INFORMATION TO USERS

This was produced from a copy of a document sent to us for microfilming. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help you understand markings or notations which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure you of complete continuity.

2. When an image on the film is obliterated with a round black mark it is an indication that the film inspector noticed either blurred copy because of movement during exposure, or duplicate copy. Unless we meant to delete copyrighted materials that should not have been filmed, you will find a good image of the page in the adjacent frame. If copyrighted materials were deleted you will find a target note listing the pages in the adjacent frame.

3. When a map, drawing or chart, etc., is part of the material being photographed the photographer has followed a definite method in "sectioning" the material. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.

4. For any illustrations that cannot be reproduced satisfactorily by xerography, photographic prints can be purchased at additional cost and tipped into your xerographic copy. Requests can be made to our Dissertations Customer Services Department.

5. Some pages in any document may have indistinct print. In all cases we have filmed the best available copy.
Gray, Thomas Walter

FUNCTIONAL-CONSENSUS AND HISTORICAL-MATERIALIST WORLD VIEWS: THEIR IMPLICIT ASSUMPTIONS, AND CLOSED AND RELATIVE NATURES

The Ohio State University Ph.D. 1982

University Microfilms International
300 N. Zeeb Road, Ann Arbor, MI 48106

Copyright 1982 by Gray, Thomas Walter All Rights Reserved
FUNCTIONAL-CONSENSUS AND HISTORICAL-MATERIALIST WORLD VIEWS: THEIR IMPLICIT ASSUMPTIONS, AND CLOSED AND RELATIVE NATURES

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

Thomas Walter Gray, B.S., M.S.

* * * * *

The Ohio State University

1982

Reading Committee:
Dr. William Flinn
Dr. David O. Hansen
Dr. Donald Thomas
Dr. Larry Brown

Approved By

[Signature]

Adviser
Department of Rural Sociology
ACKNOWLEDGMENTS

I would like to express special thanks to my adviser, Dr. William Flinn, for his personalized counseling encouragement, intellectual direction, and humor throughout my graduate education. Dr. Flinn was also instrumental in providing partial financial support through his U.S.D.A. project A-220.

Thanks also goes to my reading committee Drs. David Hansen, Donald Thomas, and Larry Brown. An intellectual debt is also acknowledged to Roscoe Hinkle whose work and teachings on the sociology of the history of sociology have been formative in my own approach. Thanks are also extended to Fred Buttel who while on the faculty at Ohio State opened intellectual doors for myself and many other students. Thanks also goes to the Department of Agricultural Economics and Rural Sociology for various teaching and research associateships and to Tasnee Wichiencharoen for her expert and short order typing skills.

The continuing friendships of Alan Osman, Emmanuel Acquah and Carol Bininger have also been a source of support and energy. Finally, I thank Peggy Limehouse-Gray for her constant vigilence against frustration and her ability to serve as a well-spring of rejuvenation.
VITA

October 29, 1947 .......... Born - West Exeter, New York

1972 ..................... B.S. (Agricultural Economics), Cornell University, Ithaca, New York

1972-1974 ............... Graduate Research Associate, Department of Agricultural Economics and Rural Sociology, Columbus, Ohio

1975 ..................... M.Sc., (Agricultural Economics), The Ohio State University, Columbus, Ohio

1976 ..................... Graduate Teaching Associate (Rural Sociology), Department of Agricultural Economics and Rural Sociology, Columbus, Ohio

1979 ..................... Graduate Research Associate (Rural Sociology), Department of Agricultural Economics and Rural Sociology, Columbus, Ohio

1980 ..................... Instructor (Rural Sociology), Department of Agricultural Economics and Rural Sociology, Columbus, Ohio

FIELDS OF STUDY

Major Field: Rural Sociology

Rural Sociology. Dr. Frederick Buttel

Socio-Economic Development. Dr. William Flinn

Sociological Theory. Dr. Roscoe Hinkle
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEDICATION</td>
<td>ii</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>VITA</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>ix</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>x</td>
</tr>
<tr>
<td><strong>Chapter</strong></td>
<td></td>
</tr>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Tacitness of Assumptions</td>
<td>5</td>
</tr>
<tr>
<td>Objectives</td>
<td>8</td>
</tr>
<tr>
<td>II. A FUNCTIONAL-CONSENSUS WORLD VIEW</td>
<td>11</td>
</tr>
<tr>
<td>Specification of Underlying Philosophical Assumptions</td>
<td>12</td>
</tr>
<tr>
<td>Nominalism/Individualism versus Realism/Holism/Society</td>
<td>13</td>
</tr>
<tr>
<td>Realism and the Nature of the Individual</td>
<td>13</td>
</tr>
<tr>
<td>Nominalism and the Nature of the Individual</td>
<td>13</td>
</tr>
<tr>
<td>Social Idealism and Social Physicalism</td>
<td>14</td>
</tr>
<tr>
<td>Philosophical Assumptions as Forces Exterior and Interior to the Individual</td>
<td>16</td>
</tr>
<tr>
<td>Views of Reality from the Interior of the Individual</td>
<td>17</td>
</tr>
<tr>
<td>Views of Reality from the Exterior of the Individual</td>
<td>17</td>
</tr>
<tr>
<td>'The Truth in the Middle' Views.</td>
<td>18</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Functional-Consensus View</td>
<td>20</td>
</tr>
<tr>
<td>An Organic Model/An Aggregate Consensus Model</td>
<td>20</td>
</tr>
<tr>
<td>Nominalist/Realist Oscillation: The Realism of Socialization and</td>
<td>28</td>
</tr>
<tr>
<td>the Nominalism of Stratification.</td>
<td></td>
</tr>
<tr>
<td>A Continuum of Positions</td>
<td>31</td>
</tr>
<tr>
<td>Functional-Consensus and Moderate Nominalism</td>
<td>33</td>
</tr>
<tr>
<td>Character of the Causal Force</td>
<td>35</td>
</tr>
<tr>
<td>A World View</td>
<td>39</td>
</tr>
<tr>
<td>Other Paradigmatic Categories</td>
<td>41</td>
</tr>
<tr>
<td>A Functional-Consensus View of Social Change</td>
<td>42</td>
</tr>
<tr>
<td>Implicit Dualism</td>
<td>43</td>
</tr>
<tr>
<td>Causes of Differentiation</td>
<td>45</td>
</tr>
<tr>
<td>The Durkheimian Model</td>
<td>47</td>
</tr>
<tr>
<td>Implicit Philosophical Assumptions</td>
<td>49</td>
</tr>
<tr>
<td>Nominalism and Social Realism</td>
<td>49</td>
</tr>
<tr>
<td>Nature of Causal Forces</td>
<td>51</td>
</tr>
<tr>
<td>The Economic Perspective and the Functional-Consensus View of Reality</td>
<td>51</td>
</tr>
<tr>
<td>The Importance of the Market</td>
<td>52</td>
</tr>
<tr>
<td>Conceptual Continuity Between Economic and Functional-Consensus Views</td>
<td>54</td>
</tr>
<tr>
<td>The Givens of Economic Analysis and Market Idealism</td>
<td>59</td>
</tr>
<tr>
<td>Summary</td>
<td>62</td>
</tr>
<tr>
<td>Dualism-Diffusion Perspective</td>
<td>63</td>
</tr>
<tr>
<td>Major Development Trends in Rural Peripheries</td>
<td>66</td>
</tr>
<tr>
<td>Barriers to Rural Development</td>
<td>69</td>
</tr>
<tr>
<td>Amelioristic Implications</td>
<td>72</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>A Regional Growth Center Perspective of Change</td>
<td>74</td>
</tr>
<tr>
<td>Central Place Theory</td>
<td>75</td>
</tr>
<tr>
<td>Location Theory</td>
<td>77</td>
</tr>
<tr>
<td>Export Base Theory and Stages Theory</td>
<td>81</td>
</tr>
<tr>
<td>Growth Pole Theory</td>
<td>82</td>
</tr>
<tr>
<td>Growth Center Theory</td>
<td>83</td>
</tr>
<tr>
<td>Summary</td>
<td>92</td>
</tr>
<tr>
<td>III. A DIALECTICAL HISTORICAL MATERIALIST WORLD VIEW</td>
<td>94</td>
</tr>
<tr>
<td>Selected Distinctions from a Functional-Consensus World View</td>
<td>97</td>
</tr>
<tr>
<td>Dialectical Historical Materialism</td>
<td>99</td>
</tr>
<tr>
<td>Materialism</td>
<td>99</td>
</tr>
<tr>
<td>Dialectical, Historical and Material Modes of Production</td>
<td>101</td>
</tr>
<tr>
<td>Quantitative and Qualitative Change</td>
<td>103</td>
</tr>
<tr>
<td>Nominalism/Realism Issues</td>
<td>106</td>
</tr>
<tr>
<td>The Capitalist Mode of Production</td>
<td>107</td>
</tr>
<tr>
<td>Commodity Relations</td>
<td>107</td>
</tr>
<tr>
<td>The Exploitation of Labor</td>
<td>109</td>
</tr>
<tr>
<td>The Development of the Forces of Production</td>
<td>111</td>
</tr>
<tr>
<td>Laws of Tendency Under the Capitalist Mode of Production</td>
<td>113</td>
</tr>
<tr>
<td>Fundamental Barriers to the Reproduction of the Capital/Labor Relation</td>
<td>115</td>
</tr>
<tr>
<td>Imperialism/Dependency Views of Rural-Urban Linkages</td>
<td>118</td>
</tr>
<tr>
<td>Underlying Causal Dynamics</td>
<td>119</td>
</tr>
<tr>
<td>Raw Material Imperialism</td>
<td>121</td>
</tr>
<tr>
<td>Commodity Imperialism</td>
<td>123</td>
</tr>
<tr>
<td>Production-Labor Imperialism</td>
<td>126</td>
</tr>
<tr>
<td>Conclusion</td>
<td>129</td>
</tr>
</tbody>
</table>
### Chapter  IV. EMPIRICAL EXTENSION OF DISCUSSION ON PARADIGMATIC CLOSEDNESS AND RELATIVITY ............ 131

- Some Descriptive Data of a Peripheral Region ......................... 132
- The Economy of the Region ............................................ 139

### Chapter  V. SUMMARY AND CONCLUSIONS ......................... 168

- Implications ............................................................... 174

REFERENCES ............................................................... 179
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Major Assumptions of the Functional-Consensus View of Social Structure and Social Change</td>
<td>21</td>
</tr>
<tr>
<td>2. Household Effective Buying Income (EBI) by County and by SMSA 1970-1979</td>
<td>136</td>
</tr>
<tr>
<td>3. Per Capita Effective Buying Income (EBI) by County and by SMSA 1970-1979</td>
<td>138</td>
</tr>
<tr>
<td>5. Sectorial Output, Employment and Income for the Region, 1972</td>
<td>141</td>
</tr>
<tr>
<td>6. Volume of Exports and Imports by Sectors for the Region, 1972</td>
<td>143</td>
</tr>
<tr>
<td>7. The Top Ten Sectors Ranked by Various Multipliers</td>
<td>146</td>
</tr>
<tr>
<td>8. Manufacturing Employment by County, for the Region, and for Ohio, 1970-1979</td>
<td>155</td>
</tr>
<tr>
<td>9. Percentage of Output Sold to Various Sets of Sectors by Top Eight Producing Sectors</td>
<td>158</td>
</tr>
<tr>
<td>10. Backward Linkages from the Top Eight Producing Sectors (Percentage)</td>
<td>160</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Functional Cybernetic Hierarchy</td>
<td>37</td>
</tr>
<tr>
<td>2.</td>
<td>Functional Structure of a Production System Within an Economy</td>
<td>57</td>
</tr>
<tr>
<td>3.</td>
<td>Capitalist Production Process</td>
<td>109</td>
</tr>
<tr>
<td>4.</td>
<td>Ohio's Major Highway Systems</td>
<td>133</td>
</tr>
<tr>
<td>5.</td>
<td>Ohio's Rail System</td>
<td>134</td>
</tr>
<tr>
<td>6.</td>
<td>Percentage of Sector Outputs Sold Forward and Within Sectors</td>
<td>149</td>
</tr>
<tr>
<td>7.</td>
<td>Percentage of Sector Outputs Sold Forward and Within Sectors</td>
<td>150</td>
</tr>
<tr>
<td>8.</td>
<td>Percentage of Sector Outputs Sold Forward and Within Sectors</td>
<td>152</td>
</tr>
<tr>
<td>9.</td>
<td>Percentage of Sector Outputs Sold Forward and Within Sectors</td>
<td>153</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Like many features of a landscape, knowledge looks different from different angles. Approach it from an unexpected route, glimpse it from an unusual vantage point, and at first it may not be recognizable

(Bloor, 1979: 145).

Bloor's metaphor probably makes the point in a more entertaining way but many other writers have also adopted his relativistic approach to science and knowledge. Mannheim (1968: 3), for instance, says that

the very fact each thinker is affiliated with particular groups in society--that he occupies a certain status and enacts certain social roles [or that he has a certain class position relative to the means of production]--colors his intellectual outlook. Men do not confront the objects of the world from the abstract levels of a contemplating mind as such, nor do they do so exclusively as solitary beings

(Coser, 1971: 431).

Chamblis (1973: 463) writes that "Science is not an inhuman enterprise that requires us to dismiss the human qualities of bias and selectivity. Science is, in fact, the human enterprise of selecting things to see and seeing
them with a bias." This bias, or world view, is fundamentally grounded in social experience and becomes articulated in particular theoretical orientations.

Orenstein (1980) suggests that social scientists have varying degrees of awareness of this bias. An awareness seems present when writers refer to each other's works using such moral-socio-political labels as conservative, radical, status-quo, liberal, or Marxist. Similarly, the works of various academic ancestors are often found as "biased." However Orenstein (1980) warns that "many of those ancestors had the same beliefs about their predecessors." They held earlier works as 'biased' relative to their own "objective" positions.

This thesis takes a relativistic position. It will contend that the "analysis of reality" is often a one-sided analysis conducted from a particular point of view that depends, ultimately, on the values of the individual researcher as molded in social experience. The stance of this thesis agrees with Bloor's (1976: 142) position that "all knowledge is relative to the local situation of the thinkers who produce it: the ideas and conjectures that they are capable of producing, the problems that bother them...their purposes and aims, the experiences they have and the standards and meanings they apply."
Social scientists do not approach research, or in fact life, with a blank slate. In the course of life each develops an interpretive filter through which social, political, and economic relations are viewed. This filter or perspective itself has certain limiting properties. A perspective contains a set of fundamental assumptions or expectations about the operation of society and a facilitative set of concepts within which interpretations of society are constructed (Mannheim, 1968: 52; Connolly, 1974: 49). The conceptual system focuses on those aspects of society that are most congruent with underlying assumptions and tends to divert attention from other and possibly contradictory aspects. Each perspective gives highest priority to a particular set of issues that other perspectives tend to treat as less fundamental matters (Connolly, 1974: 41).

Stevens (1978: 11) provides an example of a self-contained or closed theoretical-conceptual system. Consider a social theory that takes as its starting point the individual and suppose further that although the existence of society is also part of the theory, individuals are treated as being... substantially independent of the society, but nonetheless being the units or building blocks out of which society is formed. Given just these elements, such a theory is necessarily led to take as central such problems as: 'can society survive if
individuals have complete freedom?,' 'what is the responsibility of the individual to society?' 'What rights does society have over the individual?'

All these questions arise from initial concepts of the "individual" and "society" and from a particular world view that holds one rather than the other to be the concept of primary importance. Answers to such questions must be framed within the same theoretical view.

Havens (1972: 258 259) makes a similar point by presenting a series of questions from what he terms behavioral/psychodynamic perspectives that take an individualistic bent:

1) To whom, or to what group does the individual take his cues for behavior

2) To what extent does the individual feel relatively deprived in relation to his significant others

3) How is deviance viewed by significant others

4) What are the relationships between social values and innovative behavior

5) What were the early childhood experiences of the individual

6) What sort of internal responses (anxiety, rage) do current social contexts trigger

7) What have been the long run trends (over several generations) with regard to personality formation.
Issues or questions that stem from a different view of reality are difficult if not impossible to raise or focus upon within a closed theoretical-conceptual system. The assumptions that lend significance or even recognition to such alternative issues tend to be lacking.

Each individual sees the world from a particular perspective: a system of concepts, a framework, that organizes perception in consistent directions, and not inconsistent ones. Conceptual systems are open to aspects of the environment that are most congruent with expectations based on initial assumptions, but tend to close off other areas to view. The truth of a theory, therefore, must exist in terms of its correspondence with pre-existing assumptions. Statements are "true" or not according to their conformity with the parameters of contrasting perspectives. Closed conceptual systems have been discussed, (from authors' own distinct positions) by Mills (1940), Connolly (1974), Althusser (1968), Horton (1970), Mannheim (1968), Kuhn (1962) and Toulmin (1961).

Tacitness of Assumptions

Underlying the nature of particular perspectives is tacitness of intrinsic assumptions. Because investigators are often unaware of their own perspective and the
parameters of their world view, they are likely to ignore or underplay their own tendencies to push interpretations in a particular direction: "We see the world through [the concepts we employ]...to such an extent that we forget what it would be like without them: Our very commitment to them tends to blind us to other possibilities" (Toulmin, 1961: 45). The constraints of our own positions and assumptions are typically unquestioned. These assumptions often deal with such fundamental matters as the nature of social life, the role of individuals, and the causal forces that organize and change social life. These are not issues dealt with on an empirical level but matters of faith, of morality. They are value judgements that carry through to applied work. Horton (1970: 170) says that the error of the sociologist is not that he thinks normatively, but that he is unaware of it: "Awareness may help him avoid some of the gross errors of myopia: 1) mistaking his own normative categories for 'objective' fact...2) projecting a normative theory appropriate to the experience of one group onto another."

Gouldner (1971, 1973) has called for a reflexive sociology: "By using sociological knowledge and techniques on the practice of sociology itself, and more specifically on the sociologist, better theories about how the sociologist and his/her values are determined can be
developed." This thesis seeks a similar reflexivity. Adherents to a particular conceptual system have internalized it overtime; "they cannot shed it like a coat, but it is part of them in a way that facial expressions are part of a personality. To drop [a world view]...would be to lose an important part of oneself. One can't always do that, even though one tries" (Kuhn, 1962). This thesis is not a plea for a "shedding of coats" but a call for a theoretical self-consciousness in the manner of Horton (1970), Havens (1972), Connolly (1974), and Buttel and Flinn (1976). It is a call to examine and articulate the usually tacit assumptions of theoretical perspectives. Through such processes the nature of social research can perhaps be revealed as well.

It is necessary to specify certain terms. The purpose here is not to provide a complete summary of any specific theoretical model. Rather the work is launched from the operational backdrop of a "perspective," "a world view," or a "paradigm." These terms will be used interchangeably (see Ritzer 1980, Skidmore 1979, and Kuhn 1962). It also bears noting here that the world views presented in this work are ideal constructs in form and content. They are in part based on other paradigmatic summaries. The extensive task of specifying underlying assumptions of several theoretical perspectives—each vast, inconsistent,
and eclectic—demands this strategy. Furthermore, no single person is here taken or can be taken to represent a single point of view. Although there are many variations within views, and even historical variations in individual authors' views, this thesis attempts to create constructs that contain common elements of most models, after the examples of Buttel and Flinn (1977), Buttel (1976), Reynolds (1973), Havens (1972), Connolly (1974), Sherman and Woods (1979), O'Donnell et al. (1978), Horton (1970), and Boguslaw and Vickers (1978).

Objectives

The objectives of this thesis are:

1. To make explicit the tacit assumptions of "ideal types" of two alternative world views.

2. To make explicit the tacit assumptions of "ideal types" of two alternative views of rural/urban linkages as closed and consistent articulations of a more general world view.

3. To provide some indication, via an illustrative example, of the closed and relative nature of theoretical views by applying alternative perspectives to empirical data.
The objectives of this thesis are not 1) to articulate specific views held by certain researchers or the reasons that those researchers choose to see what they do, 2) to attempt a definitive proof of any single perspective, or 3) to engage in vituperative labelling. Rather what concerns this thesis is the paradigms themselves, their implicitness, their limiting nature, and their relativity. Competing perspectives are examined for two reasons. By confronting unfamiliar assumptions in opposing theories, tacit assumptions in each perspective are made more explicit, and the relativistic nature of social research can be demonstrated. This thesis will focus on two competing perspectives of rural/urban linkage--regional growth center theory, and raw material imperialism/dependency. Procedurally this focus will involve a gradual building up of assumptions and concepts from fundamental views of reality to more concrete orientations and the socio-economic specifications of the theories per se. From this building process a "showing" of tacit assumptions will be made and a sense of the "closedness" of world views will be revealed. Chapter II will present 1) fundamental philosophical assumptions--nominalism/realism, idealism/physicalism, 2) organizing assumptions of a functional-consensus view of reality including general views of social structure and social change, 3) organizing assumptions of an economic
view of reality, 4) organizing assumptions of a dualist-diffusion view of urban/rural relations, and 5) organizing assumptions of regional growth center theory. Each item will be shown to be continuous with aspects of one world view, the functional-consensus perspective. Chapter III will present 1) fundamental organizing philosophical assumptions—the philosophy of internal relations, 2) organizing assumptions of a critical-radical view of reality including assumptions about the class structure of society and social change, 3) organizing assumptions of an imperialist/dependency view of urban/rural relations. Again each item will be shown to fit a single general world view.

Chapter IV is an empirical section. It is not a detailed analysis designed to prove or disprove either perspective. Rather it will involve an extension of the regional growth center and raw material imperialism/dependency view onto empirical data. Paradigmatic relativity will be addressed by applying each perspective to data from the same geographic region and in some instances to the same data.

The final chapter will entail conclusions and implications but also an articulation of the implicit assumptions of this work. Particular attention will be given to assumptions of individualism and value-ladenness.
CHAPTER II

A FUNCTIONAL-CONSENSUS WORLD VIEW

This chapter seeks to demonstrate the self-contained nature of a social science view by providing a reflective reconstruction of regional growth center theory. Fundamental philosophical assumptions about the individual, society, and the hypothesized causal force underlying social structure and social change will be presented first. A functional-organic-equilibrium-consensus view of social reality, as undergirded with those philosophical assumptions, will then be presented. This view of reality—with philosophical assumptions specified—will then be shown to overlap with or subsume a general economic view, and in turn a dualism/diffusion view. The outline of this world view will gradually build to the more concrete regional growth center theory.

The purpose here is not to provide a complete summary of any specific theoretical orientation. The purpose instead is to deal at the level of the perspective, to articulate the fundamental assumptions of functional-organic-equilibrium-consensus views, and to show how those assumptions come to be represented in diffusion-growth center perspectives. It will be suggested that even the
most "objective" studies are undergirded by some unquestioned assumptions. These assumptions can represent value judgments that operate in applied work.

Specification of Underlying Philosophical Assumptions

Nominalism/Individualism versus Realism/Holism/Society

Either we can say that only individuals are real, the individual human beings whom we can see and hear and touch and name, and that society is merely a word, or alternatively we can say that society is a reality of a sort, a higher kind of reality, that it is prior to the individuals...and makes them all that they are and can be. In the first case we...embrace nominalism; in the second, realism (Stark 1963: 2).

