





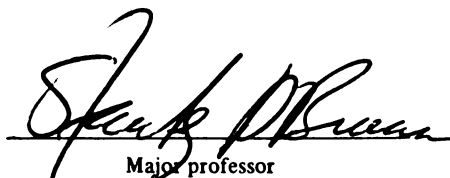
THESIS

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THE SOCIAL-SPATIAL LIFECYCLE  
OF A COMPANY TOWN: CALUMET, MICHIGAN  
presented by

April René Veness-Randle

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THE SOCIAL-SPATIAL LIFECYCLE  
OF A COMPANY TOWN: CALUMET, MICHIGAN

By  
April René Veness-Randle

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ABSTRACT

THE SOCIAL-SPATIAL LIFECYCLE  
OF A COMPANY TOWN: CALUMET, MICHIGAN

By

April René Veness-Randle

This study examines company town social geography, ethnic residential patterns, frontier development, and their relationship to immigrant assimilation. A descriptive model of the social-spatial lifecycle of frontier based company towns is compared to the evolution of one company town, Calumet, Michigan. Many of the social and spatial features depicted in the model occurred in Calumet, including some ethnic residential segregation at the neighborhood scale. Analysis of company policy and attitude towards housing and immigrant workers and ethnic behavior reveals that these patterns did not index ethnic assimilation. Calumet's ethnic residential patterns between 1890 and 1930 seem to illustrate changing company policy during a period when paternalism and ethnicity were being challenged.

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## TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS. . . . .	ii
LIST OF TABLES . . . . .	v
LIST OF FIGURES. . . . .	vi
CHAPTER	
I. Scope of Study . . . . .	1
The Approach. . . . .	2
Objectives of Study . . . . .	5
II. Literature Review. . . . .	9
The Company Town. . . . .	9
A definition. . . . .	9
Reasons for being . . . . .	11
Social geography. . . . .	12
The Mining Frontier . . . . .	16
A definition. . . . .	16
Ethnic Residential Segregation. . . . .	20
III. Social-Spatial Lifecycle Model of a Company Town . . .	24
Social Cycle. . . . .	26
Spatial Cycle . . . . .	29
IV. Methods of Analysis. . . . .	36
The Mining Frontier: An Ethnic Melting Pot? . . .	36
Company Towns: Company Imposed Ethnic Segregation?	39
Mapping procedures and analysis . . . . .	40
Ethnic Segregation: An Index of Assimilation	
in a Company Town? . . . . .	41
Procedures. . . . .	42

CHAPTER	Page
V. Social-Spatial Evolution of the Keweenaw Mining Frontier and Calumet: 1840s to 1930 . . . . .	44
The Keweenaw Mining Frontier: 1843-1866. . . . .	44
Calumet from 1866-1890: Genesis and Development of Its Social Geography . . . . .	52
Spatial development. . . . .	57
Calumet from 1890 to 1930: Ethnic Residential Patterns. . . . .	63
1890 patterns. . . . .	63
1900 patterns. . . . .	66
1910 and 1920 patterns . . . . .	69
1930 patterns. . . . .	74
VI. Analysis of Patterns and Processes. . . . .	77
Housing in Calumet . . . . .	78
Analysis of Residential Patterns . . . . .	82
Calumet after 1900: Internal and External Influences. . .	89
VII. Calumet in Decline: Summary and Conclusion . . . . .	95
Calumet after 1930 . . . . .	95
Immigrant Experience in Michigan's Copper Country: Calumet, Michigan . . . . .	99
LIST OF REFERENCES . . . . .	106

## LIST OF TABLES

	Page
Table 1. Copper Country Demographic Composition 1850-1890. (Houghton and Keweenaw Counties). . . . .	48
Table 2. Growth of Calumet Area . . . . .	54
Table 3. Population Change in the Calumet Area 1930-1970 . . . . .	97

## LIST OF FIGURES

	Page
Figure 1. Levels of Social Reality. . . . .	6
Figure 2. Immigrant Experience in Michigan's Copper Country: Calumet, Michigan . . . . .	7
Figure 3. Social Cycle of a Company Town. . . . .	27
Figure 4. Spatial Cycle of a Company Town . . . . .	30
Figure 5. Schemata of the Spatial Cycle . . . . .	32
Figure 6. Location of Calumet's Residential Areas . . . . .	59
Figure 7. Calumet, Hecla, and Red Jacket, Michigan, 1881. . .	62
Figure 8. Ethnic Residential Patterns: Calumet, Michigan, 1890. . . . .	65
Figure 9. Ethnic Residential Patterns: Calumet, Michigan, 1900. . . . .	68
Figure 10. Ethnic Residential Patterns: Calumet, Michigan, 1910. . . . .	71
Figure 11. Ethnic Residential Patterns: Calumet, Michigan, 1920. . . . .	72
Figure 12. Ethnic Residential Patterns: Calumet, Michigan, 1930. . . . .	75
Figure 13. Company Housing in Calumet, Michigan. . . . .	83

## CHAPTER I

### Scope of Study

The research focus of this study rests at the junction of four separate but interrelated fields of inquiry: company town social geography, ethnic residential patterns, frontier development, and the relationship of each of these to the process of immigrant assimilation. In order to examine their interrelationships, three objectives have been formulated to successively illuminate various aspects of the social and spatial development of a frontier based company town. Although these specifically focus on the social and spatial patterns associated with immigrant settlement in a company town, an equal interest is devoted to the processes in the lifecycle of a company town which may have had an effect on these patterns. First, how were the dozens of ethnic groups that immigrated to the Keweenaw Peninsula of Michigan between 1860 and 1930 spatially sorted? Second, was the spatial sorting process related to the social process of assimilation? Third, how did the fact that these groups lived in a town owned, developed, and controlled by a single mining company affect their spatial behavior and their social adjustment? The answer to these questions must look beyond the given spatial patterns to such issues as corporate attitudes and spatial decision-making behavior, immigrant group perception, cohesiveness, and collective social and spatial behavior, and the relationship of these to immigrant assimilation.

