Income Inequality and Transnational Corporate Penetration

by

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ABSTRACT

This study examines whether the positive association between national income inequality and transnational corporate penetration found previously by Bornschier and Chase-Dunn (1985) and others circa the late 1960s still holds for the mid-1980s. Both methodological and theoretical problems of earlier studies are discussed and solutions are offered. Economic development, political-institutional and regional variables are also included in the analyses. While further research is warranted, the results provide support for a World-System/Dependency perspective in understanding income inequality cross-nationally.

INTRODUCTION

Bornschier and Chase-Dunn's seminal 1985 work, Transnational Corporations and Underdevelopment, provided a revitalized foundation for quantitative cross-national research on income inequality from a World-System/Dependency perspective. The authors focused on the relationship between transnational corporate penetration and underdevelopment as a primary mechanism of capitalist exploitation and maintenance of the core/periphery hierarchy in the world economy. Foreign economic involvement by transnational corporations (TNCs) in the economies of less-developed countries (LDCs) was argued to be one means by which powerful world actors maintain an inherently unequal global division of labor. Using linear regression techniques on an improved cross-national data set, Bornschier and Chase-Dunn (1985) presented empirical tests of their hypotheses, which confirmed a positive relationship between levels of foreign corporate penetration and income inequality.
With one important exception (Tsai 1995), most recent work on cross-national income inequality has moved away from the examination of the impact of foreign direct investment (FDI) dependence on income distribution, focusing instead, for example, on the effects of economic and socio-cultural dualism (Williamson 1991; Nielsen and Alderson 1995) or technoeconomic heritage (Lenski and Nolan 1985; Crenshaw and Ameen 1994). This is surprising because foreign direct investment has dramatically increased in importance over the past two decades and is currently the primary source of resource flows to developing nations (Froot 1993; Tsai 1995). Indeed, LDCs are encouraged to attract foreign investment as one route to economic growth and well-being in the contemporary world-economy. Foreign investment is promoted by development professionals and lending agencies such as the World Bank as an efficient way to add to existing domestic pools of capital, technology and entrepreneurial talent (Rothgeb 1996).

Specification of the relationship between FDI and income distribution in LDCs is far from complete. Further examination of the processes specified by World-System/Dependency researchers is necessary, and it is especially crucial to examine the effect of FDI over the past two decades. This study takes the important step of quantitatively examining the relationship between TNC penetration and income inequality during the mid-1980's. The majority of previous studies have used data from the late-1960's and early-1970's and calls for more contemporary analyses are frequent (Krahn and Gartrell 1985; Ratan and Bradshaw 1992). In addition, while most previous studies indicate that high levels of foreign control over the economies of LDCs are associated with income inequality during the 1960s and 1970s, Tsai (1996) found that, with the specification of geographical region, the effects of foreign penetration were marginal. This is a significant contribution to the body of literature on the subject, and the following study will address this critique by incorporating regional variables into the analyses.

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Many researchers have examined recent changes in the world economy, but quantitative studies have largely ignored the possible impact of these changes on the relationship between transnational corporate penetration and income inequality. As Gereffi (1989) and others have argued, the declining significance of industrialization in national economies has implications for development theory. In addition, the rise of certain newly industrialized countries has affected traditional global spatioeconomic hierarchies (Haggard 1990).

Recent improvements in data accessibility and quality allow us to more reliably test World-System/Dependency arguments concerning the deleterious effect of TNC penetration on income distribution. The analyses presented here also incorporate the insights of various researchers into the study of national income inequality. The data are an improvement over most previous studies; indicators are available for a greater number
of nations and comparability issues have been addressed. Additionally, the correctly specified economic development variables and regional indicators are included in the equations, in order to ensure that the empirical results are not spurious. Moreover, I use the percentage of income accruing to the top 10% as one of the two inequality indicators in the models, which is unprecedented by previous literature on the subject. Theoretically, this is a better test of World-System/Dependency theories, as these arguments focus on the concentration of income for the elite segments of national populations.

The research presented in the following sections is a first step in the process of incorporating temporal change into our understanding of the structural processes of cross-national inequality; its limited aim is an updated empirical test of the World-System/Dependency model. After an overview of the theoretical model, I briefly discuss the variables used and related methodological issues. Then, the updated Bornschier and Chase-Dunn regression model is analyzed. Following this, additional political-institutional variables, which some have argued that Dependency research has ignored (i.e. Muller 1988), will be added to the equations for a more rigorous test of the model. This will also serve to further specify the redistributive effects of national government structure on income inequality, as well as provide a more complete picture of the processes affecting the relationship between TNC penetration and national welfare. In the final section, I present a discussion of the results of the study, as well as my conclusions regarding directions for future research on this topic.

THEORETICAL PERSPECTIVES

Modernization/Developmental Theories of Income Inequality

Modernization or developmental theories of income distribution predict that developing nations will exhibit higher levels of income inequality relative to both non-industrial and industrialized countries. However, these scholars argue that, as economic growth continues, income distribution within these nations becomes more equitable. This approach is most frequently associated with the work of Simon Kuznets (1955, 1963, 1976) who found a curvilinear association between income inequality and economic growth, and was among the first to develop a theoretical argument to explain this finding.

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Modernization theorists argue that wealth concentrates in the hands of a few entrepreneurs in the early stages of industrialization, as this is the most efficient use of scarce capital (Crenshaw and Ameen 1994). Increasing the rate of capital investment, both foreign and domestic, depends on the development of modern economic segments of the economy. This process entails the expropriation of surplus capital from other segments, and is hardest on the extractive and agricultural economic sectors. At this early
stage of industrialization, the state plays a critical role in social capital accumulation by implementing policies which ease the burden on these sectors as their surplus is transferred to modern industries in urban areas (Rostow 1960).

The link between economic growth and income inequality from a Modernization/Developmental perspective is the notion of spacial disparities in growth. These theorists argue that industrialization creates uneven development among sectors of the national economy. As urban modern industries grow, individuals involved in these sectors become relatively advantaged compared to other portions of the population, especially those in rural traditional industries such as agriculture. This creates disparities not only in income, but in social welfare, political power and integration into markets. Therefore, economic growth leads to economic dualism and high levels of income inequality among national populations; the mechanism which links industrialization and income distribution is sectoral and spacial disparities in the distribution of wealth.

As national development and urbanization continue over time, Modernization theorists hypothesize that income inequality decreases. Capital concentration becomes less urgent in the latter stages of industrialization, as urbanization economies are realized and modern economic activities and institutions diffuse from urban to rural areas. The process of spacial disarticulation found in early stages of development gives way to spacial integration in the later stages.

Theorists in this tradition argue that continued economic growth expands the middle class and increases employment and saving rates among the poor, leading to decreasing income disparity (Paukert 1973; Cheney and Syrquin 1975; Ahluwalia 1976; Kuznets 1976). This approach asserts that industrialization eventually expands employment opportunities for the entire population, generates occupational specialization which increases the bargaining power of labor and improves quality of life by decreasing the cost of living (Deane 1979). In addition, economic growth provides incentives for self-interested elites to voluntarily divest portions of their wealth to the population in order to increase consumption by creating mass markets for their goods, decrease conflict and legitimate the power structure (Lenski 1966).

New research in this tradition seeks to explain the Kuznet's "inverted-U" by reference to a comprehensive dualistic explanation which sees aspects of development as transitional. Nielsen (1994) and Nielsen and Alderson (1995; 1997) argue that the curvilinear relationship between income inequality and development is due to "transitional development processes related to the dualism (both economic and generalized) of traditional and modern sectors of developing societies." (Nielsen 1994). Sector dualism, and hence the high levels of income inequality which are brought about by such processes, are a temporary consequence of the labor force shifts and wage differentials between, and within, traditional agrarian and modern industrial sectors of developing societies. Inequality is also an unintended consequence of the demographic transition and resultant generalized dualism, which includes the uneven diffusion of sociocultural traits associated with earning power, such as education. It is not development per se, but
dualism and diffusion processes which are argued to be the keys to explaining income inequality (Nielsen and Alderson 1995).

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The empirical evidence from the literature which tests for the relationship between economic development and income inequality cross-nationally is mixed. While many have found a significant Kuznets-type inverted U-shaped association (Crenshaw and Ameen 1994; Weede 1993, 1989; Crenshaw 1992; Muller 1988; Johnson 1986; Weede and Tiefenbach 1981), others have found development to be insignificant when other variables are included in their models (Nielsen 1994; Simpson 1990; Chan 1989; Muller 1989; Prechel 1985; Stack 1980). More recent studies have failed to confirm the Kuznet hypothesis using improved longitudinal data (Deninger and Squire 1997, 1996), time-series analyses (Sasaki et al. 1997), or examination of case studies (Bowman 1997).

Clearly, further empirical work is needed in this area. While the present study is primarily focused on examining the effect of transnational corporate penetration on national income distribution, the statistical models will include a curvilinear specification of economic development. In addition to challenging the Kuznet’s "inverted-U" hypothesis to further examination, this will also ensure that the findings concerning the effects of FDI dependence on inequality are not spurious.

**World-System/Dependency Theories of Income Inequality**

As opposed to Modernization theory's emphasis on the internal dynamics of economic growth, World-System and Dependency theories are neo-Marxist perspectives that focus on the global structure of the capitalist world economy. Most completely elaborated in the work of Wallerstein (1974, 1979, 1989) and Cardoso and Faletto (1979), among others, this approach argues that national economic growth, inequality and sociopolitical change can only be understood through the analysis of a nation's relative position in the spatioeconomic hierarchy of the world system. That is, the relationship between economic growth and income inequality within any single nation is dependent on that society's relational position in the world division of labor and global power structure. It is asserted that the dynamics of capitalist accumulation in developing countries are different than the processes observable in core nations (Prechel 1985). The issue that World-System/Dependency analyses point our attention to is not the lack of economic growth in developing nations, but the type of growth their dependent status affords them and it's consequences.

In the World-System/Dependency perspective, capitalist development is dependent on social and material inequality and this inequality is in turn a result of incorporation into the world system. National economic growth and income distribution are in large part determined by growth potentials of productive activities in the larger global structure. Therefore, this approach hypothesizes that stratification of income will correspond with
the world division of labor and position in the world economy. This is a difficult concept to operationalize and, while some researchers have found that position within the spatio-economic hierarchy affects inequality independent of other factors (Nolan 1983; Bornschier and Chase-Dunn 1985), most recent studies have found insignificant effects when this concept is operationalized as core/periphery dummy variables included in cross-national regression models (Muller 1988; Simpson 1990; Crenshaw 1992). Although not fully settled in the literature, the relationship between spatio-economic position and inequality is in all probability more complex than can be captured by dichotomous variables, and other researchers have argued that core/periphery status is likely to work indirectly toward increasing inequality through the mechanisms discussed below (Simpson 1990).

There are variants to the World-System/Dependency approach regarding the creation of income inequality, some of which emphasize concentration of land ownership (Furtado 1970; Muller and Seligsen 1987; Boswell and Dixon 1990) or national export-structure (Baran 1957; Frank 1967; Galtung 1971; Prechel 1985). The following study focuses on the effect of cross-national capital transfers, which some have argued are more indicative of dependency status during the past twenty to thirty years than are trade-based measures (Prechel 1985; Chan 1989). This strand of the literature emphasizes foreign direct investment as the primary means through which the modern capitalist world-system creates, and maintains, intra- and international socioeconomic inequities. Many empirical studies of this relationship have confirmed a significant association between foreign corporate penetration (an indicator of the amount of foreign ownership and control over a host economy) and inequality (Evans and Timberlake 1980; Kohli et al 1984; Bornschier and Chase-Dunn 1985; Chan 1989; London and Robinson 1989; Crenshaw and Ameen 1994; Dixon and Boswell 1996). Other studies find this association only in certain geographical regions (Rothgeb 1993; Tsai 1995). Even those scholars which fail to confirm this relationship generally report their conclusions with reservation and do not dismiss TNC penetration as a potentially important determinant of income inequality (Weede and Tiefenbach 1981; Crenshaw 1992).

In the World-System/Dependency perspective there are three mechanisms that are hypothesized to link foreign investment and social inequality (Crenshaw and Ameen 1994). First, foreign investment in developing countries generates large sectoral disparities in the national economy, creates labor aristocracies and results in the underutilization of indigenous labor. Second, transnational corporations operating in developing nations accrue a disproportionate share of local sources of credit and repatriate profits rather than reinvesting them in the local economy. Finally, the governments of these nations, motivated by the necessity (generated by their incorporation into the capitalist world economy) of attracting and maintaining foreign investment, implement policies and strategies that decrease the power of labor and inhibit
vertical mobility. These include tax concessions, guarantees of profit repatriation, and labor laws unfavorable to workers (London and Robinson 1989).

Scholars in the World-System/Dependency tradition argue that the relationship between foreign investment and internal income inequality has different effects on various sectors of the economy, but in all segments it creates and sustains income inequality in the national population (Crenshaw and Ameen 1994). Foreign capital investment in the agricultural sector destroys traditional production processes and leads to unemployment and overurbanization through its capital intensive means of organization (i.e. labor shedding, land enclosure). In the extractive sector of the economy, foreign investment benefits only a small portion of the national population and thereby increases income inequality. This is because TNC penetration in this sector creates only a small well-paid labor force and because ownership of natural resources is typically concentrated.

World-System theorists argue that foreign investment in the manufacturing sector has the most harmful effect on national income distribution. National economies in non-core nations with large manufacturing sectors have high levels of income inequality because profits in this sector are increased by the maintenance of a large, surplus low-wage labor force. Therefore, high rates of income inequality are in the interest of transnational corporations and national elites who benefit from foreign investment; they have little incentive to take action to distribute income more equitably. Contrary to the hypotheses of Modernization theorists, the World-System perspective argues that the uneven development of highly penetrated developing economies benefits transnational corporations in that the only segment of the population which can afford to buy these manufactured goods is the wealthy elite (Evans and Timberlake 1980; Prechel 1985; London and Robinson 1989). Domestic demand for these goods depends on the concentration of wealth and high levels of income inequality. Although redistribution of wealth and the resultant expansion of markets may be in the long term interest of foreign corporations, they are driven primarily by the short-term profit logic of capitalism (Bornschier and Chase-Dunn 1985).

Furthermore, there is a convergence of interests between transnational corporations and the wealthy elite segments of the national population in maintaining income inequality which creates barriers to the "trickle-down" effect of industrialization predicted by Modernization theories. In addition to the incentives for inequity for foreign investors discussed above, the national elite strive to maintain their power and higher income so as to maintain privileged consumption patterns and access to status symbols. A common international class interest in the persistence of high levels of inequality thus link foreign investors and indigenous elites, leading these powerful groups to support (and in some cases attempt to increase) the existing unequal income distribution and to coopt and repress opposition from other segments of the population (Bornschier, Chase-Dunn and Rubinson 1977; Bornschier and Ballmer-Cao 1979; Nolan 1983; Bornschier and Chase-Dunn 1985; Stokes and Anderson 1990).
World-System/Dependency theories take issue with the Modernization argument that all capital investment is beneficial, distinguishing between the consequences of different forms of investment (Dixon and Boswell 1996). Moreover, they reject the hypothesis that the benefits of development to national elites inevitably "trickle-down" to the larger population, emphasizing how intranational class interests and structural barriers impact the possibilities for improvements in social welfare. This approach directs our attention to the connections between countries, and how these links structure the potentials for growth and well-being in discrete nations. In addition, the approach addresses microfoundations by showing, for example, how income inequality benefits the short-term interests of powerful actors within developing nations.

DATA AND MEASURES

The Measurement of Income Inequality

Many researchers have recognized problems with cross-national measures of income inequality (e.g., Ahluwalia 1993[1974]; Muller 1993[1984]). As Hoover (1989: 1008) notes in his work assessing the comparability of various types of income inequality data, most cross-national studies of this phenomena have been "relatively insensitive to issues of data quality and comparability." Fortunately, data collection procedures have improved in recent years, and much work has been done in assessing the strengths and weaknesses of various measures of income inequality, as well as their collection and interpretation.

Ahluwalia (1993[1974]) notes that income inequality is a difficult concept to measure quantitatively and is frequently incorrectly specified. The two most commonly used measures of income inequality are the Gini coefficient, which looks at the disparity between equal and actual distribution of income among quintile shares, and the proportion of income received by the top 20% of the population\(^2\). Use of the Gini coefficient has been extensively critiqued on both methodological as well as theoretical fronts (Braun 1991; Hoover 1989; Chan 1989; Muller 1993[1984]).

It is, however, generally for theoretical reasons that many researchers opt to use shares of income instead of the Gini coefficient. Muller (1993[1984]) argues that percentile shares of income are the most appropriate measures because World-System/Dependency arguments point to the concentration of income in the upper end of the distribution as the crucial indicator of income inequality. The Gini score is a measure of the variation of quintile scores from an equal distribution. As there is little variation in the bottom 20%, the difference between concentration in the top percentiles and the Gini score is due almost entirely to the distribution in the middle. In addition, the use of upper proportional shares of income has been argued to indirectly measure asset inequality, another significant dimension of economic stratification (Boswell and Dixon 1993). Considering these theoretical concerns, I will use both the top 10% and top 20% percentage shares of total income to measure income inequality. Moreover, as stated in the introduction, the
use of top decile shares of income is unprecedented in previous literature and is a better test of World-System/Dependency arguments.

The measurement of fractile shares of income as an indicator of income inequality also presents methodological problems, most importantly regarding the reliability and comparability of the data. One of these issues concerns the temporal ordering of variables. Cross-national data on percentage share of income is usually not available for a substantial number of countries for a short time span, for example over two or three years. Frequently, data on income inequality in cross-national studies covers an extended period of time, often temporally preceding the independent variables. As income distribution is a relatively stable structural characteristic most researchers agree that the variable can be validly included even where the measures temporally precede the independent variables to some degree (Chan 1989; Nielsen 1994). While income inequality does change, this change is usually relatively slow. That is, income distribution measures typically exhibit only small changes from year to year.

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Scholars have debated the appropriate length of the time span, however, with some arguing for five year (Muller 1993[1984]), nine year (Hoover 1989), or eleven year (Chan 1989) time periods. This issue is important because, as Hoover (1989) indicates, while income distribution is relatively stable, we cannot uncritically assume that factors influencing its variability operate in the same way at all points in time. Other scholars have argued that the need for a larger sample justifies the use of a wider time period, and have found the same empirical patterns using different time restrictions (Chan 1989). For this reason, I limit the measurement of the income inequality variable to a 14 year period (1979-1993). This decision is based on the need for a larger sample, as well as the fact that this work examines the Dependency model in the mid-80s². With this time restriction there is no overlap with Bornschier and Chase-Dunn (1985), and little with past Dependency studies.

Another issue in the measurement of income inequality concerns the comparability of the data, which researchers often collect from various sources in order to increase sample size. This can lead to problems if, for example, the data is not national in coverage or is based on different income-receiving units or income concepts (Hoover 1989). Fortunately, since income data collection has improved in recent years, I obtained the data used in this study from a single source, the 1995 World Bank Development Report (WBDR). The WBDR has been cited as the best available source of income data and has less comparability problems than other data sets, although standardized data collection procedures have not yet been established in all countries (Hoover 1989; Muller 1993[1984]).
Hence, this data set improves upon those used in previous cross-national research on income inequality in three ways. First, the data is updated and derived from one of the most recent sources available. Use of this dataset in the present study is an important first step in updating the modeling of national income distribution beyond the late-1960's and early-1970's data used in the majority of previous studies (important exceptions are Johnson 1986 and Nielsen and Alderson 1995). As stated previously, this update will allow us to determine if the relationships specified in the late 1960s were still operating in the mid-1980s. In addition, I take theoretical concerns into account by using percentile shares of income rather than the Gini coefficient, since the testing of World-System/Dependency arguments directs our focus on the distribution of income in the upper portions of the population. Furthermore, the use of top 10% shares of income is more relevant to these concerns as it indicates greater concentration, and the use of this measure is rare in previous studies of this topic. Finally, I have addressed methodological issues by using data from a limited time frame and from a single source to insure that validity and comparability problems are minimized.

**Measurement of the Independent Variables**

Following the full Dependency model specified by Bornschier and Chase-Dunn (1985), I use five independent variables in the linear regression equations predicting income inequality in models #1-#4 (Table 1) and #8-#11 (Table 2). Logged real GDP per capita in 1985 (RGDPCLN) (from Summers and Heston's 1995 PENN World Table Mark 5.6 data set) is included to control for level of economic development. This measure is an improvement over those studies, including Bornschier and Chase-Dunn's, which used logged GNP per capita without purchasing power parities. In a correct specification of the development/inequality relationship, logged real GDP per capita squared (RGDPCC2) is also included in the model, as level of economic development and income inequality are hypothesized by Modernization/Developmental theorists to exhibit a cross-sectional curvilinear association (Kuznets 1955, 1963, 1976).

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The measurement of transnational corporate penetration (PEN) is the ratio between foreign direct investment inward stock (from the World Investment Report 1996) and market GDP (from the World Tables 1995) in 1985. As a measure of foreign control over the host economy, this variable is both a methodological and theoretical improvement over those used previously (Dixon and Boswell 1996). One measure of the effect of state socioeconomic and sociopolitical processes, a dummy-coded variable of communist government in 1985 (COM) is included in the model. The coding of this variable is based on *The World in Figures: Editorial Information Compiled by The Economist* (1987). This operationalization is not the same as that used by Bornschier and Chase-Dunn (1985). However, it is primarily included in their study as a control variable. Both variables measure the same underlying concept and address the argument that Muller (1993[1984])
and others have made, which states that the redistributive effects of government mitigate the relationship between income inequality and other variables. In addition, I created a core country dummy-coded variable (CORE) as a measure of position in the spatioeconomic hierarchy in 1985. However, this variable was not included in the equations separately because it in itself has no substantive meaning net of the economic development and capital dependency measures. Rather, an interaction term between CORE and PEN(CORE*PEN) was included in the model to control for the possible negative association between core position and income inequality. It is this measure that is the theoretically relevant test of World-System/Dependency arguments because it captures the different processes at work in the core relative to developing nations.

Political-institutional variables are added to the regression equations in models #5-7 and #12-14, to more rigorously test the Dependency model specified by Bornschier and Chase-Dunn. As World-System/Dependency theorists argue that both position within the world economy - as well as sociopolitical processes - have an impact on levels of state economic inequality, further specification of these relationships is warranted. In addition, the effects of national state structures on income inequality is a subject of contentious debate in the literature. The results of studies examining the relationship between democracy and inequality are inconclusive and contradictory (Hughes 1997). Many studies find no causal relation between the two (Bollen and Jackman 1985; Weede 1989, 1993), while others find a negative association (Stack 1980; Muller 1988, 1995; Nielsen 1994). Still other researchers conclude that democracy has a net positive effect on income inequality (Simpson 1990; Crenshaw 1992). Clearly, this process needs further specification.

For this reason, I include two additional dummy variables in the regression models. The first is an indicator of democratic regime, derived from Gurr’s Polity III data set. This variable was constructed by creating an average democracy score for each nation for the period 1980 to 1985. The distribution of the data revealed a clear threshold point which distinguished democratic regimes from non-democratic ones, an average democracy score of 6.66 or higher. Therefore, for ease of interpretation, a dummy variable was constructed (DEM) from these average democracy index scores. The second is a variable indicating social democratic representation in parliament (SOCDEM). Some researchers have found positive effects of social democratic parties on income distribution (Hewitt 1977; Huber, Ragin and Stephens 1993), but most cross-national studies have not included regime type systematically. Separating the effects of social democratic versus non-social democratic government may explain the contradictory findings surrounding the effects of democracy discussed above. Many studies have found the cooperative public-private structures that characterize social democratic regimes promote overall social welfare, increasing national economic security and equality (Hicks 1988; Kenworthy 1995). The social democratic government indicator is dummy coded 1 for majority participation in parliament between 1980 and 1985, based on information obtained from The Statesman’s Yearbook (1987).
ANALYSIS AND RESULTS

Table 1 presents the OLS regression models of the relationship between the top decile income share measure of income inequality and the independent variables for countries with populations over one million in 1985. I will discuss these equations first, and then contrast the results with those of the models predicting top quintile income shares (Table 2). No outliers were found for any of the regression analyses and a full list of all nations included in the models is included in Appendix A. Following the Dependency model presented by Bornschier and Chase-Dunn (1985), the measures were entered into the equation one at a time in models #1-4 in order to examine the theoretically specified effects of the independent variables. State government variables are introduced into the equation in models #5-7.

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Table 1
Regression of Income Percentage Share (1985)

Top 10%:

Equations

<table>
<thead>
<tr>
<th>Predictor</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGDPCLN</td>
<td>37.91*** (13.6)</td>
<td>32.50*** (13.06)</td>
<td>37.66*** (13.29)</td>
<td>29.76** (16.79)</td>
<td>32.40*** (13.31)</td>
<td>27.74** (13.07)</td>
<td>33.05*** (13.16)</td>
</tr>
<tr>
<td>RGDPACLN2</td>
<td>-2.56*** (.84)</td>
<td>-2.23*** (.81)</td>
<td>-2.55*** (.82)</td>
<td>-2.01*** (1.08)</td>
<td>-2.23*** (.83)</td>
<td>-1.88*** (.82)</td>
<td>-2.20*** (.82)</td>
</tr>
<tr>
<td>PEN</td>
<td>---</td>
<td>1.88*** (.58)</td>
<td>1.36** (.66)</td>
<td>1.45*** (.72)</td>
<td>1.88*** (.58)</td>
<td>1.92*** (.57)</td>
<td>1.35*** (.64)</td>
</tr>
<tr>
<td>COM</td>
<td>---</td>
<td>---</td>
<td>-7.42* (4.66)</td>
<td>-7.31* (4.82)</td>
<td>---</td>
<td>---</td>
<td>-8.22** (4.56)</td>
</tr>
<tr>
<td>CORE</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>-4.81 (7.19)</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>CORE*PEN</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>-6.65 (1.92)</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>DEM</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>-1.14 (2.36)</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>SOCDEM</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>-4.59***</td>
<td>---</td>
<td>-4.98**</td>
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</table>
Table 1, equation 1 indicates that income share percentages do indeed exhibit a curvilinear relationship with logged real GDP per capita. That is, income inequality is greater where the national economy is at middle levels of development. This indicates support for the "level of development" paradigm, most commonly associated with Simon Kuznets and the "inverted U" curve (Kuznets 1955, 1963, 1976), but is also consistent with the World-System prediction of higher income inequality in the semi-periphery.

The World-System/Dependency paradigm is tested by bringing the transnational corporate penetration (PEN), communist government (COM), and interaction term between core status and PEN (CORE*PEN) variables into the regression equations (equations 2, 3 and 4). The relationship between PEN and TOP10 is, as expected, positive and significant, even when controlling for other factors. The communist government variable has a significant and negative relationship with TOP10. That is, nations with communist governments have relatively less income inequality than non-communist states. The positive association between TOP10 and PEN is stable with the inclusion of other variables and provides strong support for the World-System/Dependency contention that nations whose economies are highly penetrated by foreign corporations exhibit greater degrees of income inequality. The inclusion of the TNC penetration measure increases the variance explained by the equations from .24 to .34. However, contrary to the findings of Bornschier and Chase-Dunn for the late 1960's, the interaction term between the core and penetration measures is not significant, nor does it offer any additional explanatory power to the equation. I discuss the potential explanations for, and implications of, the disparate empirical findings of this study and that of Bornschier and Chase-Dunn in the conclusion.

Moving to the equations which include the additional political-institutional variables (#5-7), we see that economic development continues to exhibit a curvilinear association with inequality. Importantly, PEN remains significant with the addition of increased specification of government type; the positive association between high transnational corporate penetration and top decile income percentage share seems to be robust. Democratic status appears to have an insignificant effect on income distribution. Both
COM and SOCDEM are significantly negatively associated with TOP10; these forms of government have less income inequality relative to non-communist non-democracies and liberal democracies. Together with the development and penetration measures, these variables explain 38% of the variance in top decile income shares (#7).

Table 2
Regression of Income Percentage Share (1985)

Top 20%

Equations

<table>
<thead>
<tr>
<th>Predictor</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
<th>(11)</th>
<th>(12)</th>
<th>(13)</th>
<th>(14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGDPPCLN</td>
<td>42.11***</td>
<td>36.68***</td>
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1 tailed significance levels:
*** - p < .01, ** - p < .05, * - p < .10
Turning to the models predicting top quintile income share (Table 2), we see that the results are similar to those predicting decile share. The economic development variables continue to exhibit a significant curvilinear association with income inequality. As in the models predicting TOP10, the communist government variable has a positive relationship with TOP20 and the CORE*PEN interaction term is insignificant. The robust and positive PEN effect found in the models predicting decile income share are replicated in these models as well, as are the effects of government type. I present a discussion of these results and explore their implications for the study of cross-national income inequality in the next section.

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One-tailed significance levels:
*** - p < .01, ** - p < .05, * - p < .10

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As alluded to previously, Tsai (1995) argues that previous findings of a positive relationship between foreign corporate penetration and income inequality may well be the result of geographical differences in inequality. The empirical models of that study indicated that the effects of FDI were insignificant when regional variables were included in the regression equations. In order to explore this possibility for the present analysis, I introduce regional dummy variables into the core regression equations in Table 3. Following Tsai (1995), I include a Latin American and an East/Southeast Asian indicator in the models predicting TOPI0 (#15) and TOP20 (#16). The addition of regional specification substantially increases the amount of variance explained, from .38 (#7) to .48 (#15) for the equation predicting top decile share and from .36 (#14) to .45 (#16) for the equation predicting top quintile share. The development indicators become insignificant, no doubt reflecting systematic differences in regional economic development which are captured by the geographic measures. The leftist political-institutional variables continue to be negatively related to top decile and quintile income share. The results also indicate that Latin American nations have substantially greater income inequality than their counterparts in the reference group. Importantly, however, the FDI penetration measure remains significant and continues to exhibit a positive association with inequality. This indicates that, while the inclusion of regional indicators may be crucial for a full specification of any model predicting income inequality, foreign corporate penetration has an independent deleterious effect on national income distribution, at least for the mid-80s.

**DISCUSSION AND CONCLUSIONS**

The empirical findings of this study concerning the relationship between transnational corporate penetration and income inequality provide continued support for the World-System/Dependency model, although they are somewhat different than research focusing on an earlier time period. In accordance with the theoretical argument, foreign economic penetration is a significant and robust predictor of the concentration of income in the upper portion of the population. The empirical analyses reveal the "negative externalities" of capital dependency for national income distribution (Dixon and Boswell 1996). These results hold even where other relevant variables, such as level of development or regional specification, are included in the models. Perhaps the greatest contribution of this study is that it takes advantage of recent improvements in data collection and availability, allowing for an examination of the effects of FDI dependence on inequality during a more recent time period than the majority of previous research.