Each social scientist must make (though usually implicitly and sometimes blindly) an assumption about the priority or the "reality" of individuals and society. The predominant issue is one of emergence. Is society greater than the sum of the individuals that compose it? Does society manifest distinctive features that can only be understood at the societal rather than the individual level? Affirmative answers signify a social realist position; it maintains that the social, and the individual, can only be understood from the emergent societal level. The opposing position, nominalism, allows for the existence
of a whole (a society) but sees the social in terms of the individual, as an aggregation of individual attributes; society may be seen as having needs, but they can only be understood as aggregations of individual needs.

Realism and the Nature of the Individual

A social realist position sees the individual man or woman as a pawn of natural necessity; individuals are shaped, molded, directed, and controlled by society. The position holds that society makes individuals "all that they are and can be" (Stark 1963: 2). Social realism is similar to what some have termed a "social facts" position. Society is seen as external to the individual and coercive (Ritzer 1980; Abel 1970); causal efficacy lies outside the individual and within the society.

Nominalism and the Nature of the Individual

Nominalism holds that causal efficacy lies within the individual and that "society is only a word" (Stark 1963). Individuals vary widely and their differences are manifested in "needs, wants, desires, goals, aims, ends, objectives, and wishes—all of which must be taken into account" (Hinkle 1980). From this position, "the group tends to be seen as an outcome of choice by individuals, and social conduct becomes primarily a problem of consensus" (Hinkle 1980).
Hinkle (1980) makes a distinction between social nominalism and social voluntarism, but the two are intimately connected: voluntarism is the causal component of nominalism such that the group (society) exists, persists, and changes through individual will, choice, or consent. Social nominalism holds that it is false to see "the group as an object that can be studied, that obtrudes itself upon [individual] experience" (Abel 1970: 30); the individual should instead be regarded as the true causal source of social phenomena in general.

**Social Idealism and Social Physicalism**

Nominalism and social realism address, in contrasting ways, the source of social phenomena—i.e., within the individual or within society. However, what has not been addressed up to this point is the character of the causal force said to underlie social organization and change.

Social idealism "is the view that consciousness [ideas]...ultimately determine the nature of social practices" (Archer 1978: 72) and that

the nature of the social depends substantially and characteristically on human beings' possession of consciousness...association-dissociation, interpersonal relations and activities, structure and change derive primarily, substantially, or significantly from consciousness either directly or indirectly (Hinkle 1980: 326).
The nature of society, its structure and change, values, norms, and indeed all social practices are held to ultimately derive from the realm of ideas, beliefs, and preferences. This fundamental assumption about reality is very common but usually implicit. Subscription to social idealism in turn shapes and molds the subscriber's intellectual focus in particular ways. Once an idealist posture is assumed, a particular field of vision has been defined.

Social physicalism, in contrast, "is the theory that physical objects and processes ultimately determine social practices" (Archer 1978: 76). When factors of the natural environment—population, communication, transportation and other technological developments, commodities, genetics, heredity, instincts and various natural laws—are held to have the determinant influence on social structure and change, physicalism (sometimes called mechanical/materialism) has been adopted. Bell's (1967) "post industrial society," Boulding's (1967) "post-civilized society," and Brzinski's (1970) "technocratic age" are of this ilk. All emphasize the need to meet "technological imperatives" and technology's tremendous impact upon economic growth and social development.
Philosophical Assumptions as Force Exterior and Interior to the Individual

This section has so far involved concepts of nominalism/individualism versus realism/society, and idealism versus physicalism. A more concise way to address these contrasts is to structure the discussion with reference to the individual.

The cause of social reality can be seen as interior to the individual or exterior (and superior) to the individual. Interior loci tend toward nominalist postulates, exterior loci toward realist positions. The division can be reframed into a fundamental question: Is society or the individual the irreducible and determining unit of social life?

A second issue concerns the character of the causal force. Is the ultimate cause of social phenomena of an ideational or of a physical nature? Assumptions concerning the character of the causal force operate in tandem with postulates about the loci of the causal force. Physicalist and idealist explanations tend to be conceptually associated, respectively, with nominalist/individualist and social realist/society positions.
Views of Reality from the Interior of the Individual

A nominalistic and idealistic view of reality sees social phenomena as consisting of no more than the sum of individual phenomena. It also holds that "ideas cause social reality to come into existence, and that changes in ideas are sufficient to cause changes in society" (O'Donnell 1978: 142). A physicalistic and nominalistic position similarly sees social phenomena as no more than the sum of individual phenomena, but the ultimate cause of the nature of those individual phenomena is held genetic, biological, and/or environmental origin.

Views of Reality from the Exterior of the Individual

Perspectives that involve foci exterior to the individual include positions of social realism combined with physicalistic or idealistic views of causal force. The latter world view attributes causal power to something which subordinates individual experience—e.g., "ideas which exist independent of individuals, and transcend their [respective individual] ideas" (O'Donnell 1978: 142), "renders 'society' conscious and independent, and endows it with ideas to which individuals are subordinate" (O'Donnell 1978: 144). This combination of social realism and idealism includes various social/cultural prescriptions of social behaviors, role parameters, and legitimate means to
use to achieve desired goals (Etzioni 1976: 6).

A physicalistic social realism also attributes causal power to some entity exterior to and superior to the individual. That entity is commonly seen as technology but is also perceived, at times, in terms of "natural laws" and such material conceptions as capital earning rent or interest.

Preceding sections have presented four views of reality that involve the individual, society, and the causal forces held to underlie social structure and social change. These views represent various combinations of idealism, physicalism, realism, and nominalism. Burnheim (1978: 50), Archer (1978: 71), Lennie (1978: 119), O'Donnell (1978: 138), and Suchting (1978: 8367) all suggest that these fundamental assumptions combine to form the world views that underlie much of contemporary social science.

'The Truth In the Middle' Views

The preceding views of reality are, of course "ideal types." Various other views may fall "between" these perspectives or combine their assumptions in less elegant ways. O'Donnell (1978: 47) for instance, notes that "it is possible to oscillate" between nominalism and social realism, usually unwittingly, by "putting both to work
simultaneously in the explanation of one phenomenon. An oscillation [a compromise] of this sort frequently occurs in discussions which start from an opposition between the 'individual' and 'society'." And so, says O'Donnell (1978: 157), "society is explained in terms of individuals, and/or something completely independent of all individuals." O'Donnell proposes a compromise in which the truth is sometimes found in the middle as an "additive average."

The importance of the averaging will become more important later in the text. It is sufficient at this point simply to know that contrasting philosophical assumptions are sometimes combined in the explanation of various phenomena.

The remainder of this chapter will correlate underlying philosophical assumptions and a more general view of social organization—the consensus-organic-equilibrium-functional view, as it is here called. This unwieldy term will be shortened to "functional-consensus view" for ease of discussion. As Chapter I has noted, much of the following presentation is based on other summaries of the vast functional-consensus literature. What is attempted here is very schematic. Every world view has verifiable and non-verifiable assumptions and propositions. The non-verifiable assumptions—such as views of the nature of the individual, society, and causal force—tend to be accepted on the basis of moral values and life experiences.
Functional-Consensus View

Several authors have summarized the major assumptions of the functional-consensus view. Chamblis (1973: 3), for example, presents Dahrendorf's outline of the essential elements of this model of society, and contends that the basic model holds:

1. That every society is a relatively persistent configuration of elements.
2. That every society is a well-integrated configuration of elements.
3. That every element in a society contributes to its functioning.
4. That every society rests on the consensus of its members.


An Organic Model/An Aggregate Consensus Model

This perspective has been variously labeled an order-organic-functional-equilibrium-consensus view. All these terms tend to be conceptually consistent although each
Table 1

Major Assumptions of the Functional-Consensus View of Social Structure and Social Change

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Society</td>
<td>System with needs</td>
</tr>
<tr>
<td>Initiating Analytical Focus</td>
<td>Individual and/or Emergent Society</td>
</tr>
<tr>
<td>Nature of Individual</td>
<td>Subject and/or object</td>
</tr>
<tr>
<td>Social Unity</td>
<td>Consensus/Emergent Societal Requisite</td>
</tr>
<tr>
<td>Social Relations</td>
<td>Advantageous/Societal Requisite</td>
</tr>
<tr>
<td>Power</td>
<td>Differentiated pluralistic/requisite</td>
</tr>
<tr>
<td>State</td>
<td>Promotes common good/goal attainment</td>
</tr>
<tr>
<td>Stratification</td>
<td>Heuristic device/requisite</td>
</tr>
<tr>
<td>Primal Cause Force</td>
<td>Ideas</td>
</tr>
<tr>
<td>Causal Logic</td>
<td>Cause-effect</td>
</tr>
<tr>
<td>Social Change</td>
<td>Equilibrating, gradual change --cumulative, evolutionary like</td>
</tr>
</tbody>
</table>
emphasizes different aspects of the view. This discussion will emphasize organic aspects in order to distill some of the general organizing parameters, but it is recognized that an organic model tends toward a more macro-analytical approach than a focus emphasizing consensus. Where to start—with the macro structure or with consensus-forming individuals—is a question of a tension that 's inherent within the overall view. That tension will be made explicit as the perspective is presented.

In an organic model, suggests, Parson (1966)

the fundamental principle about the organization of living systems [including human cultural, social, personality, and organismic systems] is that their structures are differentiated in regards to the various exigencies imposed on them by their environment. Thus, for example, the biological functions of respiration, nutrition, elimination, locomotion, information processing are the basis for differentiated organ systems. Each of these organ systems is specialized around the exigencies of certain relations between the organism and its environment.

The quote raises an immediate sense of a differentiated but interrelated and integrated system of structures. Each of these structures performs in a way that accommodates environmental stresses and strains; functioning together they tend to insure the survivability of the system. In survival as a system, there is a sense of order, balance, equilibrium, or homeostasis. Society, by extension, is a
system that is ordered, balanced, and homeostatic, or at least tends toward that state.

The organic model has roots in the classical works of Schaffle, Lilenfeld, Fouillee, and Worms (Collins 1968; Turner 1976; Abel 1970). Basically the position draws an analogy between the structure and structural relations of a biological organism and those of a social organization. A list of these analogies includes:

1. Both society and organism can be distinguished from inorganic matter, for both grow and develop.

2. In both society and organisms an increase in size means an increase in complexity and differentiation.

3. In both, a progressive differentiation in structure is accompanied by a differentiation in function.

4. In both, parts of the whole are interdependent; a change in one part affects other parts.

5. In both, each part of the whole is also a micro society or organism in and of itself.

6. In both, the life of the whole can be destroyed but the parts will live on for a time.

These points, as set forth by Turner (1974), are distinctions that Spencer drew as early as 1860. A sense of
growth and differentiation and interdependence/integration seem prevalent. Modern analogics include the notions that:

1. Society is a bounded self-regulation system tending toward homeostasis and equilibrium.

2. As a self-maintaining system, society has certain basic needs or requisites that must be met if survival is to ensue, if homeostasis is to be preserved, or if equilibrium is to be maintained.

3. In systems with needs, it is probable that certain types of structures must exist to ensure survival, homeostasis and equilibrium (Turner 1974: 18).

Certain key terms and concepts seem to be of predominant importance in these analogies. The terms include system, differentiation, integration, adaptation, homeostasis, equilibrium, and system requisites. Most of these terms tend to presuppose the others. The view of society as a "system with needs" (see also Table 1) implies, at a minimum, that society is a differentiated and integrated entity with certain requisites that somehow must be met. Such needs have been elaborated or hypothesized by various authors—see, for example, the early works of Levy (1952: 149-198) and Aberle et al. (1950: 100-11)—but Parson's (1966) list of requisites is probably most often noted in the literature:
1. Adaptation: a society or social system must adjust or upgrade itself to new conditions by securing sufficient resources and facilities from the environment.

2. Goal attainment: a society or social system must define and achieve some set of purposes, establish priorities among system goals, and mobilize system resources for goal attainment.

3. Integration: a society or social system must maintain its integrity by coordinating and maintaining viable interrelationships among social units.

4. Pattern maintenance: a society or social system must find ways to continue existing social arrangements (including a state of readiness to address new adaptive problems as they arise) by insuring that actors in the social system display the "appropriate" characteristics (motives, needs, role-playing skills, etc.).

In general, most functionalists hold that there are invariant problems that social systems must solve. These are requisites of its survival. Failure to meet these requisites spells disintegration of the system. Disruption and stress that interfere with the society's functioning will result in change. Further discussion about the
character of social change will be advanced later in the text.

Specifying the sources of a social system's "needs" is extremely important from a "perspective" standpoint, but the literature on this subject tends to be inconsistent. What can be found is a continuum of positions between nominalism and social realism and an oscillation between the polar positions on certain fundamental functional-consensus concepts.

Is the source of a social system's needs intrinsic to the system itself or is it an articulation of individual needs? Polar positions are perhaps best represented by two of the "titular founders of functionalism," Bronislaw Malinowski and Emile Durkheim (Turner 1974: 18).

Malinowski basically assumes that system needs are ultimately a function of individual needs. Individual human beings have recurrent and common needs. To fill these needs, certain social arrangements, certain social institutions, and certain social systems are required: "It may appear that social systems are organized according to their own principles, but for Malinowski...this is never really true. Instead, he would say that beneath any form of human social system, there exists a basic personal need" (Skidmore 1979: 125). Durkheim did not specify a social system's needs but did propose a concept of social
systems "in terms of 'normal' and 'pathological' states. Such formulations, at the very least, connote the view that social systems have needs that must be fulfilled if 'abnormal' states are to be avoided" (Turner 1974: 18). These are needs of the whole, of the social system, that are independent of "personal motivated actions" (Skidmore 1979: 126). Durkheim (1964) wrote that

> A whole is not identical with the sum of its parts. It is something new, and all its properties differ from those displayed by the parts of which it is composed. Association is not, as has sometimes been believed, a phenomenon unproductive in itself, consisting merely in bringing into external relation established facts and formed properties.

For Durkheim, a social system could only be understood as an entity unto itself, irreducible to the sum of its parts; the needs of the individual parts could never add up to the needs of the whole. Malinowski posits a view that is similar in certain respects to nominalist assumptions while Durkheim assumes a social realist position. More recent writers have likewise argued over whether the wellsprings of a social system's needs are at base individual needs (Parsons 1966; Hinkle 1980) or social needs (Abel 1970; Ritzer 1980), and there seems to be an unresolved disjuncture in the functional-consensus view between social realists and social nominalists. O'Donnell (1978) refers to this disjuncture as a "society/individual tension."
This tension can perhaps be best illustrated with a brief review of socialization and stratification.

**Nominalist/Realist Oscillation: The Realism of Socialization and the Nominalism of Stratification**

Socialization involves the process of learning (or being taught) cultural values, norms, and goals that are systemically necessary for pattern maintenance. Reynolds (1973) and Horton (1973) suggest the functional-consensus image of the individual is one of an object, "a flexible form which can be given all manner of content" (Inkeles 1964: 50). This seems to be a social realist position; the passive individual is shaped by larger forces. Wrong (1961) reacts to this realist position. He suggests that the functionalist view fails to account adequately for individuality, individual causal efficacy, and that it has a rigid overinstitutionalized concept of society. Wrong holds that individuals are not totally molded, shaped, coerced, and that they often act outside the bounds of larger societal structures.

A sense of individual efficacy can also be found in Davis and Moore's functional theory of stratification. As summarized by Wesotowski (1966) this theory holds that

1. Social stratification (uneven distribution of material rewards and of prestige) is functionally
necessary and is, therefore, a universal and permanent feature of society.

2. Stratification is functionally necessary because every society needs a mechanism to induce people to occupy positions that are socially important and require training; material rewards and prestige act as stimuli for the occupation of such positions.

3. The mechanism of inducement ensures that the most important positions are conscientiously filled by the most qualified persons.

Point three was later modified by Davis to allow for various intervening influences such as ascribed status, in-group/out-group dynamics, and lack of "equal opportunity," yet the sense of differential rewards providing motivational incentives to mobile (and competitive) individuals remains. Individuals tend to be measured by self-initiative, motivation, and drive.

Both socialization and stratification are held to represent necessary processes that serve societal needs. However, they tend to have polar images of the nature of the individual. Socialization implies a passive image of individuals; stratification suggests a competitive image of individuals seeking advantage in a system of differential rewards. In certain respects, then, both nominalism
and social realism are represented.

It is obvious that various authors within the functional-consensus view subscribe to opposing positions on nominalist-realist issues. Lennie (1978) says that "the basis exists for emphasizing either the individual or society as dominant, and consequently for an oscillation from one to the other," and O'Donnell (1978: 147) suggests that seemingly polar positions may often be applied simultaneously in a compromise, a combination, or an "adding together or juxtaposing of the same basic concepts."

Reynolds (1973: 11) seems to take a social realist position when he states that "Society...is greater than the sum of its individual members; over and above the conglomeration of concrete individuals lies the press, the restraining influence of common culture, a normative order, or a collective conscience—all of which precede the individual's entry into society and survive his departure" but later he also notes that "most frequently the key or principle cause of social phenomena is conceived as a combination of human nature à la Adam Smith or George C. Homans, and culture à la Emile Durkheim or Pitirim Sorokin" Reynolds seems to combine realism and idealism, and other authors reflect this compromise position too. Most of the works that summarize the functional-consensus view offer Parsons as the contemporary representative. According to Skidmore (1979: 145), Parsons wished to avoid
extreme individualism as well as extreme determinism, and tried to accommodate both a personal/individualistic efficacy and a societal efficacy. Skidmore (1979: 160) suggests that Parsons' work represents a "normative voluntarism."

A Continuum of Positions

Perhaps normative voluntarism is "the truth that lies in the middle" for the functional-consensus view. There is a sense of social constraint as well as individual efficacy and choice. However, whether the effect is held to be more normative and constraining or more voluntaristic and nominalist depends on the author. There is a continuum of positions. Ritzer (1980: 247), for example, takes what might be termed a "prevailing socially realist" position. He holds, in reference to Parsonian conceptualization, that "the personality either is externally constrained or constrains itself as a result of socialization and the internalization of the societal value system," and that "the ability of the personality system to affect or alter macrosystems is minimal or non-existent." The individual, for Ritzer, "is clearly not an equal partner, [and] the personality is reduced to a subordinate system."

Curthoy et al. (1978: 112) present a functionalism that is not unlike Ritzer's. They suggest that certain
macro-structural features of society such as unemployment, job hierarchy, stratification, and culture tend to be taken as permanent features; however, what is taken as fixed with respect to society is taken as variable with respect to individuals. Individuals are held to be able to partake of these fixed structures in ways that they choose, but while it is possible for individuals to act independently to change themselves, change in the overall landscape of society's features seems unlikely, or only very slow and gradual.

Skidmore's (1979: 128) position is more nominalistic. He holds that the individual's expectations are structured, and that the appropriateness of acts is structured, but that concrete acts are not: "The structure does not dictate what to do, per se, as in open the door, take five steps to the chair, sit down, question the patient, examine the patient, write a prescription, and so on. Value patterns...gave, in general terms, appropriate ways of acting in specific situations." If the objectives of socialization are achieved, according to Skidmore (1979: 129), "then it is reasonable to view action-in-role as being motivated activity of valuing persons, whose acts are consistent with other persons' valuing, motivated behavior. This consistency has not been imposed." Yet Skidmore's position does contain a coercive component. "The
explanation of stratification," he says, "must lie in society's need to motivate individuals to perform tasks dictated by the functional requisites of that society."

Functional-Consensus and Moderate Nominalism

Consensus views tend to take shape within what Brodbeck (1958) calls moderate nominalist positions. These include works of the Malinowskian school, various pluralist-functionalist perspectives--Rose (1969) being the classic example--economic perspectives, and various social problems orientations (Julian 1973; Horton & Leslie 1974; Watts & Fried 1974). Etzioni (1976) provides an excellent rendition of the difference between functional models that emphasize consensus and those with more of an emergent societal system view.

Views emphasizing consensus of course tend toward the nominalist end of the continuum. The focus is upon individuals forming groups and not upon the system's needs and functions. The determination of needs lies within individuals in the aggregate and not in societal systems as emergent wholes. There exists, from this standpoint, no society that is greater than the sum of the individuals that compose it. There is no emergence. Societal needs are often seen to exist but they are of a derivative nature--the crystallization of individual needs--rather than of a determinant nature. Yet discussions of
consensus may often move to such issues as the "laws of the market" and the norms and needs of a society. Realism might be said to intrude to produce a moderate nominalist view.

Brodbeck (1958) believes there are times when it is necessary to study social phenomena "as if" they were emergent and realistic. There is a holistic sense of existence (but not an emergent whole) when society becomes personified because every individual is assumed to be the same as every other in that everybody shares the same beliefs, values, tastes, etc. It is as if there is a group mind in which all individuals share and of which each individual is merely an instance (Burnheim 1978: 54).

As a world view, moderate nominalism does not preclude the existence of a market system, an economic system, a societal system, or even system requisites. But these larger aspects of reality are seen as having no existence apart from the mere aggregation of individuals. Social phenomena are thought to be shaped and determined by individual needs (in aggregation) and not the reverse.

Alford (1974a) adopts this position in discussing the "pluralist-functionalist-preference" paradigm. Society, he says, is "differentiated into a multiplicity of social groups...satisfying a wide variety of individual needs. These groups then perform multiple functions for the society: adapting it by various changes, integrating
it, allowing it to achieve its goals, enabling it to maintain existing patterns of values." Societal needs are articulated but they derive from individual needs crystallized in consensual structures. Alford's view is similar to Hinkle's (1980) position that functionalism tends to be undergirded by assumptions of voluntary nominalism.

There exists, then, a continuum of models from social coercion to pure consensus within the functionalist paradigm. There is an intermediate position typified by the term normative-voluntarism. There is a sense of constraint, or at least of channelling and directing behavior as well as a sense of choice, motivation, and mobility. Specification of this tension along this continuum is important because it finds its way into theories of socioeconomic development.

Character of the Causal Force

An additional philosophical assumption that has a shaping influence concerns the character of causal efficacy (as opposed to its source). Recall that idealism assumes that "ideas cause social reality to come into existence, and that changes in ideas are sufficient to cause changes in society" (O'Donnell 1978: 142). Conversely, physicalism assumes that material objects and processes determine social practices (Archer 1978: 76).
Parsons (1966) suggests that a hierarchical structure directs human action. This structure is presented in Figure 1. In the left hand column are the general system requisites that any system must meet to remain a system. Parsons attributes responsibility for meeting each of these requisites to subsystems of a total "overall action system." The physical organism is seen as predominantly dealing with problems of adaptation, the personality system with goal attainment. Similarly, integration is seen predominantly as a problem of the social system, and pattern maintenance as a problem of the cultural system. Parsons arranges these subsystems conceptually into a cybernetic hierarchy with culture at the top, followed by the social system, the personality system, and the physical organism at the bottom.