In a sense, this study is an attempt to understand the genre de vie of the Keweenaw mining district and Calumet over a period of time when its social and spatial patterns and processes were being shaped by numerous internal and external forces.

Geographic research which attempts to interpret and understand the genre de vie of a particular area according to one phenomenon--spatial form--would be simplistic. Consideration of the association of various phenomena and the processes that link and generate them are essential to this type of study. Therefore, the approach used is paramount to framing the methodology and realizing the objectives. The remainder of this chapter elucidates and outlines the approach taken in this study; this is followed by a review of the pertinent literature.

### The Approach

Geographic research in the past couple decades has begun to address the fact that spatial analysis of a given distributional pattern will not necessarily be reflective of a certain set of processes. Indeed, often too much has been assumed by the observed objective spatial form (Abler, Adams, Gould, 1971). Many researchers recently have attempted to equip themselves with approaches and methodologies that will successfully bring to light the nature of the processes generating the spatial patterns they observe (Herbert, 1972; Herbert and Johnston, 1976). In many cases this task requires a broadening of traditional thoughts and methods used for examining spatial form.

As interest in the problems inherent in separating spatial "objects" from human spatial "values" increases, it becomes apparent that quantitative



analysis is not appropriate for all types of geographic research (Buttimer, 1974). Many geographers are aware that studying the objects of man is not the same as studying man's decisions, attitudes, and behavior (Kirk, 1952; Lowenthal, 1961; English and Mayfield, 1972). In response to these difficulties, behavioralism and "process-form reasoning" have been proposed as a possible approach for conducting research in historical social geography. Also models are advanced "to emulate the essence of the process believed to be operating and 'permitting' it to generate the spatial conditions..." (Amedeo and Golledge, 1975, 173). While these behavioral approaches to spatial analysis seek to understand and predict the relationships between man and his environment in a contemporary or historical context, they are not always able to identify and measure the key variables or processes generating the spatial patterns. The approach employed here rests midway; that is, there is a concern for human attitudes and values, even though it is frequently unable to deal with them using the methods of logical positivism.

Non-positivistic approaches to explaining processes that underlie observable spatial form have been suggested as alternatives to an objective analysis of spatial patterns (Mercer and Powell, 1972). These alternatives, unfortunately, are often ambiguous and confusing, hence they are neglected partly because of their lack of practical methodologies (Billinge, 1977) and partly because they are foreign to the principals of objective-empirical scientific research (Mercer and Powell, 1972). Usually the geographer (including the historical social geographer) who attempts a non-positivistic approach to gain understanding and insight about a given spatial relationship is in the largely unavoidable position

of ascribing to phenomenology, but using the methods of scientism (Billenge, 1977). This "impasse," as Ley (1977,498) describes it, was not always apparent in geography as nineteenth century French geographers, aware of the importance of milieu and genre de vie in their studies, sought an empathetic understanding of the environment being examined. Not until the early twentieth century was "Concern passed from interpretative statements of place to the more formal categorization of landscape facts" (Ley, 1977, 499). This impasse, whether apparent or real, has led some geographers away from positivism and its constraints to a different method of understanding. Phenomenology and humanistic geography offer two approaches that have been gaining interest and respectability in recent years (Tuan, 1974; 1978). They both have great utility in historical and social geography.

Despite what Ley (1977) calls a lack of firm philosophical underpinning in social geography, the need for research dealing with generative processes and human attitudes and behavior toward space, nature, and other humans is genuine. It is helpful to realize that spatial information is available for different levels of social reality and that each of these may require a different approach. This point is affirmed by Tuan (1974, 57):

Spatial analysis and other positivist techniques are well suited to the description of the upper levels of social reality. The deeper we probe the less suitable these objective (scientific) methods become, and we need to resort increasingly, to the methods of phenomenological description.

Tuan indicates further that although geographers have traditionally concerned themselves with the upper levels of social reality, that is, surface features and observable material objects, some have recently turned their