However, the results are not unequivocal. The insignificance of the core/penetration interaction term raises interesting questions for future research. Central to the World-System/Dependency approach is the notion that development processes are different in developing nations (the periphery) relative to industrialized ones (the core). Various explanations can be offered; empirically testing the issues raised by this study would be a significant contribution to the literature on inequality and dependency.
TNC penetration was at a low point in the mid-80s, which might explain the instability of the penetration effect (Miner 1997). Also, global inequality has increased since the 1965, especially during the 1980's (Ram 1992; Korzeniewicz and Moran 1997). An examination of changes in penetration and inequality over time should be undertaken in order to explore this possibility. Alternately, it may be that core nations are becoming increasingly subject to the same negative externalities of foreign penetration that have previously been found for less developed countries. That this might have changed between 1967 and 1985 would not be surprising. Deindustrialization and globalization arguments assert that changes in the structure of the world economy have resulted in the increasing convergence between the core and the periphery in terms of capital mobility (for example, Gereffi 1989). Researchers have noted an increase in income inequality in many core nations during recent decades, especially in the United States (Bluestone and Harrison 1988; Braun 1991; Nielsen 1994). Increasingly, many researchers have focused their attention on the economic and social consequences of relatively recent developments in industrial production and the structure of global capital, focusing on their implications for the core (i.e. Bowles et al 1984; Piore and Sabel 1984; Ross and Trachte 1990). The rise of some of the newly industrialized economies, especially in Southeast Asia where income inequality is relatively low, is further indication of the changes in the relations of global capitalism that have taken place since 1967 (for example, Haggard 1990).

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In conclusion, the positive effect of transnational corporate penetration on income inequality is still supported by the empirical evidence. Even accounting for national regime type, foreign penetration is associated with a greater concentration of income in the top fractiles of the population. The quantitative examination of cross-national income inequality during the past two decades is long overdue. The present research represents an necessary first step toward this end. However, this study raises more issues than it settles. The results leave many question unanswered, especially with regard to changes in the structure of exploitation and dependence in the world economy. Bornschier and Chase-Dunn (1985) provided evidence of the change in dependence from trade to capital investment relations. The research presented here indicates another change in this process, although the models do not empirically test this hypothesis. I suggest that the explanation might be found in an examination of recent historical developments – fluctuations in foreign capital penetration, mediation in core/periphery relations, variation in the mechanisms of capitalist exploitation, the changing nature of effective industrial production, changes in migration patterns - developments which have influenced the relationship between income inequality and transnational corporate penetration, perhaps altering but not eradicating the positive association between the two.

Furthermore, the inclusion of additional political-institutional variables into the equations is an important contribution toward fully specifying the relationship between form of
government and income inequality. While liberal democratic status had no significant
effect on income distribution, social democracies and communist governments exhibited
lower shares accruing to both the top 10% and top 20% of the population. These results
are somewhat intuitive; leftist governments with manifest redistributive ideologies and
policies decrease income inequality within their national boundaries. This issue needs
exploration, as in many nations where communist governments failed and/or their
economies opened, income inequality increased as nations became more highly
penetrated by foreign capital.

Future studies should more fully address and explain the issues raised by the empirical
results of this research. Specifically, changes in the levels of income inequality and
transnational corporate penetration should be added to the models to determine the
impact of time on these processes. Different measures of income inequality should be
compared. Other factors which have been found to affect income inequality should also
be included to explore the interactions between variables, as well as to increase the
explanatory power of the model. For example, ecological evolutionary theorists point our
attention to agrarian population density as an important determinant of income inequality
(Crenshaw and Ameen 1994). Additionally, further exploration of the impact of
government regime type on income inequality is warranted. Given the increased
accessibility and reliability of data, important questions concerning the effect of
globalization on dependency processes may now be empirically tested. The research
presented here represents an important first step in exploring the effect of temporal
change on the relationship between global structures and underdevelopment, providing
evidence for the continued utility of World-System/Dependency explanations of these
phenomena.

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NOTES

1. Income levels of the bottom 20% are rarely used due to lack of variation. Most nations
   have around 4-5%.

2. Fifteen observations are for years prior to 1985 (ranging from 1979 to 1984, see
   Appendix A), but were retained in the equations because of the increase in sample size.
   Removing these nations from the analysis results in a loss of variation which leads to
   increased standard errors, thereby decreasing t-scores. While the associations between the
   variables remain the same as in the models examining the full data set, the significance of
   these relationships is reduced in the equations examining the reduced data set. It is
   possible that this is a result of model underspecification, but is unlikely to be an
   indication that the reported relationships are solely due to influence of those inequality
   measures temporally preceding the dependent variables. Moreover, a variable measuring
the year for which the income distribution data was measured was not significant nor found to alter the relationships between the remainder of variables in the model.

3. Recently the World Bank has made available an expanded income inequality data set which includes both Gini and quintile data over time for a large number of nations, paying close attention to measurement and comparability issues (Deininger and Squire 1996). The use of this data in future research seems quite promising, as it allows for an examination of income inequality over time with a minimization of the methodological problems which have plagued previous quantitative inequality research.

4. A list of the nations designated as core countries in the creation of this dummy variable is provided in Appendix A, and is taken from Crenshaw (1992).

5. An indication of regional designation is provided in Appendix A, and follows Tsai (1995).

6. This is not to argue that the effects of FDI might not vary according to geographical region. Tsai (1995) found evidence of a positive penetration effect on inequality for East/Southeast Asia during the 70s. While a full examination of this issue is beyond the scope of the present study, future research should explore this issue.

7. I am currently working on a project concerning this issue.

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APPENDIX A

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</table>

*core (Crenshaw 1992)
+Latin America (Tsai 1995)
#East/Southeast Asia (Tsai 1995)
Vikings and Tigers: Finland, Sweden, and adoption of environmental technologies in Southeast Asia's pulp and paper industries

by

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ABSTRACT: This paper examines structural dimensions of the influence of core-periphery relations on adoption of environmental technologies in newly industrializing countries (NICs), using Nordic involvement in development of Southeast Asian pulp manufacturing in the late 1980s and early 1990s as a case study. Contrary to conventional wisdom, Southeast Asia was one of the first places in the world to employ new cleaner technologies in pulp and paper manufacturing. How did this happen? This paper argues that adoption of these technologies was influenced by dynamics within the world-system combined with the intentional actions of firms, states, and social movements over a 30-year period. The paper concludes that diffusion of the new environmental technologies is resulting in cleaner production in the periphery even while being part of a trend toward increased polarization between core and peripheral states, economies, and firms. Data were gathered from fieldwork in Southeast Asia from 1993-96; correspondence with Nordic firms, organizations and individuals; attendance and interviews at industry trade shows; and use of available data. Portions of the paper are derived from a larger study of adoption of environmental technologies in the pulp and paper industries of Southeast Asia and Australia.

*I sold the same stuff here as we sell anywhere in the world ... it's economics that drives it. How they operate it, what they do when the wastewater treatment facility breaks down, that I can't say ... maybe they keep on operating, get it fixed in a week. All I know is the equipment's there.

-- Singapore-based sales representative of a Nordic technology firm

Introduction

In the early 1990s, Southeast Asian pulp firms adopted world-class cleaner production technologies, defying conventional wisdom that "Third World"
countries were simply sites for "First World" manufacturing activities to run away to, to avoid increasingly stringent environmental controls at home -- the so-called "pollution haven thesis" (see Leonard 1988; see also Eskeland and Harrison 1997). How did this come to take place? This paper maintains that Southeast Asian pulp firms' adoption of new, more environmentally-friendly pulping and bleaching technologies was a product of structural dynamics within the world-system combined with the intentional actions of firms, states, and social movements in Nordic Europe (including especially Finland, Sweden and Norway) and Southeast Asia over at least a 30-year period.

After Raumolin (1984; 1990; 1991; 1992), I argue that Finnish and Swedish corporate and state interests -- modern-day "Vikings" -- have pursued a strategy of global specialization in forest industry technology as part of an effort to maintain competitive position within the structure of the world-system. In the late 1980s and early 1990s, under conditions of global recession compounded by political restructuring and realignment in Europe, Nordic countries targeted forest industry process technologies as part of a broader effort to expand high value-added exports to the newly industrializing countries of Southeast Asia -- the new "Tiger" economies. Southeast Asia was one of the few regions of the world booming at the time.

This paper begins with a summary of recent world-systems theory on industry, environment & the periphery, outlines the history of development of Finland and Sweden's specialization in forest industry technology, analyzes the establishment of "Viking" presence among the "Tigers" of Southeast Asia, examines conditions under which Southeast Asian firms adopted new, Nordic pulp and paper technologies, and discusses implications of these dynamics for world-systems theory. Data for the study were gathered from fieldwork in Southeast Asia from 1993-96, correspondence with Nordic firms, organizations and individuals, attendance and interviews at industry trade shows, and use of available data.

**Core, Periphery and Environment**

In *Global Formation*, Chase-Dunn (1989) suggests a number of ways in which core-periphery relations are changing in the course of the establishment of a "new international division of labor" (NIDL). Certain, especially more labor-intensive, forms of industrial production have been shifting from core to peripheral countries in the world-system. This shift does not alter fundamental hierarchies in the world-system, however. As Arrighi and Drangel (1986) argue, the relative composition of core, semiperipheral, and peripheral components of the world-system remain largely unchanged. This is due to the concentration of research and development, mass marketing, and other high value-added nodes in the commodity chain remaining disproportionately in the core (Chase-Dunn and Hall 1997; Gereffi and Korzeniewicz 1990; Wallerstein 1979).

With the shift of industrial activity -- the "muscles and nerves" of the world economy -- to the periphery, relations between core and periphery change accordingly (Arrighi 1985, cited in Arrighi and Drangel 1986, p. 57). Increasingly, core countries specialize in "brain" activities (*ibid.*), providing finance, technology/capital goods, and management
skills as needed to the rest of the world-system. Semiperipheral and weaker core
countries must continually scramble to keep from "falling down" in the hierarchy of the
world-system, and are particularly motivated to specialize, compete, and aggressively
export key factors of domestic comparative advantage to all corners of the globe
(Wallerstein 1979). Global economic crises are times of opportunity for weaker core and
semiperipheral countries to increase their share of world value-added (ibid.).

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While peripheral areas have historically been locations of extraction of raw materials for
export to the more capital-intensive core, for use in manufacturing, increasingly, both
first-level processing and manufacture of intermediate goods takes place in the periphery.
Today, not only are labor-intensive consumer goods produced in the periphery, but also
capital-intensive manufacturing takes place there, such as oil refining, chemical
processing, and metallurgy. Labor costs remain a factor for basic industry in the
periphery, but more for extraction and transportation of raw materials than for the limited
amounts of skilled labor used in capital-intensive production. Locating manufacturing
near sources of primary raw materials can help minimize transportation costs.

Other recent world-systems scholarship analyzes environmental dimensions of peripheral
industrialization. Bunker and Ciccarelli (Bunker and Ciccarelli 1995, p. 3), argue that
increasing control of resource extraction in the periphery is an essential feature of efforts
by "rising hegemons" to advance standing in the world-system. Hornborg (1988, p. 174)
places nature alongside labor as an essential ingredient of the world-system. Advances in
technology, he suggests, create new ways for the core to redistribute expropriation of
natural resources across space and time. Chew (1997, pp.388-389), posits that the shift of
industrial production from core to periphery is a result of ecological degradation in the
core combined with availability of inexpensive natural resources and low-wage labor in
the periphery, with "the outcome for Nature [remaining] the same..."

The global pulp and paper industry provides an interesting case in core-periphery
relations, industrialization and the environment. Historically, pulp and paper production
was concentrated in North America, Europe, and Japan, locations also of the lions shares
of paper consumption. In recent years, pulp and paper production has moved increasingly
to the periphery and semi-periphery, especially in South America and Southeast Asia,
where, as suggested by Chew's (1997) analysis, inexpensive resource costs allow the
manufacture of pulp and paper more cheaply than anywhere else on the planet. Pulp and
paper production areas in the North, then, are facing increasing competition from the
South. Northern countries which held comparative advantage in forest industries have
been pressed to include more "value-added" services, including the development and
manufacture of new process technologies.
Finland and Sweden, both historic centers of forest industry production in Europe, have been among the most successful in making a shift in the new international division of labor to forest industry consulting services and pulp and paper technology development. The forward-looking practices of Nordic governmental and non-governmental organizations, technology firms, and research centers, in developing new, cleaner production technologies increased global demand for those technologies, including in Southeast Asia.

This is one point at which earlier analyses of relations between the world-system and environment may be furthered. For multinational corporations and core states not only are vehicles of environmental destruction (as posited, e.g. by Bergesen and Parisi 1997), but also may be agents of environmental advancement. Which aspect is dominant for particular industries and locations is an empirical question, addressed here for Southeast Asia's pulp and paper industries. Or, as Arrighi and Drangel's (1986) analysis may suggest, the core-periphery hierarchy may be heightened in the course of peripheral industrialization, regardless (or even because) of the adoption of clean technologies. How do these dynamics play out in the case of the "Vikings and Tigers" -- Nordic involvement in the development of Southeast Asia's pulp and paper industries?

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**Historical Dynamics of the World-System**

Finland and Sweden have long had comparative advantages in forest industries and related industrial process technologies. A century ago, both countries were among the more peripheral states of Europe. Today both have leveraged human and natural resources and proximity to major European political and economic powers to develop substantial industrial, technological, and intellectual capabilities, rising into the ranks of the core states within the world-system. According to one prominent account, Sweden has been in the core since at least 1938, while Finland is a more recent arrival (Arrighi and Drangel 1986).

Finland's machine industry got started in the 19th century, while a territory within the Russian empire, producing ships for trading and machinery for natural resource based industry in the region, especially forestry and mining (Laakso 1998). During World War I, the Ahlström Company manufactured armaments for Imperial Russian troops. Granted independence in 1917 with the breakup of the Czarist empire, much of the course of Finland's development in the 20th century was shaped by its relations with Soviet Russia. In World War II, Finland sided with Nazi Germany, who engaged Finland's machine industry in reconditioning captured heavy military equipment (Ahlström 1949; 1963; 1994a).
Finnish machinery manufacturers received another boost following World War II, when employed by the Finnish government to provide heavy equipment to the USSR as part of satisfying Finland’s war reparations. Finland did not have much in the way of financial reserves. But it did have technical know-how and an established and underutilized machinery industry (Raumolin 1993). At least two of the key forest industry-related engineering/technology firms, Jaakko Pöyry and Ahlström (of which more below), received a boost during these years (Ulvia 1994b; Ahlström1994a).

In the 1950s and '60s, the "golden age" of Western capitalism, Finland continued to export to the USSR and Soviet bloc, successfully expanding into Western European markets as well (Holsti 1986). Following the social-democratic, state-led development model of its Nordic neighbors, Finland launched an ambitious program of investment in human capital -- establishing an extensive network of tertiary educational institutions (Alestalo 1993; Cribb 1994).

Even after decades of development and diversification, Finland remains dependent on trade with its eastern neighbor. When the USSR collapsed in the late 1980s, Finland faced a sudden loss of a major portion of its foreign trade (see Figure 1)(Economist 1995). At the same time, Sweden and Finland were heavily affected by the global economic recession of the late 1980s and early 1990s. With the highest levels of unemployment since the Great Depression of the 1930s (see Figure 2), both were forced to rapidly turn outward to global markets to salvage domestic economies and political stability.

**Figure 1. Finland’s exports to non-OECD countries, 1984-93**

![Graph showing Finland's exports to non-OECD countries, 1984-93](image-url)
Southeast Asia was among the few regions of the world booming in the late 1980s and early 1990s. What did it have that the rest of the world lacked? Two characteristics of these new "Tiger" economies stand out: labor costs below those of their more rapidly developing regional neighbors, the original "Four Tigers," Hong Kong, Singapore, S. Korea, and Taiwan; and vast natural resources. Low-cost labor spurred a boom in labor-intensive, export-oriented manufacturing (cf. Gereffi and Korzeniewicz 1990; Arrighi 1996). Extensive resources spurred a boom in primary production -- agricultural production/exports in Thailand; oil/gas, timber production in Indonesia. Pulp and paper was one of the most rapidly expanding industrial sectors in Southeast Asia. This was for indirect reasons in Thailand -- to support booming, export-oriented manufacturing; and direct reasons in Indonesia -- based on exploitation of that country's vast timber resources, and to supplement dwindling oil and gas exports as a source of foreign hard currency exchange.

The conjuncture of economic crisis in Europe and booming economy in Southeast Asia provided strong motivation for Finnish and Swedish firms and states to strengthen exports to Indonesia, Thailand, and elsewhere in Southeast Asia. In this they were quite
successful (see Figures 3 and 4). Forest industry goods and services, including pulp and paper technologies, were among the targeted exports.

**Figure 3. Swedish exports to Southeast Asia, 1988-93**

![Bar chart showing Swedish exports to Southeast Asia, 1988-93.](image)

**Figure 3. Sweden's exports to Southeast Asia, 1988-93.**

**Figure 4. Finland's exports to Southeast Asia, 1988-93**

![Bar chart showing Finland's exports to Southeast Asia, 1988-93.](image)

**Figure 4. Finland's exports to Southeast Asia, 1988-93 (ibid).**
How was it that cleaner production technologies were among capital goods exported from the Nordic countries to Southeast Asia in the late 1980s and early 1990s? The technologies had been developed in Finland and Sweden in the 1980s in response to environmental protest. A return on the public and private investment in those new technologies was not immediately possible only in Europe, given the global economic recession and concomitant overcapacity in pulp and paper manufacturing. Meanwhile, along with its booming economy, Southeast Asia experienced dramatic expansion also of social protest and environmental activism, including in opposition to pulp industry pollution. Southeast Asian firms expanding at the time were incented to invest in the new, environmental technologies to help ensure the long-term security of their investments.

Following sections of this article analyze the history of Nordic "Vikings" involvement in development of Southeast Asia's forest industries; address local experiences and dynamics of the Southeast Asian new "Tigers"; and review some of the history of the development of the new technologies themselves. The article concludes with a discussion of the relevance of this case for theory of the world-system.

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**Vikings**

The groundwork for increasing Nordic economic involvement in Southeast Asia's forest sector was laid over at least a 30-year period. Jaakko Pöyry, a Finnish consulting engineering group, began work in Southeast Asia in the 1970s. In the late 1980s and early 1990s, Finnish and Swedish forest industry technology firms exported major amounts of capital goods to the region, aided by generous government grants, loans and credits. At the end of the century, Nordic firms and states have been taking advantage of global economic crises to establish world-dominant pulp and paper sector frames, including both manufacturing and technology. Moving from traveling, to trading, to taking substantial equity interests in and managing day-to-day operations of major Southeast Asian pulp and paper ventures, Nordic firms and states have progressively deepened their sectoral block with Southeast Asian firms.

**Travelers**

*Jaakko Pöyry*. Chief among early contemporary Nordic corporate travelers in Southeast Asia was the Jaakko Pöyry Co. The Jaakko Pöyry Group of consulting, contracting, and manufacturing companies based in Helsinki, Finland, founded by a pulp and paper engineer of the same name, has been of singular importance in the shaping of the forest-related industries not only in Southeast Asia but also throughout the world (Hass 1978; Jaakko Pöyry 1993b; 1993c; Kerski 1995; Marchak 1995).
Beginning in the early 1970s, the group established a presence in Asia through Jaakko Pöyry Consulting, with funding from the Asian Development Bank (ADB) and other international development agencies. Pöyry conducted forest inventories and developed forestry management plans for the governments of Indonesia, Thailand, and other Southeast Asian countries. The Jaakko Pöyry group worked on at least 169 projects in seven Southeast Asian countries from 1971-92. Most -- nearly two thirds -- of these projects were in Indonesia. (See Figures 5, 6 and 7; see also Mayer [1996, p.26]).

The Pöyry group has excelled at leveraging business and government connections gained in the course of these studies into feasibility and construction management contracts for Southeast Asian pulp firms. Pöyry has done forestry and/or engineering consulting for PT Inti Indrayon Utama, PT Indah Kiat Pulp and Paper, PT Riau Andalan Pulp and Paper, and PT Kiani Kertas Pulp and Paper in Indonesia; Phoenix Pulp and Paper Co. and Advance Agro in Thailand; and others. Last but not least -- and key to the topic of this paper -- the Jaakko Pöyry group played a critical role in brokering the sale of pulp and paper technology in Southeast Asia.

**Figure 5. Jaakko Pöyry Southeast Asian projects, 1971-92**

*(n=169)*
Figure 6. Jaakko Pöyry Southeast Asian projects, 1971-92
(n=169)

Figure 6. Jaakko Pöyry Group's Southeast Asian projects, 1971-92, by country, n=169.

Figure 7. Jaakko Pöyry group structure, c. 1993

Figure 7. Organizational structure of the Jaakko Pöyry Group, c. 1993.

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As large-scale pulp and paper manufacturing began to take off in Southeast Asia in the 1980s, several Nordic firms were well-positioned to sell the capital goods necessary to build that industry. From the mid-1980s through the mid-1990s, pulping and bleaching technology was provided by two Sweden-based firms: Sunds Defibrator, owned by the Rauma-Repola group, Finland; and Kvaerner Pulping, owned by the Anglo-Norwegian Kvaerner group. The Ahlström Company, Finland, supplied advanced wastewater treatment and chemical recovery systems.

**Sunds Defibrator.** Based in Sweden, in the early 1990s Sunds was a subsidiary of the Finnish Rauma group (see Figure 8). Sunds supplied the entire fiberlines, including pulping and bleaching technology for the Phoenix II and Advance Agro mills in Thailand; with the latter being worth an estimated US $64.6 million. Sunds also supplied the entire fiberline for Riau Andalan Pulp and Paper, one of the largest pulp mills in the world, by building on Rauma’s historical relationship with the Raja Garuda Mas group.

**Figure 8. Sunds Defibrator - Rauma Repola c. 1993**

![Diagram of Sunds Defibrator's position within the Rauma Repola group](image)

In addition, Sunds provided the bleach plant to the Sabah Forest Industry (SFI) pulp mill in Malaysia; and fiberlines to PT Kertas Leces, PT Pakerin, and PT Bekasi Tegah, in Indonesia. Sunds has benefited from a close working relationship with both Jaakko Pöyry and the Finnish government, the latter, for example, providing a US $108 million interest-free loan to Phoenix for purchase of Sunds' (and other Finnish firms') technology.

Sunds has specialized in non-wood fibers -- today used for pulp and paper production more in Asia than anywhere else -- and its new SuperBatch™ extended cooking pulping and bleaching technology (Sunds Defibrator 1994a; 1994b; 1994c). The new technology,
suited for use with more environmentally-friendly elementally chlorine-free (ECF) and totally chlorine-free (TCF) bleaching processes, was developed in the 1980s, building on work conducted by the Swedish Royal University of Technology and the Swedish Pulp and Paper Research Institute (STFI) (Lindstrom 1999). Sunds is also responsible, with the Union Camp Co., of Virginia, USA, for developing the C-Free™ TCF pulping and bleaching process (Sunds Defibrator 1993).

**Kvaerner Pulping.** Kvaerner supplied pulping equipment to the Sabah Forest Industry (SFI) pulp mill in Malaysia, PT Indah Kiat Pulp and Paper's (IKPP) Mill #2 in Indonesia; and Siam Cellulose in Thailand. More recently, and more importantly in terms of this article, Kvaerner supplied its new Iso-Thermal Cooking (ITC™) continuous pulping technology with ECF bleaching to IKPP's Pulp Mill #8 and PT Wira Karya Sakti, IKPP's sister company, also in Indonesia. Both became operational in 1994.

Kvaerner got its start in the pulp industry in the early 1970s, when it joined forces with the Ahlström Company, from Finland (see below), and Myrens Verksted a/s, a holding of the Axel Johnson group of Sweden, to form Kamy r a/b, one of the world's leading pulp technology firms. In 1989, the Johnson group sold its share to the two other partners. Ahlström obtained exclusive marketing rights for the North American market, while Kvaerner gained rights to use the Kamy r name everywhere else, including Southeast Asia. In 1993, Kvaerner and Ahlström dissolved their partnership and Kvaerner began using its own name.

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The Kvaerner group is based in Norway, with major units throughout the Nordic countries and elsewhere. In the early 1990s, pulp and paper was one of the company's five major business sectors, along with shipbuilding, shipping, manufacturing oil and gas platforms, and mechanical engineering. Kvaerner's Pulp and Paper Division employed about 1500 of the group's 23,000 employees (see Figure 9).
**Figure 9. Kværner group business areas c. 1993**

Kværner a.s. (Norway)
28,620 employees

Shipbuilding  Shipping  Pulp & Paper  Oil & Gas Platforms  Mechanical Engineering

Kværner Eirika (Norway)  Kværner Hyrac (Canada)  Kværner Pulping (Canada)

**Figure 9. Kværner group business areas, c. 1994.**

**Ahlström.** The Ahlström Company was one of the largest privately-held firms in Finland until the end of the 20th century. As of December 31, 1994, Ahlström family members and the Ahlström Foundation held 74.7 per cent of the 458,219 shares of the Ahlström Company. There were 178 Ahlström family shareholders, including Johan Gullnheisen, Chairman of the Board of Directors, and Professor of Pulping Technology at Helsinki University of Technology. (Ahlström 1995)

While having roots in forestry and forest industries, Ahlström divested itself of most of these holdings in the late 1980s, redefining itself as primarily a technology and services company (Raumolin 1993; Ahlström 1994a). In the mid-1990s, Ahlström described itself as "a privately owned global engineering and paper group. Ahlström supplies systems and equipment to the pulp, paper, and power industries, and manufactures specialty papers". (Ahlström 1995)

For most of the 1990s, Ahlström was organized in four divisions (see Figure 10), with its Machinery and General Products divisions having the most sales and employees. Ahlström Machinery manufactured pulping, bleaching, recovery, effluent treatment and other technology for the pulp and paper industry; Ahlström Pyropower produced "fluidized bed" boilers for power generation; Ahlström Paper, the only remnant of Ahlström's forest-based industry, manufactured niche market specialty papers such as automotive filters, Ahlström General Products manufactured packaging, electrical parts, and fiberglass.

In the 1980s, Ahlström marketed pulping and bleaching equipment under its own name in Europe, and as Kamyr, Inc., in North America, under terms of the Kamyr partnership agreement. Since that partnership dissolved in 1993, Ahlström has expanded sales and marketing to South Africa, Russia, and Japan, "strengthened its capabilities in China and

[A]hlström supplied wastewater treatment and chemical recovery facilities to Phoenix II and Riau Andalan Pulp and Paper; and chemical recovery facilities to Indorayon and Indah Kiat. In addition, it had a US $200 million contract to provide power and chemical plants for the PT Kiani Kertas mill in East Kalimantan, Indonesia.

**Figure 10. Ahlström Company divisions, c. 1993**

![Diagram of Ahlström Company divisions](image)

**Figure 10.** Ahlström Company organizational structure (Ahlström 1995)

**Take-overs**

In the late 1990s, distinctions among Nordic technology firms, and between these firms and some of their Southeast Asian customers became blurred through a rash of mergers in the wake of the "Asian Flu" financial crisis. One knowledgeable insider and observer referred to these developments as such: "All the indicators for 'manic logic of global capitalism' (Greider) are explicit here in our little paradise ... it's the race within Finnish industry [to see] who is quickest to make the next move" (Wilenius 1999).

*UPM-Kymmene.* The Kymmene and Rauma-Repola companies merged in late 1997 to become the mega-forest industry firm, UPM-Kymmene. At approximately the same time, UPM-Kymmene also announced a major strategic alliance including substantial equity holdings in a joint venture with the Singapore-based, Asia Pacific Resources holding group (APRIL), operators of PT Riau Andalan Pulp and Paper and PT Inti.

Stora Enso. UPM-Kymmene's mergers and acquisitions were in response to the earlier merger of two other Nordic forest sector powerhouses, the Swedish Stora company, and the Finnish state-owned Enso Oyj pulp and paper firm (Wilénius 1999; Stora Enso Oyj 1998). Like UPM-Kymmene, Stora Enso is poised to become a major player in Southeast Asian pulp and paper manufacturing. Enso is joint partner with the parastatal Inhutani III forestry corporation in Indonesia, together with the Gudang Garam group -- manufacturers of clove cigarettes and one of Indonesia's largest consumer goods exporters (World Paper 1994a). The firms hope to construct a large-scale, export-oriented pulp mill in West Kalimantan, Indonesia, near several pulp plantations, including one of their own (World Paper 1994b; World Paper 1995). Also, in 1998 Enso announced a strategic alliance with the Advance Agro Co., major integrated pulp and paper manufacturer, in Thailand (Nation 1998a; Enso Oyj 1998). Through Enso's mergers and alliances as well as the Valmet-Rauma (Sunds Defibrator) merger, the Finnish state and Nordic private capital have direct equity stakes in many aspects of global pulp and paper manufacturing, including in Southeast Asia.

Kvaerner/Ahlström. Meanwhile, suffering heavily from the Asian flu (Kvaerner 1998b), in early 1999, the Kvaerner group was (re-)merging its Kvaerner Pulp and Paper division with Ahlström's Machinery division (Kvaerner 1998a; Virtual Finland 1998) -- shades of the old, failed Kamyr Corporation -- though under good terms this time (Wilénius 1999). Both the Kvaerner and Ahlstrom Companies had been hit hard by the Asian financial downturn and were engaged in major organizational restructuring.

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... And Tigers

Who were the Southeast Asian firms who in the last three decades sought help from Nordic corporate "travelers" in the expansion of pulp and paper manufacturing in the region, purchased capital goods including cleaner production technologies from Nordic "traders," and most recently have wooed and been wooed by Nordic public and private "take-over" interests? Key "Tiger" firms included the Phoenix Pulp and Paper Co. and Advance Agro Corporation, in Thailand; and PT Indah Kiat Pulp and Paper (IKPP) and PT Riau Andalan Pulp and Paper (RAPP) in Indonesia.
Phoenix

Phoenix Pulp and Paper was the first company to bring an ECF bleached chemical pulp mill into commercial production in Southeast Asia, in July 1994. Phoenix began exploring adding a second pulp line at its facilities in northeast Thailand in the mid-1980s. They hired Jaakko Pöyry to conduct a feasibility study for them. While planning the expansion, Phoenix came into conflict with local community residents concerning pollution from the company's existing pulp line (see Sonnenfeld 1998a). Phoenix upgraded its wastewater treatment facilities (using Ahlström equipment), but was nevertheless notified by government authorities that they would have to completely eliminate discharges into the neighboring Phong River (Nam Phong) within a few years.