A cybernetic ranking, as developed by Wiener (1948, 1954) and later borrowed by Parsons, implies an exchange through the hierarchy of energy and information. Energy and facilitating factors are held to flow up the hierarchy from purest form in the physical organism until they dissipate entirely in the cultural system. Information and controlling factors are held to show their purest form in the cultural system and to flow downward while shaping and directing energy sources and flows. "What emerges is a hierarchy of informational controls, with culture
<table>
<thead>
<tr>
<th>Parts of the general system model</th>
<th>Analytically separated systems</th>
<th>Cybernetic hierarchy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pattern maintenance</td>
<td>Cultural system</td>
<td>Information (controlling factors)</td>
</tr>
<tr>
<td>Integration</td>
<td>Social system</td>
<td>Cultural system</td>
</tr>
<tr>
<td>Goal Attainment</td>
<td>Personality system</td>
<td>Social system</td>
</tr>
<tr>
<td>Adaptation</td>
<td>Physical organism</td>
<td>Personality system</td>
</tr>
</tbody>
</table>

I = controlling factors derived from pure information
E = conditioning and facilitating factors derived from pure energy

Source: Skidmore 1975: 171

Figure 1. Functional Cybernetic Hierarchy
informationally circumscribing the social system, social structure informationally regulating the personality system, and personality regulating the organismic system" (Turner 1974: 41). While there is an input-output relationship, culture and implicitly ideas are seen as the directing, molding, and controlling forces. Cultural value orientations can be seen as circumscribing or limiting the range of variation in the norms of the social system; in turn, these norms, as translated into expectations or actors playing roles...[can] be viewed as limiting the kinds of motives and decision-making processes in personality systems; these features of the personality system...[can then] be seen as circumscribing biochemical processes in the organism (Turner 1974: 41).

This hierarchical cybernetic system is not unlike homeostatic systems presented in standard physiology texts, and Reynold's (1973: 2) characterization of this scheme as an "organic culturology" seems appropriate. The organic influences, the system orientation, and the importance of culture are evident. Idealism is manifested in the importance of culture. A normative voluntaristic tension is evident as well. The larger macro-structures are seen to control the micro-structures, but not completely. Expectations, motives, and decision-making processes are limited, controlled, and regulated, but concrete acts are not determined.
Other authors have also found an idealistic basis to the functional-consensus position. Alford (1974) presents "the culture and values of the society" as "the major force forming (and changing) the society." Buttel and Flinn (1977) suggest consensus, collective conscience, social values, norms, and goals as constituent causal forces. Chamblis (1973: 32) says that "Functionalists tend to emphasize the primacy of culture." Boguslaw and Vickers (1978), Horton (1970), and Sherman and Woods (1979) make similar statements. All such statements make an implicit philosophical assumption about the nature of societal reality. They assume a social idealism.

A World View

Certain key concepts of the functional-consensus world view have already been specified. These included, among others, a sense of a system of interrelated parts, equilibrative or homeostatic tendencies, and structural differentiation and integration. Moderate nominalist positions emphasize the importance of consensus.

Frank (1973: 46) suggests equilibrium is the real logical cornerstone of the functional-consensus approach. Van Den Berghe (1973: 57) expresses a similar sentiment: "dynamic equilibrium implies integration, i.e., interdependence and compatibility between the parts of the
The functional-consensus view provides a system that changes gradually and slowly. Equilibrium, differentiation, integration, adaptation, systemic needs, stability, consensus, and idealism are the conceptual "lenses" of the functional-consensus world view; they are the parametric prescriptions through which the content of social reality is seen and interpreted.

The nominalist/realist disjunction is an inconsistency and an eclecticism within the view. However, O'Donnell (1978: 157) suggests that this dualism is subsumed by certain generalizing tactics common to the functional-consensus view. Dualisms are often resolved with similar explanatory concepts: there are individual needs and there are societal needs personified. Either individuals in aggregate say we should do certain things or society says we should do certain things, and "society is expected to be able to generate the vectors that will correct the imbalances just as the body of a person who is ill mobilizes forces to overcome the illness" (Etzioni 1976: 7). Furthermore, individuals are held to act from ideas and society acts or adjusts or corrects in a cause-effect logic where the world is seen as composed of separate entities connected in external relationships. 'A' is seen as separate from 'B'. 'A' is not 'B' and 'B' is not 'A'. They may exist in a cause-effect relation but they are
categorically separate and do not presuppose the other's existence. Individuals may cause events and/or society may cause events but their existence is held separate and immutable.

Other Paradigmatic Categories

Several assumptions presented in Table 1 have been discussed either directly or indirectly. These have included: (1) causal force, (2) nature of the individual, (3) nature of society, (4) socialization, and (5) stratification. The purpose was not to present a complete review of each of the points in Table 1, but rather to lay out a perspective and show how it is undergirded with certain philosophical assumptions. Other assumptions in Table 1 with some direct relevance to later discussion will also be mentioned here.

The state is seen as an instrument for promoting the common good. This is in keeping with its function as "establishing priorities among system goals and mobilizing system resources for their attainment" (Turner 1974: 39). It serves a goal attainment function that contributes to the smooth operation of the system and toward equilibrium.

Power tends to be a more nominalistic notion that deals with individuals voluntarily coming together to form a group that serves group member's interests. Power is seen
as pluralistic and multi-centered; the state is seen as a broker of these pluralistic concerns.

Social relations are seen as advantageous. They serve to resolve stresses and strains and to preserve the system's homeostatic tendency.

A Functional-Consensus View of Social Change

The way in which social change is held to occur has been alluded to very generally in the context of differentiation, integration, and adaptation. As noted in Table 1, social change is seen as a gradual evolution in a society (a system) with needs. The social system is a differentiated but integrated structure that adapts to its environment--changes--in order to meet specific system needs that would otherwise go unmet.

To survive and persist, a system must change and adapt to changing conditions. The characteristics of these changes, in an organic model, involve internal cumulative changes that are usually gradual moves toward an increasingly differentiated and complexly integrated system (Nisbet 1965: 90-91). In general, this view equates differentiation with division of labor and occupational specialization in all societal subsystems. Such division and specialization are held to bind people together by interdependence and mutual interests. There is a movement from
what Durkheim termed mechanical solidarity to organic
solidarity (Durkheim 1964). As problems and strains within
the system are faced,

techniques and forces to deal with them
are contrived that then go into the rep­
ertoire of skills and roles a society
has for doing its work. This amounts to
greater specialization of function, which
calls for...different, perhaps more com­
plicated coordination of these differen­
tiated activities--more 'organically' re­
lated set of mutual dependencies arises
(Skidmore 1979: 162).

In the process, the system reaches a higher ground, a
higher "evolutionary" level of adaptive efficacy. Structur­
al internalization of stresses leaves the system prepared
for similar future problems.

This process of specialization, differentiation, and
integration tends to be held as the chief motor of histor­
ical change. Change, then, is internal to the social
system. It is also necessary. Failure to change could
mean societal failure. Differentiations occur gradually
and cumulatively, slowly building a complex, pluralistic,
differentiated, interdependent, homeostatic structure.

Implicit Dualism

Dualism can be found in the degree of differentiation
and complexity existing within a social system. The highly
complex, modern, "organic" society is one pole of the
dualism; the less complex, traditional, "mechanical" society is the other. Degrees of differentiation from the traditional/mechanical society to the modern/organic endpoint provide a continuum.

This dualistic conception exists at the individual level as well as at the structural level. Parsons, according to Skidmore (1979: 149), specified certain choices that individuals have in life. These choices become crystallized in certain value patterns as shown below.

1) affectivity versus affective neutrality
   the dilemma of whether to feel gratification or to withhold gratification.

2) specificity versus diffuseness
   the dilemma of whether to orient to the whole object or to some part of it.

3) universalism versus particularism
   the dilemma of whether to act toward the object in light of its particular relation to the actor, or because of its general attributes.

4) quality versus performance
   the dilemma of whether to be concerned about an
object because of what it is, or what it does.

These "pattern variables" in concert with system requisites help specify appropriate orientations, appropriate evaluations, and appropriate actions that help solve problems and reproduce the system.

To elaborate, social evolution is held to be adaptive change in response to environmental conditions (Skidmore 1979: 149). When social systems face adaptive problems, they can be solved most effectively by social action characterized by affective neutrality, specificity, universalism, and performance (Parsons 1966). These pattern variables are gesellschaft values in the tradition of Tonnies, Redfield, Becker, and Durkheim. Affectivity, particularism, quality, and diffuseness are the gemeinschaft end of what tends to be a dualistic conception of societies. The former set comprises behavior at the individual role level that will serve to reproduce the system in an adaptive evolutionarily expedient way; the latter set of gemeinschaft choices are anti-evolutionary and leave a society to languish in archaic traditionalism.

Causes of Differentiation

Several causes of differentiation have been propounded in the literature (Moore 1963; Parsons 1966, 1961; Smelser
1963; Cancian 1966). Collins (1968: 45) has summarized several of them:

1. The system may change as a reaction to changed conditions in the "external" environment, either natural conditions or the influences of other societies.

2. Change may be built into the system itself...concrete examples of such change are the built-in effects of institutionalized scientific and technological innovation (but also differentiation that occurs within certain values themselves such as growth, production, free labor).

3. The imperfect integration of the parts of the system may cause strains--between conflicting values, conflicting structures, or between values and structures--which result in attempts to overcome these strains.

4. Imperfect socialization of individuals into the prevailing values may give rise to innovators...who act to change the system.

5. Change in the values around which society is integrated will result in change in the social system.

These are by no means all the causes of differentiation suggested in the literature. However, the list does provide some sense of the breadth of them. For purposes of analysis the Durkheimian (1964) model of social change will be selected for discussion. It is a functional model; as a world view it anticipates diffusion-growth center views; and Durkheim's writings have been identified as a foundation of functional-consensus positions (Giddens 1971:
The Durkheimian Model

For Durkheim (1964), differentiation is in part derived from a failure to meet those system needs concerned with its environment and its desire to avoid unbridled competition. These two concerns embrace two of Collins' hypothesized causes of differentiation, as listed above: (1) a system may differentiate or must adapt to conditions of its environment, and (2) the imperfect integration of parts of the system may cause strains and consequent differentiation.

"Appealing to Darwin's theory that the more alike two organisms are, if resources are scarce, the more severe is the competition between them,...[Durkheim] reasoned that, given scarce resources, undifferentiated individuals would entail heightened competition between them—which is resolved by the division of labor," says Lukes (1973). Durkheim's general hypothesis states that the "division of labor [differentiation] varies in direct proportion to the volume and the density of societies" (Lukes 1973: 169). Volume refers to population size; density refers to population density and the degree of interaction among members of the population. Such factors as the number and means of communication and transportation increase density
effects, and competition for scarce resources in a dense population can result in mutual destruction and societal disintegration. Social differentiation is the peaceful solution, and division of labor is a functional solution. It is required for system survival. It maintains societal integration—through societal adaptation—in an evolving organic interdependent way.

Durkheim not only discussed social differentiation but also societal expansion and regional integration. He suggests, for example, that continued differentiation results in a lessening of individual pre-occupation with indigenous locations and a forming of links "with distant regions" (Lukes 1971: 171, 154), until ultimately there is a "fusion of markets in a single market which embraces virtually the whole society (and beyond) and society itself comes to resemble a great city which contains the entire population within its walls" (Lukes 1973: 154).

Lukes' words suggest market integration between and among regions, but Durkheim referred to a total societal integration. Economic connections help establish necessary cultural links between disparate groups. This is a system need. Traditional values within a context of structural modernization represent a conflict between values and structure and an imperfect integration of the system. Therefore, as a demand of societal preservation, "structural
differentiation is offset by cultural integration" (Alford 1974b: 4). Complexity comes to be offset by coherence and consistency of values. Durkheim's thesis takes shape in the proposition that the greater the frequency of interaction between culturally disparate groups the greater the probability they will become more alike, and "once begun, the diffusion of symbols and institutions from the core to the periphery should lead to a gradual reapproachment, to a stable cultural equilibrium" (Hechter 1975: 24).

Within Durkheim's model of social differentiation and integration, there is a dynamic, growing, innovating, and differentiating core; a gradual change from a simplisti­c traditional society to a complex organic society; and a cultural diffusion and regional integration.

Implicit Philosophical Assumptions

Nominalism and Social Realism

Ambivalence within the functional-consensus view of social structure about nominalism and social realism carries into concepts of social change. Do sources of societal needs ultimately lie within the individual or society? Skidmore (1979: 180) contends that "Functional­ism's account of social evolution perhaps implies...a lack of control over social change by the participants in it."
Elsewhere he writes:

If the cause of social evolution...was not to be found in human conscious intention to bring it about, then exactly what was the cause? Durkheim's analysis is that in some way the system of social relations acted on its own to protect itself, and that the participants were accomplices, even though they did not know it (Skidmore 1976: 124).

Yet the individual, in the usual functional-consensus perspective, is not held to be totally determined. A social system does contain "those relationships that are patterned and predictable" (Boguslaw and Vickers 1978: 220), but there is plenty of activity that is random and falls outside of this patterned nature. Furthermore, pattern variables represent dualistic choices. Some have characterized these choices as "submit or take the poison" (Skidmore 1978: 179), however, and the issue remains unresolved within the perspective.

If the process of evolutionary social change is not seen as a realism in and of itself, it is usually treated as if it were one. This observation tends to be confirmed by Etzioni's (1976) suggestion that consensus views either make no explicit statements on social dynamics or tend to subscribe to functional positions on social change.
Nature of Causal Force

The character of the causal force also seems somewhat ambivalent in the functional conception of social change. Is it physicalist or idealist? If such factors as the natural environment, population density, communication, transportation, and other technological developments are held to have a causal influence on social change, a physicalist answer has been accepted. However, the functional-consensus view usually holds that the causal force behind social structure and social change lies in the realm of ideas. This idealism may be seen to originate from the system or from individual consciousness but in either case physical factors such as population density might also be assigned an internal origin. Population growth, for instance, might be explained by attitudes towards babies; growth of the labor force could be laid to attitudes about work and making money; technological effects could be attributed to entrepreneurial motive and spirit, and so forth (Alford 1974b: 4).

The Economic Perspective and
The Functional-Consensus View of Reality

An economic perspective and the functional-consensus perspective, as world views, show a conceptual kinship.
Alford (1974a: 5) points to this kinship: "In sociology it is called 'functionalism', in political science 'pluralism', and in economics...equilibrium or preference theory." Certain central assumptions of an economic view will be presented first; there follows a discussion of conceptual continuities between the views.

The Importance of the Market

The dominant organizing force in a neoclassical economic view is the market.

The market determines what is to be produced, how it is to be produced, and for whom it is to be produced. Capitalists, or their hired managers, are motivated primarily by their drive to maximize profits. They go to the market to hire labor and buy raw materials which they combine with the factories, machinery, and tools...in order to produce an output....

Their objective is to maximize the difference between their sales proceeds and their expenses incurred in buying raw materials, hiring labor, and replacing used-up capital. This difference is, of course, profits. They constantly search for commodities that can be produced and sold profitably.

The capitalists' costs of production represent income to laborers and the owners of raw materials. Profit is the income that accrues to the capitalist. The recipients of these incomes spend them in the market for the goods produced.

Money circulates (or is distributed) from the business firms to the general public...
in the form of incomes generated in the production process. The money then returns to the business firms when the public (in an attempt to maximize their utilities) purchases the goods and services these firms sell in the market (Hunt and Sherman 1978: 182-183).

The fundamental economic processes—production, distribution, and consumption—held to exist in an economy rely on the operation of a market. The economic system (a societal subsystem) employs scarce resources (land, labor, capital, materials, entrepreneurship) in the production of various commodities over time and the distribution of these commodities for consumption (Samuelson 1976: 6). Firms attempt to maximize incomes, given the demand and supply of jobs. Consumers attempt to maximize consumption or utility given their resources (incomes). Resolution between demand and supply forces occurs in and through the market mechanism, and more specifically, at equilibriating prices.

Geographic issues come into consideration because supply and demand have a spatial component. Generally, there will be a spatial disparity between points of supply and points of demand. This spatial disparity or distance represents a cost of exchange that will invariably be accounted for in economic relationships.

The point is most clearly illustrated in the case of products based on highly localized natural resources that are far from the main industrial centers that use
them, but the same is true to a varying degree for most goods and services.

All economic activities are space users, whether they are grain producers occupying thousands of acres in the midwest or garment manufacturers renting a lift in downtown Manhattan. Similarly, the final consumer--the individual family or household--needs space in which to live.

The exchange of goods or services between any of these space users demands some form of movement over the earth's surface, and in this process resources will be used up as money, time, or physical energy are applied to the task of providing the consumer with his good and the producers with their return (Lloyd and Dickin 1972: 1).

These spatial relationships have been formalized in various economic geographic theories. Growth center theory is one example.

Conceptual Continuity Between Economic and Functional-Consensus Views

Many authors have suggested similarities between economic and functional approaches (Bodenheimer 1970; Alford 1974a, b; O'Donnell et al. 1978; Buttel 1976; Horton 1967; Frank 1973). Alford (1974a: 5) is most explicit and complete about these similarities. He suggests a view embracing both perspectives: "the fundamental actor from this view...is the individual. In economics, he has preferences, in sociology, values." These values/
preferences come to be expressed in groups, of which mar-
kets are a specific example:

For economics, the market is the major
social location of interaction between
individuals, and the form of that inter-
action is through the roles of buyer and
seller....[economic agents] enter the
market to sell their product and are re-
warded by income or goods and services...
Individuals enter a group to play an in-
strumental or expressive role and are
rewarded by social status....under normal
conditions all individuals in a given
market...or group accept the norms or
rules governing interactions.

Alford (1974a: 5) thus posits that from both views "forms
of interaction are characterized under 'normal conditions'
by exchange, consensus and rewards, and under 'abnormal'
conditions where the rules are violated by deviance and
'irrational' behavior." Various assumptions within these
quotes will be discussed later; however, a brief discussion
from Sweezy (1970: 5) will further emphasize conceptual
continuities between economic analysis and the functional-
consensus view.

Recall from earlier discussion of the functional-
consensus view that social relations are held to be advan-
tageous, and that there are held to exist an intrinsic
tendency toward system equilibrium and a slow, gradual,
and adaptive kind of change within and of the system.
Sweezy's (1970: 5) summary of certain assumptions of ortho-
dox economics introduces very similar points:
1. The interests of individuals, groups and class are held to be harmonious (or if not harmonious at least reconcilable).

2. Tendencies to equilibrium exist and will assert themselves in the long run.

3. Change is and will continue to be gradual and adaptive.

Alford's focus on the individual, consensus, and voluntarism tends not to emphasize the economy as a system. Yet the economy is seen as a system with interrelated parts that tend toward equilibrium by various authors (Smelser 1963). This is not in logical contradiction to Alford, but rather a matter of focus and emphasis.

Lloyd and Dicken (1972: 6) present an illustrative example of an economic system with a specific focus on the production system. Their example, shown in Figure 2, is particularly interesting because their characterization of maintenance, production, adaptation, and management functions is more than slightly reminiscent of Parson's goal attainment, adaptation, integration and latency functions. And just as Parsons suggests that his functions are applicable to various levels, institutions, and subsystems of a society, so Lloyd and Dicken (1972: 7) state that "at every level within the complex master system the same basic features are replicated."
Source: Lloyd and Dickens 1972:6

Figure 2. Functional Structure of a Production System within an Economy
These are requisites of the system, needs that must be met for system survival. But is the system (or its needs) necessarily greater than the sum of individuals (or their needs) that compose it?

O'Donnell (1978: 79) does seem to perceive a certain perceptual coercion--a sort of social realism--within the markets of economic system.

When the individual producer (for example) brings his/her goods to the market, he/she is faced with price relations between these and other commodities that appear to have no relation to his/her activity as a producer and over which he/she has no power. It appears to him/her as though natural relations have been established in the market between the commodities themselves through properties inherent in them.

The individual consumer is in a similar position. The market seems to dictate what products are offered at what prices, and while these prices and products may and do change in the long run, the individual seems to have very little if any control over them. Individuals seem to submit to the natural laws and "economic necessities of the market" (Schroyer 1973).

However, the "necessities of the market" can easily be seen as a moderate nominalistic view of economic life when the system's needs are held to derive from the needs of individual economic agents. Though concepts of an economic system and of market equilibrium do exist, few
neoclassical economists would suggest that the economic system itself is more than the sum of the atoms that comprise the whole. "These groups [markets] can be of many kinds," says Alford (1974a: 4), "but they are freely formed by individuals expressing their values and preferences."

Such a very common view of economic life is moderately nominalistic; the system is seen as no more than the sum of economic agents that compose it.

The Givens of Economic Analysis and Market Idealism

Its focus on the market system might seem to lend the economic perspective a physicalist position. Physical objects and processes (the exchange of commodities on a market) might appear to have a determinant character. However, these appearances are a product of a moderate nominalism that merely treats economic phenomena "as if" they had an independent causal existence. In fact the economic view is one of social idealism.

Individuals are taken as having preferences; preferences are taken as a given of economic life: "Preferences (to the economist)...or values (to the sociologist) are not taken as objects of explanation, but instead they are the fundamental starting points for analysis, partly because...they are regarded as inherently not subject to rational empirical analysis" (Alford 1974b: 11). Preferences and
values are held to exist in and of themselves; a preference is "the ultimate data for the economist for which there is no explanation sought" (Alford 1974a: 90). Preferences are also of the realm of consciousness. They are ideas just as values are ideas. As such, the economic view and the functional-consensus view are idealist conceptualizations.

There are certain other explicit assumptions in economic views. Economists recognize that a multitude of variables--cultural, political, and the social--influence the dynamics of economic life. To compensate for these influences, and to allow strictly economic analyses, these influences are held constant or assumed away:

One of the most important 'givens' in... economic analysis is that of economic rationality: if an individual is presented with a situation of choice in an economic setting, he will behave so as to maximize his economic position (Smelser 1963: 26).

A series of related assumptions concern what is termed "economic man." For example, it is assumed that the economic agent is a maximizer who acts rationally in calculating "in some fashion that means the best suit... maximizing aims" (Heilbroner 1974: 35). The economic agent is also held to act individually and competitively with other individuals, and is also said to have, in general, insatiable wants (O'Donnell 1978; Samuelson 1975;
Heilbroner 1974). These assumed behaviors are then held to be articulated in a market as demands for various products and services. Heilbroner (1974) suggests, implicitly at least, that these assumptions speak to an external social idealism.

It is important to remember, however, that economic analyses do not presume an understanding of society in general, but only of economic life. Heilbroner (1974: 34) suggests that underlying the presumptions of how men do behave are assumptions of how men ought to behave in some moral sense: "Economists do not believe that men and women are only and solely creatures of acquisition. They are fully aware that a hundred motivations impel them—rational and irrational, esthetic, political, religious, or whatever." The economic realm is seen as a subsystem of a larger societal context; it is only for analytical reasons that certain behavioral influences are held constant. Release these assumptions, suggests Heilbroner, and individuals are found acting competitively because they are supposed to. Individuals' wants are generally insatiable because individuals are socialized in a society "that encourages striving for status and success...consumption and recreation" (Heilbroner 1974: 36). Moreover, says Heilbroner (1974: 268), "Value judgments such as 'more is better' (or that maximizing is a commendable social
objective), or that individuals are supposed to make their own decisions on how to maximize their abilities" all underlie and help make a market society operate. He suggests therefore, that implicit in the economic view is an assumption of an external societal idealism that controls and coerces the individual. In a statement that quite strikingly recalls the tension between nominalism and social realism in the functional-consensus perspective, Heilbroner notes that "the line between individual social choice becomes blurred...and there is an element of social choice even in the 'freest' of individual decisions."