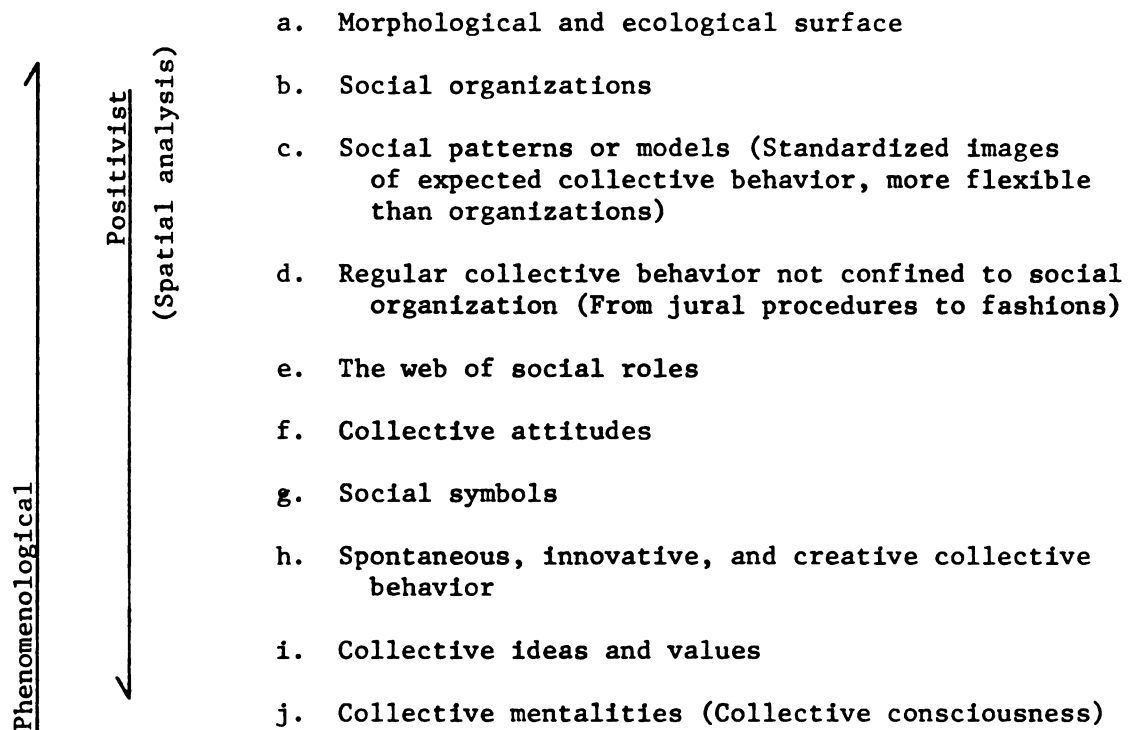
attention to the lower levels where group attitudes, behavior, ideas, and values are examined (Figure 1). An objective of this study on the social and spatial dynamics of a company town is to touch upon several of these various levels. Figure 2 indicates both how the objectives of this research illuminate different levels of social-spatial reality in Calumet and how this research is conceptualized.

### Objectives of Study

Having recognized the existence of different levels for examining human activities and the suitability of various techniques for describing them, there are three main objectives, each which requires a slightly different methodology.

The first objective is to construct a descriptive lifecycle model which pulls together the sequence of demographic, social, and spatial patterns that typically appear in the evolution of a frontier based company town from its inception to its demise. After this model is introduced, the social-spatial lifecycle of northern Michigan's Keweenaw copper district, specifically the company town of Calumet, will be reconstructed and compared to the features of the model. In this manner some understanding of the processes generating the social and spatial patterns in Calumet is gained.

The second objective is to map the ethnic residential patterns in Calumet between 1890 and 1930. An examination of these patterns will indicate whether or not ethnic residential segregation occurred, and if so, at what scale.



Source: Tuan, 1974; taken from Gurvitch, 1972

Figure 1. Levels of Social Reality

Levels of Social-Spatial Reality  
(Objectives)

Generalizations Being Tested



<u>Phenomenological</u> 	<u>Positivist</u> 	a. Calumet's ethnic residential patterns 1890-1930	Ethnic residential segregation?
		b. Descriptive model: Social-spatial lifecycle of a company town	
		--characteristics of demographic composition	Standard social and spatial patterns occurring in lifecycle?
		--nature of social organization and interaction	
		--spatial morphology	
		c. Corporate attitudes and actions through time	Conscious spatial patterning of ethnic groups?
		Ethnic group perception and behavior through time	Rapid assimilation in the frontier stage?
			Residential pattern equals process of assimilation?

Figure 2. Immigrant Experience in Michigan's Copper Country:  
Calumet, Michigan.

The last objective is to examine corporate and ethnic group attitudes, behavior, and perception over time to determine whether a sequence of internal and external events, pressures, and processes parallel and explain the lifecycle of Calumet.

The following chapters are arranged so that once the model is introduced and the methodology is set forward (Chapters III and IV), the remaining chapters chronologically depict and interpret the social and spatial evolution of the Keweenaw-Calumet area. In Chapter V, three stages in the lifecycle are addressed. First the frontier social and spatial patterns are examined and ethnic interaction and assimilation in the Keweenaw mining frontier are assessed. Next, the initial development and growth of Calumet's social and spatial organization from the frontier to early mature periods is looked at; the emphasis is on emerging town morphology and social institutions. Lastly, the focus is on the ethnic residential patterns in Calumet during the height of its evolution to determine whether residential segregation took place.

In Chapter VI, the social and spatial patterns that evolved in Calumet between 1890 and 1930 are more closely examined. Emphasis is on the processes that may have generated the ethnic residential patterns and on the relationship between residential patterns and the process of assimilation.

The last chapter treats the demise of Calumet and summarizes the social and spatial evolution that occurred.

## CHAPTER II

### Literature Review

The literature upon which this research relies is drawn from the interface of several different fields: the nature of the company towns and their lifecycles, the evolution of mining frontiers, and the classic literature relating ethnic residential distributions to assimilation.

#### The Company Town

##### A definition

During the nineteenth century when rapid industrialization was taking place in Europe and North America, a new settlement type called the company town was born through the motivation and direction of individual or corporate entrepreneurs. Eventually found worldwide, some of these towns were transplanted directly into an unsettled ore rich region by a company seeking to develop the resource (Porteous, 1974). Typically these towns were directly owned and controlled by the establishing company which provided housing and basic services to the employee residents. Each company had varying degrees of ownership and control of the land, housing, retailing, and such community services as education, health, recreation, religion, social welfare, fire and police protection, water and sanitation (Allen, 1966). Because of these variations it is difficult to construct a universal definition and description of company towns at any point in time.