In this context, Phoenix decided to "turn necessity into a virtue" and adopted an ambitious new corporate goal -- to become one of Asia's first "zero-discharge" pulp mills. To attempt to achieve this goal, Phoenix also added oxygen delignification to its existing pulp line and initiated a program to use treated wastewater to irrigate eucalyptus plantations on nearby lands. Phoenix's new pulp line was planned to incorporate the latest pulping and bleaching technology to help meet this goal. Phoenix's expansion and environmental upgrading was underwritten by a US $108 million interest-free loan from Finnish development authorities (Reuters News Service 1994b). Sunds Defibrator supplied an ECF SuperBatch™ fiberline for Phoenix's new mill. At the time of my site visit in August 1994, officials hoped that Phoenix's facilities would be clean enough to merit eco-certification for its products. If obtained, eco-certification would position Phoenix as a low-cost "environmental pulp" producer, since a substantial portion of its pulp is from non-wood (bamboo and kenaf) sources. Such a position could command premium prices in countries with "green" consumer markets -- in the mid-1990s, Phoenix claimed to be obtaining high prices in Japan for its kenaf pulp for use in "wood-free" paper products.

Advance Agro

Advance Agro is one of Thailand's newest pulp and paper mills. It was built in the northeastern region of the country by the Soon Hua Seng (SHS) group, one of Thailand's largest integrated agro-industrial business groups. SHS was mired in controversy in the 1980s for the role of a subsidiary, Suan Kitti, in cutting natural forests to establish eucalyptus plantations (see Sonnenfeld 1998a). Originally planned as the "Suan Kitti Pulp Mill," the mill's name was changed to insulate it from public and political pressure. Jaakko Pöyry and H.A. Simons, a Canadian firm, were hired as technical consultants for the mill.

SHS, wanting to minimize the impact of the Suan Kitti controversy on government approval of its proposed pulp and paper complex, hired the Finnish-owned and Bangkok-based, Presko public relations firm for advice on environmental matters. Sunds Defibrator provided ECF pulping and bleaching equipment for the mill, which began

Indah Kiat

The Sinar Mas Group, a diversified, integrated agro-industrial, real estate and financial group of companies based in Jakarta, began producing pulp at its IKPP mill in Riau, in 1984, using imported second-hand equipment from one of its Taiwanese joint venture partners. With substantial production and demand already for its various lines of bleached paper products, IKPP added a second pulp line (its first new pulp mill) in 1990, using Kamyr pulping equipment.

IKPP and its sister companies were so wildly successful that, with a downturn in the world's pulp and paper industry in the 1990s, the group seized on an opportunity to purchase new pulp and paper technology at "rock bottom" prices. Two new large pulp lines were built, one (Pulp Mill #8) at IKPP at Perawang, and one at PT Wira Karya Sakti, a sister mill in Jambi province, also on the island of Sumatra. Both are in operation today with Kvæmmer's ITC™ ECF pulping and bleaching technologies. Jaakko Pöyry has worked closely with IKPP over the years both in the company's plantation forestry program and as technical advisor. Funding for the new mills came at least in part from the international corporate bond market.

In 1995, the Sinar Mas Group "spun off" its pulp and paper interests to Singapore-based Asia Pulp & Paper Co. Ltd. (APP). Shortly thereafter, APP successfully floated millions of dollars of corporate bonds on the international markets, including in the USA, for expanded paper production in India and China. In 1998, APP announced plans to participate in a joint venture in a pulp mill in the Malaysian Borneo state of Sarawak. Also in 1998, APP announced a "global strategic alliance" with the Japanese Itochu corporation (APP 1998b). As of the writing of this article, reports suggested that APP had over US $3 billion in debts on international capital markets (Reuters News Service 1999).

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Riau Andalan

The Raja Garuda Mas (RGM) group, headed by the Tanoto family, among Indonesia's foremost plywood industry entrepreneurs, got into pulp production in North Sumatra in 1988 at their PT Inti Indorayon Utama (PT IIU) cellulose mill. They reportedly used second-hand equipment for the mill from Finland, including pulping and bleaching equipment from Rauma Repola, imported via a Taiwanese equipment company the Tanoto's had an interest in,
Despite a rocky history of engineering and political problems at the PT IIIU mill (see Sonnenfeld 199b), RGM planned what today is one of Indonesia's newest, and one of the world's largest pulp mills, in Riau, operating as RAPP. RGM hired Jaakko Pöyry to conduct a feasibility study and act as design consultant for the mill. Riau Andalan Pulp and Paper's entire fiberline, including ECF pulping and bleaching equipment, was provided by Sunds Defibrator. Funding for the project came at least in part from the international corporate bond market.

In 1995, like its competitors, the Raja Garuda Mas group spun off its pulp and paper companies to a separate, Singapore-based holding company, Asia Pacific Resources International Holdings Ltd. (APRIL). Like APP, APRIL also sold corporate bonds on international capital markets to raise funds for continued expansion. In 1997, UPM-Kymmene initiated a strategic alliance with APRIL, taking partial ownership of various APRIL facilities. (One of UPM-Kymmene's subsidiaries, Sunds Defibrator, had supplied pulping equipment to the RAPP mill.) In early 1999, APRIL spun off PT IIIU, due to continued conflict surrounding that operation (APRIL, 1999).

Summary

Results of three decades of Nordic involvement in the industrialization of Southeast Asia's forest sector are summarized in Table 1, below. From 1981 through 1996, almost all bleached kraft pulp mills built in Southeast Asia used Nordic pulping and bleaching technology (see column 5, "pulping technology supplier"). 1992-94 were watershed years for adoption of the more advanced ECF pulping and bleaching technology in Southeast Asia (see column 6, "bleaching sequence"). Jaakko Pöyry served as contracting engineer for approximately two-thirds of those ventures (see column 7, "contracting engineer"). The five bleached chemical pulp mills which commenced production in Southeast Asia from 1994-96, all use technology designed to produce ECF pulp, and to be adaptable to producing TCF pulp as demanded by global and domestic pulp and paper markets.

Table 1.

<table>
<thead>
<tr>
<th>start date</th>
<th>manufacturer</th>
<th>fiber source</th>
<th>capacity</th>
<th>pulping technology (admt/yr)</th>
<th>bleaching sequence</th>
<th>contracting engineer</th>
<th>project financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984 Indah Kiat - MTH</td>
<td>100,000 (used)</td>
<td>C/D-EO</td>
<td>Pro-Plan</td>
<td>Sinar</td>
<td></td>
<td></td>
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<tr>
<td>Year</td>
<td>Company</td>
<td>Model</td>
<td>Capacity</td>
<td>Location</td>
<td>Owners</td>
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<tr>
<td>1987</td>
<td>Sabah Forest Industries</td>
<td>MTH</td>
<td>100,000</td>
<td>Kamyk</td>
<td>C/D-EOD</td>
<td>(Canada)</td>
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<tr>
<td>1987</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(D/C-EO-D-D)</td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td>Inti Pine Indorayan Utama</td>
<td>MTH</td>
<td>180,000</td>
<td>Rauma Repola</td>
<td>C/D-EOD</td>
<td>Sandwell</td>
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<tr>
<td>1988</td>
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<td></td>
<td>(240,000)</td>
<td>(Finland)</td>
<td>H-D</td>
<td>(Canada)/</td>
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<tr>
<td>1988</td>
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<td></td>
<td>Jaakko Pöyry</td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td>Indah Kiat - Pulp Mill #2</td>
<td>MTH</td>
<td>180,000</td>
<td>Sunds Defibrator</td>
<td>C/D-EOD</td>
<td>Jaakko Pöyry</td>
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<tr>
<td>1989</td>
<td></td>
<td></td>
<td>(380,000)</td>
<td>(Sweden)</td>
<td></td>
<td>Sinar Mas;</td>
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<tr>
<td>1992</td>
<td>Siam Cellulose</td>
<td>MTH</td>
<td>50,000</td>
<td>Kamyk</td>
<td>C-EOP-H</td>
<td>Klöckner- -</td>
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<td>1992</td>
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<td>Vöest</td>
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<tr>
<td>1994</td>
<td>Phoenix II</td>
<td>MTH</td>
<td>100,000</td>
<td>Sunds Defibrator</td>
<td>D-EO-D-D</td>
<td>Jaakko Pöyry</td>
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<tr>
<td>1994</td>
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<td>Finnish Export Credit Ltd.</td>
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<tr>
<td>1994</td>
<td>Indah Kiat - Pulp Mill #8</td>
<td>MTH</td>
<td>380,000</td>
<td>Kværner Pulping</td>
<td>D/C-EOP-D-D</td>
<td>Jaakko Pöyry</td>
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<tr>
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<td></td>
<td></td>
<td>(Sweden)</td>
<td></td>
<td></td>
<td>corporate bonds</td>
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<tr>
<td>1994</td>
<td>Wira Karya Sakti</td>
<td>MTH</td>
<td>380,000</td>
<td>Kværner Pulping</td>
<td>D/C-EOP-D-D</td>
<td>Jaakko Pöyry</td>
<td></td>
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<tr>
<td>1994</td>
<td></td>
<td></td>
<td>(Indonesia)</td>
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<td></td>
<td>corporate bonds</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>Riau Andalan</td>
<td>MTH</td>
<td>750,000</td>
<td>Sunds Defibrator</td>
<td>D-EO-D-D</td>
<td>Jaakko Pöyry</td>
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<td>1995</td>
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<td>corporate bonds</td>
<td></td>
</tr>
</tbody>
</table>
1996 Advance Agro (Thailand)
edalyptus 175,000 Sunds D-EO-D-Defibrator D Jaakko Pöyry/
HA Simons (Canada)
Bangkok Bank
Thai Farmers Bank, Krong Thai Bank, Commonwealth Develop.
Corp. (UK)

1996 Kiani Kertas MTH (Indonesia) 472,000 Beloit/IMPCO "four-stage" Pöyry/Simons

Finnish Export Credit Ltd. + ?

**Table 1.** Technology employed in bleached chemical pulp production in Indonesia, Malaysia, and Thailand, 1981-97 (various sources).22

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**Technology innovation**

Where had the new technologies come from? In the 1970s and `80s, Sweden and Finland experienced rising environmental movements and concerns, including those focused on pulp and paper manufacturing (Hellstrom and Reunala 1995; Raumolin 1992). Nordic pulp producers -- many of them state-owned -- were forced to meet increasingly restrictive environmental standards -- now among the toughest in the world. Sunds and Kamyr, in cooperation with university research institutes, launched research and development programs to modify existing technologies and develop new ones to meet the new standards (Nasman and Lindstrom 1994). By the end of the 1980s, these programs were bearing fruit, with Sunds’ SuperBatch™ technology being launched in 1988, and Kvaerner’s ITC™ technology and Ahlström’s ozone bleaching systems in 1992 (Sunds Defibrator 1994c; Kvaerner Pulping 1994; Ahlström 1993). In taking a process reengineering approach to meeting environmental requirements, these firms traveled a different road than their North American counterparts who focused on developing new end-of-pipe technologies.
These factors came together in the early 1990s, resulting in the availability of Nordic environmental pulping and bleaching technology, urgent needs for new markets, and creative financing. Fortunately for the technology firms, this coincided well with the needs of Southeast Asia's new "Tigers." Jaakko Pöyry's forestry/forest industry consulting work provided important contacts and experience (Hass 1978; Jaakko Pöyry 1993g; Ulvila 1994a; Wallgren 1995). The history of local environmental conflicts around expansion of the industry, restrictive environmental regulations, and growing green international markets, provided additional reasons for the adoption of environmentally-friendly technologies in Southeast Asia's pulp sector.

The technologies utilized in these mills are world-class. This is in part a result of local community, environmental, and regulatory pressures. Nordic firms and governments have become major agents of transformation in Southeast Asia, however, by providing these technologies as well as the engineering, project management, and financing for many of these projects.

The long-term trend in the pulp technology worldwide is away from elementally chlorine (Cl₂) based, to ECF (ClO₂), to closed-process (Edstrom 1994). How fast the industry moves in any one region depends on a variety of factors, some of which have been touched on in this paper, including the availability of technology, its price, general world economic conditions, local community conflict, national environmental regulations, the pull of green consumer markets, etc. The five bleached chemical pulp mills built in Southeast Asia in the mid-1990s had many of these factors working in their favor.

Social activism will continue to influence how much environmental technology gets adopted, however, and how it is used. Without continuing pressures from outside forces - government oversight, community pressure, consumer demand -- paper producers will likely optimize their mix of bleaching chemicals to suit their economic needs and product requirements. Thus for example, while Indah Kiat's Pulp Mill #8 has ECF-capable technology, the company has run their new line with a chlorine dioxide-elemental chlorine (D/C) mix (Meadows 1995).

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Conclusion

What are the implications of the dynamics analyzed above for world-systems theory? First of all, the parallel rise of prominence of Nordic pulp technology firms and development of Southeast Asia's pulp and paper industries illustrates the consolidation of sectorally specific relations -- first cooperative, then increasingly exploitative -- between core firms and states and their peripheral counterparts, in the context of an evolving "new
international division of labor," including peripheral industrialization. This is consistent with world-systems analysis of the development of semiperipheral and weaker ("peripheral-") core states into full core status (Arrighi and Drangel 1986), and of the tendency towards increasing polarization between core and periphery. Indonesia and Thailand show limited characteristics of semi-peripherality in the forest industry/pulp and paper sector, especially since the "Asian Flu" financial crisis of 1997. Core-periphery relations have become increasingly polarized in the wake of the crisis, as a result of accelerated mergers, acquisitions and strategic alliances in the forest industry and related technology sectors globally, including in Southeast Asia.

The sale of capital goods associated with peripheral industrialization -- including now cleaner production technologies -- has multi-dimensional effects. Contrary to the conventional wisdom of the "pollution haven" hypothesis, in at least some sectors transnational firms, including technology firms, may actually be leading modernization of industry in newly industrializing countries. This suggests a further "advantage of backwardness" (Gershenkron 1966, cited in Chase-Dunn and Hall 1997, ch. 5) -- the ability to industrialize using cleaner production technology.

While arguably "cleaning up" manufacturing in Southeast Asia, sale of capital goods is a stepping stone in the increased domination of core over peripheral firms, states, and economies. This is in accordance with Arrighi's contention that:

...the industrialization of the ... periphery has ultimately been a channel, not of subversion, but of reproduction of the hierarchy of the world economy...

The relevant distinction is between activities that involve strategic decision making, control and administration, R&D, on the one hand, and activities of pure execution, on the other. The core zone tends to become the locus of the "brain" activities of corporate capital, the peripheral zone tends to become the locus of the "muscle and nerves" activities ... (Arrighi and Drangel 1986, pp. 56-57).

as well as Chase-Dunn's and Hall's argument that

upward mobility and transformational action are not necessarily the same thing. It is possible to succeed within a system without transforming the rules of that system. And it is possible to change the logic of social action without moving toward a more powerful or central location in a system (Chase-Dunn and Hall 1997, ch. 5).

Lastly, this case highlights capabilities and limitations of independent social movements across the world-system. As in Logan's and Molotch's (1987) work on the political economy of place and urban growth machines in the USA, social movements have largely not been able so much to affect the ultimate outcomes of economic development, but rather more to shape conditions under which that development takes place. In recent decades, social movements been more able to influence the nature but not fact of growth, development, and industrialization. In the present case, social movement activism has led
to the relative greening of technologies employed in Southeast Asia's pulp and paper sector, while core-periphery relations have become increasingly polarized in the course of large-scale industrialization of the periphery.

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Notes

1. Presented at the Center for Western European Studies colloquium series, University of California, Berkeley, April 15, 1999, and an earlier version at the annual meeting of the Pacific Sociological Association, Seattle, Washington, March 21-24, 1996. This article was completed while the author was Ciriacy-Wantrup Visiting Scholar at the Institute of International Studies, University of California, Berkeley. Mr. Marko Ulvila, Tampere University, and Professor Judith Mayer, Virginia Polytechnic Institute, were instrumental in the birth of my interest in this topic and have been faithful and encouraging colleagues and informants in the paper's long gestation. Professor Walter Goldfrank, University of California, Santa Cruz, also has graciously encouraged this project from its earliest stages. Dr. Markku Wilenius, University of Turku, whom I encountered by chance at a meeting of the American Sociological Association, was gracious in sharing materials from his personal Ahlstrom family archives. Professor Jussi Raumolin, University of Helsinki, kindly sent copies of his published materials, helping me commence this research. Officers and staff of Finnish and Swedish organizations and institutions too numerous to name here were universally friendly and supportive. Professors John Bellamy Foster, University of Oregon and Christopher Chase-Dunn, Johns Hopkins University, and an anonymous reviewer for the Journal of World Systems Research provided helpful comments on previous drafts. Financial assistance was received from the Australian-American Educational Foundation (Fulbright Commission); the University of California; the Switzer Foundation; the Centre for Resource and Environmental Studies, Australian National University; and Washington State University. The views expressed here are the author's alone.

2. Sonnenfeld (1996). For extended discussions of internal conditions and dynamics in Indonesia and Thailand, respectively, see Sonnenfeld (1996b; 1998a); see also Sonnenfeld (1998b).


4. Labor training and availability is, however, very much an issue in peripheral countries, as they must continually fight brain drain of talented local engineers and technicians to higher-waged areas of the world, as well as insufficient development of advanced training institutions. Advanced human resource development and retention are of
necessity major focuses of newly industrializing countries' economic development efforts.

5. The history of relations between the two countries goes back centuries. In the 18th century, Finland was under Swedish rule. Many social and economic ties remain between the two neighbors.

6. At the end of the 20th century, Finland is benefiting once again by its geographic proximity to Russia. As the Russian economy and society continues its chaotic gyrations, Finland has become a reliable source of raw materials, business services, consumer goods, and even a favored tourist destination for its neighbors (Ibrahim 1998).

7. In May 1998, Finland changed its definition of unemployment to bring it into accord with that of the European Union. Finland's official unemployment rates dropped 1-2 percent as a result (see Statistics Finland 1999). Data for 1981-84 in Figure 2 reflect the old definition; for 1985-98, the new definition.

8. The availability of large quantities of raw materials as a positive condition for economic development is consistent with (Gerschenkron 1966, cited in Chase-Dunn and Hall 1997, ch. 5). We know now, after the onset of the "Asian Flu" economic crisis of the late 1990s, that some of Southeast Asia's rapid growth of the previous decade can also be attributed to huge, loosely secured speculative investments in the region by the world's financial community.

9. Here, the structure and organization of these firms are analyzed largely as they were during the Southeast Asian boom from the late 1980s through mid-1990s. In the late 1990s, spurred in part by their overextension in Asia, all of these firms were involved in mergers (See below).

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10. In turn, the Repola group was "owned by Pohjola (insurance), Metsa-Serla (forest group owned by small-scale farmers), Ilmarinen (insurance), and Merita (bank)" (Ulvila 1996). In 1997, the Rauma-Repola group merged with the Kyrmene Corporation to become UPM-Kyrmene; in 1998, UPMKyrmene and the Finnish state launched a joint venture between Rauma and the Valmet Corporation, the latter a privatized technology company in which the state retains the largest block of shares. As of this writing, Sunds is a subsidiary of the new Rauma-Valmet corporation, jointly owned by UPMKyrmene and the Finnish state. (See below).
11. Elementally chlorine-free (ECF) pulping technologies were developed in response to concerns about toxic effects of dioxin, a byproduct of using elemental (gaseous) chlorine (Cl₂) in pulping and bleaching. ECF pulping technologies use chlorine dioxide (ClO₂), a compound more stable than Cl₂, that is nearly as effective in removing lignin from wood pulp. Other contemporary pulping technologies abandon chlorine altogether, using bleaching processes based on molecular oxygen (O₂) or hydrogen peroxide (H₂O₂). Such technologies are commonly referred to as totally chlorine-free (TCF).

12. As of this writing, Kværner Pulping was being merged with the Ahlström Corporation's Machinery division. (See below).


14. Ahlström has important historical links with the Jaakko Pöyry group (see below), including through members of the Ehrnrooths, "the richest family in Finland" (Ulvila 1995). Eric Ehrnrooth was one of the founders of Jaakko Pöyry Oy, in the late 1950s. He later went on to head Jaakko Pöyry Engineering (Hass 1978). Jan Ehrnrooth was an executive officer of Ahlström during the 1970s and '80s (Ahlström 1975; 1990; 1991). Another Ehrnrooth, Casimir, was chairman of the Board of the Kymmene Corporation, and a founding member of the Board of Directors of the UPMKymmene Corporation (see below) (UPM-Kymmene 1995). Pöyry's "longrange, ten-year 1967-77 program for A. Ahlström's Varkaus mills ... was followed quite closely and Varkaus became one of Europe's most efficient forest products complexes" (Hass 1978).

15. In 1994, prior to its recent spate of mergers, UPM-Kymmene was the second largest producer of paper in the world, behind only International Paper (Carrere and Lohmann 1996, p. 106).

16. In 1994, Stora and Enso were the fifth and sixth largest paper producers in the world, respectively (ibid.). Again based on 1994 figures, Stora Enso combined would now be the largest paper producer in the world.

17. For a detailed account of Enso’s involvement in Indonesian forestry, see Mayer (1996, pp. 219-229).

18. “Oxygen delignification” is a totally chlorine-free pre-bleaching process used to remove lignins -- the chemicals which make unbleached paper brown -- from pulp. Adding this relatively environmentally benign process prior to bleaching facilitates manufacturers' obtaining market-acceptable levels of pulp whiteness and brightness while using less or no elemental chlorine.

19. A "fiberline" is the complete set of technologies used in pulping and bleaching woody raw materials for producing finished pulp.

21. Ibid.

22. Symbols for the different stages of the pulp bleaching process are as follows: 'C' = elemental chlorine (Cl₂); 'D' = chlorine dioxide (ClO₂); 'E' = extraction, with sodium hydroxide (NaOH); 'O' = oxygen (O₂); 'P' = hydrogen peroxide (H₂O₂); 'H' = hypochlorite (NaOCl or Ca(OCl)₂) (Smook 1992).

23. Current capacities and bleaching sequences are in parentheses. 'MTH' = mixed tropical hardwoods.

24. Minister Sarwono Kusumatmadja, of Indonesia's Environmental Impact Management Agency (BAPEDAL), declared in December 1993 that all new pulp mills in his country 'had to be ECF or better (World Paper 1994c). In Thailand, government officials use stringent site-licensing reviews as well as pollution guidelines to minimize new pulp mills' environmental impact.

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Fifty Years of Indonesian Development: "One Nation," Under Capitalism...

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In Indonesia much uncertainty remains in the wake of the dramatic changes that unfolded in the latter half of the 1990's. By the end of the 20th century, the Indonesian economy was in ruins. The concept of democracy remained contested. The transportation and communication system that once at least minimally linked the diverse and at times disparate areas and peoples of the Indonesian archipelago into an Andersonian imagined national community collapsed, making more likely movements for regional autonomy, in turn, making the status of an Indonesian nation itself uncertain. One thing that is certain, however, is that Soeharto, the "Father of Development," is history. As political and economic policy makers in Indonesia, the United States, and around the world, and more importantly, Indonesia's men, women, and children pick up the pieces, it is our responsibility to look back and consider the past fifty years.

Indonesian development has been marked by a struggle between two opposing forces: one that is commensurate with self-reliance predicated upon an ideology of nationalism, and another that positions Indonesia within global capitalism. The issue that I shall address here is the degree to which the strategies of development were determined by a culture of capitalism or, alternatively, by a culture of nationalism. In fact, both appear in the development strategies under Sukarno and Soeharto. However, the manner in which the idea of the nation was deployed in attempts to effect development differed significantly. This difference helps explain the difference in the nature of the failures of both strategies—failures which have brought Indonesians to the political and economic crisis in which they now find themselves.

In the world-system, "culture" might be seen in one of two ways. In his analysis of Dutch hegemony in the mid-17th century, Wallerstein argues, "Cultures are precisely arenas
where resistance to hegemony occurs, where appeals are made to the historical values of established 'civilizations' against the temporary superiorities of the market." (1980:65). On the other hand, there also exists a "bourgeois culture" and nascent bourgeois and proletarian "praxis" in the struggle in the core for hegemony in the mid-18th century (Wallerstein 1980). In my work here, I trace the development of the cultures of capitalism and nationalism as they appear in the development strategies in Indonesia. In effect, the world-system does not bear a unified architectural form. Instead, to the extent that one might speak of a capitalist world-system, it must be thought of as remaining information, still subject to the challenges of other "systems," notably, as the case of Indonesia demonstrates, nationalism, as it is played out in specific historical and cultural experiences.

Under Sukarno, Indonesian development initially (and briefly) followed the designs of a Western-led understanding of development. By the late 1950's, however, Sukarno distanced himself from the capitalist world-system and turned to development strategies entrenched within an ideology of nationalism. Under Soeharto, Indonesia's rocket-paced aggregate levels of development--levels whose measurement of "success" was greatly flawed--resulted from increasing integration into the world-system; but economic integration relies upon another kind of integration. I intend to demonstrate that economic integration profits from a "cultural" foundation of capitalism.

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Gramsci's notion of ideology offers a view of capitalism as more than simply materialist "superstructure" and is therefore useful in my discussion of the culture of capitalist ideology in Indonesia. Laclau and Mouffe (1985) explain that, for Gramsci, "Ideology is not identified with a 'system of ideas' or with the 'false consciousness' of social agents; it is instead an organic and relational whole, embodied in institutions and apparatuses, which welds together a historical bloc around a number of basic articulatory principles. . . For Gramsci, political subjects are not--strictly speaking--classes, but complex 'collective wills'" (p. 67). In Indonesia under Soeharto, the discourse of development retained a rhetoric of nationalism, while, at the same time, Indonesians were accepting the terms of trade, so to speak, of capitalism--terms that were part of a culture of capitalist ideology, embodied in the policies and practices of the institutions of capitalism in the world-system, and diffused in Indonesian society, as it became increasingly part of a complex of "collective wills."

I organize this essay as follows: 1) theoretical framework, 2) development under Sukarno, 3) development under Soeharto, and 4) an analysis of Indonesia's attempt to "ascend" in the world-system, including an assessment of the claims to success in that attempt. In effect, the dualistic demands of capitalism and nationalism resulted in a hybrid of development strategies in which one or the other cultural orientation predominated. The contradictions inherent in Indonesian development are understandable
according to the particular history of Indonesia as a postcolonial state—as a site of the political, economic, and ideological struggle for dominance between Indonesian forces of nationalism and global forces of capitalism—a struggle that is likely to continue into the next century.

Theoretical Framework

According to World-System Theory (Wallerstein 1974; 1980; 1984; 1988; Wilkinson 1996), a mutually reinforcing system of nation-states and a market system of capitalism emerged in Europe between 1450 and 1620. The system, through processes of broadening and deepening, has developed over time and now encompasses virtually all areas of the world. It is divided, in an international division of labor, into zones of economic activity in which the core states, through unequal exchange, exploit peripheral areas and states. The underlying principle upon which exploitation is based is an effort by the capitalist class in the world-system to profit from this relationship, by deriving surplus capital and expanding markets. Between the zones of core and periphery is the semi-periphery. A similar relationship exists between core and semi-periphery. In this case, capital derived by the core from the semi-periphery comes from commodities that require more advanced technologies—industrial rather than agricultural. First incorporation and then integration occurs. The semi-peripheral states work to ascend towards the core by engaging in core-like activities (Chase-Dunn 1990; 1981). The core itself attempts to maintain its position relative to the other zones. The process involves a series of economic cycles, or Kondratieff waves in which there are alternating periods of global economic growth and of economic stagnation/contraction/hegemonic decline (Goldstein 1988; Avery and Rapkin 1982). Throughout the period under investigation in this work the system was undergoing contraction and the hegemonic decline of the United States.

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This basic theoretical framework has been supplemented (Wallerstein, Arrighi, and Hopkins 1986) with the notion of a transformed historical ground, which has three dimensions. First, there has been both a widening and deepening of stateness. Additionally, the activities of a number of regional international organizations (such as OECD, OPEC, ASEAN, COMECON, NATO, OAU etc.) further increase the "relational networks" between states as well as the tasks of the individual states themselves. Second, Wallerstein locates "organizing centers" of the "core of socialization of production" (p. 202), otherwise known as transnational (multinational) corporations. Their "reconstruction of the world-scale division and integration of labor processes fundamentally alters the historical possibilities of what still are referred to, and not yet even nostalgically, as 'national economies'" (p. 203). The third dimension of a "transformed historical ground" is what Wallerstein sees as a replacement mechanism of colonial empires. "Massive centralizations of capital...has as its agencies quite small ad hoc steering committees of consortia, each composed of several hundred banks" (p.204).
These include such international agencies as the World Bank and the International Monetary Fund (IMF). Wallerstein recognizes the difficulty this "transformed historical ground" creates for the "managers of the status quo," (p. 206) but he also sees that "it creates dilemmas for the antisystemic movements almost as grave" (p. 206). These dimensions must be addressed in the case of Indonesia, a state that entered the world-system as a state only after the departure of Dutch colonialists and the Japanese following World War II.

This, then, is the basic global theoretical framework of World-System Theory. As I see it, the case of Indonesia requires further theoretical consideration to account for the course of its development strategies. Friedman (1989) posits a broad model of the uses of "culture" which can be useful in explaining Indonesia's development strategies. On one hand, Indonesian development, at times, follows a pattern commensurate with a capitalist orientation. On the other hand, "nationalism" might be seen as an effective ideological tool for nation-building. According to Friedman:

In periods of expansion...there is a tendency for local self-reproductive systems to...become integrated into the larger colonial and international systems...Ultimately there is a strong tendency toward assimilation, toward the identification...with the model of the center, with a modernism that appears associated with success...This process is reversed in times of contraction. As modernism collapses in the center, there is an exponential increase in cultural identity both at home and abroad. At home there is a search for that which has been lost, and in the periphery for a cultural or even national autonomy previously repressed by the center. Cultural identity, from ethnicity to a "way of life" flourishes at the expense of the system. (pp. 66-68)

Prior to World War II, the world-system was undergoing expansion. Dutch colonialism was, in fact, commensurate with integration into the "the larger colonial and international systems...[with] a strong tendency toward assimilation, toward the identification...with the model of the center, with a modernism that appears associated with success." Since World War II, the world-system underwent a period of contraction. As a result, one would expect an increase in a search for an Indonesian cultural identity. This was, in fact, the case with Indonesia. The Indonesian search for identity during both the Sukarno and Soeharto periods was reflected in the ongoing struggle between forces of nationalism and forces of capitalism. How this played out, however, differed under Sukarno and Soeharto. Whereas the Sukarno regime searched for an Indonesian identity that continued with the notion of an Indonesian nation opposed to colonialism and global capitalism, the Soeharto regime sought an Indonesian national identity that would contribute to the system of global capitalism. The language of nationalism appeared in both development strategies but with different purposes.

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Heryanto (1988) examines the changing meaning of "development" in Indonesia from the beginning of the nationalist movement through the Suharto years. Heryanto's linguistic analysis can be seen as consistent with World-System Theory in the following way. Besides the unequal political and economic relationships that exist between core and periphery, there is also an unequal linguistic relationship. "Weaker states are required to use the language--meaning that they must follow the logic and the methods of understanding which are part of this language--that belongs to the states which are stronger" (p. 13). "Development" (in Indonesian, "pembangunan") was initially connected with the early ideas of nationalism, primarily during the late 1930's, the period of the "Cultural Polemics." "The meaning of pembangunan and membangukan [the verb form of the word] at that time can perhaps best be understood as equivalent to 'building' in 'nation-building' and 'character-building' which became popular expressions in subsequent periods" (p. 9).