Summary

Certain assumptions of the neoclassical economic view suggest a paradigmatic kinship with the moderate nominalist brand of functional-consensus perspectives. In both there is a sense of a system of parts that tend toward equilibrium. There is a sense of stability and coherence. Change is held to come gradually through the aggregate of individual choices and market adjustments and not through systemic super-structures. The economic view assumes a market idealism based on the existence of preferences, and that market idealism is a special case of a more general societal idealism based on cultural values. Both views focus on efficacious individuals. Equilibrium is perhaps the most
important common assumption. The market is seen as adjusting and changing in an equilibrating manner, as is society.

Dualism-Diffusion Perspective

The dualism-diffusion perspective is a specific view of socio-economic development, and more specifically, of the rural periphery's development. It has both structural and cultural components and takes shape according to the following assumptions:

1) Assumptions about rural vs. urban and center vs. periphery contrasts.

2) Assumptions about major developmental trends in rural peripheries.

3) Assumptions about barriers to rural development.

4) Assumptions about the causal force underlying social change.

5) Assumptions about consequent recommendations for development

(Buttel and Flinn 1977).

The specific content of these assumptions of the dualist/diffusion view (see Bodenheimer 1970; Frank 1969; Havens 1972; Hechter 1975; Nash et al. 1977; and Chilcote and Edelstein 1974 for summaries of this perspective) begins with what has been called a difference analysis, an index analysis, and/or a gap analysis. Lists of
characteristics held to typify urban and rural regions are assumed, constructed, and/or measured. The urban center or core is said to have "modern" features; the rural periphery or hinterland has "traditional," "provincial," and even "backward" characteristics.

The 'modern' social organization of the core is held to be characterized by a wide division of labor, a high level of urbanization, capital intensive production, small nuclear families, rationalistic bureaucratic structures, high per capita incomes, and those rational norms and values which naturally arise in such settings (Hechter 1975: 27-28).

"Rational values" usually mean the Parsonian pattern values of specificity, achievement, universalism, and affectivity (Frank 1969). Economic manifestations of this perspective also characterize the urban center as a locus of aggressive entrepreneurship; highly skilled labor; technologically advanced production; well-developed financial, communications, and transportation networks; large input and output markets; and various agglomerative advantages (to be specified later). In general, urban centers are seen as places of innovation, creativity, dynamism, and growth, and as places of socio-economic and cultural differentiation (Gray and Flinn 1978).

The rural periphery or hinterland is said to be characterized by a simplistic economy involved in primary activities such as agricultural and mineral production;
unskilled or semi-skilled low-wage labor; no agglomerative advantages, and a lack of leadership. As Hechter (1975: 28) states, "the 'traditional' social organization of the periphery manifests a narrow division of labor, low level of urbanization, labor-intensive production, large extended family, personalistic and diffuse structures, low per capita income, and traditional norms and values." Traditional values typically mean the Parsonian pattern values of diffuseness, ascription, particularism, and affective-neutrality (Frank, 1969; Smelser 1959; Hoselitz 1969).

From the dualism/diffusion perspective, rural-urban differences tend to be seen in this dualistic context, as a series of values ranging between such modern and traditional end points. In certain respects a dis-equilibrium is assumed to exist between rural and urban poles of the dualism. The functional-consensus view of social change is a world view that anticipates this structure in its conception of societies ranged on a continuum according to degrees of differentiation—from simple traditional societies to complex organic societies. Recall also, in the functional-consensus view, that certain values are thought to be adaptive systemically and evolutionarily and others are not. This point will have more relevance when discussing 'barriers to development.'
Major Developmental Trends in Rural Peripheries

The major developmental trend of the rural periphery --from the dualism-diffusion view-- is a gradual uplifting from traditionalism to modernism via the progressive diffusion and infusion of modern influences from the urban center. Rural/urban links are at the heart of this process, be it cultural or economic.

Macro-economic diffusionists tend to emphasize the exchange of goods and services between rural and urban. That exchange is held to contribute to integration and the gradual uplifting of the periphery into an economic equilibrium with the center; industrialization is often perceived as a necessary way to intensify contact between traditional and modern sectors (Hechter 1975: 22). Industrialization typically results in a widening of the division of labor and helps to create new needs and functions that heighten pressures for integration. These relations, in turn, call forth various communication and transportation connections that facilitate still other export-import links that enhance developmental trends and the rural "uplift."

It is also frequently held within structural economic-diffusion views that such effects are accompanied by and must be accompanied by cultural diffusion effects: "As the peripheral collectivity begins to participate in the national economic system, changes in its structural
relations should lead to rational, performance-centered, and universalistic values" (Hechter 1975: 28). In the functional-consensus viewpoint, traditional values within a context of structurally modernizing influences represent a conflict between values and structures—a state of imperfect integration—and "it is presumed that badly integrated structures will pass away" (Skidmore 1979: 135); as a necessity of societal preservation "structural differentiation is offset by cultural integration" (Alford 1974b: 4). Complexity comes to be offset by coherence and consistency of common values. Particularism is gradually displaced by universalism, diffuseness by specificity, and collectivism by individualism, in the functional-consensus perspective.

Cultural diffusionists emphasize the outflow of symbols, values, and institutions in progressive interactions between culturally disparate groups or regions: "Cultural diffusionists generally maintain or imply that ideas and institutions...spread from developed to underdeveloped areas by virtue of their own superior rationality or modernity" (Bodenheimer 1970: 120), and possibly a traditional area embraces the values of a modern sector long before any structural change has occurred. This diffusion might come through television, radio, and newspapers or perhaps through "the establishment of [state and]
national school systems [that have] significantly narrow [ed] socializational differences among the youth" (Hechter 1975: 27). The disjuncture between values and structure might then serve as an impetus to evolutionary change (Collins 1968).

Three important concepts of the functional-consensus view of social change are differentiation, integration, and adaptation. These three processes are held to bring gradual equilibriating change. A dynamic differentiating center is said to exist, in the dualist-diffusion view of social change, as one-half of a dualism; it spreads adaptation, uplift, and evolutionary change to the opposite traditional half of the dualism.

The predominant focus of the dualism-diffusion view however, tends not to be on differentiation and adaptation but rather on integration of the core and periphery, which exist in a prior state of mal-integration. Various "osmotic" processes are held to bring the two together. These osmotic processes may involve material goods and services or phenomena of cultural nature. The processes are facilitated by ties and interactions of increasing magnitude between disparate groups.

The modern sector is seen as an evolving progressing system, the traditional sector as a stagnant system if not a drag on the modern sector (Havens 1972). It is held
that better integration could not only uplift the traditional half but also enhance the dynamic differentiation of the core.

The dualist-diffusion perspective does seem to lie within the same world view as functional-consensus perspectives. Differentiation, integration and adaptation is important. There is also an implicit emphasis on equilibrium, coherence, and stability of the system's parts. Social idealism is more explicit in cultural aspects of diffusion and only implicit in the economic variant; Buttel and Flinn's (1977: 260) characterization of the "causal force" of the dualist-diffusion view as based in "collective conscience, consensus, social values, and social goals" is itself a social idealist characterization.

The idealist-diffusion view of development does tend to be a functional-consensus view and therefore is underlain with the same or similar assumptions. Equilibrium adjustments and integration are perhaps the most important of these in terms of conceptual orientation.

Barriers to Rural Development

Barriers to development are the reverse of trends of diffusion in the dualist-diffusion perspective: "The spiral of diffusion from modern to traditional sectors varies in accordance with the accessibility of the society
to influence from more developed [regions]" (Bodenheimer 1971: 113). It is held that "from interaction will come communality" (Hechter 1975: 7). It follows that blockages to diffusion occur from sheer isolation, the lack of ties of transportation and communication, economic relations, and cultural exchanges. Inaccessibility prevents integration and the infusion of institutions, values, and other "uplifting" influences. However, even when inaccessibility is not extreme, another block on modernizing influences in this view is a "culture of poverty."

"Cultural diffusionists," says Bodenheimer (1971: 120), "generally maintain or imply that ideas and institutions have spread from developed to underdeveloped areas by virtue of their own superior rationality or modernity." "If only the choice between tradition and modernity could somehow be placed before individuals of the peripheral group," says Hechter (1975: 23), "some have felt, modernity would easily win over." However, when modernism does not win over in certain poverty-stricken areas it is sometimes attributed to the subculture of the indigenous people. A "subculture of poverty" has been advanced in the literature by Ball (1968), Weller (1965), Lewis (1961), Looff (1971), Billings (1974), and others as a collection of values that typically includes an orientation to the present (rather than the future) as well as fatalism, familism,
traditionalism, and religious fundamentalism. Ball summarizes various aspects of this value set as "frustration-instigated behavior" (Ball 1968). Frustration-instigated behavior is unlike motivation-instigated behavior in that it tends not to be goal-oriented, or causally effective. It is behavior that helps people of poverty to deal with the daily frustrations of life; it tends not to be logically related to the alleviation of the frustrating conditions themselves.

Four types of behavior are seen to result from poverty: **resignation, regression, fixation, and aggression.** Resignation is typified by feelings of apathy and fatalism. Regression refers to the "welfare syndrome." People displaying this behavior find living "on the dole" as quite acceptable and even comfortable, refusing to avail themselves of jobs even when opportunities exist. Regression may also involve an extreme familism and dependency on relatives, a "clinging behavior" and a "homing instinct" (Galbraith 1958). Fixation is a narrowly framed and compulsive behavior in which little thinking or weighing of alternatives is undertaken; one simply acts in an "opinionated, dogmatic, and argumentative" fashion (Ball 1968: 74), and change is extremely difficult. The fourth behavior, aggression, tends to be a nonspecific "kick the dog" pattern that purportedly serves as a release for
pent-up anger but is not rationally designed and directed toward a causative source.

This set of behaviors is held to form a closed framework highly resistant to change. To the extent that individuals behave in these ways, they tend to be seen as deviants within the larger society. Because this view of underdevelopment focuses explicitly on attitudes and values, individuals are seen (in the paradigm) as fairly malleable; they are perceived to have choices among Parsonian pattern variables, or between motivation-instigated behavior and frustration-instigation behavior. To the extent that these choices are not of an evolutionary or developmentally expedient nature, the individuals making the choices are held responsible for their positions. The larger societal system does set certain constraints, in this viewpoint, but within those limitations individual choices are held to be voluntary.

Amelioristic Implications

Policy extensions of diffusion theory are consistent with the blockages postulated by the theory. Opening the periphery, either attitudinally or economically, is held to be the key to development. Isolation is the problem, diffusion the solution.
Barriers within the cultural diffusion view involve "inappropriate" ideas and "irrational" values; remedial programs tend to be prescribed accordingly. Programs take shape in education, social casework, clinical psychology, and psychiatry (Looff 1971; McClelland 1961; Hagen 1962; Polensky 1972; Ball 1974). It is held that efficient programs of socialization and resocialization can break down attitudinal barriers and allow the integration of the periphery with the modern urban core.

Bodenheimer (1970: 112) points to Hirschman's thesis of "leading" and "lagging" sectors and Rostow's "take-off" model of development as perhaps the best examples of the economic version of dualism/diffusion views. Economic diffusion often tends to see actual material connections as necessarily preceding attitudinal changes. Policy recommendations, therefore, consistently follow a pattern that tends to emphasize physical and material linkages. To anticipate regional growth center theory, emphasis falls on such physical connections as highways, export production, and dynamic economic sectors.

The assumptions of dualism-diffusion theory frame and in a sense contain its policy recommendations. Preceding sections on "barriers" and "amelioristic implications" present logical consequences of the theory. The next section will be a schematic presentation of regional growth
center theory. It is in part contained by the economic variant of dualism diffusion theory. However, its organizing emphasis tends to be differentiation rather than integration. These differences are implicit in the labels of the respective views: "diffusion" suggests integration and "growth" suggests differentiation.

A Regional Growth Center Perspective of Change

This section will suggest how certain concepts of growth center and diffusion theories are consistent with Durkheimian views of differentiation and change. Before turning to that objective, however, a review of regional growth center theory will be presented.

Regional growth center theory is an explicit economic/geographic theory that conceptually represents the aggregation of several different approaches to economic development. Newman (1972: 47) makes this evident when he suggests that

*a growth center...be visualized as a community within a hierarchy of urban places whose export base allows it to grow and progress to later stages of development....*

[a growth center is a] geographically expanding provider of employment, urban services, and other opportunities to its hinterland. Ideally, a symbiotic relationship [exists]...with polarizing and spill-over effects working to the mutual advantage of all.
Central place theory, export base theory, and stages theory are subsumed in Newman's formulation. Location theory is also evidenced in other writings (Berry 1969: 15). An outline of each of these constituent theories will precede the review of regional growth center theory.

Central Place Theory

Central place theory was first developed in the works of Christaller and Losch (Walls 1975; Berry and Pred 1968: 65-68; Valavanis 1968: 69-70). Christaller tried to explain the spatial distribution of the supply of urban retail goods and services (Johnson 1970: 117-151; Brinkman 1976: 67-69; Foust and de Souza 1978: 68-77; Lloyd and Dicken 1972: 22-27). This theory deals with geographic locations of retail sales, population density, and travel distances of consumers. "Central places" are the geographic points to which consumers travel to make purchases. Two concepts central to the theory are "threshold population" and "range of a good." Threshold population is the minimum number of consumers necessary to provide a sales volume adequate for the good to be supplied profitably from the central place. The range of a good is "the zone around the central place from which persons travel to the center to purchase the good or service offered...the upper limit of this range is the maximum possible sales radius."
Beyond this limit, the price of the good is too high" (Hansen 1971: 69). A hamlet may have a sufficient population, perhaps, to support a service station and a tavern. A "minimum convenience community" will have a sufficient threshold population to support a grocery, a drug store, a hardware store, and a bank, plus all those services provided in the hamlet. A metropolitan center is large enough to provide all those business functions plus several others.

The complement of goods of which consumers avail themselves do not all have the same threshold population or ranges:

Goods that are low in price, purchased frequently, and are short-run necessities (bread, beer, baby food, and toilet paper) ...will have low threshold. The good requires only a few people/consumers to be marketed profitably (threshold); and can only draw consumers a short distance away (range). Costly goods that are purchased infrequently will have higher thresholds (Foust & de Souze 1978: 66).

These varying threshold levels and ranges result in a hierarchy of central places. In effect, there is a nesting of communities; the largest most densely populated areas provide the greatest areas with a full complement of goods and services; smaller less densely populated places provide goods and services within smaller ranges, and consumers in these latter places most usually travel to the nearest larger place to obtain goods not provided locally.
Various extensions and modifications of the basic theory have been made. Losch developed an analysis of hierarchial centers based on market areas for industrial firms. Vance addressed wholesaling relationships and in particular exchanges between regions; he suggests that regional centers serve as exchange points between different hierarchies.

In general, the constant concept among the various sub-theories is that of a hierarchy of cities with complementary regions ranging out from each city and exchanges of materials and money flowing up and down the hierarchy into and out of each city.

Location Theory

While central place theory speaks to the distribution of settlements and the exchanges among them, it has very little to say about the actual siting of specific economic activities. Location theory has addressed these issues. It has elaborated the considerations that firms must take into account in making a decision on where, precisely, to locate. The theory emphasizes that firms locate where they can minimize costs or maximize profits on their investments. Firms must consider, among other things, the costs of (1) bringing together raw materials to a processing point--i.e., assembly costs; (2) changing the form of
these raw materials—i.e., production costs; and (3) distributing a finished product—i.e., distribution costs (Foust & de Souza 1978: 127; Hartshorne 1968: 23-27).

Assembly costs involve the grade of raw materials and transportation costs. Materials that tend to lose great bulk in processing will pull firms to locations near their source (e.g., a mine) to minimize transport costs; materials that are ubiquitous will allow firms to locate near their markets to minimize distribution costs. The latter firms are considered market oriented, while the former are resource oriented. Production costs include labor, capital, and technical and managerial skills (Foust & de Souza, 1978: 144). Labor costs per unit of output vary locationally as do interest rates on capital and the availability of managerial and technical skills. Firms must weigh these factors to arrive at a least cost/maximum profit position.

For various reasons, location decisions have tended to focus on urban areas: "Almost all economic activity (apart from agricultural and extractive industries) is carried out in or near urban centers" (Richardson 1973: 145). Agglomerative economies have been given as another reason for this centralization; this construct refers to particular savings that can be accrued by firms in close proximity to each other. Foust and de Souze (1978) classify these savings or economies in four categories.
The first category of agglomerative economies is production linkages. Firms have incentives to locate close to each other when the output of one firm is the input of another. By clustering together, distribution and assembly costs for both firms are reduced. The second category of savings is service linkages. All firms need certain repairs, spare parts, preventative maintenance, and other services. These also include financial, banking, and capital services. By itself, almost no firm is large enough to support an entire service industry, but taken together several firms can provide the demand necessary for a service sector to operate profitably. This service sector in turn promotes further agglomeration of activities in urban areas by attracting other production firms. The third agglomeration factor, according to Foust and de Souza, is market linkages, the various services provided by local firms in the process of finished product distribution. As with service sector linkages, several firms clustered together provide sufficient demand for wholesale, retail, and transportation firms that, when located in proximity to the producer, can minimize distribution costs. These marketing firms, in turn, derive advantages from proximity to the producers.

The three preceding considerations involve inter-firm linkages. Another kind of advantage, urban economies,
accrues from urban locations. These economies derive from sheer size and clustering itself. Large populations can mean large markets for goods and services. Electricity, gas, and water as well as adequate fire and police protection are available. Urban areas are also major nodes of transportation and communication networks. Furthermore, larger populations are more likely able to meet the specialized labor needs of a particular firm.

Richardson (1973: 189) summarizes all these advantages of urban locations in one sentence:

They include labor market pools, the local business consultancy and ancillary services (e.g., computer consultancies, advertising agencies, accounting and legal facilities), the proximity of supply industries, market potential economies for consumer industries (arising from spatial concentration of population), and efficiency in public services (both in regard to the level of property taxes and charges for public utilities such as electricity and water.

These are all important factors that have a dominant locational influence on many firms. Rural areas do have a few factors that have been significant historically in location decisions: the presence of raw materials and the availability of inexpensive labor. However, the myriad and ample supply of location factors in urban areas has tended to predominate in actual decisions.
Export Base Theory and Stages Theory

Two other theories relevant to growth center theory are export base theory and stages theory. Both are concerned with economic growth of a region. Export base theory deals with what have been termed region building or settlement building activities (Newman 1972: 38; Foust & de Souza 1978: 62; Walls 1975; Lloyd & Dicken 1972); it emphasizes external market relationships that various indigenous products may have. By exporting from a region, income is earned. That income is then spent and respent causing the local market to expand and stimulate other parochial activities. Ultimately, growth in a region is initiated by an increase in demand arising outside the region through export links.

Stages theory accepts the export base concept but extends it to give more of an emphasis on the dynamics of internal development as a historical process. As Newman (1972) explains, the economy of an area originally develops around an export activity such as agriculture and/or mining. Income from these exports is used to import items not produced locally, typically manufactured goods. Export income stimulates other activity within the region, and gradually the size of the local market grows enough to allow some of the previously imported products to be produced locally in the process called import-substitution.
Income previously drained out of the region in purchasing imports is then spent for local production. Eventually, suggests Newman, the volume of efficient output grows enough to permit new exports that earn additional income for the region. More sophisticated capital goods and other supplies tend to be produced within the region next, and "eventually, the area produces a well-diversified range of secondary (manufacturing) output. By this period, the relative importance of the original export basis of the economy has been severely reduced" (Newman 1972). The area launches a self-generative growth in which tertiary industries (the wholesale/retail/service sector) eventually predominate. While exports remain important, their direct income and employment effects tend to fade in comparison with those of tertiary industries.

Growth Pole Theory

Central place theory postulates a hierarchy of communities with exchanges between them and between the surrounding hinterland of each community and the community itself; the emphasis of the theory is on retail exchanges. Location theory treats the reasons why firms locate at particular points, with explanations of why they agglomerate. Export and stages theory deal with an area's economic growth.
Growth pole theory, introduced by Perroux (1950), is another view closely linked with growth center theory. The points of analysis are firms or industries and, in particular, their growth and spread effects through a hierarchy of firms. Certain industries are seen as developmentally "propelsive." Such firms are held to be large, innovative, and growing, with many complex linkages to other economic activities.

The propelsive industry is the pole of change. Its goods or services are in high demand, its managerial employees function with acumen, and its research staff allows it to introduce innovations that keep productivity at high levels. This pole of growth, in turn, benefits all the firms linked to it both directly and indirectly. It represents an expanding demand for import supplies and low cost/high quality goods or services (Hansen 1971; Brinkman 1976; Lloyd and Dicken 1972; Darwent 1969).

Growth Center Theory

Growth center theory borrows from the growth pole concept and incorporates that concept into a particular approach to development. It combines various ideas, too, of central place theory, export base and stages theory, and location theory. Berry (1969) and Hansen (1970) probably best typify this approach, though similar concepts
can be seen in the works of Myrdal (1957), Hirschman (1958), Lausen (1969), and Cameron (1970). Berry (1969) summarizes the theory:

1. Regional growth is externally induced (export-base theory).

2. Export growth translates into local growth (export-base theory).

3. Regional economic growth is a problem in the location of firms (location theory).

4. Local leadership is critical in the adjustment to external change.

5. Economic growth takes place in a matrix of urban regions through which the spatial economy is organized (central place theory).

6. Under certain conditions, large urban regions can free themselves of narrow export dependency (stage theory).

7. When economic growth is sustained over long periods, it results in progressive integration of the spatial economy.

Growth is the central attribute or mechanism of this theory. This growth is held to occur predominantly in major metropolitan areas; these are the centers of
dynamism, of self-generating growth and change: "They are centers of activity and innovation, focal points of the transport and communications networks, locations of superior accessibility at which firms can most easily reap scale economies and at which industrial complexes can obtain the economies of urbanization" (Hansen 1970). They are centers of all the economic services and fixtures that industry requires—highways, railroads, airports, finance, electricity, etc. They are also centers of social services—hospitals, schools, recreational and cultural institutions, and all other sociocultural activities that cannot operate without a critical mass of support from a large population. All of these characteristics represent inducements for large numbers of firms to locate at the center and to continue the center's self-generative growth.

Arranged away from these major growth nodes, as in the central place and growth pole theories, are secondary metropolitan areas. Growth for these smaller centers is externally induced. They specialize in providing certain functions to the larger center, and their export incomes help to drive local economic sectors. Other even smaller communities, in turn, are further specialized to serve the secondary centers. There is a hierarchy of nested communities; the largest centers dominate and order the economic activities of the "lesser" communities.
Diversity, self-growth, independence, or as Berry (1969) calls it "closure," are greatest at the top; specialization, dependence, and Berry's "openness" are greatest at the bottom. Primary activities such as agriculture and mining are most prevalent at the bottom; secondary and tertiary activities are commonest at the top. The dynamism and growth at the top also make for many job opportunities that draw population and labor up the hierarchy.

