject to external social impulses, such as new language, new way of doing business, new consumption patterns.

The illustrations also reveal that peripheral railroads ran from mineral or agricultural resources to ports indicating that any realized progress in mining or agriculture did not remain within the periphery, but was transferred to the center. The United States, however, presented an autocentric image even in the beginning of the Twentieth Century. The country
managed to form an economy where growth had an integrating effect by diffusing throughout the country. For example, while it was possible to diffuse any gain realized at Pittsburg steel mills even to San Francisco at a distance of 4.700 kilometers (Fig. 1), the Peruvian copper mines at Cerro De Pasco had no connections with Iquitos at a distance of only 750 kilometers (Fig. 2). As a result, Peruvian copper mining was more an extroverted than introverted activity. While any cost reduction at Pittsburg steel mills also affected San Francisco, any progress in the Cerro De Pasco copper mines transmitted its benefits not within Peru, but instead to wherever the De Pasco copper was exported.

The integration of the periphery into the international market created a hypertrophying tertiary sector. Competitive pressure from center industries prevented peripheral capital from making its way into industrial investment, thus diverting this capital into complementary activities. The same pressure eliminated peripheral craftsmanship, creating a reservoir of labor and driving it to work in the tertiary sector as concealed unemployed. Moreover, whenever an unequal distribution of landownership existed, the peripheral ground rent implied a monopolistic income. Unlike the central ground rent where a competitive environment led to spending on capital

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8Stephen M. Gorman, Assistant Professor of Political Science, North Texas State University, Denton, Texas. Series of personal interviews, 1979.
accumulation, the peripheral ground rent flowed into luxury imports and leisure services distributed by the tertiary sector.

Today the tertiary sector still persists in the periphery (Table I). Considering that agriculture accounts for 30 to 40 per cent of the countries' gross national products in the table leads to the conclusion that the tertiary sector has maintained its hypertrophying trend in the periphery.

### TABLE I

TERTIARY SECTOR AS A PER CENT OF GROSS NATIONAL PRODUCT IN SOME PERIPHERY COUNTRIES*

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FIGURE 1

RAILROADS OF THE UNITED STATES IN 1890*

*E. R. Johnson, American Railway Transportation (New York, 1903), p. 31.
FIGURE 2
RAILROADS OF LATIN AMERICA IN 1911*

FIGURE 3  
RAILROADS OF AFRICA IN 1920*

Ag--Silver  
Al--Aluminum  
Au--Gold  
Bau--Bauxite  
Ca--Cadmium  
Cb--Cobalt  
Cu--Copper  
D--Diamonds  
Fe--Iron  
Mn--Manganese  
P--Petroleum  
Pb--Lead  
Ph--Phosphates  
S--Salt  
Co--Soda Ash  
T--Tin  
Tu--Tungsten  
Zn--Zinc

The extroverted characteristics of the periphery mean that its economic structure is subjected to and shaped by the requirements of the center. This extroversion also has a quantitative dimension. The quantitative dimension of extroversion manifests itself clearly after the periphery alters its status from a colony to a nation. With a social fabric that was shaped and structured by the center, the periphery becomes an extroverted organism which now emulates the center by copying the social and economic institutions of the center. Consumption patterns and educational foundations of the center become the accepted norm at the periphery. The peripheral economy, which in the Twentieth Century takes the form of state capitalism, devotes its resources to huge government expenditures. While government expenditures should play an important role in the development process, in many cases military outlays constitute a substantial gross national products. Besides their large share in the

9 A survey shows that 31 out of 59 ministers of economy in the Middle East have had some form of education in the center (generally in England, France and the United States). Hossein Askari and John Cummings, "Economists as Ministers in the Middle East," The Middle East Journal, XXXII (Summer, 1979), 340-350.

10 In 1972 military spending was 200 per cent of education spending plus health spending in Burma. The same ratio was 180 per cent in Cambodia, 400 per cent in Taiwan, 220 per cent in Egypt, 270 per cent in Iran, 310 per cent in Israel, 450 per cent in Jordan, 300 per cent in Pakistan, 160 per cent in Saudi Arabia, 200 per cent in Somalia, 470 per cent in North Vietnam and 1070 per cent in South Vietnam in 1972. Mary Kaldor, "The Military in the Third World Development," in Richard Jolly, editor, Disarmament and World Development
peripheral economy, the procurement of military supplies takes the form of imports.\textsuperscript{11} Consequently, these emulative peripheral activities become an additive factor in eroding the peripheral export earnings which usually finance debt payments.