The argument as it relates to my own can be summarized in Heryanto's observation of the effect of "development" in the period under investigation here. During Sukarno's reign, "development," understood as "nation-building," was related to "the older sense of 'membangun rumah' ('building a house')" (p. 22). It follows that "Pembangunan nasional (national development) has shown its most impressive achievements in the creation of a number of physical buildings" (p. 22). These include monuments, government buildings, sports complexes, and so on. On the other hand, under Soeharto, "The Pembangunan led by the New Order focused primarily on the creation and improvement of the infrastructure for industrialization" (pp. 22-23). "Building" under Sukarno was primarily a symbolic gesture meant to consolidate a nation-state against the external forces of the world-system. "Building" under Soeharto meant economic development in line with the external forces of the world-system.

In general, as Heryanto explains, Indonesia has been in the position of having to regard "development" using "a number of Indonesianized, Javanized, or similarly ethnicized, 'biases' or 'dialects,' which are perhaps unintentional, resulting from [an] effort to talk about Development with a 'grammar' that comes from the West" (Heryanto 1988: 14-15). The Indonesian language, as a key element of culture, which became the lingua franca (literally the language of commerce) in Indonesia, depended upon the degree to which Indonesia was associated with the capitalist world-system. As such, the concept of "development" in Indonesia, in both periods, was constructed by "modernist" notions of "development." However, whereas the "Great Leader of the Revolution" (Sukarno) used development as part of a national resistance to the system, the "Father of Development" (Soeharto) used development to integrate Indonesia into the system.

In principle, the rhetoric of nationalism remained under Soeharto as part of the struggle to locate an Indonesian identity, but in practice this search for identity proceeded within a dominating culture of capitalist economic development. In other words, under Soeharto, there continued to be a search for an Indonesian identity in the struggle between development strategies, but this search for identity became part of an effort to seek
identification with the global capitalist system. I turn now to an examination of the development strategies under Sukarno and Soeharto.

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Development Under Sukarno

The colonial history of the Indonesian archipelago is a series of periods of domination and resistance. Independence in 1949 was preceded by Portuguese and then Dutch colonialism, until 1942, when Japan occupied the region. Between 1945 and 1949, the Dutch again ruled Indonesia. Sukarno became the "Great Leader of the Revolution" upon independence. The path of "development" under Sukarno is complex and tortuous, and can only be given brief attention here. (Pitt 1991; Arndt 1984; Feith and Castles 1970; Devan 1987; Drake 1989; Glassburner 1971; Papanek 1980; Wilson 1989.)

The period between 1949 and 1959 eventuated in a reaction to global capitalism, which Indonesians associated generally with imperialism and in particular with the memory of Dutch colonialism. Initially, Indonesian policy makers responded to economic domination by attempting to copy multi-party democracy, and by attempting, to some degree, to play by the rules of global capitalism. Three attempts to liberalize the economy, in 1950-51, 1955, and 1957 (which were, in effect, attempts to integrate the Indonesian economy into the world economy) all failed because of an inability to coordinate political wills. The impasse between gestures towards liberalization and continuing efforts to build an Indonesian nation was finally settled in 1958-1959 by which time Sukarno had supplemented the basic form of his "Guided Democracy" by instituting "Guided Economy." Even at this point the development plans generated under the rubric of "Guided Economy" were to be financed through reliance on foreign aid, particularly from the United States. However, throughout the 1950's, there is evidence of Indonesia's reticence to accept America's terms of assistance. Essentially, assistance from the United States was an attempt to define Indonesia's development strategies, a definition that the Indonesians were generally not willing to accept.

Moon (1998) describes a conflict of development strategies between the United States and Indonesia over agricultural production during the 1950's that illustrates the incommensurability between them, and meant the eventual move away from reliance upon the United States by the Sukarno regime. Whereas Indonesia hoped to increase rice productivity through increased use of mechanization, the United States had in mind a development of Indonesian agriculture through technical training and education. As Moon notes:

Howard Jones, ambassador to Indonesia... called this emphasis on training "the struggle for the Indonesian mind." By training Indonesians in American best practice for agriculture and extension, the [International Cooperation Administration] hoped to create
a set of institutions that would foster the "proper" sort of economic development and thus to pre-empt any slide toward communism. (p. 203)

In general, the Indonesians were more interested in procurement of machinery than in technical training. For the United States, this was one instance of a global ideological battle between communism and capitalism. Moon continues: "As American officials discovered, Indonesian actors, even those with U.S. training, did not necessarily use their knowledge in predictably American ways, nor wholly adopt American interpretations of the goals of development. The struggle to control development was at the same time a struggle to define it" (p. 211).

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The Sukarno regime, suspicious of the motives of aid from the West, turned away from the West and toward socialist states, particularly the People's Republic of China (Simon 1969), and the Soviet Union and the Eastern Bloc for development assistance. Sukarno made clear his disdain for Western ideas about Indonesian development. Near the end of his rule, he referred to the ideas of "bald-headed professors, from Oxford, from Cornell University or elsewhere" as "inapplicable to the peculiar circumstances of Indonesia" (Tan 1967:33). His primary concern, perhaps even paranoia, was with the loss of control that Western development aid might mean to his rule and his interpretation of the idea of an Indonesian nation. By the latter part of his career, his rhetoric highlighted his claims to nationalism:

We do not want help from anyone at all, and we are not going to beg for it. We are a Great Nation; we are not an insignificant nation. We are not going to beg, not going to ask for this and ask for that, especially if aid has this condition and that tie tacked onto it! Better to eat poverty rations of cassava and be independent than eat beefsteak and be enslaved!  

Of course, the Indonesian poor were lucky to get poverty rations, as starvation was a common effect of Sukarno's misguided "Guided Economy."

The Sukarno regime rejected Western foreign assistance, and withdrew from the world-economy, by separating itself from the United Nations and its affiliated organizations, the IMF and the World Bank. This move was bound to fail, primarily because of the existing catastrophic condition of the economy. "Socialism" for Sukarno was, as has so often been the case, mistranslated into authoritarianism geared toward creating a unified nation-state. Chase-Dunn's (1990) observation helps explain the failure of "Indonesian Socialism":

Socialist movements which take place in the periphery are soon beset by powerful external forces which either overthrow them or force them to abandon most of their socialist program. Anti-systemic movements in the periphery are most usually anti-imperialist class alliances which succeed in establishing at least the trappings of national
sovereignty, but not socialism. The low level of the development of the productive forces also makes it harder to establish socialist forms of accumulation (p.26).

It is significant not only that during the Sukarno era "development" failed miserably, but also that the meaning of "development" was connected more with nation-building, and less with economic growth. The change in emphasis in the meaning of "development," that is, from development as nation-building to the economic development of the nation, serves as a bridge between the Sukarno and Soeharto regimes. In effect, a culture of nationalism gave way to a culture of capitalism, and the resulting change in emphasis in development strategies reflected this cultural shift. What is puzzling is that during the Soeharto period, Indonesian officials did not abandon nationalism. "Development" retained the trappings of nationalistic ideology. However, whereas Sukarno's Guided Democracy and Guided Economy framed development in a culture of nationalism, Soeharto's references to nationalism were themselves framed within a culture of global capitalism, and were used in the service of the capitalist world-system.

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Indonesian Development Under Soeharto

Liddle (1991) argues that Soeharto was the primary deciding force in Indonesian development during the period of the New Order, and that "the persuasiveness of the theories of his economists has interfaced with political culture and ideology and with the patronimical base of the political system to produce an enduring formula that combines liberal economics with illiberal, but not entirely unpopular, politics" (p.423). Notwithstanding the lack of "endurance" of this formula, Liddle's argument is convincing to the extent that these contending forces might go unquestioned. A more fundamental issue is the underlying cultural basis of the "theories of his economists," created out of the modern world-system. The choices that New Order Indonesia made were necessarily driven by the forces that constituted that system. On the one hand, a decision to move toward liberalization was prompted by economic necessity, riding on the heels of Sukarno's economic catastrophe. On the other hand, a decision to move in a "nationalist" direction, that is, "illiberal politics," might be construed as part of a continuing reaction to the capitalist global economy. However, despite a few pauses in liberalization policies, the general tendency in the overall Indonesian development policy under Soeharto was toward integration into the world-system. One indication of this was the continuance of state-led economic policies that served the interests of the center (in Java and particularly in Jakarta)--a center which was content to trade and do business with a globalizing market, but which persisted in denying the "advantages" of liberalization to the business interests and sectors of the economy that existed on the outer islands. In the end, the success of Soeharto's policy was measured in relation to the system.
The following analysis of development in Indonesia under Soeharto will take into account the basic elements of World-System Theory, supplemented by the three dimensions of Wallerstein's "transformed historical ground." The overwhelming power of this transformed historical ground incorporated the Indonesian economy and made possible the acceptance and reliance upon the theories of Indonesia's Western-educated economists in development strategies that were based upon the culture of global capitalism.

Sukarno's "Guided Economy" was, in the end, a dissociation away from the world market. The general trend under Soeharto was towards integration into the world market. The question that I want to ask now is whether development under Soeharto retained the language of nationalism, and, if it did, whether that language was primarily a way to serve the interests of capitalism.

The shift towards world market integration, beginning in 1966, was as dramatic as the previous move towards dissociation.

The period 1966-71 saw sweeping changes. . . There was a dramatic shift from the direct control of almost all aspects of the modern economy toward heavy reliance on market signals and price incentives. This period saw the end of most direct allocations of foreign exchange, the elimination of most price controls, an opening to foreign investment, and the acceptance of the private sector as the primary source of economic growth. The important distinction between this liberalization attempt and its numerous predecessors is that it encompassed not merely liberalizing acts but also the destruction of important antiliberal forces -- replacing a strongly antiliberal state ideology with one that was nominally liberal, virtually eliminating powerful antiliberal political parties, and dismantling some important institutions of state control (Pitt 1991:78).

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Development was also institutionalized in a series of "Five Year Development Plans," known as "Repelita." These plans are important for a number of reasons. First, the bureaucrats responsible for writing and promoting the policies contained within them were a group of Western-educated economists, often referred to as the "Berkeley Mafia." Second, the genesis and formulation of these development plans were carried out under the influence of the IMF. Third, the changing emphases in Indonesian economic development policy can be traced in them. Fourth, the discourse of nationalism is a feature of each of the plans. Finally, the importance given to the concept of development in Indonesia during this period is symbolized in the relationship between these Development Plans and the Development Cabinets, as they have been called since 1968.

Development in Indonesia under Soeharto proceeded within the world-system both in terms of the cultural basis required for integration into the system, and in terms of the
economic and political structure and dynamics of the system. During the New Order under Soeharto there is evidence of an increasing capitalist orientation both within the government, and in society in general. To begin, what has often been called the "Berkeley Mafia" was a group of economic bureaucrats in the Development Cabinets. Perhaps the central figure among the "capitalist bureaucrats" was Widjojo Nitisastro, who became Minister of State for National Development in 1968, and was named Minister of State for Economic, Financial and Industrial Affairs in 1973. In 1979, he also held the position of Chairman of the National Planning Board (BAPPENAS). In 1983, Johannes Sumarlin assumed the roles of Minister of State for National Development Planning, and of Chairman of BAPPENAS. He had previously been Minister of State for Administrative Reforms from 1968. Ali Wardhana was Minister of Finance from 1968-1982. Then, from 1983 to 1987, he was Minister Co-ordinator for the Economy, Finance, Industry and Development Supervision. Emil Salim began in 1968 as Minister of State for the Reorganization of the State Apparatus and Minister of Communication from 1972 to 1979. Salim also became Minister of State for Supervision of Development and the Environment in 1981, a title which changed in 1984 to Minister of State for Population and the Environment. All of these men received Ph.D’s in economics from the University of California at Berkeley, hence, the "Berkeley Mafia."

There were also a number of other key officials who were educated elsewhere in the West. Among these is RADIUS Prawiro, a graduate of the Nederlandsche Economische Hogeschool, and a Doctor of Economics at the University of Indonesia. Prawiro began as Minister of Trade in 1973 (changed to Minister of Trade and Cooperatives in 1979), and was Minister of Finance until he was replaced by Sumarlin. Rachmat Saleh, also a Ph.D. in Economics from the University of Indonesia, took Prawiro’s position as Minister of Trade in 1983. Bucharaddin Jusuf (Ben) Habibie (Soeharto’s successor), who graduated with a doctorate from the Technical University in Aachen, West Germany, was first Minister of State for Research and Technology in 1973, and also became Chairman of the Board for the Study and Application of Technology 1984. In 1976, Soebroto, a Ph.D. from Harvard, became Minister of Manpower, Transmigration and Cooperatives. Arief Siregar was Minister of Trade beginning in 1989, and served as the Governor of the Bank of Indonesia in 1987 and 1988. His Ph.D. is from the University of Muenster.

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Besides these central figures in the Indonesian government, there was further evidence of a general movement in Indonesia towards a cultural orientation commensurate with Western capitalism. The following are a few examples of influential individuals who received Western training:

Teuku Umar Ali (Ph.D., Cornell University) Coordinator of Economic and Social Research and Assistant Dean, Faculty of Economics, University of Indonesia. Alwi Muhammad Dahlan (Ph.D., University of Illinois) Assistant to Minister of State for Development and the Environment, Lecturer of Faculties of Social Politics, Hasanuddin
University and University of Indonesia. Dono Ilksandear Djojosubroto (Ph.D., University of Illinois) Directorate-General of Foreign Monetary, Finance Department. Hariri Hady (Ph.D., Berkeley) Lecturer at Faculty of Economics, University of Indonesia, Head of Regional Social Economic Bureau, BAPPENAS. Daed Joesoef (Ph.D., University de Paris I Patheon-Sorbonne) Minister of Education and Culture, Chairman of the Department of General Economics, University of Indonesia. Mubyarto (Ph.D., Iowa State University) Lecturer, Faculty of Economics, Gadjah Mada University, Yogyakarta. Anwar Nasution (Ph.D., Tufts University) Member of Macroeconomic Study Group, The World Bank, Lecturer in Economics, University of Indonesia. Halim Shahab (Ph.D., Berkeley and University of Indonesia) President of PT Jakarta Industrial Estate Pulogadung, Member of Indonesian Delegation to the World Bank for credit negotiations. Juwono Sudarsono (Ph.D., Berkeley) Chairman of the Department of International Relations, University of Indonesia. Zainul Yasin (Ph.D., Vanderbilt University) Head of Development Center for the marketing of agricultural commodities/National Export Development Agency, Trade Department. Buchari Zainun (Ph.D., Indiana University) Director of Staff School for Civil Servants.

A glance at the brief resumes of these people suggests a diversity of educational backgrounds (though all Western educated). What is more interesting is that many of the people who held (and in some cases still hold) influential government positions were also professors at leading universities in Indonesia. This suggests that a capitalist culture likely became diffused throughout the economic and political centers, through education, to young scholars who are likely to represent the next generation of policy makers and bureaucrats. The diffusion of this culture supported the creation of the sort of Gramscian "political wills" that were commensurate with the formation of a global hegemonic bloc of capitalism.

Again, these bureaucrats and scholars were the people responsible for policy formulation (writing development plans) and policy implementation (carrying out development plans). Their capitalist orientation derived in part from their educational background. However, there was another, more direct influence on these people. Several of the people in the list above were involved in World Bank discussions and education programs. Needless to say, the World Bank and the IMF are in the business of the capitalist development of places like Indonesia. Very simply, as far as the core is concerned, a semi-peripheral Indonesia would be preferable to a peripheral Indonesia because of its potential as a market for core commodities, and as a source of industrial labor. This is the bottom line as to why the IMF was (and is still) willing to inject the Indonesian economy with its billions.

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One of the first measures of the New Order regime was to apply for readmission to the IMF, the World Bank, and the United Nations. Missions from the IMF and the World Bank visited Indonesia in mid-1966 to assist in formulating economic policy. They were instrumental in arranging a meeting of representatives of the non-Communist creditor nations at a conference in Tokyo in September 1966 to discuss proposals for a moratorium on Indonesia’s debt commitments (Pitt 1991:115).

Indonesia has since relied on the IMF and the World Bank to oversee and help finance the programs recommended in the development plans. After decades of involvement with these organizations, of having these centers of global capital influence the course of Indonesian development, of having been acculturated into a system that recommends a capitalist orientation of its members, Indonesians, and importantly, the key figures in the Indonesian government, became increasingly willing to seek integration into the world-system. Indonesia’s reliance on the core, in a period of a “transformed historical ground,” has also increased in the form of ongoing consultation and negotiation with the World Bank and the IMF. In fact, Indonesia’s reliance on the IMF for its very economic existence is a stark contrast with the random token assistance of the 1950’s and early 1960’s. I shall now examine more closely the development plans (Repelita), and the actual patterns (and results) of “development,” which further indicate the capitalist orientation of Indonesian development under Soeharto.

A number of elements are common to all of the five-year plans. Each begins with an introduction of the "targets of development," and a chapter concerning the financing of the plan. Consideration is given to each of the following, in one form or another: agriculture, irrigation, food, industry, mining and energy, manpower, transmigration, housing, science and technology, health, population and family planning, regional development, the law and justice, communication and tourism, national defense and security, information, the press, and the government apparatus/administration of the plan. Emphasis changed through the course of the plans. For example, as the economy expanded, manpower became important due to an increasing urban workforce. Repelita I does not consider technology, whereas research and development became important in the later plans. Repelita V is notable for its consideration of the "role of women," though in terms almost solely of "family welfare" and health issues.

What is most notable, at least in terms of a rhetoric of nationalism cultural continuity with the Sukarno period, is the section in Repelita V on "National Culture and Belief in the One and Only God." Notice the wording of the following key passages:

The national culture which is founded on Pancasila is directed towards giving an insight into and meaning to national development in all aspects of life so that in this way national development is development which is culture oriented... Efforts towards national assimilation need to be continued in all sectors of life within the framework of strengthening national unity and oneness and fortifying national resilience.

Tradition and historical values need to be maintained and guided in order to cultivate historical awareness, fighting spirit and love of the country along with maintaining the
preservation of culture and the continuity of development.
The promotion of the national culture under REPILITA V in principle is an effort to
create a socio-cultural condition that is in line with the value of the nation's identity that

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Pancasila is the government's national ideology, designed to universalize an Indonesian
identity. Its five principles--belief in one Almighty God, a just and civilized humanity,
the unity of Indonesia, democracy guided by the wisdom of representative deliberation,
and social justice for all Indonesians--are the basis of "national development." It is
promulgated as a form of control over the diverse regions and cultures of the Indonesian
"nation-state." Both Sukarno and Soeharto invoked it in order to attempt to instill in the
people of Indonesia a drive for development. It has been, in effect, a tool of development.
Recalling what Wallerstein says about culture, "Cultures are precisely arenas where
resistance to hegemony occurs, where appeals are made to historical values of established
'civilizations' against the temporary superiorities of the market" (1980:65), Pancasila is a
synthetic culture (drawn from ancient tradition) that can be invoked to resist the
hegemony of global capitalism by appealing to a national ideal. Under Sukarno,
nationalism appeared in an anti-systemic strategy of development in the sense of "nation-
building" as the remnants of anti-colonial resistance to the core. However, under
Soeharto, while reference to the "values of the nation's identity" remained, nationalism
became a rhetorical tool of economic development in opposition, ironically, to the sort of
anti-capitalist movement of Sukarno, and in support of the widening and deepening of
"stakeness," as part of the rise of the global transformed historical ground.

Under Soeharto, regional resistance within the Indonesian "nation-state" became an
enemy to development. This is apparent in the regional disparities that I shall examine
later. However, it is important to consider again the nature of the "nation-state."
Returning to Wallerstein's "transformed historical ground," there was, during Soeharto's
New Order, a "widening" and a "deepening" of "stakeness." Just as there is an increase in
the "relational networks" between states, so there is within them. Wallerstein has also
argued that nation-states are "created" by the world-system (1991). For example, as a
colony, India was created by the British, and the Indians themselves constructed their
state out of an understanding of their own historicity. Wallerstein's proposition is that any
given "nation-state" is the result of its historicity. Similarly, Indonesia can be considered
a nation-state because the world-system fostered its creation, first as an effect of colonial
domination, and then as an effect of the claims to nationalism of the Indonesian
government. More than this, I suggest, the Indonesian nation-state, as a creation of the
world-system was, in turn, used to help create the system. The regional, cultural,
linguistic, and ethnic divisions that constitute the archipelago explain the attempt to build
an Indonesian nation under Soeharto. Whereas Sukarno understood the nation in
opposition to the global capitalist system, Soeharto understood the nation as a product of the world-system of capitalism, as integral to development within that system.

Wallerstein continues: "There is no question that, at the present time, nationalism in general, certainly including India, is a remarkably strong world cultural force. It seems stronger today than any other mode of social expression or collective mentality... Nationalism, in historical terms, is a very new concept. It is clearly the product...of the modern world-system" (pp.133-34). And, as a product of that system, the success of Indonesian development would need to be measured in terms that the system prescribes, that is, in terms of "ascent" within the system.

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The Problems of Integration: Indonesia "Ascends"

While the Five Year Development Plans include appeals to nationalist ideology, the plans do not emphasize nationalism. The central concern of development under Soeharto was economic success--"ascent" in the system of global capitalism.

Indonesia's economic "success" during this period has been well-documented. In 1965, Indonesia's Gross Domestic Product (GDP) was about $3.8 billion; in 1989 it was about $94 billion. For Indonesia to ascend, it would need to engage in core-like activities, that is, there would need to be a shift from agricultural to non-agricultural production. The following comparisons show this to be the case. The percentage of GDP in agriculture went down from 56% in 1965 to 23% in 1989, while industrial GDP went up from 13% in 1965 to 37% in 1989. Manufacturing and services also increased as a percentage of GDP. Manufacturing increased from 8% to 17%; services rose from 31% to 39% (World Bank 1991: 208). Furthermore, energy consumption per capita, as an indication of industrialization, increased from 91 to 263 kilograms of oil equivalent between 1965 to 1989 (World Bank 1991: 212). These figures describe an industrializing Indonesia that was poised to ascend in the world-system. As a peripheral nation-state it had signs of having semi-peripheral status.

Despite such evidence (that Indonesia appeared poised for ascent), Indonesia's external national debt increased significantly from around $20 billion in 1980 to nearly $70 billion in 1990 (World Bank; 1990). The growth in debt is even more striking over the 20 year period beginning in 1970, when total external debt was only $2.5 billion (World Bank 1991: 244). Because the IMF has become the leading referee of "Third World" debt, the effect on Indonesia, through increasing reliance on IMF regulated loans, is that it has become increasingly--in fact, exponentially increasingly--reliant on the IMF. The relationship that began in 1966 mushroomed into one of dependence on the IMF for guidance in dealing with debt. Robison (1986) explains, "While the prospect of being caught in a debt trap as consuming as those of Brazil, Argentina or Mexico is remote,
Indonesia's reliance on loans makes it increasingly susceptible to pressures from the World Bank for structural adjustment" (p. 381).\textsuperscript{14} (Of course, the economic collapse associated with the fall of Soeharto has resulted in tremendous reliance on the IMF, and a resumption of a significant servicing of debt to the institutions of a "transformed historic ground.")

Although the national statistics of growth are impressive, three important points should be considered. First, the Indonesian economy, while growing at high rates, averaging 5.1% between 1984 and 1991,\textsuperscript{15} was still plagued by the problems associated with its integration into the capitalist global market. Second, although Indonesia ranked ninth on the Human Development Index in terms of a positive change, rising from 0.316 in 1970 to 0.491 in 1990 (World Bank 1990), its overall position remained "low" (as opposed to medium or high), ranking Indonesia at 98th of the world's countries. Third, for all the rhetorical attention (to the extent that it appears) to "regional development" in Repelita II-V, there continued to be serious regional economic disparity by the early 1990's.

The force of development under Soeharto was to attempt to effect the building of an Indonesian nation that was to be developed economically--in other words, a nation whose development could be measured in terms understandable in the language of a culture of capitalism. To do this, the strategy of development relied heavily on the institutions and mechanisms of a "transformed historical ground," to use (and, in turn, to be used by) the techniques of development recommended by Western-oriented officials, and provided by an expanded system of banking and financial institutions. In short, Soeharto literally bought into the capitalist world-system, making Indonesia reliant upon it as a culture of development. In this way, the nation he was building was actually being built by the system, becoming, as Wallerstein expresses it (and the choice of words here is telling), a "product of the world-system."

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As such, success of this project would necessarily be in terms prescribed by that system; that is, development was measured primarily in the aggregate terms of national economic development. Under these terms, Soeharto was successful in building an economically developed, aggregate "nation." However, in other terms, this sort of nation-building was a failure. Inequity remained a characteristic feature of Soeharto's "nation." In the final section, I wish to draw attention to this failure not only to point out inequity, but also to point out that the measurement of success (as was the concept itself of "development") was based in the language of the institutions of the "transformed historical ground" of the capitalist world-system.

Poverty in Indonesia
By the 1990's, capital derived from the development of Indonesia as a "nation-state" had yet to make its way to a significant portion of Indonesia's people. (By the turn of the century, with the end of the "Asian economic miracle," poverty and hunger became pervasive.) The problem was that capital formation, where it happened, took place at the economic and political centers of Indonesia, leaving the rest of the country outside the system. In effect, Soeharto's "nation" was exclusive to the pockets of Indonesia that became integrated into the global capitalist system.

I shall now consider the two most extensive assessments of economic growth and poverty in Indonesia for the years that complete the period (1966-1990).22 The first is a report prepared by the World Bank (1990); the second is the work of the Indonesia Project at the Australian National University (Hill 1989). Part of the work of the World Bank is to promote itself by focusing on its success. Association with the culture of capitalism is enhanced when developing states are made to believe in the success of that culture. The effect of the World Bank report is a replication of a myth of success in the face of continuing problems associated with development. It is an interesting case of marketing at the highest altars of capitalism.

According to the World Bank report, Indonesia: Strategy for a Sustained Reduction in Poverty (World Bank 1990), in Indonesia, "The percentage of the population in poverty and the absolute number of the poor declined during the 1980s. Income inequality has also declined during the 1980s" (p. 1). There are three important points about the report's findings. First, the report concentrates on aggregate data, making distinctions between urban and rural sectors, but offering only very sketchy regional statistics (see Table 1). In fact, the only finding the report explicitly makes about regional inequity is as follows: "In 1987, the incidence of poverty...remained substantial in the eastern areas (25%)" (p. 15). Second, recommendations for dealing with the problem of poverty were foremost aimed at pursuing macroeconomic growth. Third, the source and nature of the data used in this study belie a suspect relationship between Indonesian policy makers and the World Bank.

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**TABLE 1**

**OFFICIAL ESTIMATES OF POVERTY: 1980-87 (WORLD BANK)**

**INCIDENCE OF POVERTY BY AREA**

<table>
<thead>
<tr>
<th>Area</th>
<th>1984</th>
<th>1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Java and Bali</td>
<td>25.0</td>
<td>21.0</td>
</tr>
<tr>
<td>Outer Islands</td>
<td>18.4</td>
<td>17.6</td>
</tr>
<tr>
<td>Western</td>
<td>14.0</td>
<td>13.7</td>
</tr>
</tbody>
</table>

*¹ Only the western part of Java.*
Winters (1995) reveals a "special relationship" that the World Bank had with Indonesian officials that places in question not only the veracity of such reports, but also the practices of capitalist development.

The problem of counting the poor prompted an illuminating controversy in 1989, when the World Bank was drafting the 1990 World Development Report that would showcase Indonesian development. When the Bank, as is its custom in Indonesia, circulated the report to Indonesian officials for their approval, conflict arose because the Bank used a definition of poverty that yielded a significantly higher number than the 30 million announced publicly by Soeharto. This led to several rounds of negotiations between the Bank and Indonesia's ministers to settle on an acceptable number that would not embarrass Suharto, who had apparently picked his number out of thin air. Without even so much as a footnote to alert trusting leaders to these negotiations, the Bank ended up relying completely on Indonesian data and definitions, so that the figure published in the 1990 report was exactly 30 million. (p. 422)

Winters also points out that the government's definition of poverty in Indonesia (upon which the World Bank has relied), even by 1994, was (equivalent to) $9.30 per month for people who lived in rural areas and $13 per month in cities, and was "barely enough to buy the cheapest brand of instant noodles three times a day...[meaning] that no money [was] left over for shelter, clothing, health expenses, or transport" (p. 422). The measure of ascent was as illusory as ascent itself. In this account, one can read a complicity between the institutions of the "transformed historical ground" and a corrupt cadre of Indonesian officials--officials who were determined to see to it that ascent would be assured by bending the statistics to prove "success." 21

The other work, Unity and Diversity: Regional Economic Development in Indonesia since 1970 (Hill 1989), surveys each region (and considers the further dimension of development in the provinces). The work's editors summarize the findings of these surveys:
[M]any crucial issues in regional development remain unsolved. They might have remained submerged—as they have for most of the post-independence era—had there not been a dramatic decline in Indonesia's terms of trade in the mid-1980s. Now, however, a financially constrained central government no longer has the capacity to fund major development projects throughout the country. Jakarta must look more to the regions for ideas, money, and initiative. Reforms are required in regional finance, in the delegation of administrative authority, and in national programmes—from rice to trade policy and transmigration—which have a regional impact. The "unity" of the last 20 years of strong central government has to be complemented more effectively by the "diversity" which flows from a greater emphasis on regional initiative and self-reliance (p. 53).

In effect, the recommendations in this report point to an Indonesian nation divided between a purportedly "successful" and integrated Indonesia located in the centers of capitalist economic activity and another Indonesia that remained outside the system and, by any measure, in poverty.

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**Conclusion**

In the late 19th and early 20th centuries, the Dutch implemented what was called the "Ethical Policy" in the Dutch East Indies (Saunders 1984). In many ways, this was a precursor to development in postcolonial Indonesia. Whether or not the effect of this policy was in fact "ethical," it contributed to the rise of Indonesian nationalism, which was later to become the foundation for claims to an Indonesian nation-state. The "Ethical Policy" of concerned Dutch colonialists bears a resemblance to the recent apparent concerns of the representatives of the World Bank for development in Indonesia. The resemblance suggests what has been a common characteristic of the world-system: wherever there is capitalism, there also is exploitation and a concern to conceal it.