While materials, labor, and population move up these hierarchies, and export incomes down, industries filter down also. The propelsive innovative firms are typically capital intensive and require highly skilled labor in their sophisticated enterprises; their workers are highly productive and labor is able to garner a high wage. Older firms with more dated capital equipment are relatively more labor intensive and have higher wage bills because they must compete in area where high-wage labor is the norm. Very often these older firms will move out of the center and down the hierarchy to locations where less specialized, lower skilled, and lower wage labor can be found. These new arrivals in smaller communities have many of the same effects upon a local region as export income. They tend to drive the local economic sector through linkage, agglomeration, and spending and respending patterns. They are also likely to represent additional export income for
the region to the extent the firms retain their old market
to the extent the firms retain their old market
to the extent the firms retain their old market relationships. Although their capital equipment is out-
dated on the terms of the top centers, they often represent
an uplifting of labor productivity in smaller centers; with
the higher productivity that increased mechanization
allows laborers move up pay scales and a gradual upgrading
of the region results.

So far this discussion has centered on inter-city
connections. However, there are two major elements in
this growth-center organization of economic space:

(a) a system of cities, arranged in a hierarchy
    according to the functions performed by each,
    and

(b) corresponding areas of urban influence surround-
    ing each of the cities in the system (Berry
    1969: 17).

These fields of urban influence, or hinterlands, bear much
the same relationship to their complementary centers as
smaller centers do to larger centers. Labor, population,
and materials move into the center; export income and older
industries diffuse out. Commuter incomes from city may
also flow out to the hinterland. Berry (1969) suggests
that various urban services also spill out. Such services
include health, education, transportation, and various
other public facilities. Some authors suggest (Hansen
1970; Berry 1967; Lloyd and Dicken 1972) that the movement of population itself into centers has positive impacts on the hinterland by reducing the number of excess laborers available and thereby pushing local wage rates upward.

Growth center theory generally holds that with sustained economic growth there is a progressive uplifting and integration of the rural into the metropolitan hierarchial system. Medium-sized centers can themselves climb out of a specialized role by continuing to acquire new export bases and by following the process of import substitution into later stages of development. Eventually and gradually, "growth impulses and economic advancement should 'trickle down' to smaller places and ultimately infuse dynamism into even the most tradition-bound peripheries" (Berry 1969: 20). This process of uplifting and integration may occur very slowly, especially for certain remote underdeveloped regions. To address the slowness of the process, growth center theory takes a particular amelioristic bent (Brinkman 1976; Berry 1967, 1969; Hansen 1970).

Ameliorism of Growth Center Theory

Many areas have been and remain depressed because of some combination of isolation from urban influences, a past export specialization that collapsed in the face of changing demand, and the sheer outflux of population and
resources to a degree that very little remained to provide a base for even the most minimal of services. At the extreme, some areas are "troughs of economic backwardness [that] lie in the most inaccessible areas along the peripheries between the least accessible lower-level centers in the hierarchy" (Berry 1969; Friedman 1960; Hansen 1971). For whatever reasons, these areas lack sufficient links to the urban system to allow growth effects to diffuse into them.

Policy extensions of growth center theory to alleviate some of these problems are oriented toward "attempts to use what appears to be natural socioeconomic forces toward the fulfillment of a generally acceptable policy of area development" (Lloyd and Dicken 1972). Such a strategy calls for inducing growth processes that would speed and/or heighten diffusion effects "but in the direction of movement rather than counter to" (Berry 1969).

Growth center theorists hold that a large share of the efforts to induce development needs to focus on centers (Berry 1969; Hansen 1971, 1970, 1965; Darwent 1969; Lloyd and Dicken 1972). Investments at the center increase diffusion effects, which include more job opportunities in the centers for rural-to-urban migrants. Periphery investments should be thought of in terms of how best to enable people to adjust to and integrate into the urban system.
Economic efforts in the periphery include industrial park development, sewers, and water lines, but in particular highway development to emphasize center-hinterland links directly by facilitating the movement of labor and materials. Social investments in the periphery involve educational and training programs for rural people to produce skills appropriate for urban jobs. Hansen (1970) emphasizes that such training provides residents with a choice of living places.

Another way to emphasize links is the development of export activities that definitionally bring export income into a peripheral area. Export sectors with an "initial kick" or a propulsive effect for the region would be stressed in this view (Lloyd and Dicken 1972; Perroux 1950); the appropriate sector would have a large output and large multiplier effects.

Growth center theory obviously falls within an economic orientation. It represents a view of development that is, in some sense, an eclectic crystallization of various economic views. In certain respects it appears to embrace assumptions of realism and physicalism. A growth center, physicalist in nature, seems to coerce and shape individuals and the landscape on its own accord. However—given its economic basis—the view is a moderate nominalist position as well as idealist. It is a moderate
nominalism in that while growth centers may be treated "as if" they are emergent and realistic; ultimately they are seen as determined by individual needs (in aggregation) and not the reverse. Further it is actual physical phenomena that are not seen as causally determinant but ultimately ideas variously articulated in preferences.

For analytical purposes aggregations are made. Markets/growth centers are treated as self-existent phenomena with their own dynamics and movements—but not as emergent dynamic phenomena. As a view of development, the orientation involves around concepts of gradual adjusting and equilibrating changes between various demand and supply factors. These conceptions are contained within the several constituent development theories—such as central place, export base, stages and growth pole views. Peripheral areas in a societal sense are seen in disequilibrium with the center and require certain amelioristic interventions to better integrate them with the larger society. Urban areas are seen as dynamic centers of change and differentiation that can further economic progress and development. In a moderate nominalist sense they cause development and if properly integrated can lift up and infuse dynamism into peripheries.
Summary

There are certain fundamental assumption sets that underlie functional-consensus views of reality. These assumptions serve as conceptual lenses that frame "readings" of social phenomena. They are the parametric prescriptions through which the content of social reality is seen and interpreted. Four assumptions, in general, prescribe this view though several are inter-related and relevant.

One of these assumptions is social idealism. Ultimately the primal causal force held to be underlying social structure and social change lies in the realm of ideas. These ideas may take shape in the form of collective conscience, consensus, social values, social goals, and economic preferences. The idealist assumption may be fairly implicit in more moderate nominalist forms of the view such as exist in economics, and quite explicit in discussions of values and ideational cultures. The second assumption is more an inconsistency, or a disjuncture in the view than a specific concrete position. It refers to the nominalist/realist disjuncture. Is society a consensual, additive whole or an emergent whole greater than and subordinating of the sum of individuals that compose it? This tension is an inconsistency and an eclecticism within
the view. However little violence is done to the perspective in terms of conceptual consistency. Paradigmatic dualisms are often resolved with similar explanatory concepts among various works: there are individual needs in aggregate via consensus, and there are societal requisites emergent and personified. Individuals are held to act from ideas and society is held to act from ideas. Individuals act and society acts or adjusts or corrects in a cause-effect logic. Cause-effect is itself a third assumption of the view. Its importance will be made clearer in the next chapter. Basically, from this position the world is seen as composed of separate entities connected in external cause-effect relationships. Individuals may cause events and/or society may cause events but their respective existence is held separate and immutable. A fourth assumption concerns change and equilibrium. Social change is seen as gradual equilibrating, cumulative change that is societally adaptive and/or (individually) mutually adjusting. Change is seen as a series of disequilibriums/re-equilibriums that increase societal complexity and adaptive stability. Societal dualisms and concepts of equilibrating rural-urban linkages tend to be contained within these assumptions.
CHAPTER III

A DIALECTICAL HISTORICAL MATERIALIST WORLD VIEW

Organizing views of a dialectical-historical-materialist perspective come from the philosophy of internal relations (Ollman, 1975: 27-43), which involves concepts of dialectical relations. A dialectical view holds that objects or people cannot be understood as discrete categorical entities that effect and are affected by other entities in a cause-effect sense. Rather ontological "things" can be understood only as defined by and presupposed by their connections with other "things." For example, the sun and a plant appear to be separate physical objects, but in a relational sense one presupposes the other's existence.

The sun...is the object of the plant--an indispensable object of it confirming its life--just as the plant is an object of the sun, being an expression of the life awakening power of the sun, of the sun's objective essential power. The sun's effect on the plant, which most of us are inclined to treat causally, is considered ...to be an 'expression' of the sun itself, a means by which it manifests what it is and, in this way, part of it

(Ollman 1975: 29).
Boguslaw and Vickers (1978: 180) in a simpler way express this sense of inner connection, mutual expression, or presupposition. They state:

We know that acorns and oak trees are different things, but an acorn can become an oak tree. A river and an ocean are different things but a river may flow into an ocean. A human fetus and a person are different things, but a fetus can become a person. At what point does an acorn become a tree? At what point does a river become an ocean? At what point does a fetus become a person?

There is a presupposition that one entity is an expression of the other.

Beyond this notion of inner connection, the philosophy of internal relations involves certain other concepts summarized by Sherman and Woods (1979: 395-398): 1) interconnection of opposites as well as objects in a more general sense, 2) change, and 3) quantitative and qualitative change. Marx (1964) refers to these concepts as dialectical laws of motion as does Ollman (1975).

Basically this view of reality holds that "entities" are inter-connected in contradictory relations. That "contradiction" is not to be interpreted as logical contradiction but rather an inter-penetration of polar opposites, a connection of opposing forces. Lennie (1978: 134) provides an example of a contradictory relation in nature.
When introduced in the body, antigens... set up a defensive reaction in the body which, as a result produces, or tends to produce, anti-bodies. The anti-bodies and the antigens act so as to tend to nullify each other. They are thus opposite aspects of a contradiction. At the same time there is a unity of opposites in that antigens only continue to exist in virtue of the body (as energy source, etc.) and the body's anti-bodies only exist in virtue of the presence of the disease agents.

In a social context examples of contradiction would include struggles between slaves and slaveowners, debtors and creditors, or workers and capitalists.

In addition to connection and opposition, dialectical views include change. Connected entities resolve their opposition in "movement." An additional assumption of this sense of change is that such movement is at first quantitative and ultimately qualitative:

All change is, first and foremost, a change of degree or quantity, but at a certain point, the accumulation of quantitative changes leads to the emergence of new qualities. According to [a dialectical perspective] the only way in which new qualities emerge is from quantitative changes


To illustrate, "Marx declares that this law provides the basis for the molecular theory in chemistry where the addition of atoms to a molecule, one by one, produces successively different compounds" (Ollman 1975: 55).
Water can be seen as exhibiting this quantitative/qualitative nature with varying temperatures. Steam is not simply a hot liquid nor ice a cold gas; the qualitative difference in these states is related to quantitative collisions among molecules as heat is varied. Or, as Marx remarked, "the emergence of Homo sapiens as a species resulted from quantitative changes in apes, but human beings are not simply bigger and better apes" (Boguslaw and Vickers 1978: 187).

"Above all else", says Ollman (1975: 52), the "dialectic is a way of viewing things." It is a view of the world based in concepts that entities are connected in certain contradictory relations. These relations result in change and movement that ultimately crystallize in qualitatively new states of existence.

Selected Distinctions From
A Functional-Consensus World View

The functional-consensus world view described in Chapter II tends to revolve around the formal Aristotelian logic of cause and effect. Formal logic is based on certain axioms that include the contention that A is equal to A and A is not equal to non-A. According to Gurly (1978) and to Boguslaw and Vickers (1978), this logic tends to freeze
views of reality into fixed categories. Things or events are seen as discrete and separate, as having attributes that are intrinsic to them. The focus tends to be on what a thing is, rather than on processes of becoming (Zeitlien 1967). Connections and change are seen in terms of causes and effects, but if the connections are removed, entities and attributes would still—according to this non-dialectical viewpoint—exist.

Moreover, the perception of change in cause-effect logic is generally set in terms of a quantitative gradual process. The object of change maintains its essential identity as it is gradually and cumulatively altered in a continuous fashion. This is strikingly distinct from dialectical change, in which an entity is seen as "capable of turning into something new by the unfolding of...itself to something new" (Gurly 1978).

Boguslaw and Vickers (1978) and Sherman and Woods (1979) furthermore suggest that when dialectical concepts are applied to views of social organization, they imply a degree of historical specificity because social change is not seen as a series of continuous changes, but rather as a number of qualitative leaps. This historical specificity tends to prohibit the levels of abstraction contained within the functional-consensus view:
differences between slave society and feudal society or between feudal society and modern capitalism, are not simply quantitative differences. The institutions, power relations, and laws characterizing feudal society were not simply larger versions of those typical of slave society, nor are the institutions, power relations, and laws characteristic of modern capitalist societies simply larger versions of those typical of feudalism. Relation between masters and slaves are different from relations between nobles and serfs, and the latter are different from relations between owners and workers (Boguslaw and Vickers 1978: 180).

The importance of qualitative differences tends to build into the dialectical view a certain degree of historical specificity; views of social reality then are termed historical dialectics.

Dialectical Historical Materialism

Materialism

One other assumption of the dialectical perspective needs to be discussed here: materialism, says Archer (1978: 81) "is the theory that the practices by which people produce their material means of life, economic practices, determine the limits within which all other social practices and, through them, forms of consciousness, can vary." This standpoint does not suggest that economic
structure determines all structures of society or that all structures arise from the economic. Rather the dialectical-historical-materialist view of reality holds that economic structure sets limits within which other structures may vary. There is an irreducible autonomy but it is a relative autonomy. Nevertheless, the emphasis of the view falls on economic relations because of their perceived fundamental importance relative to other structures of society:

In the social production which men carry on as they enter into definite relations that are indispensable and independent of their will, these relations of production correspond to a definite stage of development of their material powers of production. The totality of these relations of production constitute the economic structure of society—the real foundation, on which legal and political superstructures arise and to which definite forms of social consciousness correspond. The mode of production of material life determines the general character of the social, political, and intellectual processes of life. It is not the consciousness of men that determines their being, but, on the contrary, their social being determines their consciousness.

(Marx 1970).

Marx argues, contrary to social idealists, that the determinant force of social organization is the relations that individuals enter into with other individuals, (in order to appropriate material). It is not, Marx says, ideas, values, consciousness, collective conscience or culture that determines social organization.
The mode of production of society or its economic base "is comprised of nothing more or less than human beings, nature, and the interactions [between humans and nature]" (Sherman and Woods 1979: 283). There are two specific and fundamentally important interactions to be discussed here. First are the dialectical relations between individuals and nature whereby the means of material existence are appropriated; these are often termed the technical relations of production or the forces of production: "The notion of productive forces designates the set of factors of production, resources, tools, men, [and other means of material production] characterizing a determined society at a determined epoch which must be combined in a specific way to produce the material goods necessary to that society" (Godelier 1975). These forces of production are used to appropriate necessary materials from nature for survival and reproduction, and in fact are in part a consequence of a contradiction between man and nature. Individuals seek to satisfy their needs by appropriating nature, but material nature limits, restricts, and precludes the complete satisfaction of human desires and activities. However, within these limits the individual acts upon nature. He or she becomes more through the realization of
needs, and nature in turn becomes more through human acts upon it. The synthesis of this process is the development of the forces of production—e.g., hunting and gathering, agriculture, technology, equipment, industry, the division of labor, and overall organization. The forces of production represent the crystallization of the appropriation dialectic.

The second fundamental interaction is the mode of production. As humans seek to resolve the appropriation contradiction, they enter relationships of authority, ownership, control, and/or cooperation with other individuals. As with the relations of appropriation, the social relations of production exist in determined societies at a determined epoch. For example, "in slave societies, the principal social relations are between master and slave; in feudal society, between lord and serf; and in capitalist society, the principal ones are between employer and employee" (Boguslaw and Vickers 1978: 184).

Social relations of production (the mode of production) shape and limit how appropriation occurs. In a slave society the forces of production will develop within the limits of master/slave social relations, and conceptually similar limits of social relations upon the forces of production will operate in feudal, capitalist, and communal societies.
Quantitative and Qualitative Change

In the dialectical-historical-materialist perspective, the social and technical relations of production "shape most of the other characteristics of any society" (Boguslaw and Vickers 1978: 73). Godelier (1972) suggests that the social relations of production are the defining and original relations of any mode of production. They are the constant definitional relations that exist from a society's inception to its dissolution. When these relations are antagonistic (dialectical) they are referred to as class relations; Althusser and Balibar (1977) and Castells (1979) call them relations of expropriation. Class relations define an individual's position vis-a-vis the means of production. The relation is asymmetrical in that the dominant class—master, lord, or capitalist—controls the means of material production. The subordinate class—slave, serf, or worker—has no independent access to the means of production and depends on the dominant class for its material existence. It must employ the means of production of the superordinate class to reproduce itself. The dominant class is in a position to exploit the subordinate, to expropriate production and retain for themselves any surplus that labor produces beyond its own needs of existence.
However, this social relation of production is in contradiction; opposition exists and struggle occurs. The dominant class seeks to maintain and reproduce its preferred position; the subordinate class struggles to change it. As a consequence the development of the forces of production (the process of the appropriation of nature) tends to reflect this struggle. The forces developed serve dominant class interests but the character of this development presupposes a challenging class seeking to ultimately destroy the superordinate/subordinate relation. "Society," says Lennie (1978: 133), "develops through the efforts of one class to dominate the other, and the efforts of the other class to free itself from this domination." Gradual quantitative changes in the forces of production are driven by class struggle, but these changes tend to reproduce the superordinate/subordinate relation. The dominant class is able to shape development to serve its class interests and to continue to expropriate labor's product.

Ultimately, however, the accumulation of quantitative changes comes into contradiction with the relations of production:

eventually the further development of material production, necessary for the continued existence of a given society, becomes incompatible with the class basis on which it is developed. The material conditions are thus laid down for the overthrow of the dominant class and the
development of production on the basis of new relations of production.... This contradiction between the forces and relations of production is the principal...contradiction through with social change [is assumed to occur]

(Lennie 1978: 133).

A qualitative dissolution of the existing mode of production and its class relations brings forth a new mode that will contain an appropriation relation and social relations of production more concordant (although the process continues in dialectical fashion).

This section on modes of production has been framed on certain philosophical assumptions of a world view based on dialectics. Dialectical views of reality tend to predispose conceptual positions to a certain degree of historical specificity. Recall, for example, that Godelier's (1978) definition of "forces of production" included the qualifiers "in a determined society at a determined epoch." This world view also makes a materialist assumption; social organization is held to be fundamentally constructed around actual human beings living in certain social, material, and productive relationships. These relationships are seen as determining other social institutions and ideas.
Nominalism/Realism Issues

The individual is seen as a social animal in the dialectical view and cannot be understood as a nominalistic actor. Marx held that the individual was social for various reasons:

1) s/he is descended from group living creatures
2) s/he has a heterosexual procreative impulse
3) s/he needs companionship and [most important for purposes here]
4) s/he requires association or cooperation for his/her sustenance. Production cannot occur singlehandedly. It must involve association or cooperation. Thus, individuals must come to have definite connections and relations with one another and only within these social connections and relations does their action in nature, their production, take place

(Ollman 1975).

The individual, in this perspective, cannot be understood in terms of nominalistic cause-effect terms. Rather the individual, as a social being, must be understood in terms of dialectical social (and material) relationships. To abstract out "society" as existing separately from the individual and having certain causes and effects does not make sense in a dialectical view. One's focus is instead on internal social connections, contradictions, resolutions,
and change. The social is real in that it is more than the
discrete individuals that compose it, but it is a dialec-
tical realism, constantly transcending itself and develop-
ing out of itself (Ollman 1975).

What is important for purposes here is that the
dialectical view finds it inconsistent to abstract out an
individual or a society, to focus on their attributes as
intrinsic to them, or to analyze their cause/effect rela-
tions. Rather the focus from the dialectic view is on
relations—opposing relations—and how they resolve them-
selves to yield change.

The Capitalist Mode of Production

Commodity Relations

Under the capitalist mode of production relation
between people—though not specific to capitalism—is the
commodity relation. People produce materials for exchange.

Commodities are containers for two values; 1) use
values—the satisfaction individuals derive from consump-
tion of commodities and 2) exchange values—the quantita-
tive value products have when exchanged. Marx (1967) sug-
gested that commodities could only be exchanged on the
basis of some cross-commodity standard. He maintained that
the common quality of commodities is its labor basis of
existence. Commodities are held to come into existence only with the expenditure of labor, because "utility is based on individual attitudes [preferences] and desires and does not provide a common objective standard by which the values of commodities generally can be compared" (Eaton 1966: 26).

The exchange value of commodities is therefore determined by the amount of labor-time "required to produce an article under normal conditions of production and with the average degree of skill and intensity prevalent at the time" (Marx 1977: 39). All commodities are held to exchange on this basis, including labor power. Labor power, under the capitalist mode of production, is a commodity.

(It is important to note here that in this view of reality wages are the price of labor power and not labor time. Labor time is the common content of commodities and is equivalent to its exchange value. To suggest that wages are the price of labor time is to suggest that labor time is the price of labor time. Rather wages are held to be the price, the exchange value of labor power. It is the amount of labor time required to produce labor power. This would include therefore the price of such commodities as food, clothing, shelter, education and training. Capitalists buy and workers sell the capacity to labor—the capacity to work for temporary periods of time.)
The Exploitation of Labor

The original and defining contradiction under the capitalist made of production is the capital-labor relation (Godelier 1972). This contradiction represents social relations of production as defined earlier, and capitalist expropriation of exchange value from labor is held to be intrinsic to the production process.

The capitalist production process is represented below (from Eaton 1966):

```
<table>
<thead>
<tr>
<th>Variable Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>(wages)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>M --------------- C ---------------- P ------------- C1 --------- M1</td>
</tr>
<tr>
<td>(Money) (Commodities) (The Process (New Commodi- (More</td>
</tr>
<tr>
<td>of production) fash- money)</td>
</tr>
<tr>
<td>ioned in the process of production)</td>
</tr>
<tr>
<td>Constant Capital</td>
</tr>
<tr>
<td>(raw materials,</td>
</tr>
<tr>
<td>machinery</td>
</tr>
<tr>
<td>buildings)</td>
</tr>
</tbody>
</table>
```

Figure 3. Capitalist Production Process

Capitalists begin production with a quantity of money with which they purchase the means of production--machinery, tools, buildings, fuel, and various other inputs. The capitalist must also buy raw materials and labor power. Labor is set to work utilizing the means of production to
produce new commodities from the raw materials. These new commodities are then sold on the market.

If all commodities exchange on the basis of the labor time they contain, there seems to be no room for exploitation in this process: "The capitalist must buy his commodities at their [exchange] value, must sell them at their [exchange] value, and yet at the end of the process must withdraw more value from circulation than he threw into it at the starting" (Boguslaw and Vickers 1977: 74). The secret of exploitation is that variable capital--i.e. labor--produces more value than it costs to call it forth to production. The price of labor power is the socially necessary labor time to produce--i.e. the price of food, clothing, shelter, etc. To the extent that labor produces more than this subsistence value it places in the hands of capitalists this excess amount, called "surplus value" (Marx 1967, Eaton 1966). Raw materials, factories, tools, and fuel are constant capital because their value passes into the produced commodity unchanged. Wages are variable capital because they represent investments by capitalists that increase in value. Wages of labor pass into the new commodity but so does the new value produced. Capital expanded on wages grows.

Capitalists by virtue of ownership and control of the means of production are able to expropriate surplus value.
Laborers, by virtue of having no independent access to the means of production, must produce this value to reproduce themselves. However, this relation is a dialectical struggle. Each is united under a determinant mode of production, and each presupposes the other's existence, but the relation is also one of mutual opposition. Labor struggles with capitalists for possession of the surplus. It organizes, it strikes, it socially redefines the costs of its reproduction. Capitalists seek to minimize wages paid. Yet as long as labor as a class is only able to retain enough value to reproduce itself (to purchase its means of subsistence) it can never free itself by monetary means from the labor/capital contradiction. It is only in ending the relation that labor prevails.