Peripheral foreign exchange earnings which are already burdened by arms imports suffer in dealing with the debt problem. Table II shows the debt burden of several peripheral countries. Even with the exclusion of military imports, debt payments deplete a large share of peripheral export earnings.

A comparison and contrast of the Rostovian and the Amin models leads to the following conclusions about their applicability.


\textsuperscript{11}For example, the following figures show the cumulative imports of major weapons by some peripheral countries between 1965 and 1975. (Figures are in millions of United States dollars at constant 1973 prices). Egypt, 3,000; Iran, 3,200; Iraq, 1,100; Israel, 2,100; India, 1,900; Libya, 1,100; Syria, 2,200; North Vietnam, 1,500; South Vietnam, 1,500. Frank Barnaby, "The Scale of World Military Expenditures," in Jolly, p. 19. To clear this point further, the following figures are given to show the rate of growth in arms imports and the rate of growth of GNP per capita. Argentina, 6.7 and 4.7; Brazil, 6.7 and 4.7; Egypt, 34.9 and 0.9; Iran 42.4 and 7.6; Iraq, 7.4 and 2.5; Israel, 87.8 and 5.0; Jordan, 5.4 and 1.1; South Korea, 21.5 and 7.9; Libya 18.6 and 10.2; South Vietnam, 6.9 and 5.7; and North Vietnam, 103.5 and 0.2. Kaldor, p. 76.
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<td>1.7</td>
<td>1.9</td>
<td>3.2</td>
<td>3.9</td>
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<td>Total Debt</td>
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<td>2.2</td>
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<td>2.8</td>
<td>3.1</td>
<td>2.9</td>
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<td></td>
<td>Debt Service</td>
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<td>20%</td>
<td>20%</td>
<td>26%</td>
<td>22%</td>
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<td>Brazil</td>
<td>Exports</td>
<td>2.7</td>
<td>2.9</td>
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<td>40%</td>
<td>28%</td>
<td>29%</td>
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As is often the case with inductive methodology, the Rostovian inductive model has a shortcoming in that examination of the historical experience of several developed countries does not necessarily mean that their development pattern can be inferred to the world as a whole. The Rostovian model does not relate the different parts of the world to each other in order to explain why they are different. Rather, it abstracts a sample from the universe to which it refers, and analyzes the sample in isolation from that universe. As a result, the Rostovian historical approach becomes incomplete in assuming that the first stage or the traditional society also exists beyond the sample. Therefore, the Rostovian model is not a development model for the world as a whole and fails to throw light upon the phenomenon of unequal development. Nevertheless, although the Rostovian model


**Exports and total debt expressed in billions of dollars debt service ratio expressed as per cent. The debt service ratio is defined as total debt service (repayments of principal and payments of interest) on external public debt as a percentage of export earnings. Ranging from 11 to 252 per cent, the debt service ratio is very volatile. This volatility stems from the relief that is gained by borrowing to pay up debt installments. As a result, the relief becomes a temporary phenomenon. For example, while the debt service ratio was 17 per cent for Turkey in 1976, the country was faced with a five billion dollar debt in 1978. At the same year, the Turkish exports were about 3.4 billion dollars, indicating a 147 per cent debt-service ratio. Cumhuriyet Ekonomi, October 2, 1978, Sections 1 and 2, p. 2.
lacks in the aforementioned analytical power, it explains the development process within the limits of its sample.

Taking a holistic and dialectic view, the Amin model shows that the center, since colonial expansion, has integrated the periphery into a single stream of world history, which has generated simultaneously the present development of the center and the present underdevelopment of the periphery. The integration of the periphery into the global system means that the central economy becomes introverted and articulated at the expense of extroverting and disarticulating the peripheral economy. Added to these is the social extroversion of the periphery. Through the introduction of a new set of political, religious, and social norms, the peripheral traditional norms are distorted, and the periphery is transformed into a new social form where the emulation of the center becomes "a conventional basis of reputability."12 As a result, today's periphery represents an extroverted structure in both economic and social terms. Therefore, the Amin model which explains the evolution of development and underdevelopment and the resultant phenomenon of unequal development applies to the world as a whole.