To summarize, World-System Theory is a plausible framework of explanation of the development strategies of Indonesia during the period of the 1950's through the 1990's. Sukarno's development strategies, moving from a brief period of integration into the world-system early in his rule to dissociation by the late 1950's, came to be organized according to an understanding of nationalism that drew upon the nationalist period of the colonial period. The meaning of "development" changed under Soeharto to pay homage to the global market, eschewing in practice Sukarno's "nation-building" in favor of economic development. Economic activity during the New Order under Soeharto moved Indonesia towards integration into the system by working within a capitalist cultural orientation, implementing policies commensurate with that orientation. Indonesian development strategies under Soeharto included elements of nationalism in the rhetoric of the plans written by Indonesian policy makers. However, in practice, the rhetoric of national self-reliance took a back seat to economic reliance on the institutions of the
"transformed historical ground" of the global capitalist system in an attempt to ascend within the system. As a measure of ascent, economic "success" is identifiable only in the centers of Indonesian society where assimilation was most likely to occur. Despite the (questionable) findings of the World Bank, for the rest of society, the effects of assimilation and "ascent" were a perpetuation of economic inequity and poverty. Just as Sukarno's "development" of the Indonesian economy was a dismal failure, Soeharto's economic "nation" was a dismal failure inasmuch as its (relatively few) members were members of a nation built of, by, and for the capitalist world-system, leaving most of society on the side of the road to "ascent." In short, the economic struggle of ascent involved a cultural struggle between capitalism and nationalism, as uneven in its results as in the process.

One cannot assume that the Berkeley Mafia, their descendants, or their benefactors, the IMF and the World Bank, can have all the answers to the social, political, and economic problems of Indonesia. When huge and powerful groups such as these fail—and arguably fail miserably—perhaps it is time to ask the people for whom any system is anathema to making ends meet what ought to be done. The answer could well be as illuminating as any concocted by any of those who, for the past fifty years, have purported to have in mind Indonesia's "development."

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Notes

1. Wallerstein does not develop this argument to any great extent in the context of Dutch hegemony vis-a-vis the peripheral area of the Dutch East Indies. Dutch colonialism in the Indonesian archipelago flourished a century later. Its effects were devastating on the local economy. According to Kemasang, "Dutch 'mercantilism' destroyed the chances of Indonesia's domestic bourgeoisie and set back its growth for over 200 years" (1985:57).

Kemasang shows how the Dutch, specifically the Dutch East India Company (VOC), first gained access to, and then supplanted, the indigenous (priyayi) monopoly in the spice trade by using the Chinese as trading liaisons and later as tax collectors. When the Chinese themselves gained access to capital they became a perceived threat to the Dutch, first as a capitalist class themselves, and then as effecting the revival of an indigenous capitalist class. In 1740, the Dutch slaughtered "around 10,000 Chinese in and around Batavia [now central Jakarta] alone, about 10% of the region's total population, [and] put an end to any remaining chances that the community ever had of at least catalyzing the growth of a domestic bourgeoisie" (p. 75). These events demonstrate the extent to which a hegemonic power can go to retain ownership of the means of production, and is relevant to the present discussion as an explanation of the historical constraints of 20th century Indonesian development. See also Kemasang (1982) for an analysis of similar effects of colonialism elsewhere in Asia.
2. Needless to say, what "culture" is has been the issue of considerable debate. Notice that I begin this paragraph with the phrase: "Culture might be seen..." I carefully choose this wording because, if culture is anything, it is certainly a matter of interpretation--of what people make of it. In this case, culture can be seen to be the foundation of either nationalism or capitalism. This division is also apparent in terms of the way culture is used as a tool of political and economic strategy. The analysis that follows also suggests this as an indication of what culture might be. In fact, "culture" runs the gamut of epistemological and ontological meaning as well as economic and political strategy. Wallerstein (1990a) proposes that "[t]he 'culture', that is the idea-system, of this capitalist world-economy is the outcome of our collective historical attempts to come to terms with the contradictions, the ambiguities, the complexities of the socio-political realities of this particular system" (p. 38). He continues by arguing that the dualism between nationalism and capitalism (or, as he puts it, between universalism and racism/sexism), is synthetic, that "the two ideologies are a symbiotic pair" (p. 42), because the two separate ideologies, to the extent that they can be separated, reinforce one another, and, upon closer inspection, undermine one another. In the end, however, Wallerstein sees anti-systemic opposition to universalism (as it is presently enacted) to be generally futile, to the extent that it buys into the division and replicates the perpetuation of the myth that present vocabularies of change are appropriate to future transformation. This is evident in the failure of both Sukarno and Soeharto, both of whom sought the development of Indonesia in the terms recommended by the system--that is, that an Indonesian identity needed developing, using the model of the modern Western state. See also Boyne (1990) and Wallerstein (1990b). In any case, "culture" is made to be an important factor in Indonesia's development strategies by the agents of development, which makes it an important issue in understanding the "development" of Indonesia.

3. See also Cox (1983).

4. Gramsci's view of ideology is relevant to these elements of Wallerstein's "transformed historical ground" (see note 2), since it is manifested in "institutions and apparatuses" with "collective wills." An important element of this essay is, I believe, to demonstrate how this works: the integration of the "nation-state" of Indonesia into the "collective wills" embodied in the "institutions and apparatuses" of the IMF and the World Bank, and the global division of labor.

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5. Bergeson (1990) makes a similar point:

A state acts and communicates through a diplomatic language independent of the local vernacular, at first Latin and later French, and diplomatic representatives (ambassadors, emmisaries, couriers, etc.) and in earlier centuries through linked dynastic families. The point here is that the presence of these linkages precedes state interactions, and further,
makes it possible in the first place. From this point of view the international system, in
the form of its culture (diplomatic language and systems of representation) does not
follow the interaction of states, but makes that possible (p. 76).

6. Kuitenbrouwer (1991) explains that the colonial period was a period of great human
suffering. "Between 1873 and 1909, 60-70,000 Achenese and 2,000 members of the
colonial army were killed in Aceh; 10,500 members of the colonial army, 25,000
Javanese forced labourers and an unknown number of Achenese died of illness,
exhaustion or hunger. Starting with Lombok in 1894, the military actions in other parts of
the Outer Regions caused the additional deaths of 10-15,000 local inhabitants and about
500 members of the colonial army" (pp. 367-68). The government of postcolonial
Indonesia has itself been quite capable of similar--even more horrific--violence. In 1965,
just prior to the installment of the New Order under Suharto, as many as 500,000
Indonesians, due to their alleged ties to Communism or due to their Chinese ethnicity,
were killed. And in mid-1970's East Timor 200,000 people lost their lives in their
struggle for independence during the invasion and occupation by Soeharto's forces. Since
then, there have been numerous massacres, including the killing of thousands of people in
Irian Jaya and Aceh, as well as East Timor.

7. According to Tan (1967: 30):

On 5 July 1959, President Sukarno issued a decree which had three important effects: it
abruptly ended both the country's Western type of parliamentary democracy and its
liberal economy; it dissolved the Indonesian Constituent Assembly installed in 1956 to
draft a replacement for the interim Constitution of 1950; finally, it resurrected the original
Constitution of 1945 (Undang-Undang Dasar or UUD 1945) as the nation's organic law.
Its preamble contained Panitia Sila, the five principles which formed the philosophical
basis of independent Indonesia...

A. . . source of guidance. . . was Manipol-Usdek. . . President Sukarno explained that
Manipol-Usdek consisted of five essential elements:
1) The Constitution of 1945, being the original constitution upon the proclamation of
Indepedence, was the true and proper fundamental law of the state.
2) A consequence of that Constitution was Indonesian socialism.
3) Indonesian socialism entailed guided democracy.
4) Guided democracy in turn entailed guided economy.
5) The whole doctrine embodying these points gave rise to the concept of Indonesian
Identity, the moral and intellectual characteristics which informed the Indonesian nation.

Hence came the acronym Usdek which. . . was used to name and popularize the fresh
exegesis of the philosophy of the state:
U -- Undang-Undang Dasar 1945: the Constitution of 1945
S -- Socialisme a la Indonesia: Indonesian socialism
D -- Demokrasi Terpimpin: Guided democracy
E -- Ekonomi Terpimpin: Guided economy
K -- Kepribadian Indonesia: Indonesian Identity.


11. Liddle (1991) sorts out the economic policy makers of the New Order as being either "nationalists," "patrimonialists," or "economists." Soeharto associated himself with the nationalists and patrimonialists to the extent that they supported Soeharto's deference to nationalism. However, as Liddle points out, the economists (the group that are identified as being, or being in league with, the "Berkeley Mafia") received Soeharto's enduring favor because of the "success" of their liberal economic policies. Liddle also proposes an alternative argument to the one presented here. He entertains several factors that might have contributed to an increase in liberal economic policy in Indonesia, including international economic forces, domestic culture, patrimonialism, and economic crisis. He contends that all of these contributed to the choice of liberal policy, but argues that it was primarily a matter of Soeharto's own "voluntary" and "autonomous" choice. This certainly was an important factor. Soeharto's own personal interests were no doubt at stake in the choice of development strategies. However, the question of the agency of a single individual cannot account for the overwhelming power of the forces of nationalism and/or capitalism that made the choices available to him, nor can it account for the multiplicity of historical and structural forces that he faced.

12. On a visit to Sulawesi in 1995, residents there indicated to me that the issue of free trade in cloves and copra was of great concern to the people who lived there, as the central government was tightening its control on that trade. Because of a continuance of tight controls by the central government, the region was experiencing severe economic hardship--at a time when the center was experiencing sharp economic growth. Similar instances of unequal development were taking place throughout the archipelago.

14. These are also taken from *Who's Who in Indonesia*, Roeder (1980) and *International Forum Indonesia*, International Forum Indonesia (1990). The list is only a very brief sample. Positions listed are partial.

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15. One important aspect that relates to development strategies was the emergence in 1989 and 1990 of the idea of openness (in Indonesian, "*keterbukaan*") (Hein 1990), which came on the heels of the openings in the Soviet Union and Eastern Europe that had been taking place under the rubrics of *glasnost* and *perestroika*. Openness in Indonesia suggested a receptiveness to political freedom and economic liberalization. In an Indonesian context, a debate over openness was conducted in terms of a conflict between "Asian values" and globalization. This debate found its way into the debate over development strategies inasmuch as nationalism generally reflected "Asian values" and liberalization reflected the globalization of capitalism. In short, Soeharto embodied the dilemma facing Indonesian society by adhering to "Asian values" in his ongoing efforts to promulgate *Pancasila* as the guiding principle of the development of Indonesian society, while at the same time continuing to promote macro-economic policies that accepted the infusion of globalization to the extent that it contributed to Indonesian economic development. In fact, this issue was nothing new to Indonesian politics and economics, in which "*globalisasi*" and "*gaya hidup baru modern"* ('new modern lifestyle') had long been the subject of derision among traditionalists in Indonesia. Under Sukarno, this conflict of values included a Marxist criticism of Western capitalist exploitation. Under Soeharto, the conflict lost this ideological attitude, but was essentially quite similar. How the debate over openness in Indonesia in the 1990's has impacted the development strategies that Indonesia will pursue into the next century would require further investigation. However, one might speculate that the openings inspired by *keterbukaan* eventually led to the violent transition that Indonesia was undergoing at the end of the century.

16. The article "Does India Exist?" was originally a session paper published in "Historical Sociology of India," XI World Congress of Sociology, New Delhi, August 18-23, 1986.

17. See Booth and McCawley (1981); Bunton (1983); Dickie (1988); and Soehoedi (1976) for more on Indonesian economic development since 1966. For reports on the effect of the world market on Indonesia's economy see Friedland (1991); Poot (1990); Robison (1986); Rowley (1987); Schwartz (1991a; 1991b; 1991c); Wertheim (1980); and Winters (1988).

18. See also Robison (1988).

20. Poot (1990) offers the following data: GINI indexes based on Gross Regional Domestic Product per capita, that is, based on the internal economic production of the region are, "unweighted," 0.292 (Java), 0.535 (Outer Islands), 0.519 (Indonesia); and "population weighted," 0.176 (Java), 0.470 (Outer Islands), 0.360 (Indonesia), where a 1.0 would indicate "perfect" income inequality. While Poot goes on to show that the disparities are less significant when accounting for the mining sector, which should be expected, the disparities in these GINI indexes cannot be ignored. Furthermore, when one considers that these are regional statistics, the disparities internal to the "nation-state" of Indonesia would become even more dramatic in relation to the world-system as a whole.

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21. Wallerstein (1990a) argues:

The real sleight of hand is to engage in national rather than global measures... [i]t is perfectly possible for real income, as measured by GNP per capita, say, to rise in some countries while going down in others and in the system as a whole. But since the countries in which the rise occurs are also those most extensively studied, observed, and measured, it is easy to understand how facile but false generalizations take root. In addition, despite the better statistical systems of such core countries, it is undoubtedly the case that they do not measure adequately the non-citizen component of the population (often illegally in residence). And since this is the poorest component, the bias is evident" (pp. 48-49).

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Evolution, Complex Systems and the Dialectic

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Abstract

The status of large scale historical macro-theories is contested both in world-systems theory and in sociology as a whole. I distinguish three types of such dynamic models: evolutionary models, systems models and dialectical models. I define dialectical models as a family of complex systems models characterized by positive feedback (self-reinforcement or auto-catalysis). Such models lead to processes of accumulation and polarization, leading to system crisis. The games of Monopoly and Risk provide popular examples. This paper investigates the dynamic properties of three examples of such models: Myrdal's model of cumulative causation; Collins's models of Marxian transformations and geopolitics; and Chase-Dunn and Hall's iterative model of world-systems transformations. A combination of evolutionary, complex systems and dialectical analyses has considerable overlap with chaotic, far-from-equilibrium types of models and with analyses of complex adaptive systems. Such discontinuous, nonlinear dynamic models show great potential for solving problems of dynamic analysis both within world-systems theory and within sociology as a whole.

1. Introduction

Within sociology as a whole, the aim of constructing predictive macro-theories has an ambiguous place, and this ambiguity is even more marked within world-systems theory. The distinctive concepts of sociology were quarried out of nineteenth century macro-theories, particularly those of Marx, Durkheim and Weber (Knapp, 1994), and their theories rested on the larger mass of historical and evolutionary macro-theories by figures such as Bagehot, Comte, Condorcet, Ferguson, Hegel, Maine, Morgan, Saint-Simon, Spencer and Toennies. But today, subdisciplines concerned with social change, such as historical sociology, are relatively isolated from the mainstream of sociological analysis, which concentrates on such contemporary institutional structures as formal organization, the family, or crime and deviance, taking larger institutional dynamics for granted. This means that for many sociologists, subdisciplines concerned with social change, such as the Political Economy of World-Systems are treated as relatively irrelevant to the main theories and the day to day work of sociological analysis. Dynamic
large-scale theories of social change are more prominent within world-systems theory. But approaches to world-systems aiming at a theory of large scale dynamics are in tension with approaches that are skeptical about the possibility of any such theory, and treat the large scale dynamic as a given context for the analysis of particular historical configurations.

Large scale theories of social change are often driven by the simple projection of long term secular trends. Some secular trends appear to characterize the demographic, technological and economic spheres, usually conceived by Marxists as parts of the material base. With various oscillations, there has been an inexorable rise in the world’s population, and long term increases in literacy, science, technology, productivity and economic production, with manifold further consequences -- increase in transportation, communication and connectedness of the world’s population. There has been a rise in the size and complexity of organizations and political units. Secular trends of this kind have been one of the roots of evolutionary theories in sociology. Such theories often attempt to state the implications of such secular trends for the political or cultural spheres (Knapp, 1994). Such trends seem to some theorists to enable other changes in spheres such as inclusive citizenship, ethnic tolerance, gender equality or political democracy and to necessitate other developments. The Marxian conception of the expansion of the forces of production, and their dialectical fettering by the relations of production (Cohen, 1978) formulated one model of these linkages. The evolutionary conception of modernization, differentiation and modern values, formulated another.

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Sanderson (1990; 1997) has stressed the resources of evolutionary theory. He acknowledges that many evolutionary theories are teleological, progressivist, overly endogenous, use a specious (functionalist) concept of adaptation, lack an adequate concept of human agency, and impute too much directionality to human history. However, he argues that these flaws are accidental rather than necessary characteristics of evolutionary theories. He reports that most sociological respondents believed that evolutionary theories are sound in principle, but in need of improvement (Sanderson, 1997). While few sociologists believe that evolutionary theories are undeserving of criticism, only about one third believe that they should be abandoned.

The growth of technology, science, complexity, literacy, urbanism or productivity opens up possibilities and imposes imperatives on changes in economic, political, cultural and social relations. Social, political and cultural structures which were viable in a pre-nuclear age or in an age when primitive transportation and communications could slow the spread of epidemic diseases, may be entirely non-viable today. Fundamental disagreements about historical development and social change hinge on such possibilities or imperatives. The abolition of feudalism or of slavery suggest irreversible, directional tendencies. This does not imply philosophical, teleological or ontological necessity, and it
is perfectly compatible with the notion that a natural or social catastrophe might reverse millennia of development. However, directional changes are not a random walk. They reflect an intrinsic dynamic which, for good or ill, will continue as long as the structural sources of that dynamic persist and are not counteracted.

This paper will analyze a family of models of evolution and transformation that are based on positive feedbacks. Any process that reinforces or feeds on itself can be described as a positive feedback loop, and such processes tend to produce a secular trend. The positive feedback loop is one of the simplest and, arguably, most pervasive of feedback structures. It characterizes autocatalytic or self-reinforcing processes. Positive feedback is the natural model for processes of accumulation.

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Positive feedback processes also have an intrinsic tendency to reach a limit and they often are characterized by path dependency, instability and amplification of shocks. Thus, such processes and models based on them are characterized by catastrophic discontinuities, and by chaotic, far-from-equilibrium dynamics (Hallinan, 1997; Wallerstein, 1997). Such processes often generate tendencies toward increased inequality and polarization, especially when applied to control of scarce resources such as wealth or land, power or influence.

The archetype of such processes are those driven by "The Matthew Principle" - "To him who hath shall be given and from him who hath not, shall be take away even what he hath," from the parable of the three servants, Matthew 25:29 (Merton 1973; Cole and Singer 1991; Knapp et al. 1996). There are many social processes in which possession of one resource makes it easier to acquire others. The game of Monopoly provides a clear illustration of the systemic dynamic of accumulation, increased rents, polarization and increased inequality leading to the collapse of the game when all players but one are wiped out. The game of Risk, based on the accumulation of territories as a source of armies, provides an isomorphic geopolitical illustration. Such processes tend to produce increased inequality as well as polarization, and thus they are natural models for Marxian dialectical processes and transitions (See Figure 1).
Although such models have natural applications to social dynamics, they are "nonrecursive." Variables cannot be arranged in a causal order without loops. Most of our empirical estimation techniques and conceptual causal images require the assumption of a recursive model. Nevertheless, the kinds of empirical and theoretical problems which we now face may require us to think in nonrecursive terms, and in doing so, it will be useful to employ a form of dialectical analysis.

2. Evolutionary Theory

Evolutionary theory has been an essential point of reference for macro-social theory. The outstanding success of Darwin's account of natural selection in producing a non-teleological model of organic transformation and speciation has meant that it has served as a recurrent paradigm for macro-social theories. More particularly, Darwinian evolution produced a model of structural change, which occurs at a different time speed and a different process from the observable actions of organisms.

However, within the social sciences the aim of modeling macro-theory upon that of evolutionary theory has always been sharply contested. Evolutionary theory has been closely tied to Social Darwinism, which has ideological and theoretical implications deeply antagonistic to those of social science. Moreover, the limitations of Darwinian evolution as a theory, even in its home sphere of the analysis of biological variation, are reinforced in the social sphere, where there are no mechanisms directly analogous to sexual reproduction, DNA, organism death or selection. Accordingly, evolutionary
models of social change are often diffuse analogies which give no theoretical explanation of the long term secular trends.

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One of the great virtues of Sanderson's (1991) analysis was to show the interconnection between theories of macro social change and specific, local sociological theories. Sanderson (1997;94) has rightly stressed the fact that the classic sociological theorists often held evolutionary assumptions. He mentions Durkheim's Division of Labor in Society, but it would be equally correct to stress evolutionary themes in Marx, Weber, Mead, Spencer or Park. The fact that early sociologists were concerned to explain powerful, long run directional transformations mean that they had to come to terms with Darwin's evolutionary theory. For example, Marx offered to dedicate Capital to Darwin and the Afterward to the first German edition described the dialectical method in terms of evolutionary theory. There, Marx gave an extended quote from a Russian review which had underscored the aim of establishing objective laws of motion which operate independently of human volition. The review had asserted that there is a law of the connection between political-economic phenomena at any time, and that there are laws of variation governing their development and transition. The review continued that Marx,

"proves, at the same time, both the necessity of the present order of things and the necessity of another order into which the first must pass over;.... The old economists misunderstood the nature of economic laws when they likened them to the laws of physics and chemistry. A more thorough analysis of phenomena shows that social organisms differ among each other as fundamentally as plants or animals.... The scientific value of such an inquiry lies in the disclosing of the special laws that regulate the origin, existence, development and death of a given social organism and its replacement by a higher one." (Marx 1974[1887]: 17-9)

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Marx adopts the reviewer's view that the aim and method of Capital is like that of biological evolutionary theory, and he identifies this aim and method as that of the "dialectic," commenting,

"Whilst the writer pictures what he takes to be actually my method, in this striking and [as far as concerns my own application of it] generous way, what else is he picturing but the dialectical method." (Marx ibid.)
This virtual identification of dialectic with the method of biological evolutionary theory raises a number of questions, to which we shall return in the fourth section of this paper. However, it is evident that Marx, as well as all the other classical sociological theorists, whatever their admiration for some aspects of Darwinian theory, also maintained a distance from it because of its ideological affiliations, because of the limitations of Darwinian theory as a theory of long-term change, and because of the dis-analogies between biological and social evolution.

During the late nineteenth and early twentieth centuries, the most influential evolutionary social theories were those associated with Spencer, Darwin, Galton and Sumner, based on conceptions of biological inequality and liberal individualism. World War II, the Holocaust and the New Deal were an abyss for this kind of evolutionary social theory, and the forms of evolutionary theory which reappeared after World War II disassociated themselves from biological assumptions of European genetic superiority. Nevertheless, there remained powerful historical and logical connections between evolution, biological natural selection and justifications of individual and group inequality. Evolutionary theories tend to be drawn to liberalism by a kind of hidden gravitational attraction. And this connection is important because of the resurgence today of neoclassical evolutionary theory (Rushton, 1995; Levin, 1997; Jensen, 1998; Taylor 1998).

Moreover, even aside from its ideological affiliations, Darwinian theory has limitations as a theory of long run changes, even in its home sphere. The assumption that mutations are random, that modifications build on each other and that adaptation is relative to a given environment means that there is no reason to suppose that an evolutionary process, if repeated, would produce the same outcome. Natural history cannot ground predictions. While the theory of natural selection provides a framework for analyzing the process by which long run evolutionary trends came about, there is doubt whether the gradual accretion of adaptive changes provides a sufficient or an adequate account. Gould (1989) has stressed the discontinuous rates of change, with cascades of evolutionary modification, punctuated with mass extinctions. A mammal is "higher," "more adapted," or "more complex" than a cockroach only in a value-laden, ambiguous and undefined sense. Levin & Lewontin (1985) have stressed that what evolves is not an organism, subject to a fixed and given environment, but an ecosystem. Theorists of complex adaptive systems such as Kauffman (1993), have stressed that mutual interconnection and adaptation is subject to "red queen effects" (from the scene in Alice In Wonderland in which one must run to stay in place). If one set of organisms is developing massive attack claws and teeth, while another set develops increasingly massive defense armor, then each may be more "adapted," so that organisms without the attack or defense features will be weeded out. But they are adapted to each other and to a specific environment; probably "adapted-in-general" is a nonsense category. Their adaptation, like that of the
nation state as a war making machine, does not mean that they are adapted to other environments or threats, such as climatic changes or disease.

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Moreover, even if the process of natural selection were an adequate and sufficient account of biological evolution, there are powerful differences between biological and social evolution. Processes of social, cultural and political change are often Lamarkean rather than Darwinian and operate on an immensely shorter time scale. Van Parijs (1987) shows that even restricting consideration to the two processes of blind selection and of reinforcement (and diffusion), the combination of local equilibria and interaction may produce a highly discontinuous, unpredictable process. Sanderson detaches evolutionary theory from progressivism and teleology at the cost of making it nonpredictive, by arguing that societies are not adapted, but individual behavior is adaptive. However, this risks merely saying that people do what they do because it seems to them like a good idea at the time. It is unclear that this generates a theoretical explanation of any long run directional trends, particularly consequential material trends.

3. Complex Systems

A central insight of sociological theory, in opposition to the liberal individualism typified by Spencer, was that social structures have properties which are not easily or obviously a function of the individuals who are members of those social structures. The dynamics of a hurricane are not well-analyzed in terms of the trajectories and dynamics of individual rain drops (Matthew, 1980). Social structures may reproduce or perpetuate themselves independently of the awareness and intentions of individuals. One of the basic attractions of biological evolution as a model of large scale change was the promise to provide a model of macro-structural change. Similarly, one of the basic insights of world systems theory, in opposition to modernization theory, was that the structure of the world system exists and reproduces itself independently of the position of various societies, states and regions within it.

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During the twentieth century, systems theories have been an important body of analytical techniques that are relevant to such holistic properties of structures. Since its origin in engineering analysis, systems theory has developed into a number of heterogeneous bodies of analysis with separate journals, methodologies and almost non-overlapping literatures. For example, general systems theory was an ambitious program for a general theory of all holistic structures (von Bertalanffy, 1968). It inspired subsequent attempts
to model system needs of organizations on those of all living systems (Miller, 1995). Cybernetics (Weiner, 1965) generated a vast array of analyses of information systems. Systems dynamics constitutes a family of techniques for simulating feedback models in the investigation of organizations, urban or ecological processes (e.g. Forrester 1969; 1971; Collins, 1995) Systems analysis and operations research constitute a wide variety of ways of breaking down an organizational structure or process (Cortes, 1974). These and similar bodies of theory have demonstrated the possibility of powerful counterintuitive dynamic effects of system structure, and in the past decades, the technical capacities of computer modeling have led to a powerful explosion of simulations of complex system dynamics (Collins, 1995; Bar-Yam, 1998).

The dynamics of a system can always be represented in at least two ways: as a set of causal relations operating between parts, and as a trajectory in a phase-space. Even very simple deterministic nonlinear systems may generate non-repeating, unpredictable trajectories that exhibit discontinuous shifts from one region to another of the phase space (Lewin, 1992).

The potential for constructing dynamic holistic models of social structures have been one of the main promises of systems theories. However, those promises have been largely unfulfilled. Burns and his collaborators (Burns & Buckley 1976) distinguish "morphostasis," systemic processes operating within a given structure, maintaining that structure, and "morphogenesis" the kinds of processes operating to transform the structure. In principle, both kinds of processes can be investigated with systems methods, concepts and simulations. In practice, systems models have concentrated almost exclusively on "morphostasis" and have great difficulty dealing with the genesis and transformation of systems. Dynamic simulations that treat the structures and relations as given often assume away precisely those processes that most sociologists would consider "dynamic." Empirical analysis of (nonrecursive) models with feedbacks raises formidable technical problems. For example, such feedbacks will violate assumptions of uncorrelated error terms, which allow simple least squares estimation, and they will often produce identification problems, which make empirical estimation of causal effects impossible. While there are technical solutions to many of these problems, such as two stage least squares estimation techniques (Berry, 1984; Brown, 1995), they are inconvenient and make demands for data and rigorous theory which we often lack.

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The result of these problems is that systems models are often static analyses by stipulation. A set of components and of causal forces is assumed and treated as given; their simulation is not connected to empirical evidence that the causal forces are as assumed in the model. Such simulations may be useful in showing implications of theoretical assumptions or the sensitivity of a dynamic to variation in some component parameter (Hanneman and Collins, 1987; Collins, 1995). Sometimes simulations show
that no plausible variation in some inputs or causal connections makes much difference to
the operation of such system. Forrester constructed well-known simulations suggesting
that all the currently considered solutions to some problem were bound to fail (1969; 1971),
either because the proposed solutions generate feedback increases in the initial
problem, or because alternative paths make changes in some inputs or parameters
ineffective.

Thus, even without quantitative estimation, the qualitative structure of causal relations, is
often far more important than the quantitative size of its component parameters. For
example when variables are part of a mutually reinforcing complex, sorting out the
quantitative effects of any one of them is often both ferociously difficult and practically
irrelevant. Often, what is important dynamically is the net mutual reinforcement of the
complex, which may lead to qualitative system dynamics such as path dependence,
instability and amplification of small differences in initial conditions. Moreover, systems
of positive feedback often have two properties which are extremely useful in explaining
structural change; they often produce a secular trend, and they often produce increased
inequality and polarization. In both cases the dynamic reaches a limit, either external or
internal. We shall consider three examples of systems of positive feedback: Myrdal's
analysis of cumulative causation, Collins's models of Marxian crises; and Chase-Dunn
and Hall's iterative model of world-systems transformations. Each of them can be
understood as an evolutionary dialectical process.

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a) Myrdal: In *An American Dilemma* (1944), Myrdal argued that minority group
disadvantages encourage white racism (e.g. white supremacy, segregation and
stereotyping) which reinforce minority disadvantages. Myrdal developed the conception
of group advantages or disadvantages as a mutually reinforcing, auto-catalytic process.
He suggested that group characteristics such as mean education, job skills, percent
employed, income, wealth, health, credit rating, political influence, marital stability, or
law-abidingness are mutually reinforcing. Advantages promote other advantages;
disadvantages promote other disadvantages. The result is a vicious cycle that tends to
produce greater inequality, polarization and segregation.

Myrdal's Nobel prize was based on the idea that cumulative causation (both as vicious
cycles of poverty and as beneficent cycles of development) is central to the analysis of
development and institutional transformation (1968; 1970; Agresano, 1997). The mutual
reinforcement of advantages or disadvantages, often called the Matthew Effect in
sociology (Merton, 1973), operates at several levels of analysis (Knapp et al, 1996). An
individual's characteristics may affect his or her life chances; they may affect aspirations
and identity; and the characteristics of an individual's neighborhood, network, family,
 racial or ethnic group may affect the individual's life chances, either directly or by
influencing the responses of others. A whole society may have advantages or disadvantages which cumulate absolutely or relatively.

Myrdal’s analysis of cumulative causation.

In Figure 2, the two circles represent the mutually reinforcing complexes of majority dominance and minority disadvantage (Knapp et al. 1996:21). Each complex, itself, consists of a mass of disadvantages and/or privileges that are mutually reinforcing. Because each element reinforces the others in the complex, in the absence of other forces such as government policy, such a system will tend toward increased inequality and polarization.