Several common themes and consistent features appear in the working definitions posed thus far. One early definition of company towns states that:

A community is known as a company town when it is inhabited solely or chiefly by the employees of a single company or group of companies which also owns a substantial part of the real estate and houses. Such a community is typically unincorporated; it may, however, be part of a larger, incorporated municipality or it may be a separate, incorporated town (Davis, 1931, 119).

Unable to formulate a holistic definition, Allen (1966, 6) simply defines it as "any community which is owned and controlled by a particular company." He leaves aside such common features as company-provided housing and public services. Through comparisons, Knight (1975, 8) tries to encapsulate the characteristic features of the company town by distinguishing it from the work camp or single enterprise community. Although the work camp is often referred to in the literature as a company town, it is a temporary settlement composed predominantly of males. The company town tends to be more permanent and has a more balanced sex ratio. The single enterprise community is like a company town in that the majority of the labor force is engaged in one economic activity (either primary or secondary sector), but it is not necessarily controlled or owned by a company (Knight, 1975).

For this study, the company town is based on the more restrictive and classical interpretations, that is, where not only the work scene is directed by the company but so is the social environment.



## Reasons for being

Of the many reasons given for the development of the company town, most writers agree that its location vis-à-vis some resource is an important factor. Davis (1931, 115) states that the company town as an institution originated in "the primitive, pioneering conditions prevalent in industries which were isolated because they depended on raw materials," and that they appeared along the "succeeding industrial frontiers." Based on the extraction of valuable mineral resources or timber, these towns were by their very nature often remote, inaccessible and isolated; thus it was often necessary for the company to act as a temporary economic and social pioneer (Porteous, 1970). In the absence of small scale private enterprise or local government (which would have normally provided the basic economic and social structure), the company was given the responsibility of constructing the town's buildings and providing basic services (Porteous, 1970). As Galantay (1975) points out, it was usually advantageous for the company to make the working and living environment as appealing as possible in order to attract prospective employees and their families often to an extremely rugged or isolated area. The accounts of many company towns reveal this type of conscious foresight was not necessarily typical of the establishing company.

Unavoidable acceptance of responsibility as economic and social pioneer was not always the motivating force behind the genesis of the company town. Sometimes a company purposefully located its enterprise in areas that could draw on a certain labor pool or to escape higher wages, taxes, and interference elsewhere. These reasons were behind the relocation of mill towns from the Northeast to the southern Piedmont

(Davis, 1931; MacDonald, 1928). Other company towns were established as model towns through the philanthropic ventures of a well intentioned entrepreneur. Pullman, Illinois is an example of a model town developed to house employees at the Pullman Coach factory (Buder, 1967). What began as a well intentioned venture ended in a disaster because of the dictatorial management of its owner-developer (Lindsey, 1931). Additional reasons for establishing a company town were to maintain a stable work force, particularly skilled laborers and married men, and to control workers in case of strikes (Magnusson, 1931). Each of the many types of company towns established reflects the nature of the economic activity and the values and goals of the company. Activities of such towns include transportation (Porteous, 1969), manufacturing (Potwin, 1927; MacDonald, 1928; Lindsey, 1931; Bodnar, 1978), lumbering (Weed, 1974), fishing and canning (Wall Street Journal, 1974), and mining (Irey, 1951; Allen, 1966; Porteous, 1974).

### Social geography

An examination of nearly all of the sources that refer to the internal features of company towns reveals that their morphology and general appearances are similar. Yet there are salient differences, one of the most obvious being the degree of town planning. An examination of original mining town plats in the West by Reps (1975) illustrates that nineteenth century town planners sought to impose regularity and functionalism into the townscape with a grid patterned street layout. This type of urban planning was also apparent in a midwestern company town. A description of Austin, Michigan's morphology by Syrja (1976)

depicts a well organized townscape overseen by the mining captain who resided in a house atop a hill. Spread out on the grid patterned streets below were rows of identically styled, red, two family houses; three ethnically segregated boarding houses were situated among them. Similar urban designs were found in southern mill villages. The company laid out the streets and built one to several styles of homes; the largest and nicest ones located on the main street were reserved for company officials and foremen (Potwin, 1927). Although detailed planning was carried out in some towns, most company town morphologies reveal unplanned development and growth. For example, a description of an Appalachian coal mining town by Murphey (1933) refers to the irregular, haphazard street pattern (lined with identical houses) which followed the mountainous terrain and centered on the company store.

Whether the town was consciously laid out or left to develop and expand uncontrolled, uniformity of housing style and location by occupational position were common characteristics (Porteous, 1970). Shurick (1924, 313) summarized the internal morphology of coal mining towns in the 1920s in this way:

The typical mining community is laid out in much the same way as any other small town in rectangular blocks grouped around a central point where the mine office and railroad station are located....

Within it are found:

...a few substantial, well-built houses, equipped with modern conveniences throughout...for the superintendent, clerical forces, doctor, store manager, etc. Next there is a larger group of similar houses along less pretentious lines for the foremen, subforemen, and some of the preferred class of men such as the electrician, master mechanic, etc. The balance of the houses which go to

make up the bulk of the camp will be divided roughly into two general classes. The first of these will be of a fairly substantial well-built type...for the more permanent miners who appreciate something of a better class.... The inferior houses are designed to meet the requirements of the lower class of improvident miner who would be indifferent to anything above the crudest type of house and probably abuse anything better.