CHAPTER V

CONCLUSION

The purpose of this study is to compare and contrast the development of development and the development of underdevelopment approaches to test their applicability in dealing with the global problem of unequal development. While the Rostovian model is considered as the epitome of the development of development approach, the Amin model is thought to epitomize the development of underdevelopment approach. In the selection procedure, not only the model builders' relation with development economics but also their international recognition is taken as a yardstick.

The Rostovian model views development as a historical process consisting of five stages where each stage is predetermined by its predecessor and gives rise to its successor. After the occurrence of certain events one can therefore predict what the next stage will be. The Rostovian five stages are deduced from a sample of developed countries, and then inferred to the world as a whole as the road map for development. Methodologically, the Rostovian model is historical, deterministic, predictive and inductive. The Amin model takes a holistic and dialectic view and contends that the world was divided in the period of its unification.
into the center, or colonial powers; and the periphery, or colonies. According to Amin, this divisive unification creates what he calls the center-periphery system. In effect, the working of the system depends upon the acceleration and maintenance of development at the center by accelerating and maintaining underdevelopment at the periphery. Development and underdevelopment are two dialectical parts of a global unity, the center-periphery system. Therefore, methodologically the Amin model is historical, holistic and dialectical.

The development path of Rostow's sample began with a traditional society where the output level and social mobility were limited due to a lack of technological applications and a hierarchically structured social formation. Upon this stage came the transition phase where in many cases a new-elite emerged and initiated the construction of railway and communication networks which in turn shortened the transition for take-off. Growth of the leading sectors either in railway construction or in major export industries marked the take-off stage. From then on, the economy became self sufficient in that it could produce anything it preferred.

Unlike the Rostovian model, the Amin model claims that the peripheral traditional societies were distorted both economically and socially. In economic terms, through colonial expansion the center establishes railway and communication networks and grafts major export sectors upon the periphery. The design
of the networks is such that while the periphery is linked to or extroverted with the center, sectoral intercourse within the periphery is minimized or the periphery is internally disarticulated. As a result, any improvement that takes place in the peripheral production techniques is transferred to the center. In social terms, the introduction of new political rule, economic system, language and religion distorts and extroverts the peripheral society. The extroversion of the peripheral society becomes more evident when the periphery alters its status from a colony to a nation. Showing a great weakness in its own auto-centric development, today's periphery relates itself economically to the center and socially emulates center institutions.

As detailed in the preceding chapter, a critical analysis of the two models reveals that the Rostovian model has two shortcomings which limit its general applicability. The development pattern of a sample of countries cannot be applied to the world as a whole if significant differences exist, and, differences do exist. More importantly, when Rostow analyzes his sample, he fails to relate it to the other parts of the world. Consequently, the Rostovian model ignores the history external to its sample, as in the assumption that the development path begins with a traditional society. Amin, however, powerfully shows that while the development process of some countries may have begun with a
traditional society, the same process reflects itself in developing underdevelopment in the larger part of the world. The integration of this larger part of the world, the periphery, into the international market results in the global phenomenon of unequal development which has evolved into the development of underdevelopment. Having once been extroverted and disarticulated in its integration into the international market, the periphery still depends upon the center. Thus, the periphery continues in its peripheral role by imitating both the economic and social institutions of the center.

Contrary to Rostow's claim that unequal development will be eliminated as soon as the underdeveloped countries discard their traditional yoke, Amin shows that this is not so. In fact, the Amin model demonstrates that unequal development is inherent in the center-periphery system, in that the center and the periphery are antithesis of one another. If development occurs within the center-periphery system, it benefits the center, indicating that underdevelopment at the periphery has been furthered. Therefore, unequal development which the world has been witnessing for centuries, continues in existence as long as the center-periphery system is in operation.

In conclusion, the Rostovian model, which does not correspond to the history of today's vast impoverished peoples whom it is supposed to guide, cannot be a development
model and cannot explain the global problem of unequal development. On the other hand, the Amin model, which takes the world as its unit of analysis, lucidly explains why there is such a vast impoverishment in the world of today. As a result, it also explains the phenomenon of unequal development on a global scale.
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