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Myrdal stressed that such feedback cycles of advantage or disadvantage tend to be path dependent and unstable (1944: 1065 -1072; 1968:1843-78). Positive feedbacks tend to amplify initial differences or any shocks or interventions. Such processes and complexes are pervasive, and their tendency to polarization and path dependency generates the kind of unstable and chaotic dynamics that have recently been the focus of complex systems dynamics and of dialectical contradictions. Myrdal noted, but did not analyze, ways that processes of mobilization and mass action can be expected to further amplify the instability and discontinuity of such systems. However, instead of linking his analyses to political struggles, or to long term material trends, Myrdal located his analysis within a functional framework, affiliating his analysis to the "value premise" of the "American Creed" and of "modernization," which holds that social position should not be ascribed,
and which generates a "dilemma" between a value commitment to an open society and
the dynamic of unequal life chances and segregation generated by cumulative causation.
A similar functionalism deformed his developmental economics.

b) Collins: A second example of a systems model of social transformation is Collins's
(Hanneman & Collins, 1987; Collins, 1995) models of revolutions and of the welfare
state. Collins, a Weberian conflict theorist, argues that most aggregate social theory
neglects dynamic models in favor of comparative statics (Collins 1995) The great virtue
of Marx's theories, Collins argues, is that they were dynamic, while Weber's models,
including those of the prerequisites of rational capitalism, are ideal-typical comparative
static analyses. Collins's simulation of the Marxian model of capitalism uses the
microDYNAMO program (Hanneman, 1988) to explore its theoretical sensitivity to
assumptions about the size of some of its parameters.

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The central model is related to the core MCM model from Capital. Profit-making leads
to the increasing organic composition of capital as well as to the concentration of capital,
the decline in the number of capitalists and an increase in the rate of unemployment (the
reserve army). In the standard run, this leads to increased unemployment, depression,
inequality, and the erosion of the power base of capitalists and loss of state power -- the
classic scenario of Marxian revolution. The further dynamics of Collins's model flow
from its assumption that, since capital accumulation is funded out of profits, the loss of
state power by the capitalist class halts capital accumulation, leading to the stagnation of
the economy, and the further rise of unemployment. Thus, Collins and Hanneman's
second model of the post-revolutionary situation avoids this stagnation by having the
state function as an organ of planning and capital accumulation - leading to a state-
managed economy. But what is possible in the post-revolutionary situation, Collins and
Hanneman suggest, is also possible under capitalism, and so they construct a third model,
in which the rise of unemployment and capital concentration is avoided by the
development of a welfare state.

Thus, Collins produces a single model of accumulation, whose developmental dynamic
branches into three trajectories: revolution followed by collapse; revolution followed by
state-planning; or avoidance of revolution by a welfare state. The concepts are
unremarkable; the parameter specifications are debatable; the trajectories do not appear to
exhaust all possibilities. But what is important is that the analysis derives substantively
important alternative outcomes often conceived as representing fundamentally different
causal structures, as branching paths from the same model, given relatively small changes
in some parameters.

The central divergences of the models result from shifts in state power, and the authors
do not elaborate their assumptions with respect to this parameter. The substance of the
analysis requires further investigation. A fundamental virtue of the model is that it shows that reasonable assumptions about ways that unemployment and inequality result from the self-reinforcing cycle of capital accumulation and about the impact of unemployment and inequality on political mobilization make it possible to develop plausible dynamic models of social transformations producing substantively interesting diverging trajectories.

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It is interesting that Collins fails to relate this endogenous system model to the intersocietal, geopolitical model that Collins claims is the central explanation of the transformation and dissolution of the Soviet block (Collins, 1992). In that model, expansion arises from the feedback loop in which the territorial size of the conquering state leads to greater resources, which leads to military advantage and regime legitimacy. The expansion hits limits (represented by negative feedback loops) when the expanding state attains a central position (king of the mountain, eliminating marchland advantage) and to logistical overloads (1992: 1560). Collins maintains that in the 1970s, the former Soviet Union was reaching those limits, leading to unraveling and collapse. He suggests that the geopolitical model, at the largest time scale, can be usefully connected to internal dynamic models, such as Tilly's, in which military success leads to intensive resource extraction, which leads to state organization which leads to military success.

The self-reinforcing character of Collins's geopolitical arguments (1992) can be simply represented by a positive feedback loop of domination, directly analogous to the positive feedback of advantage and accumulation. Control of population, coercive resources or strategic areas may help a power to acquire further resources. The game of Risk in which territories yield armies, and armies yield territories, is a simplified archetype of this dynamic. Myrdal stresses that the loop of cumulative causation is unstable -- the way up is the way down. The amplification of advantages generates a beneficent cycle, but if anything brings that process to an end the amplification of deficits will generate a vicious cycle (unless one happens to end on the knife edge of an unstable equilibrium). The process of domination is unstable and path dependent in the same way. The accumulation loop generates inequality, which is reinforced by the transfers of resources from the poor to the affluent, and the process of domination should generate power inequality and concentration of power in the same way.

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c) Chase-Dunn and Hall: A third example of a systemic model of social transformation is the iterative model of world-systems transformation developed by Chase-Dunn & Hall
(1997). A central construct of world-systems theory has been the self-maintaining reproduction of inequality between core and periphery, which produces a powerful dynamic over the last 500 years. The system has depended importantly on the incorporation of new groups and new areas into the world economy. Those processes inexorably approach limits when 100% of the world’s population and territory is incorporated. At those limits the irresistible force of incorporation hits the immovable object of global limits, producing systemic crises. An idiographic answer to the question what happens next is that system dynamics can only predict that there will be a crisis, but outcomes are necessarily invisible. A more theoretical approach extends the theoretical definition of world-systems from the modern, global, capitalist world system to prior world-systems.

Though not global, they were world-systems in exhausting or nearly exhausting the reach of commercial, political and cultural networks. Thus they constitute a reasonably large universe of inter-societal systems that came into existence, expanded and then been merged or incorporated into larger systems. Chase-Dunn and Hall’s analysis of the dynamics governing the “rise and demise” of such systems marries a theory of semiperipheral institutional innovation to the model of circumscription developed by Camero, Harris, and Cohen (Chase-Dunn & Hall 1997; Sanderson, 1995). The theory of semiperipheral innovation has roots in Trotsky’s concept of uneven and combined development, Gerschenkron’s analysis of the “advantages of backwardness,” Service’s distinction between adaptation and adaptivity, and Quigley’s concept of the institutionalization of an instrument of expansion (Chase-Dunn & Hall 1997: 78-82). The dominant core states are institutionally inflexible because of the sunk costs of commitment to institutional forms which are the basis of their core position. Peripheral areas are also locked into the existing institutional structures both by their poverty and by ties to the core, but some semiperipherial societies are in a position where it is possible to make structural innovations and to implement them.

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The core of Chase-Dunn and Hall’s model of political circumscription is the positive feedback loop connecting hierarchy formation and intensification. Hierarchy formation refers to “increases in socially structured inequalities within or among societies (e.g. class formation, state formation, or empire formation)” (Chase Dunn & Hall 1997:101-3), and intensification refers to “technological innovations and the adoption of intensified production practices” (ibid.). Hierarchy and intensification are formulated abstractly, to apply to different modes of accumulation in different epochs. In Marxist terms, they are analogous to the relations and the forces of production. Chase-Dunn and Hall (1997: 102) suggest that similar dynamics repeat themselves (iterate) in the transformations of “modes of accumulation.” Several aspects of the model highlight the characteristics of positive feedback models of accumulation and domination.
This model contains two positive feedback loops:

- the tight and powerful interaction between hierarchy formation and intensification, and
- the great positive loop involving the other six variables (ignoring the five negative paths).

The negative paths operate as a set of (temporary) safety valves, relieving population pressure.

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A positive feedback loop tends to expand until it hits a limit. One of the simplest way of representing such a limit is as a negative feedback loop. Chase Dunn and Hall represent the processes of hierarchy formation and intensification as connected to negative feedback loops involving population pressure, circumscription and conflict. The process of circumscription was conceived by Carneiro (1970) to account for the formation of pristine states. Population pressure plays a key role, partly because coercive control is difficult to accomplish if a dominated population can move away. Chase-Dunn and Hall suggest that the closure of the system and its hitting limits (demographic, ecological and
its ability to handle internal and external conflict) are central to other transformations of world-systems, as well as to state formation. It is the circumscription of the core powers benefiting from a given mode of appropriation that opens opportunities for semiperipheral innovation.

I cannot pursue this analysis further here, except to make one remark about the mutual reinforcement of hierarchy and intensification in relation to circumscription. We have suggested that hierarchy and intensification are not only mutually reinforcing, but that each of them constitutes a self-reinforcing process of accumulation/domination with intrinsic limits. The accumulation of capital and increase of productivity is analogous to Monopoly; the accumulation of power and domination to Risk. But of course, the economy does not always polarize as in Monopoly; and conflict within the political state system does not always end in world empire. If there are intrinsic tendencies of such feedback loops to do so, this raises the question what counteracts those intrinsic tendencies. A central insight of world-systems theory is that it is the linkage of the two processes; a central issue of the circumscription model in the case of the circumscription of a world economy, is the breakdown of that linkage.

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### 4. Dialectical Theory

Traditionally, Marxists have dealt with the problems posed by evolutionary change, complex systems and system transformation by using concepts of the dialectic. However, the consolidation of a world-view and analytic strategy in opposition to mainstream liberal social and political thought sedimented a considerable amount of ideological baggage onto conceptions of dialectics. Even if we exclude the dialectics within classical Western philosophy, "dialectic" refers to a number of different kinds of analysis done by figures such as Hegel, Marx, Engels, Lenin, Loquacious, Stalin, Mao Zedong, Gramsci, Adorno, Habermas, and Bhaskar. It is doubtful that any single schema could well-describe the key features of all of them.

We saw that Marx identified "dialectic" with the view that everything is changing and finite -- nothing lasts forever. Engels characterized substantive dialectic as a process,

"the great basic thought that the world is not to be comprehended as a complex of ready-made **things**, but as a complex of **processes**, in which the things apparently stable, no less than their mind images in our heads, the concepts, go through an uninterrupted change of coming into being and passing away, in which in spite of all seeming accidentality and of all temporary retrogression, a progressive development asserts itself in the end..." (Engels 1888).
It is possible to distinguish two broad branches of dialectics that are complementary and interrelated: epistemological (concerned with the transformation of concepts) and ontological or substantive (concerned with objective transformations of "things," Knapp & Spector, 1991). They are interrelated partly because the development of concepts and theories can be understood as a natural social process or practice. Cultural categories build on each other and develop by a process similar to cumulative causation and positive feedback. As a theory of knowledge, dialectics often refers to a circular or non-foundational epistemology (Rockmore, 1986), based on a feedback model of practice. Here, we lay aside conceptual and epistemological aspects of dialectics to focus on substantive processes.

Traditionally, Marxists have approached substantive dialectics in terms of a family of concepts derived from Hegel, including negation, contradiction, dixervention, limit and sublation. Such concepts have a natural affinity with positive feedback dynamics. While neither Hegel nor Marx were "systems theorists," Hegel had an acute sense of the ways in which cultural, political, social and historical arrangements and processes were often self-reinforcing. He also recognized that such processes tended to produce accumulation and polarization and to hit limits, so that they become self-destroying by the same dynamics which had been self-reinforcing. Marx admired and developed these ideas, and later Marxists have applied them in a host of ways.

More generally, Marxists have approached substantive dialectics as a focus on process. Anything whatever is changing; it is not only what it is but also what it is becoming. Anything whatever is finite; it will not last forever; it allows a "historical section" which traces its origin and self-maintenance to its demise.
This essay has stressed that there is an affinity between these aspects of dialectic and the
dynamics of complex systems, particularly systems of positive feedback. Not all analyses
of positive feedback are dialectical; not all dialectical analyses concern positive
feedbacks; but most systems of positive feedback are highly likely to display dialectical
properties.

Systems of positive feedback are simple and arguably pervasive. One example of this
process is an accumulation loop (Monopoly) in which control of economic resources
leads to further resources. Another is the process of domination (Risk) in which control
of power or coercive resources generates further power. Both processes are recursive and
must ordinarily be analyzed as holistic systems, and both tend to be unstable and path
dependent and to generate inequalities. The tendency to generate inequalities is one
reason that the concepts of contradiction and conflict are apt; the fact that their expansion
tends to bring them into collision with limits (such as ecological carrying capacity) is
another.

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Thus, I would agree with the enigmatic opening sentence of Eckhardt's essay, "A
Dialectical Evolutionary Theory of Civilizations, Empires and Wars."

A "dialectical evolutionary theory" tries to relate the concepts of civilization, empire, and
war to one another in such a way that their interaction results in positive feedback loops
leading them ever upward and onward in a spiraling motion, unless and until it leads
them in the opposite direction by way of negative feedback loops which reverse the
direction of the spiral." (Eckhardt, 1995:75)

As a matter of terminology, a vicious cycle or downward spiral is usually also termed a
"positive feedback loop," since it is a same-sign causal loop. In any case, Eckhardt
postpones discussion of it to later publications. His analysis uses time series data on
civilizations (measured by Kroeber's geniuses), empires (measured by Taagepera's
territorial size), and wars (battles) to argue that variations in these over time are highly
intercorrelated and to show an (exponential) increase in these variables over three
millennia. This is certainly consistent with a self-reinforcing, autocatalytic process of
accumulation and domination.

There are some limitations of Eckhardt's model specifications and historical data.
Correlations and factor analyses are weak evidence of causal connections, since it is
notorious that variables often tend to move together over time even when there are no
causal connection among them. Moreover, when the data are historical mentions (of, say,
battles), there is the further problem that historians' mentions of anything - rats, clouds or
sexual peccadilloes - are often a function of the gross volume of historical analysis
focused upon a period or a group.
Moreover, Eckhardt's analysis is only dialectical in a limited sense. No qualitative changes are posited over the entire three millennia, but merely an invariant correlation of civilizations, empires and wars. It would appear that the relevant question is whether or not the social dynamic has changed. Nevertheless, the virtue of Eckhardt's analysis is that it links the concepts of dialectics and positive feedback.

From the standpoint adopted here, there are three main implications of the self-reinforcing processes plausibly involved in this transformation:

- The dynamics of development also generate inequality within and between the political units.
- Development tends to collide with external and internal limits.
- At the limit of expansion, positive feedback loops are transformed from a beneficent cycle of development to a vicious cycle of collapse.

Self-reinforcing processes are powerful analytical tools in accounting for long term social developments and their possible branches. If groups with one kind of resource are in a strong position to acquire other resources, the result is a dynamic that generates accumulation, inequality and polarization. Moreover, the same dynamic that generates expansion insures that limits to that expansion produce an inherently unstable situation, and collapse or contraction.

There are at least two bodies of analysis that such a theory can mobilize and integrate. The first is the burgeoning analysis of the dynamics of complex non-linear systems. The second is the older body of dialectical historical and political analyses. The idealism and obscurantism of many of Hegel's constructions is well known. But whatever else he was, Hegel was an erudite historian and systematic thinker who was extremely sensitive to self-reinforcing processes of accumulation and to their tendency to produce polarization and conflict. His cultural, political and historical analyses have been extended, since then, by Marxist thinkers. Recast in systems terms, even tortuous forms of argument from the Philosophy of History, which are utterly inadequate as theory, are immensely interesting theoretically as outcomes to be explained. For example, the great overall structure of that work pictures a "world spirit" that undergoes a discontinuous development with geographical displacements. After a rhythmic development in one area, such as Persia, the "world spirit" takes a flying leap to another, such as Greece. We are only now in a
position to theoretically grasp and empirically analyze the kinds of discontinuity and geographical displacement to which such Hegelian dialectical analyses drew attention.

5. Conclusion

It has been remarked that all theories of history (and hence all macro-dynamic models) boil down to a circle or a line. Evolutionary theories produce lines in the form of directional secular trends. Cyclical theories generate circles, which include the degenerate circle of a point (i.e. arguments that human nature is everywhere the same) and the snow storm of postmodernism (i.e. arguments that all patterns and macro-theories are merely subjective forms of ideological domination). Dialectical theories are often viewed as combining cycles and trends - a cycle leading to an advance and a recapitulation at a higher level - producing a kind of spiral.

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This essay has argued that a common and pervasive form of dynamic system - the positive feedback loop - produces many of the characteristics of dialectical systems. Classical dialectics produced a somewhat portentous apparatus of concepts for analyzing change, such as diremption, contradiction, negation, sublation and limit. Contemporary systems dynamics and analyses of non-linear systems, provide useful tools for analyzing social transformations, and produce systems with discontinuous dynamics that are easily described in terms of dialectical categories. They generate systems that often accomplish accumulation by a dynamic that necessarily creates polarization ("diremption"), and whose historical trajectory may be both forked ("bifurcation") and repeat at a higher level of prior developments. The concepts of limit and contradiction give the essential dynamics of such systems. The marriage of the richness of the traditional concepts of dialectics with the quantitative techniques of contemporary dynamic systems analysis is a promising way to address many contemporary theoretical problems.

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A Global Perspective on Racial and Linguistic Integration
in South African Christian Congregations
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ABSTRACT

This is a study that uses data from a national survey of multicultural and multilingual Christian congregations in South Africa to examine the institutional factors that support the dominance of English in formerly segregated churches without a formal language policy. Data were collected by qualitative methods on the levels and types of linguistic integration (as well as cultural incorporation) in each of 60 congregations from nine Christian denominations across South Africa. The patterns found are best explained in terms of articulation of formal and popular ideologies that contribute to institutional isomorphism across state and civil institutions.

INTRODUCTION

One of the most notable effects of the apartheid state was to segregate all major institutions legally, resulting in an enforced and almost total residential and social segregation between 1948 and 1990. Contact between race groups was extremely limited, usually to formal work environments; while linguistic diversity was dampened under a bilingual language policy which favoured English and Afrikaans.

Currently South Africa's new, post-1994 regime endorses non-racialism and implicitly as twin national ideologies underpinning its frequent exhortations to nation-building. Non-racialism encourages racial integration within the same institution across all sectors of society, from educational to economic, most notably in the affirmative action quotas of the recently passed Labour Equity Bill. Multiculturalism emerges in the recognition of eleven official languages in the new 1996 Constitution, in contrast to the two official European-derived languages of the past (English and Afrikaans). The preamble of the 1996 Constitution also implicitly recognises the rights of all South Africans to practice their languages and cultures. Concretely, people are drawn together into settings and relations which previously were ideologically and geographically difficult to structure, where they can renegotiate or discard ascribed and enforced identities, such as race or language.
There is some evidence that the state's formal multilingual policy conflicts with an existing informal monolingual language ideology. This would explain why the evidence in the public sector is so ambivalent, a subject I referred to elsewhere (Venter 1996). Official encouragement of multilingual diversity is often denied in practice, with English achieving hegemony in Parliament and Senate by 1996, in provincial–national government communication, as well as in many local government meetings (Langtag 1996:47). A Siswati-speaking Constitutional Assembly official reportedly said that "we in the ANC do not believe in ethnic languages" (Leadership 14:2, p.13).

An audit by the Language Plan Task Group (Langtag) in 1996 of the annual reports by government departments found that only two departments published multilingual reports (Communication Services, Justice); seven bilingual (English and Afrikaans); and twelve used English only. In addition many other Government publications were published in English only, including general notices (e.g. relating to the restitution of Land Rights Act in 1995) and White Papers (like the Reconstruction and Development Programme of 1994) (Langtag 1996:159–161). In the tertiary education sector Afrikaans-speaking universities have in the past come under pressure to switch to English from non-Afrikaans-speaking students and from the Minister of Education, Professor Sibusiso Bhengu.

The option for a former colonial language places language practice in South Africa within a pattern well established across Africa by elites, who tend to favour European languages above indigenous ones (Prah 1993). While most African states are exoglossic, dominated by European languages (English, French, Portuguese) as the national language – yet European languages are usually spoken by a small elite comprising "fewer than 20 per cent" of the population (Kaschula & Anthonissen 1995:102,103). Endoglossic states include Tanzania (Swahili), Somalia (Somali), Ethiopia (Amharic), Sudan (Arabic), and Guinea (with eight languages such as Fula, Manding). Other states which have indigenous official languages, but which do not actively promote their use, include Botswana (Tswana), Burundi (Kinyarwanda), and Swaziland (isiSwati) (Kaschula & Anthonissen 1995:102).

South African Christian churches were just as affected by apartheid as other social institutions, with few exceptions. Despite an initial ideal of racially–mixed services expressed by most denominations from the 17th to 19th centuries in the first colonised region of South Africa (the present Western Cape), racially–integrated congregations are rare in South Africa today. Although vocally opposed to legislated discrimination, the English-speaking churches generally exhibited a pragmatic compliance with racial segregation. By 1964, Anglicans, Methodists, Catholics, and Presbyterians admitted that "people of different races do not normally worship together in the same church" (Cawood 1964:58,61,52,76,92). Segregated congregations became the rule well into the 1980s, with the only exceptions often being cathedrals in large cities. Significant sections of the
mainline churches were labelled as English-speaking or Afrikaans-speaking - despite other language groups forming majorities in these denominations.

The central concern of this article is with language usage in racially and linguistically diverse congregations; with what the choice of language(s) reveals about the relations between language groups; and with how this configuration can be explained through new institutionalism. I am interested in how religious institutions are affected by extra-institutional factors which function at national and global levels. For this reason I examine language choice in a voluntary organisation without a formal language policy, as providing an ideal setting in which to demonstrate the effect of meso- and macro-factors.

As part of religious institutions in a secular state, multicultural and multilingual Christian congregations fall outside direct control of the state as far as language preference is concerned. Theoretically the language used in services (e.g. English, Zulu) is much more open to negotiation than those used in the public sector organisations. At the same time churches are not unconnected to other dynamics and institutions, and their members do not leave either ideological persuasions or social identities at the door, thus importing external dynamics into the decision-making of congregations. Others have examined integrating congregations (Massie 1993), as well as race and language at the denominational level (Kritzinger 1995, Zaanman 1994). Yet mine is the first attempt to specifically examine language usage in South African congregations, as far as I am aware.

Of special import in this article is how language preference links to the perceptions and interrelations between groups of people. First, language preference (i.e. which language one chooses to speak) is not necessarily a neutral option, but often co-occurs with contestations of power. Second, language preference is a function of a language ideology, which determines the attitudes of different language groups towards one another, as well as structuring relations between groups in a status hierarchy. Third, language usage as part of a social identity is largely dependent on the institutional setting within which it takes place. The type of setting, in conjunction with the ideology, determines specific types of representation, with certain linguistic identities deemed appropriate and others not.

In what follows below I will first clarify some terms and briefly outline the methods used to obtain the data which forms the basis for this discussion. Then I supply a summary of the distribution of language and race groups within the three denominations relevant to this study, in the context of a brief social history of the emergence, development, and current state of segregation and integration within these. This overview leads to a description of the data, followed by a analytical discussion. Finally, I close with some concluding comments.

TERMINOLOGY
Language refers to the vernacular of a particular (ethnic) speech-community, i.e. English, Afrikaans, Zulu. Race was retained because it remains an operational social construct in the South African context, despite ideological and technical problems involved. While race has no scientific merit, it continues to affect social relations. Racial composition adds a different dynamic to the functioning of a congregation or denomination, and so is worthy of isolation (see De Gruchy 1986:246). I am convinced that a focus on race is essential to expose overt and covert racist patterns of behaviour.

For purposes of argument I distinguish between integrating and integration as follows:

a. Integrating is used in a general sense to refer to congregations which display some (unspecified) level of linguistic and racial diversity, and which are presumably still undergoing this process. Congregation refers to the average number of those people (i.e. the "congregants"), no longer of school-going age, who attended all services on all Sundays during March 1997 for the purpose of participating in Christian worship.

b. Integration refers to the incorporation of differences at two levels in answer to the questions: "Are any differences present", and "How were these differences included?". I operationalize integration at the general level of congregational membership (number of race and language groups present), and at the specific level of congregational leadership (representativeness of race and language groups).

The implication is that an integrated congregation will be a type of mixed congregation that has a (relatively) stable racial/ethnic mix, in which the diversity of members is represented at all levels of decision-making, and allowed to affect the content and structure of the service. In this sense integration proceeds from "a recognition of a racially and culturally pluralistic society ... in which cultures, languages, and races interrelate so as to bring strength, depth, and diversity to the whole. Integration should not mean, or require, the giving up of one's accent, songs, or life-style, but it can be the framework in which diversity is shared and appreciated by all" (Davis & White 1980:100).

THEORETICAL ORIENTATION

My study falls, broadly speaking, within the political sociology of language, which addresses language and power as central issues. I refer to the forms through which language and power are mediated (e.g. political ideology, culture, language ideology) as well as the outcomes (e.g. hegemony). Politics "concerns the exercise of power in social situations, its structuring, as well as its legitimation within social groups" (Goke-Pariola 1993:7). The "politics of language necessarily involves relations between languages" (Fardon & Furniss 1994:6).
The focus of a political sociology of language articulates with discourses on language choice, language planning, language policy, and language use. In a narrow sense the emphasis is on "rule-making and rule enforcing activities" of sociolinguistic groups within certain domains, and in a broader sense on "the patterned co-variation of political and social behaviour on the one hand, and language behaviour and use on the other" (Goke-Pariola 1993:7). The narrower focus relates to "who speaks what language/dialect to whom, and when, and what are the consequences of breaking the sociolinguistic rules". The broader emphasis is on how, who or what produces the conventions that determine the "expressive resources" available to particular groups or languages (Goke-Pariola 1993:7).

New institutionalism is not a unified approach, but takes rational choice, historical, and sociological forms, which are employed somewhat differently by economists, political scientists, and sociologists (Cook & Levi 1990; Koellble 1995; Hall & Taylor 1996; Lowndes 1996; Hirsch 1997; cf. Sjostrand 1993:6; Granovetter & Swedberg 1992). My focus is on relevant components of new sociological institutionalism, in which institutions (including "conventions and customs") are viewed as dependent on macro-factors such as culture and society; i.e. institutions are dependent variables which determine individual actions (Koellble 1995:232,234). Actors choose actions based on their institutionally-guided perceptions of appropriateness within a particular context (Koellble 1995:234). Individuals are embedded in so many relationships that utility-maximising and rational explanations becomes almost impossible. Organizations choose particular cultural or symbolic systems "which are then reflected in the structures, functions, and goals of the organisation as well as the rationality of individuals within the organisation and institution" (Koellble 1995:235).

As a major concept within new institutionalism, institutional isomorphism captures what I intend to argue below: that institutions tend to respond to conditions in a particular socio-political environment by usually becoming more alike (DiMaggio & Powell 1991:66). I am most interested in coercive mechanisms (laws, ideologies) such as those set by the state which lead to the institutionalization of similar rules in organisational structures (compare DiMaggio & Powell 1991:68). Yet the influence of the other mechanisms cannot be dismissed: mimetic isomorphism is partly caused by the presence of individuals in churches who are also political beings; while the apparent lack of attention by seminaries to preparing clergy to instigate or manage racial and linguistic integration represents normative isomorphism. My emphasis on structure brings my work more in line with "new" historical institutionalists (who focus on structure) than with rational choice theorists (who emphasise individual action).

In my perception, the world system and the nation-state align with language practices at state and sub-state levels. Here I agree with sociological institutionalists who stress the importance of larger frames of reference. Nation-building and language outcomes can both be seen as examples of global and regional institutional isomorphism. From this perspective the similarities in language outcomes across former African colonies provide
an example of institutional isomorphism operating at the national and global levels. At the national level institutional isomorphism is driven by the attempts of states to integrate nation-states to foster loyalty through policies and ideologies aimed at creating a common national identity.

Any consideration of local social change should be considered against the global system to see whether it was prompted by developments at that level. My analysis below will proceed against the backdrop of an eclectic world system perspective (without the hyphen). As such I will retain and synthesise - somewhat loosely - world-economy and world-polity norms into a implicit analytical framework. Some synthesis is possible due to a level of agreement between world-economy and world-polity theories. In world-economy theory an ideological system operates (Wallerstein 1990:38), which seems similar to the notion of global norms in world-polity (Meyer 1987; Boli 1980, 1987, 1993; Meyer, Boli, Thomas, & Ramírez 1997). World-economy and world-polity theorists also seem to agree on the relevancy of location in overall system. Both perspectives accord some significance to cultural hegemony, the role of the nation-state in nation-building, and the absence of a central actor in the world system.

Obviously I am not suggesting that structural similarities between world-polity and world-economy theories should paper over their differences. For example, world-polity theorists like Meyer and Boli argue strongly that global norms operate independently of the world-economy, and determine the legitimacy and structures of nation-states within a global polity. By contrast, Wallerstein considers a global idea system to legitimate the world division of labour. For the latter world culture plays a secondary rather than a primary role "in the reproduction of contemporary world order", and vice versa, as Chase-Dunn (1989:88-104) observed.

So why insist on a synthesis? Principally because of the difficulty of separating world culture, which drives isomorphism, from the world-economy or from the world-polity. And like world-polity advocates, world-economy theorists do acknowledge that obvious isomorphisms have been produced to some extent within the world-system. For Chase-Dunn the mechanisms are "cultural imperialism and the ideological hegemony of European religion, politics, economics, and science" (Chase-Dunn 1989:98). As a result consensual symbolic systems are emerging globally in the form of "certain underlying cultural themes", which are "at the least shared by national elites everywhere" (Chase-Dunn 1989:98,100).

So my world system theory consists of a conceptual tool kit, taken from three perspectives on the world system. Globalization theory provides the notions of glocalization, and the inherent dialectical tension of heterogeneity and homogeneity. World-economy supplies the centrality of geographic stratification (i.e. core-periphery relations). World-polity contributes a central analytical concept in this study, namely institutionalism, particularly the concepts of institutional ecology and isomorphism. From this perspective, South Africa's nation-building project represents local attempts to
address the twin paradoxical global pressures of increasing pressure for equality of opportunity for all (i.e. social equity), and insistence on recognition of cultural differences (see Rex 1986:120).

METHODOLOGY AND SAMPLING PROCEDURE

The empirical data for this study was collected as part of research conducted between 1995 and 1997. I was particularly interested in finding congregations with high levels of racial and high levels of linguistic diversity. The unit of analysis was congregations, a meso-level phenomenon, but various aspects of demography and diversity that affect congregations at the macro- and micro-levels were included. Although the research approach was qualitative, I attempted to gather a representative sample across the three denominations selected.

I lean towards a nomothetic perspective, wanting to explain similarities within different congregations by reference to the global structure. Yet this does not mean that idiographic elements are not present; particularly as I consider the 60 cases as a single case study in order to place them within a world system perspective.

The three major "English-speaking" Christian denominations which were finally included claim never to have followed segregationist policies, namely the Anglicans (Church of the Province of South Africa), Methodists (Methodist Church of Southern Africa), and Roman Catholics. The rationale for the inclusion of denominations in the survey was size (affiliation) and non-segregationist ideology, while individual congregations were selected primarily for being racially diverse. As Table 1 shows, these three denominations have a combined affiliation of 7,25 million people – about 26% of the total South African population, and 28% of all South African Christians (unless otherwise indicated, figures reflect the Human Science Research Council's 1993 Omnibus Survey). In addition a major Pentecostal–Charismatic grouping was also included as representing different theological and structural traditions, namely the International Federation (formerly "Fellowship") of Christian Churches.