The Development of the Forces of Production

Capitalists cannot merely consume the surplus produced and still remain capitalists. They must structure their appropriation of nature in a way to reproduce the capital/labor relation. They must continue to purchase raw materials, labor power, and all the constituents of the means of production, as well as sell their product on the market.

This process goes on in an environment of commodity relations. People relate to each other on the basis of
exchange, as buyers and sellers, in a competitive relation where buyers struggle with buyers, sellers with sellers, and buyers with sellers for exchange value. Capitalists must struggle with other capitalists to purchase their inputs, to sell their output, and ultimately to reproduce the capital/labor relation. To do otherwise is to lose position vis-a-vis production and join the ranks of labor. Not only are capitalists able to expropriate value from labor because of their superordinate position, but they must do so in confrontation with other capitalists.

Capitalists gain advantage over other capitalists by accumulating relatively more surplus value. More surplus translates into greater investment potential, and the undercutting and squeezing out of competitors. Because the source of surplus value is labor's production, the incentive is forged for labor repression and exploitation. The system becomes historically set. In the face of capitalist competition, and the need to reproduce the capital/labor relation, production becomes production to protect capitalist class interests. The appropriation of nature and the forces of production develop through this dialectical process. The expropriation of the surplus, and the investments and re-investments that must occur, shape the character of the appropriation of nature and slowly, quantitatively develop the forces of production.
Laws of Tendency Under the Capitalist Mode of Production

Marx's purpose in his mammoth works on the capitalist mode of production was to discover the economic laws of motion of modern society, or more correctly, its laws of tendency (MacQuaire 1978). Two laws are usually cited: 1) the law of increasing firm size and 2) the law of increasing immiseration, often called the law of uneven development (dos Santos 1973, Hill 1975, Buttel and Flinn 1977). These two laws are polar aspects of the single process of capital accumulation. One presupposes the other: "Accumulation of wealth at one pole is, therefore, at the same time accumulation of misery, agony, or toil—mental degradation, at the opposite pole" (Marx 1967: 644-5).

Capitalists, in their attempt to reproduce their class position must extract increasingly more surplus value from labor's production. Competition among capitalists demands it. They may do this in the following ways:

1) by extending the working day without increasing wages
2) by reducing wages without reducing the working day or output
3) by increasing output per hour either by a) forcing the worker to work harder per hour for the same wage, or b) by improving methods of production (Eaton 1966: 75).
"Improving methods of production" perhaps has the greater consequences. It involves heaping the expropriation on fewer and fewer workers through mechanization. Mechanization, or capital intensity, allows firms to substitute constant capital for variable capital, to displace labor power. They are able to put more commodities on the market with less contained labor time than competitors, and to realize greater profits.

When competitors innovate, the rate of profit per item moves downward because each commodity contains less labor time than it did before innovation (although total profits may be higher because larger masses of commodities are produced). This effect on profit rates drives capitalists to innovate further and the process continues. There is a gradual quantitative concentration of capital in firms. Eventually it is "hopeless for capitals below a certain size to compete. Small capitals will be crushed" (Eaton 1966). There is a concentration and centralization of capital (value) in larger and larger firms, and as a consequence, in the capitalist class.

The obverse of this process of increasing firm size is the increasing displacement of labor power and growth of unemployment. As capital intensity increases, labor power becomes more and more redundant in the production process and laborers are discharged. One process
presupposes the other in the capital/labor relation.

(When firms reach oligopolistic size and continue to innovate, their products—as under competitive capitalism—contain less labor time. However, prices will fail to drop since there is effective exclusion of competition. Prices remain high and inflated, and concurrent displacement of labor brings the combination of high unemployment and inflation.)

Fundamental Barriers to the Reproduction of the Capital/Labor Relation

Of certain inherent barriers to the reproduction of the capital/labor relation and the capitalist mode of production, the most fundamental is the contradiction between the forces of production and the relations of production (Godelier 1972). The simultaneous concentration/centralization of wealth in the capitalist class and displacement and impoverishment of the labor class are quantitative consequences of the capital/labor contradiction. They express the character of the appropriation of nature within the limits set by the social relations of production.

Crises occur in this appropriation. The capitalist class can only realize the value contained in its commodities through sale on the market, but simultaneously it seeks to depress the amount of wages paid for labor power.
Yet "everywhere the very masses whom it exploits to gain its profit have become the main market to whom it seeks to sell its products" (Eaton 1966: 99), and increasingly impoverished workers are unable to purchase all the commodities placed on the market. A realization crisis results. Capitalists individually and as a class must find ways out of this crisis in order reproduce the capital/labor relation. To the extent that they are able to "slip around" these barriers they make quantitative changes in the capitalist mode of production. To the extent that they are unable to reproduce the social relations of production they must join the ranks of labor on an individual basis or face qualitative change in the wage-profit relation on a societal basis.

Resolution of this contradiction becomes increasingly difficult as accumulation of value and wealth within the capitalist class continues. As rising numbers of workers become impoverished their worsening material conditions tend to forge and unify consciousness of their position as a class vis-a-vis production. The forces of production and social relations of production take on an increasingly sharp distinction from and opposition to each other. Ultimately capitalists' inability to reproduce themselves and labor's consciousness of its condition results in a revolutionary and qualitative change in the relations of production.
The contradiction between the forces and relations of production is the fundamental dialectical relation of change under capitalism (Godelier 1972); cumulative quantitative changes lead to qualitative change.

However, as hinted earlier, there are various ways that capitalists can "slip around" the barriers, take the capitalist mode of production to a higher quantitative level of accumulation, and avoid qualitative change for a time. These counteractions can include, according to Harvey (1975: 11):

1) taking capitalist production into new spheres of activity--transforming peasant subsistence agriculture into corporate farming, or developing new specialist businesses, for instance

2) creating new social wants and needs and developing new product lines

3) encouraging the growth of population at a rate consistent with long-run accumulation

4) expanding geographically into new regions, increasing foreign trade, and exporting capital.

Other and more complete discussions of each of these points can be found in Eaton (1966: 168-169), Marx (1967: 232-240), and Hill (1975). The foregoing presentation represents the historical materialist view of the capitalist view of the capitalist mode of production. This presentation was based on works by Eaton (1966), Godelier (1972a, 1972b, 1978),

Attention here will now focus on the last "counter-action" listed above. This point deals with imperialistic relations between regions, and its implications for rural-urban linkages from a historical materialist perspective. Frank (1969), Baran (1957), Fanon (1967), Magdoff (1970), O'Connor (1970), Mandel (1976), Lenin (1963) and others have examined various facets of imperialism, dependency, and/or rural-urban relations in a context of dependency, but many treatments of the subject are historical rather than theoretical in nature; an "orthodox" view, in a coherent philosophical sense, is not really available in this varied literature. Perspectives on imperialism and dependency are conceptual extensions of historical materialism, but the body of work is quite varied and at times inconsistent.

Imperialism/Dependency Views of Rural-Urban Linkages

In the historical-materialist world view, imperialism is the forging of economic links between geographic centers of relatively high capital accumulation and geographic regions of "under-development," with under-development defined in terms of the degree of sophistication of the
forces of production. These economic links are devised, it is said, in order to slip around the barriers to capital accumulation and reproduction of the capital/labor relation (Harvey 1973), O'Connor 1971).

Concepts of dependency are in turn seen as the effects of imperialism within under-developed region; effects within a region are shaped, in this view, by imperialistic relationships with the "outside." The dependent region is held to become conditioned by and ordered by the needs of the external imperialistic region.

The terms imperialism and dependency tend to presuppose each other in a single inter-related process. Imperialistic links are seen as ties between regions that result in the furthering of "development" of one region and "underdevelopment" in another in an asymmetrical relation "between social formations of such a kind that the structural organization of one of them has no logic outside its position in the general system" (Castells 1979: 19).

Underlying Causal Dynamics

In the capitalist mode of production, say theories of imperialism, the development of the forces of production is spatially concentrated in urban centers. Commodities are not only produced; they must be sold too. The period between time of production and time of consumption is termed circulation time (Marx 1967b: 248-256), and the
longer this period is, the longer it takes to re-invest profits. Value is locked up in commodities. To the extent that firms can locate near one another they can minimize this circulation time and quicken their turnover of capital. They must do this in the face of competition. Hence the forces of production become concentrated in geographic space in urban regions. Transportation and communication facilities develop in part to minimize this time as well. Other input and output "feeders" also concentrate and centralize. Cities develop as spatial articulations of the forces of production. They "house the working class, are the markets for the commodities produced, and are the 'nerve centers' for the coordination of the complex production and circulation activities of a capitalist society" (Buttel and Flinn 1977: 265; see also Hill 1975 and Harvey 1975).

Barriers to continued expropriation of surplus value, as specified earlier, demand that capitalists find ways to circumvent the barriers and reproduce the capital/labor relation. One way is to expand geographically and develop imperialistic relationships. Among the various sorts of imperialisms described in the literature are 1) raw material imperialism, 2) commodity market imperialism, and 3) production-labor imperialism (see Polloix 1974; Rhodes et al. 1970; de Janvry 1978).
Raw Material Imperialism

The continuing quantitative expansion of capital accumulation requires an expanding source of raw materials. Most materials may be obtained within the urban region from input suppliers. However, primary raw materials must be sought where they exist in nature, and previous capital development may preclude their extraction in urban areas. If so, capitalists must expand spatially into a periphery to appropriate nature. The purpose of expansion is to further accumulation in the center, not to "develop" the periphery. Extraction of materials allow urban capitalists to continue producing, to continue extracting surplus value, and to maintain their position vis-a-vis production.

The peripheral area's specialization in the export of raw materials results, for the periphery, in a simplistic economy with few spin-off or input-output effects. This kind of export specialization in the 'developing' region results predominantly in resource depletion; in Galtung's (1971) words, "there is little left but a hole in the ground." Raw materials imported into the developed sector are processed, reprocessed, and integrated into products of the urban center, where they help insure the reproduction of the capital/labor relation of the center and the continued concentration and centralization of capital in that region.
Nevertheless, the materials do not move themselves on their own. Labor is required to appropriate them from nature, and this labor must be paid for its labor power in order to reproduce itself. This exchange value is spent in the peripheral community for various labor reproducing activities—e.g. construction, food, retail, wholesale, and financial activities. Furthermore, most economic production no matter how primary, requires some sort of service sector. There are, in short, some spin-off effects in peripheral areas because of the export of raw materials, but these few spin-offs pale in comparison to the complex interdependencies in urban areas that import those materials.

Under raw material imperialism, peripheral activities tend to be few in number and highly dependent on the export sector. The forces of production develop in an uneven manner and serve, ultimately, the capitalist class of the urban center. Moreover, to the extent that urban capitalists own the raw materials in the periphery—rather than purchasing them from peripheral capitalists—surplus value is extracted directly from peripheral labor and centralized in the urban region in the form of repatriated profits (Webb and Lewis 1974).

Other effects and consequences are held to exist because of raw material imperialism. Raw materials must
be physically moved and time must be expended in moving them. Certain transportational development—highways, railroads, and electric transmission lines—arise to connect the resource areas to the urban region. This infrastructure speeds the transit of raw materials and therefore reduces circulation time. There is also an actual transportation cost of moving the material; transportational developments can reduce these costs as well.

In this view of rural-urban linkages, raw material imperialism is a shape of appropriation resulting from the expansionary dynamics of the capitalist system. It is an expansion of the production mechanisms spatially and a quantitative development in the forces of production. Capitalist development in the periphery, from this position, is a supportive development that facilitates the movement of materials outward. The simplicity of the peripheral economy is presupposed by the expansion. Mechanisms to lift coal out of a mine are not developed beyond that purpose; mechanisms to move materials to an urban region are not developed beyond that purpose.

**Commodity Imperialism**

One barrier to continued reproduction of the capital/labor relation is lack of a market to absorb the increasing quantities of commodities produced (Harvey 1975). The very
nature of production—the creation of exchange value by laborers—and the payment of only part of that value to labor, builds crises into the production process. The value contained in commodities cannot be realized if effective demand is lacking to purchase them. This barrier rises higher as more and more labor power is displaced while capital intensive production increases. Geographic expansion by firms is a way around this barrier too. Raw material imperialism deals with production barriers; commodity imperialism deals with market realization and under-consumption.

In this view, rural-urban linkages provide outlets for surplus commodities. Peripheries are seen as markets for realization of surplus value; realization releases exchange value from its commodity form and allows it to be re-invested. Again, as with raw material imperialism, these linkages are seen as serving the interest of the capitalist class in urban regions.

Flooding of peripheral areas with mass produced urban goods tends to destroy competitive peripheral capitalists where they exist. Urban firms are able to produce commodities with less labor time than rural capitalists; survival in an urban region of capital intensity demands this. They are therefore able to undercut prices of equivalent commodities produced in the periphery, and to drive
rural firms out of business. The development of transportation infrastructure furthers this process by reducing shipping costs.

In the peripheral region, a second effect of commodity imperialism is unequal exchange (Dix 1970, Malizia 1973, Emmanuel 1972, Galtung 1971, Mandel 1976). While the peripheral economy becomes ever more specialized in raw material exports as indigenous capitalists lose out to urban competitors, urban regions become ever more complex locations of industrial production; material exchanges between urban and rural areas increasingly involve high cost manufactured goods being traded for inexpensive raw materials. Furthermore, because peripheral economies are so simplified, large quantities of commodities must be imported. As an area of consumption they are dependent on urban commodities.

As with raw material imperialism, commodity imperialism represents a combined and uneven process. Urban growth and development are enhanced while peripheral development is slow or stagnant. The periphery provides "fresh room" for capitalist accumulation and for reproduction of the capital/labor relation (Harvey 1975). Peripheral development is mainly a conduit for capitalist accumulation in the urban center.
Production-Labor Imperialism

Production-labor imperialism refers to the establishment of production facilities by urban firms within peripheries, where the level of development of the forces of production is low, the demand for labor-power is weak, wages are low, and skills are low. Peripheral labor power is seen as a reserve army of surplus labor that can feed the expansion of production. It represents an escape from barriers to accumulation for certain firms.

Recall that the rate of expropriation of surplus value may increased by a general choice between directly increasing the exploitation of all workers employed (reducing real wages in various ways) or heaping the exploitation on fewer workers by mechanization and displacement. Historically most firms have moved toward improvement in the methods of production--i.e., capital intensity. Greater expropriation has been heaped on fewer workers as a necessity in the face of capitalist competition. Methods that raise exploitation of all workers (e.g., extending the working day without increasing wages) are more openly exploitive and usually bring greater disruptions through class struggle (Hill 1975, Eaton 1966). Capital intensity allows greater expropriation of value and displaces troublesome labor.
However, many firms are unable to innovate and increase capital intensity beyond a certain point. There may also be certain aspects of production that are labor intensive. A need for high-wage labor may act as a barrier to accumulation for these firms; they may circumvent the barrier by moving to areas where a reserve army of labor exists. Because of its dependent nature and the periphery's lack of development of the forces of production, peripheral labor can serve these imperialistic needs.

Hymer (1975) suggests that a geographic division of labor arises, with peripheral workers specialized as low skill, low-wage labor while urban workers are specialized as high skill, high-wage labor. Firms and branches are established according to their particular needs for the production of surplus value. de Janvry (1976) suggests that expropriation may go beyond the limits necessary for the reproduction of labor power. Many small farmers have chosen to remain on their land in the face of dire economic circumstances, in part because of an emotional attachment to the farm as a way of life. They do gain partial subsistence from farms, and indigenous capitalist firms are not structurally required to pay wages equal to the cost of reproducing labor power, but rather can pay subsistence wages to these "part-time" workers.
Production-labor imperialism, as with the two previously discussed imperialism, is a product of the dynamics of capitalism itself. Branch plant locations represent a direct expropriation of surplus value by urban firms. Workers are paid the costs of reproducing themselves. This income/exchange value does have secondary effects that help to reproduce labor provisioning firms in the periphery, but again only as an extension of urban capitalists' needs. Service sectors that maintain the branch plant, in effect, maintain an urban force of production installed in the periphery to extract peripheral surplus value. These forces of production are quantitative extensions of urban forces, developed to appropriate nature in a manner that maximizes the expropriation of surplus from labor. Independent plants that locate in the periphery for labor have no effects that are qualitatively different from branch plants. They have moved to the periphery because of barriers to reproduction in the center. Other factors are certainly important in locating economic activities in rural areas. However, the predominant location factor--along with raw materials--has been an in-place, agreeable, and productive labor supply (Bennett 1972, Leak 1969, Hansen 1974).

These various imperialisms and dependency effects are separated here for purposes of exposition. They tend
to combine in varying degrees in one process characterized by "asymmetrical relations between social formations of such a kind that the structural organization of one of them has no logic outside its position in the general system" (Castells 1979: 19). It is a process of combined and uneven development.

Conclusion

It is important to see here that concepts of imperialism and dependency in rural/urban linkages are products of a dialectical-historical-materialist perspective; the perspective's assumptions shape its view of reality. The assumptions of dialectical-historical-materialism taken in combination frame reality in terms of unitary but opposing forces and contradictions that resolve themselves in cumulative quantitative change and, eventually, in qualitative change. This qualitative-quantitative distinction is articulated in views of social reality that have a degree of historical specificity. Materialism is combined with the historical dialectical view to produce concepts of social reality that hold human material relationships to be the ultimate determining force.

In this dialectical-historical-materialist view, capitalism develops "out of itself," creating its own contradictions and resolving them in a quantitative manner.
Societies must appropriate nature to survive materially. Under capitalism, the defining social relation of production is the capital/labor relation; the appropriation relation is resolved within limits set by the capital/labor relation. Appropriation, in serving the capital/labor relation, develops and crystallizes as the forces of production. Quantitative increase in appropriation eventually comes into contradiction with the social relations of production, and barriers to reproduction of the capital/labor relation arise. Imperialism allows the creation of "fresh ground" for reproduction of the system (the reproduction of the capital/labor relation). Capitalism seizes a quantitatively new level of development. Expansion of its relations into geographic space has occurred, and no qualitative change will occur until the barriers (the contradictions) become fundamental once more.
CHAPTER IV

EMPIRICAL EXTENSION OF DISCUSSION ON PARADIGMATIC CLOSEDNESS AND RELATIVITY

The previous chapters on world views articulated the tacit assumptions of various theoretical postures. These assumptions were seen to shape, form, and lend a closed character to views of social reality. Since more than one world view contends privy to reality, the views are implicitly relative.

In this chapter certain conceptions of regional growth center theory and raw materialism imperialism/dependency will be applied to empirical data. The chapter is not designed to prove or disprove either perspective but to serve as an empirical extension of the previous discussion. Paradigmatic relativity will be demonstrated by applying each perspective to data assembled from the same geographic region, and to the same data.

Much of the data for this chapter was collected via a 10 year research and extension project on economic development under Title 5 of the Rural Development Act of 1972. The geographic focus of this project was an Appalachian region in southeastern Ohio—referred to here as the
GROW region. The project was quite broad and as a consequence a fairly extensive data base has been established on the region. Some of that data will be used here as well as other more standardized sources, e.g. census data, and data collected by the Department of Economic and Community Development of the State of Ohio.

Some Descriptive Data of a Peripheral Region

The empirical focus of this chapter is a five country region in south-eastern Appalachian Ohio. The counties: Gallia, Meigs, Jackson, Athens and Vinton are located in Figures 4 and 5. These counties will be compared to five SMSAs in Ohio: Canton, Cincinnati, Columbus, Cleveland and Dayton and to the state of Ohio. Figure 4 shows the interstate highway system in Ohio. In general, this system bypasses the five county region; it provides ready access to each of the five SMSAs. Osman (1977) reports that several businesses have cited poor transportational access as a reason for not locating in the Appalachian region. Figure 5, the railroad system, depicts various dead-end lines that lead out of the region.

Acquah (1976) and Sadr (1977) suggest this five country region is the least developed area in the state of Ohio. Comparing incomes and Effective Buying Income (EBI)
Study area: Athens, Gallia, Jackson, Meigs, Vinton.

Source: Ohio, A State on the Move (Department of Economic and Community Development, 1975).

Figure 4. Ohio's Major Highway Systems
Study area: Athens, Gallia, Jackson, Meigs, Vinton.

Source: Ohio, A State on the Move (Department of Economic and Community Development, 1975).

Figure 5. Ohio's Rail System

---
of the 5 counties with those of the five SMSAs provides
data that tends to support their (Acquah's and Sadr's)
position.

Effective Buying Income (EBI) is

a classification developed by Sales and
Marketing Management, it is personal in-
come less personal tax.... Personal in-
come is the aggregate of wages and
salaries, other labor income (such as
employer contributions to private income,
...dividends paid by corporations, per-
sonal interest income from all sources
and transfer payments (such as pensions
and welfare assistance). Deducted from
this total are personal taxes (federal,
state, local), non-tax payments (such as
fines, fees)...and compensation paid to
military and diplomatic personnel sta-
tioned overseas.... (Sales and Marketing
Management 1980s A-34).

Effective buying income is a "bulk" measurement that indi-
cates the general ability to buy.

Table 2 compares the median Household Effective Buy-
ing Income for the five Appalachian counties to the median
Household EBI for the five SMSAs and for the state of Ohio
--for the years 1970 and 1979. The Appalachian area shows
a consistent "lag" in buying power in comparison to the
SMSAs and to the state for both 1970 and 1979. For example
in Athens, the county with the highest median Household EBI
reported for the years 1970 and 1979, median Household EBI
was $9,688 and $13,992, respectively. However, for the
state of Ohio, it was $10,831 and $19,274, respectively.
Table 2
Household Effective Buying Income (EBI) by County and by SMSA 1970-1979

<table>
<thead>
<tr>
<th>County</th>
<th>Median Household EBI</th>
<th>SMSA EBI</th>
<th>Median Household EBI</th>
<th>SMSA EBI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athens</td>
<td>9,688</td>
<td>13,992</td>
<td>Canton</td>
<td>12,472</td>
</tr>
<tr>
<td>Gallia</td>
<td>7,822</td>
<td>11,706</td>
<td>Cincinnati</td>
<td>11,284</td>
</tr>
<tr>
<td>Jackson</td>
<td>7,344</td>
<td>10,909</td>
<td>Cleveland</td>
<td>11,063</td>
</tr>
<tr>
<td>Meigs</td>
<td>6,535</td>
<td>11,328</td>
<td>Columbus</td>
<td>10,413</td>
</tr>
<tr>
<td>Vinton</td>
<td>6,597</td>
<td>10,786</td>
<td>Dayton</td>
<td>11,726</td>
</tr>
<tr>
<td>Region</td>
<td>8,105</td>
<td>11,769</td>
<td>Region</td>
<td>11,417</td>
</tr>
<tr>
<td>Ohio</td>
<td>10,831</td>
<td>19,274</td>
<td>Ohio</td>
<td>10,831</td>
</tr>
</tbody>
</table>

Canton, the SMSA with the highest median Household EBI, reported $12,479 for 1970 and $21,374 for 1979. This pattern was consistent throughout each region. The county levels were lower than state levels in comparison to SMSA levels which were greater than state levels. In 1970 the median Household EBI was 39% higher in the state than in the five county region. In 1979 the state of Ohio's median Household EBI was 46% higher than the five county area.