Another important distinguishing feature of the social geography of the company town is the existence of segregated residential districts on racial, ethnic, or class lines (Porteous, 1977). A federal government study on company housing in 1920 indicates that segregation was prevalent in a number of company towns. In some southern and northern towns the Negro population was separated from the white and in some southwester towns the Mexican population was relegated to the fringes of the community to live in houses built by themselves on company land. Also there were northern towns where ethnic groups were segregated into different sections of town, or purposefully mixed "to prevent too great a clannishness among the European immigrants;" in several company towns throughout the United States, non-American employees were prohibited from renting company housing altogether (Magnusson, 1920, 37-38). Although Magnusson's analysis of imposed segregation by various companies represented only a small portion of the total number of company towns in existence at that time, it does suggest that a policy of imposing segregation was common. For other company towns a conscious effort to impose segregation between groups may not have taken place. For example, in a study of a company owned Pennsylvanian steel town, Bodnar points out that while there was residential segregation according to one's position in the company hierarchy, segregation based on

ethnicity was not initially apparent. However he adds:

Since company housing was built in sections to accommodate the influx of immigrants, laborers tended to settle in the same area. (Which) is not to say that newcomers did not choose to congregate around individuals who spoke the same language. They invariably did. But the pattern of housing construction by the company insured the emergence of such a housing arrangement (Bodnar, 1978, 20).

Public reaction to company towns and company attitudes toward their role within the towns have shifted over time. Where paternalism was an attraction drawing immigrants to the company towns in northern Michigan during the 1890s (Gates, 1957), it became the symbol of tyranny and oppression in later years. An editorial from the New Republic in 1937 (171) stated that the paternalism between the tannery company in Elkland, Pennsylvania and the community was "about as friendly as the relation between serf and nobleman in feudal society." Even in one model community paternalism was a thorn provoking this analogy:

The feudal baron held his serfs to the land by force; the qualities of ease, luxury and convenience are only disguises of a like compulsion (American City, 1924, 30).

To cope with rising public resentment, many companies sold their homes, often through an intermediary (American Business, 1948). Dislike for paternalism, however, may be subsiding; in one northern California town a number of families wishing to rent company housing have put their names on a waiting list (Levenson, 1977). In summary, the company town has had an important position in the development of the industrial and resource frontiers. Common features of graded housing quality and residential segregation by race, ethnicity or class were reflections of company attitudes toward various groups within the town and occupational

positions in the company hierarchy. Reactions to paternalism have varied according to how the community perceived the role of the company and what the company itself perceived as its main position. Company policies have often been redesigned to comply with prevailing attitudes and their own objectives. Similarly the life span of a company town has been determined by the availability and marketing of the resource, by its relative isolation to the more populated areas, and by attitudes and perceptions within and outside towns themselves. Like the evolution of other urban forms, the company town has changed as have the processes which generated it.

### The Mining Frontier

#### A definition

The term frontier in the literature has many different connotations. As a place the frontier was considered the edge of settlement, an area virtually uninhabited and isolated which demanded self-sufficiency and physical endurance; as a process the frontier denotes a series of stages of development that a region passes through (Meinig, 1960). The frontier has also been used to denote a particular state of mind to some people, a perception of one's situation in a newly settled environment. According to this reasoning, if early settlers felt isolated and distant from the rest of society, it drew out of them self-sufficiency, toleration, and an egalitarian spirit. Forced to adapt to the frontier environment, Turner saw the frontier as a place where old behavioral patterns were abandoned and replaced with a pioneering spirit that prompted the

establishment of new social organizations. In these institutions cultural differences were minimized and fused into an entirely new "American" composite nationality (Turner, 1893). It was such reasoning that led Turner to state that the frontier was "the line of most rapid and effective Americanization"--a melting pot of various ethnic groups. This view of environmental determinism was the prevailing attitude from which much of American immigrant history is written, and it typifies the perception that many scholars had about the "immigrant experience" (Handlin, 1951). The melting pot analysis, however, is one of several interpretations of the American immigrant experience, and as such, it represents one end of a spectrum of assimilation experiences (Gordon, 1964).

Defining and delimiting the geographical extent of the frontier has not been a clear cut task for social scientists. Usually frontier scholars have relied on a mixture of various spatial and cartographic criteria, such as population densities, on certain demographic criteria, and on the appearance of certain social characteristics (Hudson, 1977). The levels of agricultural specialization, commercialization, and degree of social organization have also been used to determine the "passing of the frontier" through a geographic area (Mitchell, 1972). The most readily used parameter has been population density. In 1893 Turner stated that according to the U.S. Census Reports, the United States no longer had any frontier, e.g. areas with less than two people per square mile. John Fraser Hart (1974) has suggested that different stages of frontier development are evident in any given region and that two persons per square mile represents only the initial frontier line of occupancy. Later stages of frontier evolution are illustrated by increasing

population densities: six people per square mile represents the line of settlement, eighteen people per square mile the line of urbanization. In each case, population density was the criterion used in defining frontier development.

Taken within the context of the mining frontier, which Turner discusses in 1893, not all the evolutionary characteristics apparent in the "waves of frontier advance" were found in the mining frontier. One historian, Paul (1963), describes the mining frontier as individual and isolated pockets of settlement whose location was determined by the resource site. Within these pockets a regular pattern of social and spatial processes occurred composing the lifecycle of the mining town. But these processes were not necessarily the same as those that occurred in other frontier regions or with the evolution of the urban frontier per se (Wade, 1959). According to Hart and Mitchell, urbanization followed the stage of occupance and agricultural development. Agriculture, however, was not necessarily considered the forerunner of the mining frontier (Paul, 1963) or the urban frontier (Wade, 1959). In Smith's Rocky Mountain Mining Camps: The Urban Frontier (1967, 7), he states that "intellectually and culturally, the urban mining center acted as an assimilator and transmitter of European and American ideas and traditions." Urbanization was generated spontaneously, and, supporting Turner's hypothesis that cultural assimilation took place in the frontier environment, the urban mining frontier was a virtual ethnic melting pot. The processes or features which indicate the passing of the mining/urban frontier are similar to those used in other frontiers, vis-à-vis, the ultimate "closing" occurred when those settlements were linked by transportation routes to the outside world (Paul, 1963).