<table>
<thead>
<tr>
<th>Denomination</th>
<th>Affiliation</th>
<th>Number of churches</th>
<th>Number of clergy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglican</td>
<td>2 000 000</td>
<td>1 200</td>
<td>12 bishops</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 300 priests</td>
</tr>
<tr>
<td>Catholic</td>
<td>2 750 000</td>
<td>875 parishes</td>
<td>32 bishops</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 280 priests</td>
</tr>
<tr>
<td>Methodist</td>
<td>2 500 000</td>
<td>6 450</td>
<td>941 ministers</td>
</tr>
<tr>
<td>IFCC#</td>
<td>400 000</td>
<td>600</td>
<td>900 ministers</td>
</tr>
</tbody>
</table>


Note: # IFCC = International Federation of Christian Churches.
In the Methodist, Anglican, and Catholic denominations, blacks and black languages proportionally outweigh other language and racial categories, comprising 12% of all Catholics, and 11% of all Methodists (Zaaiman 1994). "Coloureds" make up the largest single grouping in the Anglican church, namely 26%, as Table 4 shows. Together the Anglicans, Catholics, and Methodists have a combined membership of 7.25 million – about 26% of the total South African population and 28% of all South African Christians (unless otherwise indicated, figures reflect the Human Science Research Council's 1993 Omnibus survey).

An initial small-scale pilot study was conducted between 1995 and 1996, involving 36 congregations. Addresses of suitable congregations were obtained by means of a snowball method. Three data-gathering methods were used, comprising: a postal survey of 24 congregations; workshops initially involving 36 congregations held in Pretoria (1996), Durban (1996), Cape Town (1995 and 1996) - followed by three in Cape Town (1996) which examined the historical process of racial incorporation in three Anglican congregations; and lastly telephone interviews with 23 clergy and a Methodist bishop. Not all congregations involved in the pilot study were included in the second phase.

In the final study 56 regional church officials (e.g. bishops or administrative secretaries) identified, on request, some 222 congregations in their areas which they believed contained "significant mixes of people from different race or language groups". This total is quite small, as the combined total of such congregations in the Anglican and Methodist churches make up less than 3% out of an estimated 7,650 congregations. The final survey comprised a postal survey in 1997 of the 222 congregations and 12 telephone interviews. In the survey clergy were asked to complete a questionnaire with the assistance of at least 5 lay leaders, while in the telephone interviews a semi-structured schedule was used.

The survey yielded 60 valid cases out of 75 received, resulting in a final response rate of 34% when measured against the universe of 222. Seven denominations were represented, i.e. the Church of the Province (CPSA), the Roman Catholic Church (RC), Methodist Church (MCSA), the (Pentecostal-orientated) International Federation of Christian Churches (IFCC) and one Independent, one Presbyterian, one Free Methodist Church. Of the 60 cases, 35% (21) were Anglican congregations, 33% (20) Catholic, 15% (9) Methodist, while 10% (6) belonged to the IFCC. The 60 congregations represent 7 out of 27 Catholic diocese and archdiocese; 8 out of 12 Anglican diocese; and 3 out of 11 Methodist districts. The 60 congregations represent an estimated total of 18,566 people, of whom the Charismatic-Pentecostal IFCC and Catholics make up the two single largest groups at 50.16% and 30.35% respectively.

The low response rate was due in part to incorrect information supplied by denominational officials, who did not always know what was happening in the churches under their supervision. While those churches which did not respond may differ from
those that did, my impression - based on typologies developed in previous studies - is that the sample was fairly representative of types of integrating congregations. From experiences with workshops involving integrating congregations I assume that those who did not respond were not that well-integrated, felt that integration did not present a particular problem, or did not trust my provenance as attached to an Afrikaans - and so ostensibly politically conservative - university.

Are these congregations truly reflective of trends in South African society as a whole? In language terms yes, if evidence from research on university students, state organisations, education institutions, and transaction interactions in commercial settings are anything to go by. And not only representative of South Africa, but of language practices which ensconce a foreign language across Africa as a whole. So while the data-set is small, its robustness is improved by association with other studies who have shown similar trends in other domains and at other levels of analyses.

I now turn to a discussion of how race and language functioned in the history of the three major denominations in this study, based on recent research (Venter 1994, 1995, 1996, 1998). The data from the survey is presented below in a quantitative form, yet in essence was qualitative, and based on impressions of leadership. The 60 cases do provide broad enough evidence to comment on general patterns for integrating congregations, especially where supported by studies of related phenomena in society, e.g. language preference. I acknowledge, though, that further investigation at the micro-level is necessary to confirm my conclusions.

**LANGUAGE AND RACE IN THE MAJOR CHRISTIAN DENOMINATIONS**

My primary focus is on the three major English-speaking Christian denominations who claim never to have followed segregationist policies, namely the Anglicans, Methodists, and Roman Catholics (see Table 2). In addition a major Pentecostal–Charismatic grouping was also included as representing different theological and structural traditions, namely the International Federation (formerly "Fellowship") of Christian Churches. The rationale for the inclusion of three of the four major denominations were based on size (affiliation) and non-segregationist ideology, while individual congregations were selected primarily for being racially diverse.

| Table 2: Affiliation as percentage of the total South African population, 1960–1993 |
|---------------------------------|------|-----|------|-----|
| Anglican                       | 8.78%| 7.87%| 6.48%| 5.98%|
| Methodist                       | 10.68%| 10.58%| 8.49%| 9.52%|
| Catholic                        | 6.73%| 8.71%| 9.47%| 10.18%|
Source: HSRC Omnibus Survey 1993. Used by permission of the Sociology Departments of Huguenot College and the University of Pretoria

Note: # includes the Church of the Province of South Africa as well as the Church of England.

As far as language is concerned, more than 23 languages are spoken in South Africa. These can be subdivided into seven groupings (percentage of the total distribution of the eleven official languages in brackets), namely Nguni languages: Zulu (22%), Xhosa (17%), Ndebele (16%), Swati (2.6%); Sotho languages: North Sotho (9.7%), South Sotho (6.7%), Tswana (8.6%); Tsonga (4.4%); Venda (2.2%); European languages and derivatives: Afrikaans (15%), English (9%), and small percentages of Dutch, German, Greek, Italian, Portuguese, French; Asian languages: Tamil, Hindi, Telugu, Gujarati, Urdu, Chinese; Other e.g. sacred languages such as Arabic, Sanskrit, and Hebrew (compare Desai 1994:26; Popene e.a. 1997:29).

No single language group has been captured by a particular Christian brand but, as Table 3 shows, various languages are distributed across the three major Christian denominations involved in the study. A similar distribution occurs across other denominations. The exception is Afrikaans-speakers, who tend to belong to either the Uniting or Dutch Reformed Churches.

<table>
<thead>
<tr>
<th></th>
<th>Eng</th>
<th>Afr</th>
<th>Xhosa</th>
<th>Zulu</th>
<th>Sotho</th>
<th>Sha/Tso</th>
<th>Swa/Nde</th>
<th>O/E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglican</td>
<td>39.1%</td>
<td>13.5%</td>
<td>15%</td>
<td>14.3%</td>
<td>0.8%</td>
<td>1.5%</td>
<td>0%</td>
<td>.8%</td>
</tr>
<tr>
<td>Catholic</td>
<td>19.3%</td>
<td>10.9%</td>
<td>6.8%</td>
<td>37%</td>
<td>22.9%</td>
<td>1%</td>
<td>1%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Methodist</td>
<td>16.1%</td>
<td>14.9%</td>
<td>14.9%</td>
<td>27.6%</td>
<td>21.8%</td>
<td>1.7%</td>
<td>2.9%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: HSRC Omnibus Survey 1993. Used by permission of the Sociology Departments of Huguenot College and the University of Pretoria.

Note: Eng=English, Afr=Afrikaans, Sha/Tso=Shangana/Tsonga; Swa/Nde=Swati/Ndebele; O/E=Other European; O=Other

Historically missionaries had a strong influence on language development, as they learnt - and standardised - indigenous languages. Yet from early on a division of labour emerged among missionaries who could speak indigenous languages, and other clergy who could not. For example, in the 1800s few Catholic priests could speak indigenous languages, and so served mainly the white urban areas, where Mass was conducted in Latin and the sermon or instruction in English (Brain 1991:71). In this way language and race became interrelated, so that language differences corresponded to racial segregation. Even in the Catholic Church, which "recognised no colour bar from the earliest times, all Catholics sharing the same building and joining in the same worship", "difficulties of language and distance" led to segregated parishes in the Transvaal of the 1890s (Brain 1991:71). By contrast, the Catholic parishes of the Cape of the 1880s "included both
European and coloured" (Brown 1960:204). But once the tribes across the Orange were thought of in 1840, the pattern of Catholic mission changed to segregated missions, as European civilisation was considered unlikely to dominate there (Brown 1960:204; see Oosthuizen 1968:15).

As a percentage of denominational affiliation (Table 4), blacks form clear majorities in the Catholic, Anglican, and Methodist Churches. Blacks make up almost 70% in both Catholic and Methodist Churches, but less than half of the Anglican church. White Anglicans have decreased from 12.49% in 1960 to 7.72% in 1993 according to HSRC data. Coloureds form a significant minority in the Anglican church, a factor which reportedly affects church politics in regions such as the Northern and Western Cape where they form a majority.

<p>| Table 4: Race as percentage of denominational affiliation, 1993 |</p>
<table>
<thead>
<tr>
<th>Black</th>
<th>Coloured</th>
<th>Asian</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglican</td>
<td>46.62%</td>
<td>26.32%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Catholic</td>
<td>69.27%</td>
<td>15.63%</td>
<td>5.73%</td>
</tr>
<tr>
<td>Methodist</td>
<td>69.54%</td>
<td>14.37%</td>
<td>0.57%</td>
</tr>
</tbody>
</table>

*Source: HSRC Omnibus Survey 1993. Used by permission of the Sociology Departments of Huguenot College and the University of Pretoria*

So despite the ideal of racially-mixed services expressed by most denominations in the 17th to 19th centuries in the first colonised region of South Africa (the present Western Cape), racially-integrated congregations are rare in South Africa today. This is in great part due to the political policy of residential and social segregation enforced by the apartheid regime between 1948 and 1990, a policy with antecedents in the colonial period. Some congregations put the ideal into practice until about 1872.

Where incorporation of people of colour into the English-speaking churches occurred, it happened on the basis of their social position as subservient labourers to whites. So the master-servant relationship functioned to integrate these congregations, and continued to structure relations in the form of separated seating arrangements for different classes (read: races). Leadership remained the exclusive preserve of white male landowners. Superficial integration was often contradicted – or at best skewed – by the occasional turning away of people of colour, and by the overriding equation of white civilisation and culture with Christianity (compare Villa–Vicencio 1988:43,47,54; Maimela 1988:323; Goedhals 1989:108).

Over the last two decades of the 19th century, separate communion services and segregated services became the norm – with some exceptions. Eventually segregated congregations became the rule well into the 1980s. In most white congregations a "three
o'clock service" developed for black domestic workers. These euphemistically-termed "afternoon services" are held primarily for domestic workers in vernacular languages under the authority of a black clergy-person based in a nearby black "township" congregation.

While the English-speaking denominations technically remained racially-mixed in terms of having white and black clergy, the rate of racial integration into national church structures was very slow, as revealed by a comparison of church founding dates with the appointment of e.g. blacks to denominational positions. The Catholic church was founded in 1834, and the Anglican church in 1848. In the Anglican church only white bishops were appointed until 1953, and all had been born in England. The first black bishop (Alpheus Zulu) was appointed in 1960, and the first black archbishop (Desmond Tutu) in 1986 (Goedhals 1989:120,124; Cawood 1964:16,56; Hinchliff 1968:240). By 1980 only one diocesan and four suffragan (assistant) bishops were black. By 1988 nine out of 18 diocesan bishops and five suffragan bishops were black (Goedhals 1989:121; Pato 1989:172).

The Methodist church was established in South Africa in 1814, but the first black Methodist president (Seth Mokitimi) was only elected in 1963 (Gish 1985:74). In the whole history of the MCSA only seven black presidents had been appointed by 1988 (Gish 1985:4,69). The current Presiding Bishop (Mvume Dandala) is also black. Apart from most congregations, subregional (circuit) structures were also segregated. As a result, the Methodist Church of Southern Africa initiated a policy advocating integration of regional structures in 1976, and recently extended this policy downwards to integrate situations where two separate racially-segregated congregations were using the same church buildings at different times. A similar integrative dynamic is in operation in the Church of the Province of South Africa (Anglican).

In the light of the above, the most remarkable aspect about racially-mixed local congregations in South Africa is not that they do not exist, but that some exist at all. Surprisingly, some continued to exist through the dark years of apartheid, e.g. Catholic Cathedrals in Cape Town, Johannesburg, Pretoria, and Kimberley (Cawood 1964:10; Brain 1991:157), as well as ordinary congregations in e.g. Kalk Bay. Of particular interest are the deliberately integrated congregations which emerged in conscious defiance of the political system during the dark years of apartheid. These did not appear formally until 1962 in the form of North End Presbyterian Church, East London; and in 1968 in the Buitenkarst St Methodis Church, Cape Town.

In the post-1990 era racially-mixed congregations have demonstrably been multiplying faster than before due in part to demographic changes in urban areas. Previously racially homogeneous urban Christian congregations now have to manage an increasingly diverse racial, linguistic, and cultural membership. As a result people are increasingly drawn into such multilingual settings alongside others previously classified as "other". An arbitrary breakdown shows clearly that the rate at which congregations are integrating is speeding
up. Thirteen racially-integrated congregations emerged during 1974–1989, compared to the 24 that did between 1989–1997. In the 63 years from 1830 to 1899, 7 congregations were racially integrated, compared to the 7 that became mixed over the next 48 years (1900–1948). During the next 24 years (1949–73) the integration-rate slowed down, with only 4 achieving this status. But the inverse happened over the subsequent 23 year period (1974–97), with 37 congregations becoming integrated.

Next I profile the 60 cases as a basis for my discussion in the penultimate section. Without exception, these are all examples of either congregations which have always been integrated, or formerly white congregations which have recently become integrated. What the situation is in black multilingual congregations still remains to be investigated. What little I know about them suggests that due to the multilingual facility of black South Africans, congregations in multilingual settings will, at least, have thoroughly bilingual services. The exceptions would probably occur in highly homogenous settings.

DESCRIPTION OF CASES

Of the 60 cases, 35% (21) were Anglican congregations, 33% (20) Roman Catholic, 15% (9) Methodist, while 10% (6) belonged to the International Fellowship of Christian Churches (IFCC).

Language was seen as the most prominent marker of diversity, was perceived as the most problematic, and was cited in a multiple option response by leaders of 39.3% (33 of 60) of churches as the form of diversity which at present most influence their congregation's structures. Most respondents perceived their congregations to be in neighbourhoods that were substantially linguistically diverse. In general, 75.9% of respondents (44 of 60 cases) reported that two or more language groups occurred in the neighbourhoods around their congregation's buildings – including 27 (46.6%) which were in neighbourhoods where three or more languages are spoken. In other words, only 24.1% (14) described their neighbourhoods as linguistically homogenous.

Responding congregations were asked to indicate the approximate percentage of first language speakers in their respective congregations. Ten of South Africa's eleven official languages were distributed over the 59 valid responses, while the number of first languages of congregants in a particular congregation ranged from two to 11 languages, excluding foreign languages. The presence of up to four first languages in a congregation was fairly common. Forty-five congregations (76.3%) contained 1–4 first languages; 12 (20.3%) between 5 to 8; and two (3.4%) had 9 to 12 first languages. A similar number of congregations had five (5 or 8.5%) languages than had six first language-speakers (4 or 6.8%).
Despite the English–speaking label of the denominations to which these churches belong, in a quarter (16 cases) English first–language speakers made up 33% or less of the total membership, as Table 5 illustrates. In 11 congregations (19.7% of 59) surveyed, the number of people who spoke English as first language made up less than 20% of the total. Three churches (3.6%) reported that no English was spoken by members of their congregations. At the other end of the scale English first–language speakers formed a majority (50% or more of all members) in 40 out of 60 congregations, which includes a two-thirds majority (more than 66%) in 29 cases (or 47.5%). In all, English first-language speakers were distributed across 55 congregations.

<table>
<thead>
<tr>
<th>% of English first language speakers</th>
<th>No. of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>3</td>
<td>3.6%</td>
</tr>
<tr>
<td>1-33%</td>
<td>13</td>
<td>22%</td>
</tr>
<tr>
<td>34-66%</td>
<td>17</td>
<td>28.8%</td>
</tr>
<tr>
<td>67-100%</td>
<td>28</td>
<td>47.5%</td>
</tr>
</tbody>
</table>

Source: Own data, 1997.

Afrikaans was spoken by more than 50% of the congregation in 8 out of 59 churches (i.e. 14.8%). Altogether 18 (35.9%) reported that 25% and more of their congregation was Afrikaans–speaking. In 12 (20%) no Afrikaans–speakers were reported present. In 54% of all churches surveyed Afrikaans formed the first language of 8% or less of the total membership. Afrikaans first-language speakers were spread over 46 congregations. European first-language speakers (other than English) were distributed over 19 cases, and Asian first-language speakers over eight. In terms of African languages, Zulu was spread over 23 congregations, Xhosa over 18, Sotho over 15, Tsonga over 6, Swazi over 5, Venda over 2, Shangaan over 4, Pedi over 4, Tswana over 3. Other African first-language speakers were distributed over 17 congregations (29%).

Congregational integration was measured along two dimensions, namely race and language.

The extent of racial integration was measured in terms of a racial–integration index, which indicated how representative the leadership, home groups, and outreach programmes of congregations were. I assumed that the level of integration was interrelated to the level of diversity, as would racial integration relate to language integration. Table 6 reviews the extent to which racial integration has occurred. The index represents a ranking according to the total score that could be obtained when scores from three categories were added: mixed, some mix, or representative of the racial diversity of congregants. Through this multidimensional method 54.9% (28 of 51 cases) could be said to be substantially integrated, with 39.2% (20 cases) somewhat integrated, and 5.9% (or 3 cases) poorly integrated.
The linguistic-diversity index, as Table 7 indicates, comprised 5 categories: number of languages spoken in sermons, hymns, liturgy, praying, and readings. The level of linguistic integration is represented in terms of whether or not their services reflect the number of languages in the congregation, i.e. whether they are essentially mono-, bi-, or multilingual.

Six congregations placed in the "well-integrated" category, compared to 22 in the "somewhat" and 25 in the "poorly" integrated categories. No single identifiable variable emerged that could explain similarities among the six congregations that were linguistically well-integrated, nor the differences between these and the 25 with poor linguistic integration. There seems to be some inverse correlation between number of first languages spoken and level of linguistic integration. A high number of first languages (ten or more) appears to be associated with somewhat integrated churches. Where relatively fewer languages are present (2 to 6), higher rates of language integration is reported. Higher levels of linguistic diversity in neighbourhoods appears not to be associated with higher levels of linguistic diversity in congregations. Neighbourhoods with high levels of linguistic diversity seem mostly associated with congregations with medium levels of diversity.

<table>
<thead>
<tr>
<th>Level of integration (index)</th>
<th>Overall%</th>
<th>Leadership</th>
<th>Programmes</th>
<th>Home groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorly integrated</td>
<td>5.9%</td>
<td>17.5%</td>
<td>15.4%</td>
<td>15.1%</td>
</tr>
<tr>
<td>Somewhat integrated</td>
<td>39.2%</td>
<td>40.4%</td>
<td>44.2%</td>
<td>47.2%</td>
</tr>
<tr>
<td>Well integrated</td>
<td>54.9%</td>
<td>42.1%</td>
<td>40.4%</td>
<td>37.7%</td>
</tr>
</tbody>
</table>

N= 51 * 57 @ 52 # 53 $

Notes:
* 5 invalid response, 4 no responses;
@ 1 invalid response, 2 no responses;
# 2 invalid responses, 6 no responses;
$ 2 invalid responses, 5 no responses

Source: Own data, 1997.

<table>
<thead>
<tr>
<th>Level of integration (index)</th>
<th>Number of languages in congregation #</th>
<th>Number of languages used in service</th>
<th>Total as % of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorly integrated</td>
<td>Three or more (multilingual)</td>
<td>One (monolingual)</td>
<td>47.2%</td>
</tr>
<tr>
<td>Somewhat integrated</td>
<td>Two (bilingual)</td>
<td>One (monolingual)</td>
<td>17.0%</td>
</tr>
<tr>
<td>Well integrated</td>
<td>Three or more (multilingual)</td>
<td>Two (bilingual)</td>
<td>24.5%</td>
</tr>
<tr>
<td></td>
<td>Two (bilingual)</td>
<td>Two (bilingual)</td>
<td>7.5%</td>
</tr>
<tr>
<td>2</td>
<td>Three or more (multilingual)</td>
<td>Three or more (multilingual)</td>
<td>3.8%</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------</td>
<td>-------------------------------</td>
<td>------</td>
</tr>
</tbody>
</table>

Source: Own Data, 1997.
Note: # Number of first languages spoken by congregants
* 6 invalid responses, 1 no response.

What is somewhat disguised by Table 7 is that monolingual services - usually English - are the norm in multilingual congregations regardless of the size of other language groups. One language is used in the services of 64.2% congregations (34 of 54 cases). This is the more remarkable as in 46 congregations (76.7% of 60 cases) three or more first languages occur. In 32% of responding congregations two languages are used (17), and in only 3.8% (2) are three or more used. Given the presence of more than one first-language group in all congregations polled, bilingual services would have been the expected option, at the least. When the number of languages used in the service is broken down into a more detailed picture, 74.1% of responding congregations (40 cases) are seen to have had monolingual preaching only. By comparison about a quarter had bilingual sermons (13 cases or 24.1%) and only one (1.9%) multilingual sermons.

A comparison of the indices clearly show the relatively well-integrated racial nature of the congregations compared to the poorer linguistic integration. Other major trends can be summarised as follows:

a. most congregations exhibit some form of linguistic diversity, but with low levels of multilingualism;

b. most congregations prefer monolingual sermons;

c. linguistic diversity tends to be expressed in the form of bilingualism;

d. English predominates as language of choice in multilingual settings;

e. integrating congregations are associated with neighbourhoods with high levels of diversity.

In the next section I attempt to provide a interpretative framework for these tendencies which gives attention to structure and agency, while examining the interplay of micro-, meso-, and macro–factors.

DISCUSSION

The discussion in this section remains at the level of informed speculation, and applies only to general trends among integrating congregations. The same factors are also present in congregations whose make–up is far more representative of their congregants, but then occur with a positive emphasis. While I would argue that the evidence points to a
surprising lack of linguistic and cultural accommodation in integrating congregations, there are exceptions.

Factors which function to limit linguistic diversity

There are several critical elements which constrain linguistic diversity in South Africa; some which can be mentioned briefly, others which require more detailed analysis. The former include the enforced use of Afrikaans under Afrikaner nationalism and the negative reaction to that by the majority of South Africans, which effectively de-legitimated that language. Also, native English-speakers provide another example of inhibiting factors, as they have the biggest impact on language preference in multilingual settings. In the case of integrating congregations, this means white congregants, or immigrants who may technically be multilingual but not in any South African language. And, reluctance on the part of congregational leadership (clergy, lay leaders) inhibits the operation of multilingual or multicultural identities.

In addition there are two major factors which require more detailed analysis.

The first comprises the constraints posed by institutional setting on the ability of linguistic or ethnic identities to advance their own interests in congregations. Here organisational culture is of particular interest, while the vector formed by class, language and religion with the integrative dynamic of the congregations also acts as brake.

Apparently institutional culture continues to favour the unofficial national language English, and in a few cases the old official language, Afrikaans in the setting of "English-speaking" Christian denominations. The same ambiguity which marks official policies (good intentions contradicted in practice) occurs here. Linguistic diversity is now reflected in most liturgical publications (Prayer Book of the CPSA) and hymnals, but evidence shows that this is not necessarily translated into congregational life. It is hard not to conclude that South African mainline congregations are "still dominated by European Christian forms" (Ramphele 1989:179). As social institutions, denominations are carriers of the social, cultural, economic, and political forces in society (see Villa-Vicencio 1988:42). And so congregations also contain the values of European culture embedded in the language, structures and processes of their denominations (Ramphele 1989:179; see Cochrane 1987:26; Saayman 1994:12; Bill 1994:168).

The evidence also suggests that the intersection of language and religion in an integrative setting favours middle class aspirations and formation. A lot of ink has been spilled recently about the emergence of a black middle class, for whom English fits class aspirations. Most mixed congregations seem to follow the ideal set by black political elite, namely the primacy of English, and so offer a natural home to this group who are easily integrated into existing leadership structures without affecting the internal
functioning of congregations. Black languages and customs are seldom allowed any space to function, with the exception of hymns translated into Bantu languages. In this way current integration in practice reinforces class divisions, structures of exclusion, and internal colonisation with respect to indigenous languages and cultures. Lower income blacks are integrated in terms of their existing class position.

As can be seen from the next major constraint discussed below, these practices stretch back to colonial times, and apparently have been systemically reproduced to the present day. Under the impact of the Christian missions indigenous societies divided between those who used tradition to oppose domination, those who accepted the cultural dominance of settlers, and those who opposed political exclusion and economic exploitation in Christian terms. The so-called English-speaking churches incorporated indigenous peoples into a European-derived belief system, in which the economic and political structures of the settlers were replicated.

In these integrating congregations blacks, as then, who are allowed into leadership are fully acculturated and occupy the same class positions as their white peers. On the other hand blacks are utilising religious institutions to gain access to economic resources through assimilating their offspring. Meanwhile the marginalised segments of the population, in trying to emulate the status language of the elite, are arguably losing their ability to express themselves in indigenous languages, without emerging above inadequate standards of English. Phah has argued persuasively that this inability to conceptualise in the mother tongue adds to the inability of Africa to produce scientists of note.

The second major constraint on language preference in integrating congregations is posed by a language ideology which operates in South African society, but also across Africa, and is linked to features of the world system. In fact, I would argue that a language ideology, in the sense of attitudes towards languages, has been in operation in this country for a very long time. It structures languages (and so intergroup relations) in a status hierarchy in relation to one another, and deems that English is the only language fit for interstate, substate, and intergroup communication.

Such a language ideology is implicitly traced in other studies which examine the language attitudes of South Africans. The study of individual language preferences have often focused on universities, e.g. Vivian De Klerk’s 1996 study of Rhodes students and Kweisi Phah’s 1993 study of six Southern African universities; including the historically black Universities of the Transkei and of the Western Cape. Studies of the general public have been conducted by the Human Sciences Research Council (e.g. Schuring 1979), the South African Broadcasting Corporation (see Gough 1996:55), and the Institute for a Democratic South Africa (unpublished 1997).

The origin of the ideology lies in the Anglicisation policies of the colonial and Union periods, but can also be located in global politico-economic factors which favour the
domination of particularly English and North American cultural forms. The increasing
dominance of English in South Africa can also be explained by the indebtedness of major
institutions here to the United Kingdom – and the USA, as is the case with other
Commonwealth nations. As a result, structures and organisational cultures discriminate
against other language and cultural groups, ensuring that European-derived languages
dominate (cf. Castles 1992). I do not argue that world ideology directly affects local
congregations, but rather that global norms affect the state-building project in terms of
the direction taken by language practice and ideology, and that this is reflected in the
dynamics of congregations, as it is in the education system. In this way language
ideology locally is tied to the global language ideology.

In addition, a small but significant proportion of past and recent leaders of the liberation
movement were educated in English or in British educational institutions. The roots of a
pro-English bias in the black resistance movement originated in the vector formed by
state, education, and religious institutions in the pre-apartheid era. Before 1948 English
mission schools produced English-speaking black intellectuals, including the founders of
the African National Congress (in its early guise as the African Native National
Congress). Examples include Sol T Plaatje, Walter Rubusana, Pixley ka Isaka Seme, John
L Dube, Sam Makgathli, and Saul Mnse (Maake 1994:114). The founders of the Pan-
Africanist Congress were also schooled by the missions, "such as Robert Mangaliso
Sobukwe, Anton Mziwakhe Lembede, Zaphania Mothopeng". These men were described
by H F Verwoerd as "Black Englishmen" (Maake 1994:114).

When the dominance of English is superimposed onto the hierarchical geographical
ordering of the world-economy it becomes clear that the language of two former core
states - the former hegemon, Britain, and the recently dominant USA - is now the
"supercentral" language (De Swaan 1989, 1994). English has achieved pre-eminent status
as global language (Crystal 1997), as a result of the expansion of cultural hegemony
through economic means, and of Western education systems as part of the globalization
of development. As the world-economy is dialectically linked to cultural change, cultural
hegemony accompanied the expansion of the world capitalist system. The preference for
English is supported through the example of the state and various elites, but also through
the common understanding that English is the language of status and commerce.

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This is not to deny that reciprocal influences from the periphery do affect the core, nor
that alternative language options do not figure in world culture, setting up contradictory
trends. On the one hand the world-capitalist system often requires trade to be conducted
in the supracentral language of the dominant core state, and aid agreements to be
concluded in favour of the same language, namely English. But on the other hand the
norms circulating within the world-polity require that nation-states acknowledge and
protect constitutionally the diversity of its peoples. Thus two ideologies have been
established within the world system which in linguistic terms simultaneously promote
monolinguism and multilingualism, homogeneity and heterogeneity, as well as
hybridity.
In the politics of difference, a pertinent question is which language/s will dominate public and private institutions. Across many institutions languages are in competition, and perhaps only the economically powerful will survive in the public domain in South Africa. English has achieved a renewed status as the unofficial official language, despite all the good policy intentions. English is increasingly advanced by some politicians as the dominant language for use in most major institutions (e.g. education, business, government).

Factors which function to enhance linguistic diversity

The rare cases where multilingual interaction occurred is often associated with sympathetic leadership, such as a sympathetic clergy person. The constraints of institutional culture are only overcome where the critical mass of mother–language congregants are so large that another language cannot be avoided. Cases where black congregants insist on cultural or linguistic inclusion are very rare.

CONCLUDING THEORETICAL REMARKS:

Analysing linguistic and racial integration through attention to interactions between and within meso- and macro-levels

In South Africa the status and role of languages in meso–level interactions are now embedded in a language ideology, supported by the informal language policies embedded in the organizational culture of religious institutions which are labelled "English–speaking". Such a language ideology functions to dictate where and when a particular language is appropriate, and to enforce monolingualism. Congregations where the majority of members are not English–speaking, yet this is the language preferred, illustrate the point. There seems to be some consensus that the public realm is unsuitable for any language other than English, while the room for indigenous languages seems to be contracting. Obviously none of the above examples are purely about language, nor as straightforward as I represent them.