Table 3 compares the per capita EBI by GROW region county, SMSA, and state. This table also demonstrates that the county area is low compared to the others, particularly the SMSAs. Per capita EBI for Athens, the county with the highest levels for 1970 and 1979 is $2,534 and $5,064 respectively. State levels for 1970 and 1979 are $3,555 and $7,359 respectively. Again, SMSAs, in general, fare better. Cleveland, the SMSA with the highest levels reported $3,938 for 1970 and $8,312 for 1979. In 1970 the per capita EBI was 49 percent higher in the state than in the five county region. In 1979 the state of Ohio had a per capita EBI 57 percent higher than that in the five county region. There were roughly two dollars of effective buying income per capita in the state, in general, for every one dollar existing in the five county region in 1979.
Table 3

Per Capita Effective Buying Income (EBI) by County and by SMSA 1970-1979

<table>
<thead>
<tr>
<th>County</th>
<th>Per Capita EBI</th>
<th>SMA</th>
<th>Per Capita EBI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Athens</td>
<td>2,534</td>
<td>5,064</td>
<td>Canton</td>
</tr>
<tr>
<td>Gallia</td>
<td>2,388</td>
<td>4,661</td>
<td>Cincinnati</td>
</tr>
<tr>
<td>Jackson</td>
<td>2,348</td>
<td>4,367</td>
<td>Cleveland</td>
</tr>
<tr>
<td>Meigs</td>
<td>2,146</td>
<td>4,684</td>
<td>Columbus</td>
</tr>
<tr>
<td>Vinton</td>
<td>2,020</td>
<td>3,905</td>
<td>Dayton</td>
</tr>
<tr>
<td>Region</td>
<td>2,380</td>
<td>4,684</td>
<td>Region</td>
</tr>
<tr>
<td>Ohio</td>
<td>3,555</td>
<td>7,359</td>
<td>Ohio</td>
</tr>
</tbody>
</table>

The 1970 census data (see Table 4) show the 5 county median family incomes for the five county area are below the state level and the SMSA levels. Median family income was roughly two-thirds of the state average. Percent of families below the poverty line suggests an 'underdeveloped' nature to the region as well. In 1970 Gallia, Jackson, Meigs, and Vinton counties had rates approximating 20 percent. Athens had a rate of 13 percent. In comparison, rates for the five SMSAs were all below 10%. Cincinnati had the highest level, 8.1% and Canton the lowest level, 5.8%. Only 7.6 percent of all Ohio families were below the poverty line in 1970 (census 1970). These data and the other measures presented seem to confirm Acquah's (1976) and Sadr's (1977) suggestion that the area is an economically depressed region.

The Economy of the Region

Table 5 presents the sector outputs, employment, and income levels for the GROW region for 1972 (see Hushak and Ro (1980) and Husain (1982) for an explanation of data production). Just 27 sectors account for all of the region's economic activities. Only eight sectors dominate the region's output, employment and income. These sectors are: 1) utilities 2) services 3) retail trade 4) food manufacture
Table 4

1970 Median Family Income, Percent of Families Below Poverty Line by County, SMSA, by State of Ohio

<table>
<thead>
<tr>
<th>County</th>
<th>Median Family Income</th>
<th>% Below Poverty Line</th>
<th>SMSA</th>
<th>Median Family Income</th>
<th>% Below Poverty Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athens</td>
<td>7,628</td>
<td>13.1</td>
<td>Canton</td>
<td>10,249</td>
<td>5.8</td>
</tr>
<tr>
<td>Gallia</td>
<td>6,915</td>
<td>19.1</td>
<td>Cincinnati</td>
<td>10,257</td>
<td>8.1</td>
</tr>
<tr>
<td>Jackson</td>
<td>6,635</td>
<td>20.5</td>
<td>Cleveland</td>
<td>11,407</td>
<td>6.9</td>
</tr>
<tr>
<td>Meigs</td>
<td>6,485</td>
<td>22.1</td>
<td>Columbus</td>
<td>10,460</td>
<td>7.6</td>
</tr>
<tr>
<td>Vinton</td>
<td>6,334</td>
<td>19.9</td>
<td>Dayton</td>
<td>11,234</td>
<td>6.0</td>
</tr>
<tr>
<td>Ohio</td>
<td>10,313</td>
<td>7.6</td>
<td>Ohio</td>
<td>10,313</td>
<td>7.6</td>
</tr>
</tbody>
</table>

Table 5

Sectoral Output, Employment and Income for the Region, 1972

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Output ($Millions)</th>
<th>Employment (Number)</th>
<th>Income ($Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility</td>
<td>89.698</td>
<td>1,292</td>
<td>9.514</td>
</tr>
<tr>
<td>Services</td>
<td>70.621</td>
<td>3,686</td>
<td>26.954</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>63.121</td>
<td>5,472</td>
<td>30.900</td>
</tr>
<tr>
<td>Food</td>
<td>53.876</td>
<td>938</td>
<td>12.463</td>
</tr>
<tr>
<td>Finance</td>
<td>56.691</td>
<td>894</td>
<td>8.497</td>
</tr>
<tr>
<td>Construction</td>
<td>56.594</td>
<td>1,988</td>
<td>27.923</td>
</tr>
<tr>
<td>Livestock</td>
<td>17.762</td>
<td>1,574</td>
<td>1.369</td>
</tr>
<tr>
<td>Crops</td>
<td>4.492</td>
<td>399</td>
<td>0.424</td>
</tr>
<tr>
<td>Coal</td>
<td>17.873</td>
<td>543</td>
<td>8.750</td>
</tr>
<tr>
<td>Tabacco Manufacturing</td>
<td>3.325</td>
<td>20</td>
<td>0.362</td>
</tr>
<tr>
<td>Textile</td>
<td>1.042</td>
<td>111</td>
<td>0.603</td>
</tr>
<tr>
<td>Lumber</td>
<td>5.191</td>
<td>221</td>
<td>1.869</td>
</tr>
<tr>
<td>Furniture</td>
<td>0.796</td>
<td>50</td>
<td>0.362</td>
</tr>
<tr>
<td>Printing</td>
<td>12.444</td>
<td>697</td>
<td>5.431</td>
</tr>
<tr>
<td>Chemicals</td>
<td>7.444</td>
<td>321</td>
<td>1.546</td>
</tr>
<tr>
<td>Plastics</td>
<td>6.295</td>
<td>339</td>
<td>1.816</td>
</tr>
<tr>
<td>Leather</td>
<td>1.373</td>
<td>215</td>
<td>0.749</td>
</tr>
<tr>
<td>Stone and Clay</td>
<td>7.154</td>
<td>415</td>
<td>2.613</td>
</tr>
<tr>
<td>Primary Metals</td>
<td>2.408</td>
<td>111</td>
<td>1.193</td>
</tr>
<tr>
<td>Fabricated Metals</td>
<td>7.186</td>
<td>815</td>
<td>3.913</td>
</tr>
<tr>
<td>Mechanical Machinery</td>
<td>2.868</td>
<td>770</td>
<td>1.407</td>
</tr>
<tr>
<td>Electrical Machinery</td>
<td>0.789</td>
<td>162</td>
<td>0.434</td>
</tr>
<tr>
<td>Transportation</td>
<td>17.004</td>
<td>609</td>
<td>7.793</td>
</tr>
<tr>
<td>Communication</td>
<td>15.720</td>
<td>578</td>
<td>5.448</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>10.927</td>
<td>581</td>
<td>4.699</td>
</tr>
<tr>
<td>Federal Government</td>
<td>1.086</td>
<td>435</td>
<td>0.893</td>
</tr>
<tr>
<td>State and Local Government</td>
<td>7.272</td>
<td>072</td>
<td>1.599</td>
</tr>
<tr>
<td>Grand Total</td>
<td>546.055</td>
<td>28,338</td>
<td>169.531</td>
</tr>
</tbody>
</table>

Sources: Hushak and Ro (1980) and Husain (1982).
5) finance 6) construction 7) livestock and 8) coal. They account for nearly 80 percent of the region's total output, 60 percent of its employment and 75 percent of its wage income. Table 6 presents the region's exports and imports. Coal and utilities dominate the export sector accounting for over 80 percent of them. Several products are imported into the region with five sectors accounting for over 75 percent of them: 1) finance, insurance and real estate 2) services 3) construction 4) wholesale trade and 5) retail trade.

From a regional growth center perspective the region might be seen as a "trough of economic backwardness...that lies within a relatively inaccessible area" (Berry 1969). Berry's statement may be a caricature for this area but certainly the region is peripheral to the more dynamic complexes of Cincinnati, Dayton, Columbus, Cleveland and Pittsburg. It is remote, economically depressed, specialized by relatively few economic activities, and export oriented.

Growth Center Interpretations of a Periphery Region

Growth center theory has two implicit foci; one retrospective and one prospective. The retrospective focus takes certain paradigmatic positions on economic growth
Table 6

Volume of Exports and Imports by Sectors
for the Regions, 1972

<table>
<thead>
<tr>
<th>No.</th>
<th>Sectors</th>
<th>Exports ($ Millions)</th>
<th>Imports ($ Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Livestock</td>
<td>2.282</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Crops</td>
<td>2.876</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Coal</td>
<td></td>
<td>10.239</td>
</tr>
<tr>
<td>4</td>
<td>Construction</td>
<td></td>
<td>26.327</td>
</tr>
<tr>
<td>5</td>
<td>Food and Food Products</td>
<td></td>
<td>6.677</td>
</tr>
<tr>
<td>6</td>
<td>Tobacco Manufacturers</td>
<td></td>
<td>1.493</td>
</tr>
<tr>
<td>8</td>
<td>Lumber and Wood Products</td>
<td></td>
<td>0.693</td>
</tr>
<tr>
<td>9</td>
<td>Furniture and Fixtures</td>
<td></td>
<td>4.384</td>
</tr>
<tr>
<td>10</td>
<td>Printing and Publishing</td>
<td></td>
<td>0.592</td>
</tr>
<tr>
<td>11</td>
<td>Chemicals</td>
<td></td>
<td>0.699</td>
</tr>
<tr>
<td>12</td>
<td>Plastics and Rubber Products</td>
<td></td>
<td>5.432</td>
</tr>
<tr>
<td>13</td>
<td>Leather Products</td>
<td></td>
<td>1.722</td>
</tr>
<tr>
<td>14</td>
<td>Stone and Clay Products</td>
<td></td>
<td>0.585</td>
</tr>
<tr>
<td>15</td>
<td>Primary Metals</td>
<td></td>
<td>0.896</td>
</tr>
<tr>
<td>16</td>
<td>Fabricated Metals</td>
<td></td>
<td>4.293</td>
</tr>
<tr>
<td>17</td>
<td>Mechanical Machinery</td>
<td></td>
<td>0.181</td>
</tr>
<tr>
<td>18</td>
<td>Electrical Machinery</td>
<td></td>
<td>1.408</td>
</tr>
<tr>
<td>19</td>
<td>Transportation</td>
<td></td>
<td>0.508</td>
</tr>
<tr>
<td>20</td>
<td>Communication</td>
<td></td>
<td>3.729</td>
</tr>
<tr>
<td>21</td>
<td>Utility</td>
<td></td>
<td>50.209</td>
</tr>
<tr>
<td>22</td>
<td>Wholesale Trade</td>
<td></td>
<td>18.717</td>
</tr>
<tr>
<td>23</td>
<td>Retail Trade</td>
<td></td>
<td>11.093</td>
</tr>
<tr>
<td>24</td>
<td>Finance, Insurance and Real Estate</td>
<td></td>
<td>36.946</td>
</tr>
<tr>
<td>25</td>
<td>Services</td>
<td></td>
<td>26.600</td>
</tr>
<tr>
<td>26</td>
<td>Federal Government</td>
<td></td>
<td>1.845</td>
</tr>
<tr>
<td>27</td>
<td>State and Local Government</td>
<td></td>
<td>10.803</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from Hushak & Ro (1980) and Husain (1982).
dynamism, change, and rural-urban linkages. The prospective focus is more amelioristic and suggests developmental strategies for change that are in keeping with retrospective positions. Growth centers are seen retrospectively as nodal points of growth dynamism and change that diffuse their effects into peripheries. Prospectively therefore, the regional growth view suggests policy directions that are consistent with the conceptualized dynamics of growth center systems. Development programs are held to be best applied "in the direction of movement rather than counter to it" (Berry 1969).

Investments for development therefore are thought to be best applied to centers themselves in hopes of increasing job opportunities for periphery residents and increasing economic diffusion effects. When focused specifically on peripheries, the most judicious investments are thought to be those that focus on rural/urban integration. This might include, among other strategies, transportational developments, increased export development, and local promotion of industrial sites for industrial filterers. Rural/urban connections and strategies to develop them allow growth impulses of the center "and economic advancement to ...'trickle down' to smaller places and...infuse dynamism into even the most tradition-bound peripheries" (Berry 1969: 20).
This section will not establish the existence of or map out the connections of a regional growth center hierarchy. Rather at this point this thesis will provide an illustrative interpretation of periphery data that is consistent with certain growth center conceptualizations. Prospective interpretations will be emphasized though retrospective considerations will also be articulated.

Turning to the Appalachian region discussed earlier Hushak and Ro (1980) and Husain (1982) have calculated various economic multipliers for the area. The largest multipliers of their analysis are presented in Table 10. Each of these multipliers is interpreted in relation to a hypothesized expansion of demand of a specific sector. For example, output multipliers measure the total output produced in an economy per one dollar change in final demand of a given sector. Employment multipliers indicate changes in total employment (measured in man years) due to a one million dollar change in the final demand of a given sector. Income multipliers measure the total change in income in the regional economy due to a one dollar change in the income of a given sector.

From Table 7 plastics is found as having the highest output multiplier in the region at 1.895. For every one dollar expansion in the demand of plastics (actually plastics and rubber products) there is a total expansion
Table 7

The Top Ten Sectors Ranked by Various Multipliers

<table>
<thead>
<tr>
<th>Rank</th>
<th>Output Multiplier</th>
<th>Employment Multiplier</th>
<th>Income Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Plastics (1.895)</td>
<td>Utility (6.166)</td>
<td>Liverstock (2.592)</td>
</tr>
<tr>
<td>2</td>
<td>Food (1.879)</td>
<td>Food (4.167)</td>
<td>Utility (2.477)</td>
</tr>
<tr>
<td>3</td>
<td>Chemicals (1.877)</td>
<td>Tobacco Manf. (2.977)</td>
<td>Crops (2.284)</td>
</tr>
<tr>
<td>4</td>
<td>Livestock (1.643)</td>
<td>Chemicals (1.971)</td>
<td>Chemicals (2.115)</td>
</tr>
<tr>
<td>5</td>
<td>Utility (1.633)</td>
<td>Construction (1.766)</td>
<td>Food (1.818)</td>
</tr>
<tr>
<td>6</td>
<td>Stone (1.618)</td>
<td>Transportation (1.759)</td>
<td>Plastics (1.803)</td>
</tr>
<tr>
<td>7</td>
<td>Lumber (1.578)</td>
<td>Finance (1.756)</td>
<td>S &amp; L Gov't (1.772)</td>
</tr>
<tr>
<td>8</td>
<td>S &amp; L Gov't (1.530)</td>
<td>Plastics (1.741)</td>
<td>Stone (1.584)</td>
</tr>
<tr>
<td>9</td>
<td>Printing (1.508)</td>
<td>Lumber (1.652)</td>
<td>Lumber (1.572)</td>
</tr>
<tr>
<td>10</td>
<td>Crops (1.474)</td>
<td>Stone (1.623)</td>
<td>Tob. Manf. (1.557)</td>
</tr>
</tbody>
</table>

Figures in the parentheses are the values of multipliers. See also Appendices F, G, H and I.

Source: Adapted from Hushak and Ro (1980).
of output in the economy of $1.85. Utilities has the largest employment multiplier at 6.166. This multiplier indicates that for a one million dollar expansion in final demand for utility output, 6.166 additional jobs would be generated in the economy. Livestock has the largest income multiplier at 2.594, a one dollar increase in the income of the livestock sector would produce a total of $2.594 of income in the economy.

Hansen (1968)—relying on Perroux—suggests that development strategies should include sectors that have large interdependent effects within an economy. Such emphases are held to have 'propulsive' or 'initial kick' effects on a region that small non-connected sectors do not. As stated, the employment/income/output multipliers presented in Table 10 are the ten largest for the region. Expansion of these sectors would have amplifying effects throughout the local economy. Six sectors overlap with high ranks in all three multipliers. Those sectors are: 1) utilities 2) food 3) chemicals 4) plastics 5) lumber and 6) stone. Expansion of these sectors would result in maximum direct and indirect effects of generating employment, income, and output in the region.

As stated previously growth center perspectives of peripheries emphasize rural/urban links. Export links from the periphery are held important for tying these
regions into the dynamism of urban areas and the export in­
comes that result. Strategies of development that are in
opposition to the perceived dynamics of urban change and in-
ovation are seen as ill-conceived and not developmentally
promising (Hansen 1974a, 1974b; Berry 1967, 1969). Refocus-
ing on the six activities presented above as sectors for ex-
pansion, three are preferred; plastics, chemicals and utili-
ties. Utilities and plastics production both export large
quantities of their output (see Figures 6 and 7). Plastics
exports over 85 percent of its regional output. Utilities
export 56 percent. These two sectors together account for
approximately 75 percent of the exports from the region.
The export orientation of these activities is in turn ampli-
fied in other sectors of the economy. An expansion of plas-
tics production requires an expansion and provides an outlet
for additional chemical production. Chemical production
sells 30 percent of its output to the plastics sector. An
expansion in utility production similarly provides expan-
sion potential to its backwards linked sectors. Coal sells
24 percent of its production to utilities which is in turn
incorporated into electricity and exported. Figure 7 also
illustrates the important links local government activities
have with activities exterior to the region via utilities;
representing 22 percent of federal government sales—post
office, commodity control, utilities—and 80 percent of
1/ All sector exchanges included that involve at least 10 percent of each sector's total output.


Figure 6. Percentage of Sector Outputs Sold Forward and Within Sectors.
1/ Linkage not include: Federal government sectors sells 13% of its output to retail trade, retail trade sells 90% of its output to the household sector. All other sector exchanges includes that involve at least 10 percent of each sector's total output.


Figure 7. Percentage of Sector Outputs Sold Forward and Within Sectors1/
state and local sales—passenger transit, utilities. As a caveat to the foregoing, coal itself exports 57 percent of its output separate from utilities. It does not show up strongly in the multiplier analysis because of its relatively weak secondary effects—11th in employment, 17th in output, and 19th in income.

To sum, Figures 6 and 7 illustrate retrospectively the importance of exports in the region. Utilities and plastics represent some of the largest output, employment, and income impacts in the region. They both generate export earnings. Further, utilities is intimately connected with coal production, itself a producer of export income. Plastics exports also provide a major outlet for chemicals, an important output, employment and income generation itself. From a regional growth center focus these activities are the 'region builders.' They bring incomes into the area from outside. They help infuse dynamism into the more remote areas.

The remaining sectors found to have large multiplier effects are ultimately dependent on household demand. These sectors are represented in Figures 8 and 9. Expansion of these sectors in themselves would bring no new income into the region. From a regional growth center perspective, regional growth is held to be externally induced (Berry 1969: 13). Lumber, stone, and food manufacture are
1/ All sector exchanges included that involve at least 10 percent of each sector's total output.


Figure 8. Percentage of Sector Outputs Sold Forward and Within Sectors

1/
1/ All sector exchanges included that involve at least 10 percent of each sector's total output.


Figure 9. Percentage of Sector Outputs Sold Forward and Within Sectors

1/
basically in place in the region via local household demand. While they have relatively large multiplier effects they would need some prospective tie to the more dynamic areas of the national economy to warrant a development focus. This might be made indirectly through other sectors and directly through their own export.

These recommendations are based on retrospective positions of the 'naturalness' of urban oriented growth. Development strategies are held to be most promising when oriented "in the direction of movement and not counter to it" (Berry 1969: 13). Other prospective foci might include recommendations for transportational developments. Highways in the region have been cited as some of the worst in the state (Osman 1978). Transportational links can help bring urban and rural regions together and the periphery more directly into center dynamism. Industrial park developments might be another prospective position based on the possible existence of 'urban filterers.' The region has expanded its manufacturing sector from 1970 to 1979 (Table 8). While the state of Ohio had a two percent decline in manufacturing employment over that period the region had a 32 percent gain. Data are not available on whether these new manufacturing jobs were due to urban filterers or not. However a regional growth center perspective might begin looking at this phenomena in that
Table 8

Manufacturing Employment by County, for the Region, and for Ohio 1970-1979

<table>
<thead>
<tr>
<th>County</th>
<th>Manufacturing 1970</th>
<th>Manufacturing 1979</th>
<th>% Change 1970 - 1979</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athens</td>
<td>1,719</td>
<td>1,569</td>
<td>-9.0</td>
</tr>
<tr>
<td>Gallia</td>
<td>437</td>
<td>1,207</td>
<td>176.0</td>
</tr>
<tr>
<td>Jackson</td>
<td>2,060</td>
<td>2,847</td>
<td>38.0</td>
</tr>
<tr>
<td>Meigs</td>
<td>401</td>
<td>402</td>
<td>.2</td>
</tr>
<tr>
<td>Vinton</td>
<td>495</td>
<td>745</td>
<td>51.0</td>
</tr>
<tr>
<td>Region</td>
<td>5,112</td>
<td>6,770</td>
<td>32.0</td>
</tr>
<tr>
<td>Ohio</td>
<td>1,403,801</td>
<td>1,379,045</td>
<td>-2.0</td>
</tr>
</tbody>
</table>

context. Gray (1978) found in a sample of industrial parks in Appalachian counties of Ohio generally, that one-half of the firm occupants were branch plants of metropolitan based operations.

**Raw Material Imperialism/Dependency**

**Interpretations of Periphery Data**

The purpose of this section is to provide an illustrative interpretation of periphery data from a raw material imperialism/dependency perspective. Data for this section comes from the same five county region examined in the growth center section. Before attention here turns to data interpretation a brief review of the raw material imperialism/dependency perspective will be presented.

Recall that under the capitalist mode of production the imperatives of reproducing the capital-labor relation, and the competition among capitalists results in a concentration and centralization of capital in firms. This process becomes articulated geographically in urban regions. Barriers to this accumulation result in the development of imperialistic relations into peripheries. What precise barriers urban capitalists slip around is held to prescribe the nature of periphery development. Raw material imperialism tends to specialize peripheries primarily into
resource-export enclaves with various secondary labor re-
producing and maintenance activities.