Landis (1938) in his study of three iron mining towns on the northern Minnesota frontier demonstrated their evolutionary lifecycle according to various cultural, demographic, economic, and social criteria. His purpose was to analyze the evolution of frontier life in the mining settlement. Like Smith and Turner, Landis (1938, 7) felt that the frontier acted as a "crucible." He described these Minnesota towns as "the American melting pot in ferment, where thousands of raw immigrants from all the European countries were molded, first into the industrial patterns of the range and then into the social and political completion of the community." Indeed, the townspeople themselves perceived their situation in 1894 as a common struggle against nature. Man was born to hustle" (Landis, 1938, 27) in an environment that required each of them to abandon his/her old ways in order to cope with the new physical, economic, cultural, and social order. Landis found that as the towns became assured of a permanent economic base (mining), the community passed out of the frontier stage and evolved into a more stable, mature town. Frontier lawlessness, toleration of vice, and the predominance of single males were placed by social organizations such as schools, churches, and law enforcement. The sex ratio and age distribution also began to balance out. "Tolerance of paternalism" and the "ascendency of the mining company in community affairs" were also typical features of the "mature stage" according to Landis (1938, 32). The last stage in the evolution of these mining towns occurred once the townspeople and mining company acknowledged depleting ore reserves. Conservation became the rule and eventually internal economic and social stability eroded into episodes of conflict between the townspeople and the mining company.

General economic and social disorganization concurred with a marked out-migration of young people and "decay of material culture" during the devolution.

Although Landis does not specifically deal with the spatial processes that paralleled the town's lifecycle, attitudes toward ethnicity and its related social and spatial distance are revealed in this quote:

"Virginia (Minnesota) is more of an American town than are the other towns...a 'white' town" (Landis, 1938, 23). Moreover, he states that "Southern European immigrants were not considered white folk by the local residents" and that "it is generally conceded that her (Eveleth) population is more predominantly Southern European than that of either of the other Range towns" (Landis, 1938, 24). It should be noted that while these mining towns were one-industry towns, they were not company towns.

In summary, the frontier is considered both a place and a process that evoked certain perceptual responses that were either real or imagined. Whether the frontier actually acted as a crucible for Americanization is still being debated. Yet, it is apparent that in the minds of both scholars writing about the frontier periods in history and the local frontier settlers themselves, that the frontier phase had salient cultural differences. Also it represented a place where distinct social and spatial processes evolved.

### Ethnic Residential Segregation

Since the 1920's, research examining ethnic residential patterning has been conducted in several disciplines. The earliest and most abundant literature emerged from sociology, particularly from the so called

Chicago school which centered on the work of Robert Park and other urban ecologists. In these examinations the overriding guiding concept was the hypothesized relationship between social distance and physical space. Research was based on the hypothesis that "the greater the degree of difference between spatial distributions of groups within an area, the greater their social distance from each other" (Peach, 1975, 1). As Peach points out, this hypothesis argues that:

...degrees of spatial similarity between socially defined groups are correlates and symbiotes of the degree of social interaction between those groups; that there is a spectrum of spatial association varying from complete similarity between groups, at one end, to complete segregation at the other; and that the correlate of complete spatial similarity is complete social interaction, with high rates of inter-marriage, while the correlate of segregation is the rejection, by the higher group, of social interaction with the lower group (Peach, 1975, 1).

According to this description, the social distance hypothesis could be tested on any given social group anywhere, be it an ethnic or racial group, an occupational group, or a socioeconomic group. Also social interaction, or the degree of social distance, can be measured by any number of variables. Some of the most frequently used measures are included in the traditional social distance scale developed by Bogardus (1926) where subjects are asked to respond to a series of questions indicating their willingness to interact with members outside of their own group. Indicators or measures that have been used to determine ethnic group social distance include rates of naturalization, ability to speak English, numbers of ethnic institutions, ethnic endogamy, and spatial distance.

Of paramount importance for this study is the relationship between ethnic residential segregation, that is, the spatial association where an ethnic group is clustered, and ethnic assimilation or when complete social interaction takes place between ethnic groups in the company town framework. It is generally affirmed in the literature that these two concepts are inversely related, that is, the greater the degree of ethnic residential segregation, the less the degree of assimilation for that group (Duncan and Lieberman, 1959; Boal, 1976). Unknown is the relationship between assimilation and ethnic residential segregation in a situation where residential patterns are determined by a corporation that owns and builds the houses. The way this relationship can be examined in company towns rests on the following hypothesis. In 1943, Hawley (674) hypothesized that the "Redistribution of a minority group in the same territorial pattern as that of the majority group results in a dissipation of subordinate status and an assimilation of the subjugated group into the social structure." His reasoning is based on the belief that ethnic residential segregation is not only the outcome of social distance (non-assimilation), but that maintenance of this pattern prohibits social interaction and ready assimilation. In another study by Lieberman (1961) on ethnic residential segregation in ten American cities he supports this idea, that is, highly segregated ethnic groups are less likely to become United States citizens, adopt English, or marry outside of their group. Lieberman concludes that:

...examination of the spatial distributions of human populations or social institutions is not merely a convenient tool or indicator for research purposes--as important as this may be--but is, additionally a potentially significant factor in interpreting and predicting differences in social behavior (1961, 56).