Elements of structure and agency interact to dampen linguistic and cultural diversity in many integrating congregations. At the macro–structural level language ideology, class formation, institutional and congregational setting, and changing demographics all play a role; as do the congregants as actors and the clergy as gatekeepers at the micro–agency level. Meso–level factors include the size of the congregation, the ratio of language groups in relation to one another, geographic location (rural–urban), and the policies of the denomination. For example, majority indigenous languages (macro–factor) only emerge in large congregations (meso–factor); in small congregations (meso–factor) congregants opt (micro–agency) for English (macro–factor).

As rational agents congregants, denominational leaders, clergy, lay leadership all consciously or subconsciously bring the contestations between groups into congregations
with them, while choosing to represent themselves in a particular way. Yet such micro-
level actions are also constrained by other actors in the meso-level setting, such as the 
cultural ideology at work in society at the macro-level and in the organization at meso-
level. In other words, while the purpose of the setting is to reinforce a particular social 
identity, that of Christian believer, church members also bring multiple identities into that 
setting, some which are repressed and others which are selected. Language symbolises 
which identity is deemed more relevant to that setting, and demonstrates the perceived 
status between different language groups.

In most integrating congregations an awareness of the need for multiculturalism is 
evident in the recent inclusion of samples of linguistic diversity in hymns and readings. 
While these acknowledgements of diversity are symbolically necessary, regrettably their 
limited scale of usage means that they will have little effect on existing class or status 
relations between congregants. Should such practices continue, the national policy of 
multilingualism will not be advanced, but instead the marginal status of black languages 
will be confirmed and confined to “minority” rankings. This multilingualism merely 
enhances the status of English, stigmatises other languages, and leads to a form of 
linguicism – a form of discrimination against minority groups based on language 
preference.

At the same time competing loyalties to language and ethnic group are undercut by 
contending religious and national identities. While elsewhere language and religion have 
contributed powerfully to ethnic identity formation, this has not happened in South 
Africa, as more missionaries were at work here during the colonial era than elsewhere on 
the continent. Ethnic groups were broken up among the denominations, so that religion 
and ethnicity were different sources of identity with little overlap between them. 
Membership in mainstream and Pentecostal Christianity tends to neutralise the attraction 
of local ethnic identities by offering global alternative identities, of being Catholic, etc. 
Anecdotal and personal experience suggests that believers tend to place loyalty to the 
Christian identities above other identities.

The same applies to racial identity: in accordance with the dominant non-racial ideology, 
racial identities are downplayed by denominational and congregational leaders (in line 
with similar sentiments in the social sciences here and abroad). Yet race demonstrably 
continues to affect the structures of religious organisations and the interactions within 
them. This is illustrated by the existence of a separate black caucus in some 
denominations (Anglicans, Methodists); the apparent need by church officials to (re– 
)claim a history of racial integration (e.g. Catholics); election of denominational church 
leaders from certain racial backgrounds (Methodists); the exclusion of white clergy from 
certain regions (e.g. the Uniting Reformed Church, Anglicans); and a general reluctance 
from those formerly known as blacks and whites, as well as blacks and coloureds, to 
unite in regional or local congregational structures.
Some congregations have little racial integration of leadership structures, but generally speaking racial integration is more noticeably present than is cultural or linguistic integration. In line with the anti-apartheid position of the churches, many actively espouse non-racialism in the sense of playing down the salience of race as category. In some denominations (Anglican) clergy are no longer required to report membership in terms of race. However this does not mean that awareness of race has diminished, or that racial integration has taken place. In some cases relations between black and white, or black and coloured are still strained. In the opinion of a clergy person the Black Consultative Forum in the Anglican church was unhappy with the disproportionately large number of white bishops. Another clergy person felt that the bishop in his diocese reportedly wanted to be "the first one who had no white clergy".

But the increasing domination of class values does not move churches away from race as an issue, for it is European upper and middle class interests which now dominate local congregational structures. These configurations of power enforce white standards of living (e.g. dress codes, even within black congregations), and deny other races access to leadership (see Ramphele 1989:187). Class structures in South Africa coincide with race in an 'internal hegemony', a tempered domination of power and privilege in which race no longer appears as the primary criterion. This structure was revealed in past attempts to de-racialise (church) systems without loss of [white] power, an exercise based on the recognition that dismantling privilege based on race must result in the collapse of (most ?) social infrastructures (Villa-Vicencio 1988:83,84).

*Analysing integration in terms of institutional change*

Institutional isomorphism can explain the tendency in integrating congregations to use English, by referring to the embeddedness of religious organisation in ever widening concentric contexts of national and global institutions, particularly polity and economy. The expansion of the world system in polity and economic terms is historically associated with the spread of colonialism, a process which led to the diffusion of state forms and instruments of state control and legitimation, namely education and, more ambivalently, Christianity as a world religion. Both mission education and imperialism established a cultural hegemony in British colonies which ascribed to English a higher status than to indigenous languages. Local elites were drawn into these institutions and in this way a language ideology was institutionalized and reproduced.

The difficulties that congregations have in integrating linguistic and cultural diversity demonstrate how problematic it is to replace one set of values and associated norms and roles with another in a context of coercive isomorphism formed by state and denominational policies. The result is the incomplete institutionalisation of non-racialism and multiculturalism. Following Moberg (1962:19-20), patterns of integration in congregations express institutionalised behaviour trends within a state-recognised institutionalized voluntary associational organisation. In this approach I analyse congregations as organisations in which several institutions (religion, gender, leadership)
intersect. A congregation and the denomination to which it belongs represent different aspects of the same religious institution. Institutional change within both are brought about by extra-institutional mechanisms (values and norms in the institutional environment, e.g. nonracialism, nation-building) or intra-institutional mechanisms (e.g. through antagonistic actors who oppose one another in the same institution (compare Koelble 1995:235).

Within such an environment other institutions conform to various degrees, i.e. become isomorphic. In congregations that resist full linguistic and cultural integration, organisational inertia takes the form of loose coupling - that is, racial integration of leadership structures is the price paid in order not to deal with language or other aspects of culture. Notions of multiculturalism are not regarded as essential to organisational survival. Hypothetically, conformity to external policies depends on the extent to which intra-institutional support exists for the values which they represent. Congregations which initiated integration before the formation of the post-apartheid state were arguably more influenced at an extra-institutional level by the relations of its leaders to global organisations like the WCC. Yet, given the policies of the present state, it would become increasingly difficult for institutions dependent on state recognition to resist some measure of implicit conformity to these norms of behaviour. Hence institutional isomorphism is likely to develop more rapidly under the present state.

Integration in congregations can be viewed in terms of a dialectic cycle through which institutional change occurs in a local organisation. Only if values are institutionalised will they be successful; they will only be institutionalised if they are broadly accepted. Institutionalisation implies acceptance of ideas (values and norms), and their implementation in roles and behaviour. On this basis I would argue that congregations which are racially integrated only (along with those that are not integrated at all in contexts which would allow this) present instances of the partial institutionalisation of multiculturalism in contrast to the more complete implementation of nonracialism and nation-building. Racial equality has been institutionalised to the extent that it has penetrated the consciousness of individual congregants (other races should be equally included) and has been accommodated in the creation of formal roles (black lay leaders). Yet the norms that determine the status and roles that languages may play (English should dominate) remain unaffected. As a result indigenous languages are not included, and those congregants or clergy who would support their incorporation are rendered ineffective by the attitudes of both English-speakers and the other language groups, which accept the status quo.

Extra-institutional values - such as multiculturalism - are incorporated and unevenly distributed across the structures of the denomination. Among synodical representatives positive multicultural values are most clearly institutionalised as evidenced by policy and in the use of e.g. different languages in the Anglican prayer-book, but without affecting the norms governing the congregation. At the congregational level there may even be an obvious acknowledgement of the different value-set contained in denominational and
state policy, but this has not as yet ousted the dominant cultural ideology. While there is little disagreement about the usefulness of allowing other races to be integrated, the roles and status associated with language and culture remain unaffected.

Extra-institutional values articulate with the cultural norms of the world system, namely equality and progress (Beyer 1994:23), and feed into the continuous need in the capitalist system for economic expansion. Equality, in the form of a globalized norm of liberal democracy, enables the removal of ethnic and racial barriers which could hinder the creation of new markets, a process undergirded by the diffusion of English as a global language through tertiary education and financial aids programmes. The globalization of liberal values supported the establishment of various charters of human rights, including the Freedom Charter, the present South African constitution, and the ideologies of nonracialism and multiculturalism. These values are expressed in state policies and legislation. Paradoxically, the world system also incorporates norms which establish a single global division of labour between core and peripheral states.

Global factors can explain the preference for English indirectly, as supported through the example of the state and various elites, and through the common understanding that English is the language of status and commerce. Anecdotal evidence points to an understanding in certain black circles that the state's multilingual policy is merely an ideological mechanism for the devaluation of Afrikaans and other minority languages (like Venda). This view, for instance, was aired by black clergy at a recent workshop for a denomination not included in this study.

Generally speaking, both whites and blacks in integrating congregations dominated by English accept the status quo. For speakers of minority African languages, English represents a neutral alternative to the linguicism expressed by major language speakers such as Zulu or Xhosa. For whites, the use of English maintains the dominance of European cultural values while appearing to conform to nonracialism; while for blacks it confers entry into a higher status and symbolizes the upward aspirations modelled by the new elite.

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Reviewed by Katherine Moseley

"To the merchants and mariners of the seventeenth century the wide waters of the Indian Ocean appeared of vast, superhuman dimensions. An interminable time was spent crossing it...." So opens Barendse's splendid account, resembling, in its complexity, color, and scale, the region it describes. Indeed, it takes us, like fellow-travelers, to the ports, ships, and mercantile communities of that great maritime area, bounded by the East African shoreline, the Red Sea and Persian Gulf, and India's western coast.

Based on over a decade of archival research in the Netherlands, India, and Portugal, Barendse's book blends social and economic history, economic geography, and institutional analysis. While synthesizing perhaps thousands of primary documents, it retains the feel of an account -- descriptive, discursive, with little in the way of generalization, aggregate data, or quantitative trends. The underlying strategy, however, seems like Braudel: to take the reader to the scene, letting him sort through the evidence himself for clues to interests and motives, underlying structures, and long-term shifts. There are shortcomings: countless typographic errors, quaint wordings, rudimentary tables, the lack of an overall bibliography, and vagueness on certain points. All these pale, however, in face of the utterly convincing realism of this work's seductive combination of historical sweep, sharp insights, and rich detail.

Barendse's focus is on the last half of the seventeenth century -- a period of Dutch hegemony, English ascent, and Portuguese decline and the problematic of "European expansion" in many ways frames the book. This is far from a conventional imperial or economic history, however: it is resolutely centered on the regional economy, with minimal attention to wars, states, boundaries, or even to trade with the metropoles. A chapter is devoted to each of the three great chartered companies of the Indies, but the emphasis throughout is on contradictions and ambiguities: the impossibility of effective monopolies or central control; the ubiquity of corruption, smuggling, and "private trade"; the immense and inescapable role of indigenous traders, shippers, and financiers.

The Moghul, Safavid, and Ottoman empires, along with other local principalities, also remain in the background, leaving the political demarcations of the region somewhat unclear. As in Europe, Barendse notes, "the comucopia of American bullion was emptied by the state on payments for a salaried bureaucracy and army" (111), while the sale of offices and tax farming were milked for further revenues. Despite their actual dependence on trade, however, the Asian states with the exception of the Omanis tended to treat commerce with some disdain (preferring, as Barendse puts it, "the stirrup to the ship") (p. 434).

Europeans -- barred entirely from most of the Ottoman Red Sea -- were generally confined to coastal enclaves; Barendse provides fascinating detail on these, especially the
stratified, more or less creolized Portuguese settlements of the western Indian ports, and their subaltern strata of mestizos, converts, and lascarim troops. Other diasporas of Portuguese settlers, lancados, and mercenaries stretched up the Zambezi and Euphrates, and into the political centers of the interior. More generally, the ports and sea lanes teemed with a multicultural assortment of renegades, freebooters, "sea proletarians" (a term from Frederick Lane), and African (ex-)slaves.

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Barendse's focus then, is not only regional but maritime, and especially on the coastwise, inter-Asian, or "country trade." The major flow was between India (producer of pepper, cloth, and diamonds, inter alia), and the Middle East (still the major conduit for bullion, along with cotton, silk, and coffee). To both regions came smaller flows of African slaves, ivory, and gold. Barendse provides especially rich material on not only the operations of the Companies, but on local-level structures and transactions' ports and bazaars, Indian and Muscati merchant and banking networks, European privateers, ships' crews, the seasonality of trade in such places as Basra, Mocha, Goa, and Surat.

It is the character and dynamic of this commercial system that is Barendse's overarching concern. In the long run, he seems to argue, the more humdrum, localized trade in bulk goods was as important as, and intertwined with, the long distance trade. Though the latter was crucial for capital accumulation and state revenues, "the entire trade of the Indian Ocean would barely have filled one modern freighter" (p. 173). Even the old silk route, he argues, was less "a highway from Europe to the celestial kingdom" than "a succession of small local circuits of trade" (p. 134). Markets for high-value exports were limited and fragmented, beset by inadequate information and erratic fluctuations, high insecurity and protection rents (or by customs duties, which might be even worse). To minimize risks, small-scale "peddling" and dispersed "portfolio investments" tended to prevail.

Barendse is accordingly quite cautious on the question of a seventeenth-century "world-economy." The Arabian seas, he says, did make up a regional maritime system (p. 60), but less an (integrated, hierarchical) "world-economy" than a simple "network of trade" (p. 435). And thus the transformative impact of the European chartered companies on their mercantilist character, their superior centralization, capitalization, and power; their ability to achieve economies of scale and lower costs; and their role in forging wider linkages on a truly global scale. One might add the Wallersteinian point that Barendse does not quite make explicitly the fact that there was not one chartered company but several, always competing, never able to regulate, stabilize, and thus limit global commerce as they might have wished.

By the end of the century, Berendse suggests, "the integration of the Arabian Seas within the modern world system was well underway" (p. 439). Spatially, eastern and western Asia became more closely connected, as did both not only to Europe, but to
the wider Atlantic world. A marvelous chapter, entitled "Private Deals," tells of the
smugglers and buccaneers who, in defiance of mercantilist restrictions, pioneered the
American routes, carrying East African slaves and other booty to the Bermudas and New
York. "By 1700 global connections tied both the Indies together," Barendse
notes (p. 407). Similarly, tea and other Chinese goods began to appear in significant
quantities, in exchange for opium, textiles, and bullion earned in the Indian trade.

Larger and more unified markets, in turn, narrowed the gap between staples and hitherto
luxury goods. By the end of the century, bulk-manufactured cloth, and primary products
like indigo, coffee, and rice entered massively into world-wide trade; so did labour, "not
only slaves but indentured labour and mercenaries as well" (p. 5). Market integration also
spelled greater cost/price competition and a "global process of product substitution" (p.
216). Indigo from the Caribbean and Guatemala displaced the Indian product, first in
Italy, then in the Levant; pepper from the East Indies, shipped round the Cape, struck a
blow to Western Indian exports and the traditional Levant trade. Competing supplies of
New World sugar, cotton, then coffee were to follow close behind.

This ongoing reorganization of world trade was led by Europeans, Barendse argues,
above all by the English, whose multiple advantages are explored in some detail. These
included their early entry into the tea and coffee trades, the close connections they
eengineered between Bombay, China, and Madras, and their experience in producing
textiles for the Middle East. But "paramount to the rise of the British Empire in Asia,"
Barendse argues (pp. 378-9), was their thriving "country trade," soon surpassing the
Portuguese, then the Indians themselves. In the process, Bengal and Arabia prospered,
but to the detriment of the Malabar Coast and the Levant.

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Bullion had long drained eastward to India's "bottomless sink" (reflecting
Portugal's early deficits with the region, for example). With the decline of the
transit trade in pepper, the Persian and Ottoman balance of payments turned negative as
well. By the turn of the century, silver began to drain eastward from India itself; "One
could obtain bullion for the China-trade," Barendse notes, "with the sale of European
commodities at Surat and Bombay..." (p. 405). These shifts seem to have been part of a
more general decline affecting the Arabian Seas, ca. 1660-1690, to which Barendse
alludes at several points. There were other possible culprits, however'inflation and
heavy taxes, plague and climate change; the possible connection to a wider "seventeenth-
century crisis" is mentioned as well.

Here, as on other major points, Barendse sticks to the evidential clutter, the uncertainties,
of the middle ground. His book stands somewhere between Steensgaard and Pearson,
emphasizing both the revolutionary role of European commerce and the immense
importance of the preexisting inter-Asian trade. Similarly, it treads a path between
Wallerstein and Frank, seeing the area as not "external" but still only partly integrated to
a still-emerging world-economy in which India, as well as
Europe or China, had a major place. This world system, however, was also assuming distinctive capitalist, systemic features, and under increasing European control.

A revised edition, to be brought out in the United States by M.E.Sharpe, promises to tell us more of the African side of the Arabian Seas. For now, useful (but uncited) companion volumes might be Risso\'s Merchants and Faith: Muslim Commerce and Culture in the Indian Ocean (Westview 1995), and Joseph Harris, The African Presence in Asia (Northwestern 1971). Photos and other art work would also be precious complements to a new edition, but are perhaps too much to hope for. Such basic amenities as an index and bibliography, however, not to speak of proofreading, should be de rigueur, along with better maps, perhaps some even showing political boundaries, trade routes, or commodity flows. This volume is a great achievement, and surely deserves the best.

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This book builds on Graeme Donald Snooks’s earlier volume, The Dynamic Society: Exploring the Sources of Global Change (Routledge, 1996). Both books lay out a general theory of human society and history known as materialist man, but the more recent book develops the argument in much greater detail. Snooks argues that there are no adequate models of human social behavior, but that the two most popular ones are neoclassical economics and sociobiology (more on this shocking statement later). Neoclassical economics goes wrong, he says, in assuming that humans are primarily cognitive beings who intellectualize about the world, whereas sociobiology goes wrong in being too genetically deterministic and in giving pride of place to the struggle for reproduction rather than to the struggle for survival. Human social life is governed by passions, not intellect, and the most important passion is the struggle for material advantage, i.e., for wealth and power. To realize material advantage humans adopt one or more of four dynamic strategies, which Snooks calls the family multiplication strategy, the conquest strategy, the commerce strategy, and the technological strategy. In the process of developing this argument Snooks reveals himself to be an old-fashioned economic determinist. At the base of every society is its dynamic economic strategy, and political and social institutions rest on this strategy and function to promote it. Social change occurs by virtue of the unfolding and eventual exhaustion of a dynamic strategy, at which point the leaders of the society shift to the next-best strategy. As the dynamic strategy changes, new social and political institutions emerge.

The dynamic strategy most likely to be found in small-scale preindustrial societies is the family multiplication strategy. Here families hive off from other families and occupy new land. This strategy has also been used by more complex societies in the settling of frontier regions, such as in colonial America. The most common dynamic strategy in the world of large-scale agrarian civilizations has been the conquest strategy. Here the political leaders of a society, usually in close collaboration with its economic leaders, engage in a pattern of constant war against other societies. War becomes a large-scale business, and wealth is created in the form of the spoils of war: land, slaves, tribute, etc. The usual reason that agrarian civilizations adopt the conquest strategy is that there is no real alternative. By far the greatest example of the conquest strategy is the Roman Republic and Empire. The dynamic strategists were the senators, who had launched this strategy by about the middle of the fifth century BC. Later the senators were replaced by the emperor as the primary strategist, a change necessitated by the need for greater centralization of the whole process of conquest. According to Snooks, by AD 138 the Romans had essentially exhausted their conquest strategy, but since there were no real alternatives to it the empire started on a process of long and slow decline. As another example of the conquest strategy, Snooks discusses the Aztecs, whose budding empire in the fifteenth and sixteenth centuries was centered around the capital city of Tenochtitlan. Unlike Rome, the Aztecs did not make use of a large slave labor force, and there was no
permanent army. As in Rome, war became a serious business. Merchants -- the dynamic
strategists of the commerce strategy -- were greatly distrusted, but since their wealth was
useful to the state they were tolerated. One of the more prominent features of Aztec
society was its religion based upon extensive human sacrifice. For Snooks this religion
symbolized the "dark spirit of conquest" that was the essence of Aztec society. The Aztec
conquest strategy was cut short by the Spanish conquerers early in the sixteenth century
before it had a chance to spread and ultimately to exhaust itself. Snooks speculates that
had this not happened the Aztecs would soon have embarked on the conquest of much of
North and South America.

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A few agrarian societies have been fortunate enough to use the commerce strategy rather
than the conquest strategy. This strategy involves the creation of wealth by producing and
trading goods over as large an area as possible. It depends on favorable geographical and
other circumstances that give a society the necessary access to markets and trade routes.
Since commerce societies could not coexist peaceably with conquest societies, the former
had to be beyond the reach of the latter. The greatest commerce society in all of human
history was, of course, ancient Greece. The Greeks were not only geographically suited
for the commerce strategy, but since they were divided into a number of small and
independent states that were equally matched militarily the conquest strategy could not be
successfully employed. The Greeks employed their commerce strategy between
approximately 800 and 550 BC. An integral part of this process was the founding of
many Greek colonies in both near and distant regions. These colonies were important to
the Greeks because "they were the means by which Greek city-states attempted to gain a
monopoly over trade in a particular part of the Mediterranean" (p. 213). According to
Snooks, commerce societies emphasize the "beauty of reason" rather than the "darkness
of chaos" of conquest societies, and this was certainly true of Greece. Because its
dynamic strategy was fundamentally different from that of Rome, the political structure
of Greek society was also different. In Greece we find the city-state or polis, a political
form based on rule by assemblies of male citizens rather than a king or emperor. As
commerce expanded democracy expanded, because democracy facilitated commerce. By
around 550-500 BC this strategy had exhausted itself and Greece was forced to turn to
the conquest strategy. But since it had no particular advantage in the use of this strategy it
subsided into insignificance on the world stage. Venice in the time between
approximately AD 1000 and 1500 was also a major commerce society. It followed a
similar path to that of Greece. It was ideally geographically situated for commerce, and it
followed this strategy for several centuries. Soon, however, the strategy had run its course
and, like Greece two millennia earlier, it turned to conquest. But since it had, also like
Greece, no particular advantage in the use of this strategy the conquest strategy failed,
and early in the sixteenth century Venice opted for a policy of neutrality and diplomacy.

The history of Europe, England in particular, over the past millennium reveals a sequence
of dynamic strategies. Between about AD 1000 and 1450 England used a conquest
strategy. Once this strategy had been played out England adopted a commerce strategy.
This latter strategy had itself been played out by the middle of the eighteenth century, and as a result England embarked upon what Snooks calls the technological strategy, or what I think might be more appropriately called the capitalist strategy. This involved the substitution of inanimate for animate energy and was marked by, of course the Industrial Revolution.

As far as Britain's dynamic strategists were concerned, the essence of the Industrial Revolution was that it devised cheaper ways (both technically and institutionally) of producing old products, such as cotton textiles, and new products such as consumer durables, and cheaper ways of transporting those products to markets at home (by canals and railways) and abroad (by steam-driven steel ships) . . . By providing ways of achieving favoured access to resources and markets other than the exhausted traditional ways of force, diplomacy, and physical proximity, the British Industrial Revolution imparted a new impetus to commercial expansion. But this time commercial expansion was the outcome of the technological rather than the commerce strategy (pp. 293-94).

Despite its short history, the United States has also undergone a sequence of dynamic strategies. In colonial America the strategy followed was that of dependent commerce, a version of the commerce strategy in which the colonies were a junior partner to England. This strategy came to an end late in the eighteenth century, and the United States then embarked on a strategy of family multiplication by expanding into the Western frontier. Once this strategy had been exhausted by around 1890, the US took up the technological strategy. Snooks argues that the key to understanding US society is that it was the world's first megastate and the first society to create a megamarket. Prior to the Civil War the US was really made up of two subsocieties that were committed to different dynamic strategies. The North wanted to expand industrial capitalism into the Western frontier in order to create a megamarket, but the "longrun material success of Southern strategists depended more on their economic relationship with Britain than with the rest of America" (p. 379). The Civil War was really fought over this clash of strategies, and Snooks contends that had the South won the war the US would have been divided into a number of nation-states rather than one megastate. Thus, the outcome of the Civil War was essential to the preservation of the North's technological strategy, for this strategy could not have been sustained without a megastate and a megamarket.

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In the final two chapters Snooks takes out a small crystal ball. The future, he says, will be dominated by the clash of four megastates because small nations, though they may fare reasonably well, can never be economic or political hegemons. European countries have increasingly recognized this, and thus have created the European Union. Snooks is optimistic that Russia, now that it has shed communism and embarked on the technological strategy, will, within a generation or so, emerge as a megastate. He also foresees China as one of the megastates; along with the EU and Russia, it will join the United States as one of the four megastates of the twenty-first century. What is the possibility that a global state will eventually succeed the megastates? This is neither possible nor desirable, Snooks contends. A global state would be an unmitigated disaster
because it would kill off the competition that is an essential part of the technological strategy and thus kill off that strategy itself.

There is a great deal of value in this book and I urge all those scholars with a serious interest in world history on such a grand spatial and temporal scale to read it. I am in strong agreement with his materialism (even economic determinism), and much of what he says about dynamic strategies and their importance is quite plausible. However, there is also much that is problematic, some of it seriously so. For one thing, Snooks concentrates wholly on what might be called "external" dynamic strategies and totally ignores "internal" strategies. That is, he concentrates entirely on intersocietal relations as if this is the only source of wealth and power and completely ignores the forms of wealth creation that go on within societies. In large-scale agrarian societies a great deal of wealth is created simply through the surplus extraction process engaged in by landlords against peasants. Snooks claims that "for a conquest society the domestic economy is a side issue" (p. 188). Certainly conquest can bring in a great deal of additional wealth, but the domestic economy should not be relegated to such an insubstantial status. After all, what do societies do when their conquest strategy fails, or what do societies incorporated into another society through conquest do to create wealth? Most commonly, they (i.e., their economic and political elites) engage in surplus extraction.

Snooks also turns his back entirely on the world-system perspective. There is no world-system, he argues, and the global economy is merely the outcome of dynamic strategists operating within the institutions of individual societies. In a sense this is true, but in another sense it is highly misleading. Once a world-system has been created, to some extent it acquires a life of its own and constrains the actions of its constituent members. Or so most of the readers of this journal would argue.

Snooks also does an inadequate job of explaining how dynamic strategies are exhausted. I have no difficulty accepting his thesis that strategies eventually exhaust themselves and have to be replaced by new strategies. However, Snooks doesn't really do enough to show us, within the framework of his concrete case studies, how strategies peter out; he merely asserts that a strategy petered out rather than developing the evidence to show us how and why this happened. I also have a problem understanding just what Snooks means by the family multiplication strategy. His discussion of this strategy in The Dynamic Society seemed to make it clear that this was a strategy suitable to very small-scale societies, and yet in The Ephemeral Civilization we read that this was the major strategy of American society in the century between 1790 and 1890, and we also learn of the enormous amount of wealth that the use of this strategy created. But surely family multiplication cannot be much of a wealth creating strategy on its own, let alone the level of wealth that Snooks is referring to. Perhaps I misunderstand the family multiplication strategy, but it would appear to me that it could not create much wealth unless it were combined with one of the other strategies. For example, the expansion of the railroads was a major aspect of the expansion into the Western frontier of the United States, but this was driven by Snooks's technological strategy (or what I prefer to call the capitalist strategy) rather than by simple family multiplication.
I also take exception to Snooks' broadside attack on social evolutionism. He asserts that social evolution is a myth, and he is out to destroy it. In using the term social evolution he seems to mean some sort of unilinear process that never reverses itself or bears off in any other direction, for he says that "sharp directional changes and reversals in institutional change observed throughout the historical record cannot be explained by an evolutionary model" (p. 8). Snooks is woefully out of touch with the literature on social evolution and theories of it. There are many social scientists today who are evolutionists, but few would claim that social evolution is some sort of unilinear process that never changes course. Indeed, I have developed an evolutionary interpretation of world history (Sanderson, 1995) that takes full cognizance of the rise and fall of civilizations, societal collapse, etc. Snooks is not reading some of the literature that he should be reading. He also seems to think that social evolutionism is some sort of unitary approach, but some years ago I tried to dispel that notion (Sanderson, 1990).

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One of the more startling statements in The Ephemeral Civilization is Snooks' contention that the two most influential models of human behavior have been neoclassical economics and sociobiology. I am not sure how influential neoclassical economics is outside of the field of economics itself, but I do know that sociobiology has made headway only in two social science disciplines, psychology and anthropology, and sociobiology is still highly contentious there. Within sociology sociobiology is still fiercely resisted by all but a small minority. Again, Snooks needs to acquaint himself with a wider body of literature than what he has been reading. However, more important is Snooks' own treatment of sociobiology. There have been many serious distortions of the claims of sociobiology, but Snooks' treatment is one of the worst I have seen. He claims that sociobiology is a rigid form of genetic determinism that makes humans slaves (his word is robots) to preordained forces, but this charge has been successfully repudiated countless times. Only a little familiarity with the literature of sociobiology will disabuse the careful and objective reader of such a claim. Perhaps Snooks' most serious charge against sociobiology is that, even though it claims to be Darwinian, it is in fact a distortion of Darwin. Sociobiologists distort Darwin, he says, by emphasizing the struggle for reproductive success, when in fact what Darwin was talking about was a struggle for survival, for material resources, not for producing offspring. In fact, though, Snooks seriously misunderstands Darwin and has created a false dichotomy. Not only did Darwin emphasize reproductive success, but his theory depended intimately upon it. Life is a struggle for both survival and reproductive success, and evolution cannot occur if organisms do not mate and leave copies of their genes in future generations. This is the only way an adaptive trait can spread throughout a population. What Snooks is really trying to do, it would seem, is to gain for economics a privileged position by making most important that which economists focus on, competition for material resources.

This is not the only serious interpretive error committed by Snooks, for in fact his entire treatment of sociobiology is just one massive exercise in intellectual distortion. In my
copy of the book I have marked long passages on pp. 110-11, 112, 113, 117-18, 121-22, 123, 124, and 125 that are just disasters of confusion and misunderstanding. He makes such startling assertions as the claim that animals have institutions, norms, and values; that animal behavior is not under genetic control; and, incredibly, that "children are, except in human families, an unavoidable by-product of the satisfaction of sexual desires" (p. 125). Ironically, what Snooks fails to see is that his general theory, materialist man, is not only compatible with sociobiology but makes sense only in terms of it. Why do people strive for wealth, status, and power? Because these are the resources they need in the struggle, not only to survive and prosper, but to attract mates and perpetuate their genes.

Fortunately, Snooks' discussion of sociobiology has little effect on the main argument of his book, which could have been written in much the same way without much theoretical grounding at all. I recommend Snooks' book for economic historians and their fellow travelers, but an important lesson of this book is that economists and economic historians should either stay away from theories in fields significantly removed from their own or take the time and effort required to make sure they understand these theories correctly.

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