With the above conceptual frame certain consistent
interpretations may be made of the data. Recall as pre-
viously presented that eight sectors account for nearly 80
percent of total regional output. These sectors were
services, retail trade, food, finance, construction, coal,
and livestock. The major forward linkages of these sec-
tors are presented in Table 9. This table illustrates
the region is resource-export specialized—coal and utili-
ties—and labor sustaining with the construction, food,
retail trade, finance, and sectors each selling more than
75 percent of their output to households. Seventy percent
of these eight sector production ($300,000 millions) or
over one half of the regional output passes out of the
economy as exports or as local consumption without input-
ting to other sectors. Other forward linkages tend to be
within these eight sectors. No sector sells more than 7
percent of its output to the other 19 activities. Where
sales are made within these eight sectors they are in
general one step from export or household consumption.
For example, livestock sells a predominant portion of its
output to food but food in turn sells 75 percent of its
output to the household sector. Coal sells 24 percent of
its production to utilities but utilities then exports
Table 9

Percentage of Output Sold to Various Sets of Sectors By Top Eight Producing Sectors

<table>
<thead>
<tr>
<th>Livestock</th>
<th>Coal</th>
<th>Construction</th>
<th>Food Utilities</th>
<th>R. Trade</th>
<th>Finance Services</th>
<th>Other 19 Sectors</th>
<th>Export Demand</th>
<th>Household Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.6</td>
<td>0</td>
<td>0</td>
<td>73.6</td>
<td>0</td>
<td>0</td>
<td>1.8</td>
<td>.3</td>
<td>2.8</td>
</tr>
<tr>
<td>0</td>
<td>14.6</td>
<td>0</td>
<td>.3</td>
<td>24</td>
<td>0</td>
<td>.1</td>
<td>.1</td>
<td>6.8</td>
</tr>
<tr>
<td>.2</td>
<td>.1</td>
<td>0</td>
<td>.3</td>
<td>4.7</td>
<td>.4</td>
<td>3.5</td>
<td>1.0</td>
<td>1.3</td>
</tr>
<tr>
<td>3.3</td>
<td>0</td>
<td>0</td>
<td>17.9</td>
<td>0</td>
<td>0</td>
<td>.1</td>
<td>2.9</td>
<td>.6</td>
</tr>
<tr>
<td>.1</td>
<td>.3</td>
<td>.1</td>
<td>.6</td>
<td>22.9</td>
<td>1.6</td>
<td>.3</td>
<td>1.4</td>
<td>3.3</td>
</tr>
<tr>
<td>.5</td>
<td>0</td>
<td>4.8</td>
<td>.2</td>
<td>.1</td>
<td>.4</td>
<td>.7</td>
<td>1.8</td>
<td>4.3</td>
</tr>
<tr>
<td>.3</td>
<td>.5</td>
<td>.7</td>
<td>.5</td>
<td>.5</td>
<td>3.4</td>
<td>3.9</td>
<td>3.1</td>
<td>2.5</td>
</tr>
<tr>
<td>.2</td>
<td>.4</td>
<td>4.5</td>
<td>2.8</td>
<td>1.3</td>
<td>3.8</td>
<td>3.0</td>
<td>7.3</td>
<td>1.6</td>
</tr>
</tbody>
</table>

1/ Rows sell percent of sector specific output to columns.

2/ Includes all sectors that account for at least 10 percent of sales of the top 8 sectors.

Source: Adapted from Hushak and Ro (1980) and Husain (1982).
over 50 percent of its output.

Table 10 presents all other sectors that sell at least 10 percent of their output to the top eight producers. Livestock can be seen providing an outlet for crops. Construction absorbs major portions of lumber, stone and clay, and to a lesser extent primary metals and transportation. Food also provides an outlet for crops and transportation. The utilities and retail trade sectors purchase large amounts of federal government output. Services provides a major outlet for printing and fabricated metals.

These nine input activities—crops, lumber, printing, stone and clay, primary metals, transportation, fabricated metals, federal government, and state and local government—represent the extent of complexity of backward linkages from the largest eight sectors. Their output represents only 12 percent of total regional output.

Regional sector interdependences in general involve single links in a processing chain that prepares products for export or for labor's consumption. Noticeable exceptions (not shown) are primary metals which inputs to fabricated metals, which inputs to services. Crops sells to livestock and livestock sells to the food sector. These two processing chains are a typical in a region dominated by single-linked connections.
Table 10

Backward Linkages from the Top Eight Producing Sectors (Percentage)1/ 2/

<table>
<thead>
<tr>
<th>Live-Stock</th>
<th>Coal Construction</th>
<th>Food Utilities</th>
<th>Trade</th>
<th>R. Finance</th>
<th>Services</th>
<th>Other 19 Export Sectors</th>
<th>Demand</th>
<th>Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crops</td>
<td>22.5</td>
<td>0</td>
<td>.3</td>
<td>24.1</td>
<td>0</td>
<td>0</td>
<td>1.8</td>
<td>.9</td>
</tr>
<tr>
<td>Lumber</td>
<td>0</td>
<td>1.4</td>
<td>61.7</td>
<td>.1</td>
<td>0</td>
<td>.1</td>
<td>.1</td>
<td>.1</td>
</tr>
<tr>
<td>Printing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3.0</td>
<td>.2</td>
<td>.8</td>
<td>1.5</td>
<td>41.4</td>
</tr>
<tr>
<td>Stone &amp; Clay</td>
<td>0</td>
<td>.6</td>
<td>75.0</td>
<td>0</td>
<td>0</td>
<td>.3</td>
<td>.2</td>
<td>1.8</td>
</tr>
<tr>
<td>P. Metals</td>
<td>0</td>
<td>1.2</td>
<td>10.5</td>
<td>.1</td>
<td>.9</td>
<td>0</td>
<td>.2</td>
<td>0</td>
</tr>
<tr>
<td>Transportation</td>
<td>2.1</td>
<td>.6</td>
<td>11.2</td>
<td>10.3</td>
<td>8.5</td>
<td>.7</td>
<td>1.9</td>
<td>2.9</td>
</tr>
<tr>
<td>Fab. Metals</td>
<td>.3</td>
<td>2.4</td>
<td>1.6</td>
<td>3.5</td>
<td>0</td>
<td>.4</td>
<td>.1</td>
<td>11.4</td>
</tr>
<tr>
<td>Federal Govt</td>
<td>0</td>
<td>.1</td>
<td>.3</td>
<td>.6</td>
<td>21.8</td>
<td>13.3</td>
<td>5.2</td>
<td>6.8</td>
</tr>
<tr>
<td>State &amp; Local Govt</td>
<td>0</td>
<td>0</td>
<td>.2</td>
<td>.1</td>
<td>79.1</td>
<td>2.1</td>
<td>2.1</td>
<td>7.1</td>
</tr>
</tbody>
</table>

1/ Rows sell percent of sector specific output to columns.

2/ Includes all sectors that see at least 10 percent of the output to the top 8 sectors.

Source: Adapted from Hushak and Ro(1980) and Husain(1982).
The lack of differentiation is an existent state of the local economy that any theoretical position would affirm. However from the historical materialist view it is not the result of "natural equilibrating economic forces" but rather of the laws of tendency of a specific exploitive mode of production. The raw material imperialism/dependency view holds that urban and periphery 'development' presuppose each other in the law of combined and uneven development. One region's level of economic sophistication presupposes the other's simplicity. Peripheral development is seen as ordered around the imperatives of appropriating materials and moving them to urban centers of capitalist accumulation. This process requires certain other economic activities to insure the reproduction of labor power. Development of the forces of production is not expected beyond those ends.

The character of these rural-urban links are seen as impacting upon other aspects of the periphery. Major transportational infrastructure are seen as being developed to permit and speed the removal of materials. The highway and railroad developments in Maps I and II are seen primarily as conduits of material extraction. Elective transmission lines similarly are seen as an infrastructure that removes a peripheral product and in a manner that minimizes circulation time of capital.
The simplicity of the peripheral economy is seen as allowing for commodity imperialism as well. Table 9 indicates that it is necessary to import materials in 19 of the 27 activities conducted in the region. The gross regional product for the region (Table 5) is $546,000 million. Imports equal $170,000 million. Exports equal $75,000 million. The amount consumed in the region can roughly be computed by adding gross regional product to imports and subtracting exports. This figure, the amount consumed in the region, is $626,310 million. Imports represents 25 percent of that figure. Approximately one quarter of total regional consumption is imported. Further, imports exceed exports by $80 million. This amount represents capital flight from the region.

While asymmetric exchange exists in the region, it is impossible from this data to determine when imports came from urban centers. Livestock, crops, and lumber, for example, are probably produced in periphery areas. Wholesale and retail trade, finance, and services perhaps, come from centers of accumulation. Certainly the dominant exports from the region--coal and utilities--are marketed in the urban areas. These energy exports are held to be instrumental in allowing urban expropriation of surplus value to occur at a more capital intensive level.
Penetration of periphery areas for raw materials is also seen as resulting in varying degrees of absentee ownership. Some data do exist on the ownership structure of coal and utilities in the region. Two external corporate conglomerates, Gulf Resources and American Electric Power, own three of the thirty-six coal companies in the region (Keystone Coal Manual 1976). These three mining companies represent fifty-six percent of the total amount of coal produced in the region (Ohio Mines Report, 1976). Four electric power plants are located in the region (Ohio Electric Institute 1967). All are absentee owned—three by American Electric Power, one by Ohio Valley Electric Company (Moody's 1977). (As a caveat American Electric Power recently was able to acquire Columbus and Southern after being previously denied under anti-trust legislation).

Historical materialist views look for these absentee relations and suggest they represent direct expropriation of surplus value from peripheral workers. These firms have access to and control raw materials of the periphery and also are able to expropriate surplus value from periphery workers in raw material appropriation. This combination suggests a raw material and labor production imperialism.

From this world view recommendations of development would tend not to include emphasizing rural-urban links. These links are seen as helping to perpetuate an
exploitive structure that serves to subordinate rural areas to urban capital accumulation. Rather development strategies from this view might include emphasizing and nurturing new institutions for meeting human needs where old organizations are failing. This approach tends to place emphases on "localism." "Localism" tends to redefine development in terms of meeting local needs with local resources. Such strategies have been suggested by Belden and Forte (1978) and Buttel (1978). These authors emphasize organizing agriculture in certain regions to meet local needs. Various cooperative organizations are suggested that bring local farmers and consumers into a more direct relation. Berman (1967) and Young and Newman (1979) describe various other situations where rural firms, approaching bankruptcy, have been bought out by the employees. Basically localism is a suggestion for an alternative economy within the larger structure--serving to meet needs where the larger structure fails. From this view of reality, these alternative institutions are seen as the seeds of replacement in the event contradictions within larger institutions are qualitatively resolved.

Summary

Two paradigmatic approaches were applied to empirical data in this chapter. Those approaches involved a
growth center view and concepts of raw material imperialism/dependency. The purpose here was illustrative in that data were interpreted in a manner consistent with each respective position. No attempt was made to disprove hypotheses but rather to present two ways of seeing.

Growth center theory is undergirded with assumptions that concern 1) individualism/nominalism 2) idealism 3) cause-effect logic 4) equilibrium and gradual adjusting change. The importance of the individual as a separate categorical entity that pre-exists social organization is presumed. These individuals having needs, act with ideas/values/preferences to effect satisfactions in group organization, in markets. Groups act as clearing houses or equilibrating mechanisms for meeting individual and aggregate consensual needs. From this there is a gradual mutual adjustive process of change. For analytical purposes a moderate nominalist position is assumed where these aggregations are treated "as if" they were separate emergent phenomena. Discussion can then move to such issues as "the laws of the market" and the effects of growth centers.

Growth centers represent geographic aggregations of groups/markets where—given sets of alternatives—individuals/groups have found they can best satisfy aggregate needs. The cumulation of these groups gives the area a complex dynamic, self-generating character where change involves dis-equilibrating-re-equilibrating adjustments.
This aggregated structure and its internal dynamics tends to be seen as "natural" in that ultimately it represents the crystallization of preferences of voluntary natural individuals. Tying remote regions into these areas in an amelioristic sense allows peripheries to benefit from this aggregation and in a direction consistent with naturally occurring developmental processes. Therefore a "reading" of peripheral data from this view emphasizes developing those links. The raw material imperialism/dependency world view similarly makes certain assumptions concerning social structure and social change. Fundamentally these assumptions deal with dialectics, historical specificity, and materialism. From this view social organization is not seen as deriving from individuals coming together in mutually advantageous ways. Rather the structure is seen as inherently based on an exploitive class relation. From this view rural-urban linkages are seen as mechanisms for reproducing that class relation. Integration of urban to periphery is seen, not as an uplifting phenomena, but as a subordinating process that locks the rural into a tendency of "combined and uneven development." "Readings" of periphery data do not focus on development of equilibrating mutually advantageous structures but on a process that perpetuates exploitive class relations. Emphasis is not placed on how development can occur with integration--
exports, highways, industrial filterers—but on how imperialism occurs through exports, highways and industrial filterers.

As stated the purpose of this chapter was to provide illustrative interpretation of periphery data from the two specified world views. These readings are based on the same data from the same region of Ohio. They represent consistent extensions of the more general assumptions of each view. One position advocates a more complete integration of the rural to the urban the other severance of links and ultimately a qualitative change in the wage-profit system. Both presume privy to understanding the organization and change of the social. In this respect each position is relative, and represents a certain bias based on commitments to previous assumptions.
CHAPTER V

SUMMARY AND CONCLUSIONS

This thesis was initiated from the position that each individual sees the world from a particular perspective; from a system of concepts, from a world view framework that organizes perception. Certain aspects of these conceptual systems are often times un-said and implicit yet have a framing influence on respective paradigmatic views. These unsaid/implicit aspects include fundamental assumptions on the nature of the social, the individual, and causal forces held to be organizing and changing social phenomena. These are not issues subscribed to on an empirical level but rather are matters of faith and belief. They are in a sense value judgements representing parametric lenses onto reality, shaping perception in consistent directions. Since more than one world view holds itself privy to reality the views are intrinsically relative, "truth" is relative. Says Bloor (1979: 143):

What constitutes the very existence of science is its status as an ongoing activity. It is ultimately a pattern of thought and behavior, a style of going about things which has its characteristic norms and values. It does not need any
ultimate metaphysical sanction to support it as make it possible. There need be no such thing as truth, other than conjectural, relative truth, any more than there need be absolute moral standards rather than locally accepted ones.

Following from these positions, the purpose of this thesis was to make explicit the tacit assumptions of two world views—a functional-consensus perspective, and a dialectical-historical-materialist perspective—and suggest their closed and relative natures.

The important underlying assumptions of the functional-consensus view were shown to be: 1) categorical cause-effect logic 2) social idealism 3) nominalism/individualism and/or realism/emergent society 4) equilibrium and gradual adjusting cumulative change. The cause-effect assumption presumes that entities within society are separate and categorical. The world is seen as composed of separate entities connected in external relationships. 'A' is seen as separate from 'B'. 'A' is not 'B' and 'B' is not 'A'. They may exist in a cause-effect relation but they are categorically separate and do not presuppose the other's existence. Individuals may cause events and/or society may cause events but their existence is held separate and immutable. Social idealism refers to the position that the causative force of the social is seen to lie in the realm of ideas—collective conscience, culture,
values, consensus, preferences. The third assumption is more an inconsistency, or a disjuncture in the view than a specific position. It refers to the nominalist/realist disjunct ure. Is society a consensual, additive whole or an emergent whole greater than and subordinating of the sum of individuals that compose it? This tension is an inconsistency and an eclectic ism within the view. However little violence is done to the view in terms of conceptual consistency. Focus is directed upon either individuals or a personified emergent society. These individuals or society are seen as having certain needs. These needs are met in dynamic group aggregations or in emergent organic, elaborations in the social system. Un-met needs either at the individual level or at the emergent societal level represent dis-equilibriums. These dis-equilibriums are resolved in gradual, mutually advantageous, and adaptive changes. A dis-equilibrium/re-equilibrating process is assumed to occur that preserves the system but changes it in a quantitative and cumulative fashion. These four "ideal type" assumptions tend to contain in elaborated form various functional-consensus positions, the neoclassical economic view, dualism-diffusion views, and the regional growth center perspective.

In the second world view articulated in this thesis the assumptions of dialectical-historical-materialism were
taken in combination. They were seen as framing reality in terms of unitary but opposing forces/contradictions that resolve themselves in cumulative quantitative change and, eventually, in qualitative change. This qualitative-quantitative distinction is articulated in views of social reality that have a degree of historical specificity. Materialism is combined with the historical dialectical view to produce concepts of social reality that hold human material relationships to be the ultimate determining force. These "ideal type" assumptions tend to contain in elaborated form various conceptions of the capitalist mode of production and processes of imperialism/dependency.

As stated, the functional-consensus view assumes a position of social nominalism and/or social realism. These are classic philosophical conceptions of the individual and society where each is seen in a categorical sense. From the dialectical view the individual cannot be understood in nominalistic cause-effect terms. Rather the individual, as a social being, must be understood in terms of dialectical social (and material) relationships. The dialectical view finds it inconsistent to abstract out the "individual," or "society," and to focus on their attributes as intrinsic to them, or to analyze their cause-effect relations. Rather, conceptual focus is instead on internal social connections, contradictions, resolutions
and change. The social is real in that it is more than the
discrete individuals that compose it, but it is a dialec-
tical realism, transcending itself and developing out of
itself. While the functional-consensus view assumes a
classic nominalism and/or realism, the dialectical view
assumes a transcendental realism.

These formative assumptions tend to rather polar
relative images of reality. Social structures from the
functional-consensus view are essentially taken as
"natural" and given. They are seen as tending toward
homeostatic states, changing in quantity but not in kind.
Social relations are seen as advantageous; system changes
as adaptive and societally preserving. The dialectical-
historical-materialist view sees structures as historically
specific, exploitive, quantitatively changing but tending
toward qualitative change. While the former "sees"
harmonizing dynamics, the latter "sees" unitary oppositions
in struggles of resolution.

More concrete foci of each view tend to be directed
to those aspects of society that are most congruent with
underlying assumptions. Regional growth center views do
not in general "see" exploitive relations within the
capitalist mode of production nor in rural-urban linkages.
Similarly, but in a polar position, imperialism/dependency
views "see" the capitalist mode of production as exploitive
and rural-urban linkages as perpetuating and expanding that exploitation. The framing concepts of each view respect­ively preclude and nullify the other's field of vision. They are closed views in that they de-limit conceptual perception. They are relative views in each other's nullification.

This thesis takes the position that science is value-laden. Certain value-judgements are made—though usually implicitly—concerning the organization of reality. These presumptions then find their way into various theoretical views.

How the existence of these values in science is perceived is itself subject to paradigmatic relativity. This thesis has in part tended to structure arguments in an manner that assumes epistemological idealism and individualism. Values are seen as being introduced into the science process by individuals. A dialectical perspective might perceive these values as in fact tools (forces of production) of knowledge appropriation. Scientists must appropriate nature in a manner that produces knowledge. From the dialectical view appropriation is not seen as existing in isolation, but rather as under a determinant mode of production—capitalism. As such the tools of appropriation come to reflect the limits set by relations of production. The implicit assumption of the functional-consensus
view—lacking a conception of class relations—would be seen as tools of knowledge appropriation that continue class relations. Conversely, dialectical views would be seen as producing knowledge that serves qualitative changes in the mode of production.

The purpose of this thesis has not been to articulate specific views held by certain researchers or the reasons those researchers choose to see what they do. Rather, what has concerned us here are paradigms themselves, their implicitness, their limiting nature, and their relativity. Sociology implicitly assumes it stands outside its assumptions in doing sociology. Only by articulating and making explicit implicit assumptions can "objectivity" be approximated. Furthermore we may find that in the process of articulating the character and implicitness of world views, that differences in 'fact' may be much less important than differences in how we organize and slice reality. This thesis has focused on the science process. In a sense it is a request for theoretical self-consciousness. Through such processes more 'objective' theories may result.

Implications

The purpose of this thesis was in part to provide an exercise in reflexive sociology. By understanding our own selves as sociologists/social scientists in the process of
doing social science, we can perhaps better understand the people within the focus of our studies.

A shaping assumption of this thesis is that social scientists are the ultimate form givers of knowledge. It is suggested here that researchers/social scientists are constitutive forces in the knowledge process and cannot be separated from and made independent of empirical facts. Rather selective perception is held to occur, though not by explicit design, but through the researchers use of implicit paradigmatic lenses. Such a position contrasts with strict empirical positions that assume concept and theory formation add nothing to empirically derived data. Though certainly not a precise documentation Chapter IV of this thesis tends to support the former subjective position. Various studies of community power similarly are supportive of a subjective rather than an objective science (Meenaghan 1972). Connolly (1974) suggests:

> When I suppose I merely see what is 'out there', I am oblivious to the particular spectacles I wear--oblivious, that is, to the presumptions underlying my inquirers and to the contours of concepts organizing my perception. The results is unjustified confidence in the conclusions I reach and an inability to approach the environment from alternative angles of vision (Connolly 1974).

The empirical objectivity of science is therefore questioned in this study and a more subjective, value laden
position is posited. Furthermore, it is suggested here that an empirical position tends to hide or conceal organizing assumptions. Assumptions may often be implicit and unacknowledged because 'facts' are seen as being totally 'out there', rather than in part subjectively constructed.

If objectivity is problematical, how is it the researcher comes to see what he does? The answer to such a question basically takes up most of the content of this work. In a limited sense this work is an exercise in critical theory. "Critique reconstructs the constitutive genesis of the existing in order to recognize the actual, or the universal possibilities that are objectively present in the existing" (Schroyer 1973). In this thesis, attention was focused on a reflective reconstruction of two existing development theories in order to reveal the choices made and hence possibilities contained in their derivations. Each theory was in a sense reconstructed by reflecting back to the fundamental philosophical assumptions and gradually building up to existing theoretical socio-economic development views. This process by implication is an emancipatory activity. It reveals the constraints and limits of vision. As such it also reveals objective possibilities of choice available to the researcher. Social idealism is bracketed relative to social materialism. A cause-effect logic is a choice of view relative to a dialectic logic. Change can
be seen as quantitative and equilibrating or dialectical and qualitative. The choices become explicit and as such emancipatory rather than implicit and constraining.

These choices can be seen as reflected in policy decisions as well. Educational programs are idea programs. They tend to presuppose a functional-consensus view of reality, social idealism, and quantitative equilibrating change. Idea programs are inconsistent with historical materialist views. Such programs from this position would in general be seen as ideologies that hide class relations and tend to reproduce the current mode of production. Historical materialist positions would tend to produce policy directions that are in opposition to perceived class relations. This might include basing various local institutions around non-class relations and organizing production for local needs. A functional-consensus view might see the historical materialist policies as inefficient and non-development, missing in the advantages of regional specialization. Rather as stated previously, emphasis may be placed on how development can occur with integration - exports, highways, industrial filterers. Conversely, historical materialist views might focus on how imperialism occurs through exports, highways, and industrial filterers. When implicit assumptions are made explicit a total accounting of paradigmatic frames can occur. A fuller
understanding of consistent orientations to reality can be understood and more open and aware choices can be made.

Why what researchers choose to see what they do has not been addressed in this thesis. Rather this work focused on how embraced paradigms constrain and limit world views. Making these constraints explicit reveals their limiting character and adds an emancipatory effect to doing science. "Each critical reconstruction is a self-understanding that breaks down the constraints of past forms of consciousness" (Shroyer 1973). What choices an individual researcher actually makes are dependent on various influences— not discussed here. As with paradigms, individual decisions to embrace and build world views are often based on unexamined assumptions and positions (Gouldner 1970). A similar reflective process on reality itself, and not just on the science process, could help place and build an individual's consciousness within a structure and perhaps free him or her from any revealed constraints.
REFERENCES


Aberle, D. F. et al. 1950. "Prerequisites of a Society." Ethics, LX.