Numerous other studies concerned with the relationship between residential segregation and social distance have been conducted both within and outside the United States. Of greater importance for geographers is an understanding of the generative processes underlying ethnic residential patterns. Whereas once the spatial pattern was believed to be a significant indicator of social processes, given validity through cartographic display and quantitative analysis using various indices to measure the clustering and mixing of an ethnic group (Duncan and Duncan, 1955), now other indicators and explanations are looked for to interpret the patterns observed. Peach (1975, 4) concludes that "residential distributions and indices of residential dissimilarity are significant not only as correlates of the most important social interactions" and that these are also important "in their own right." However, these distributions and indices do not reveal anything of the values, attitudes, and beliefs of the population that is being observed, nor do they truly indicate the reasons why a population is distributed the way it is.

### CHAPTER III

#### Social-Spatial Lifecycle Model of a Company Town

An analysis of the literature on frontier development indicates that there are an expected set of social and spatial processes which usually occur (Dawson, 1934; Wade, 1959; Meinig, 1960; Paul, 1963; Mitchell, 1972; Hart, 1974). Likewise, a comparison of the literature dealing with company towns reveals that in their evolution there is a regular sequence of social and spatial events (Landis, 1938; Louis, 1941; Allen, 1966; Lucas, 1971; Weed, 1974; Porteous, 1974; 1977). That characteristic social and spatial patterns may be identified in the lifecycle of frontier based company towns makes it possible to describe and predict the nature of the processes occurring in their evolution. The purpose of this chapter is to present a model that is both descriptive and schematic which will portray the social-spatial lifecycle of a specific type of company town.

Based to a great extent on descriptions and generalizations already apparent in the literature, a lifecycle model would identify how interaction of changing social and demographic features in a company town framework would correspond with certain spatial patterns. For simplicity a unilinear evolution from the frontier stage to the period of decline is used. The social-spatial lifecycle model is divided into three sections. The descriptive portions (Figures 3 and 4) are based on pertinent literature; the schematic portion (Figure 5) is a

visual depiction of the spatial patterns described in the model. To aid in studying the lifecycle, demographic and social data were drawn from U.S. Census Reports and local histories. The spatial data are obtained from local histories, photographs, and old company lease records.

Amedeo and Golledge (1975) point out that the purpose of model construction is to determine the accuracy and validity of the elements and processes illustrated in it. Couched in this light, the goal of constructing a lifecycle model is to determine whether or not the stages, their accompanying social, demographic, and spatial characteristics, and the processes creating the stages can be identified and portrayed. In any model construction the elements need to be carefully identified and defined. Similarly, any premises or assumptions should be outlined. The transferability of the model to another time period or situation is questionable.

For the social-spatial lifecycle model of a company town, several conditions or premises exist.

1. The town being examined is a true company town, that is, the establishing company owns, develops, and controls land and its buildings. The company also rents housing to its employees and dominates the town's social and spatial organization.
2. The company is based on the extraction of some non-renewable resource. Thus its life span, and that of the town's, is inextricably related to resource availability, technology, and market demand. The location of the town is determined by the resource site.

3. The company town is initially developed in a frontier or semifrontier environment.
4. The region is characterized by a diverse ethnic population.

### Social Cycle

Examination of literature on frontier evolution and the social characteristics of company towns indicates that the demographic composition of the population changes in a predictable pattern as the region and its towns evolve from the frontier stage through maturity and to eventual decline (Figure 3). These changes represent one of the primary indicators of progression from one stage to another. Also, selected identifiable demographic patterns of social interaction characterize the various stages in the lifecycle of a frontier based company town.

Characteristic of the frontier stage, the initial demographic composition of the population is predominantly foreign born young men arriving individually as prospectors and adventurers. Uncertainty about the future, internal cooperation, and social integration are typical. Toleration of vice and lawlessness is also common. When the demographic composition of the area approaches a more balanced sex distribution, the frontier stage ends and the area is in transition to the mature stage.

During the transition stage the proportion of single men between the ages of 20 and 35 declines as more women enter the region. Not only does the male/female sex ratio begin to balance, but a more normal age distribution is created with the birth of children; there are also aging members from the early mining community. Social organizations are



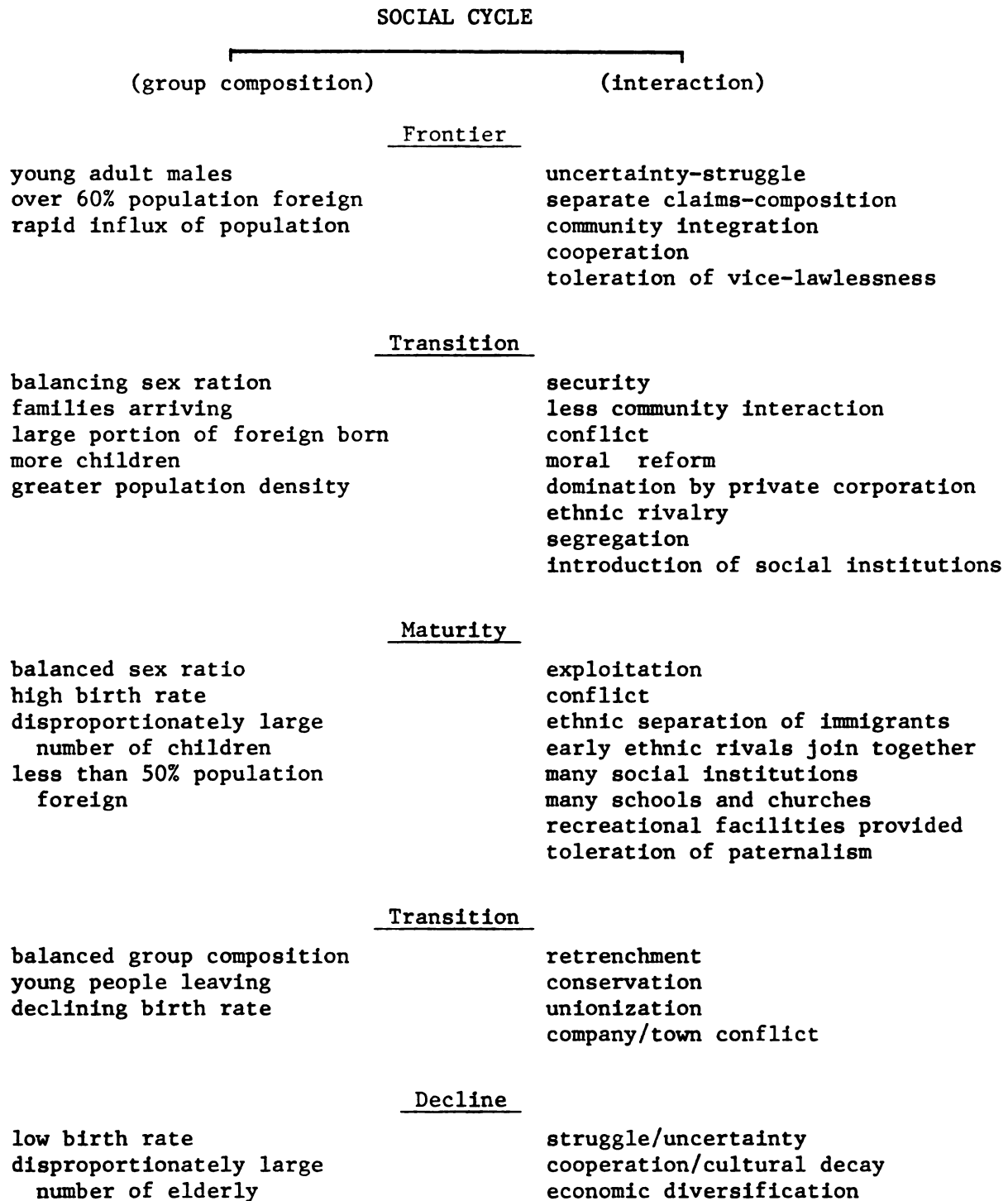


Figure 3. Social Cycle of a Company Town.

established and the degree of interaction among ethnic groups declines. Enaction of social reforms, ethnic rivalry and conflict, and the rise to power of a single mining company which plans and develops the community's social and spatial organization are also characteristic of the transition stage. With the ascendancy of the company and its growing role as social and spatial planner-developer, community participation and interaction are not summoned. Ethnic rivalry coupled with institutional and residential segregation are common.

By the mature stage the company's position in the town is firmly established and unchallenged. The demographic composition is similar to non-company towns, that is, there is a more even age distribution, a high birth rate, and nearly balanced sex ratio. The proportion of foreign born residents drops as immigration slows due to stabilizing job opportunities. Because the extent of ore reserves is known, the area ceases to be a magnet for foreign immigrants. Socially, the town is characterized both by economic security and population stability. Conflict between rival ethnic groups remains common, although early arrivals may interact to some extent. Social institutions including schools, churches, and recreational halls have been provided by the company; paternalism is largely tolerated.

The impending decline of a company town is illustrated by a second transition stage. The demographic composition is characterized by a reversal of earlier changes; young people exit and the birth rate declines. In this fourth stage, group interaction increases in light of future economic insecurity. Retrenchment and conservatism by the company generate internal conflict between the company and the mining

community. Because new employment opportunities have ceased, the company exploits the employees it retains. Unionization is favored by the employees.

The ultimate decline or death of a company town is characterized demographically by a disproportionate number of old people who have remained despite economic decline, instability, insecurity, and the physical decay of the buildings. With the disappearance of company control and domination, community interaction and cooperation are fostered as plans for future economic revitalization and diversification are proposed.

### Spatial Cycle

Paralleling the social cycle, early frontier spatial organization consists of temporary campsites distributed randomly throughout the region where each individual prospector searches for ore (Figure 4). Since each man brings his own supplies and the element of competitive advantage in staking claims creates a degree of secrecy, there is little clustering of campsites around any given site. As the region opens up and larger ore bodies are discovered, there is a merging of campsites for exploitation, companionship, assistance and the trading-sharing of supplies (Figure 5a).

The transition of a remote isolated frontier region into a stable region linked to areas of population concentration is characterized by the development of the region's spatial infrastructure. To facilitate mining operations certain basic transportation routes and surface

## SPATIAL CYCLE

Frontier

isolated  
 individual campsites  
 non permanent  
 few permanent roads into region and within region

Transition

some company buildings erected  
     shaft and change houses  
     ethnically segregated boarding houses  
 saloon  
 permanent settlement  
 permanent transportation network  
 more urbanization  
 town planning  
 increasing communication network

Maturity

company housing  
     ethnically segregated row houses  
     large homes for key personnel  
     isolated ethnic settlements  
 saloons outside town  
 city services  
 schools and churches  
 recreation halls  
 CBD development  
     grid pattern  
 new home construction  
 mining modernization  
 transportation improvements

Transition and Decline

no growth  
 liquidation of company homes and company holdings  
 conversion of abandoned buildings - new uses by community  
 decay of transportation routes  
 decay of housing

Figure 4. Spatial Cycle of a Company Town.

Figure 5. Schemata of the Spatial Cycle.

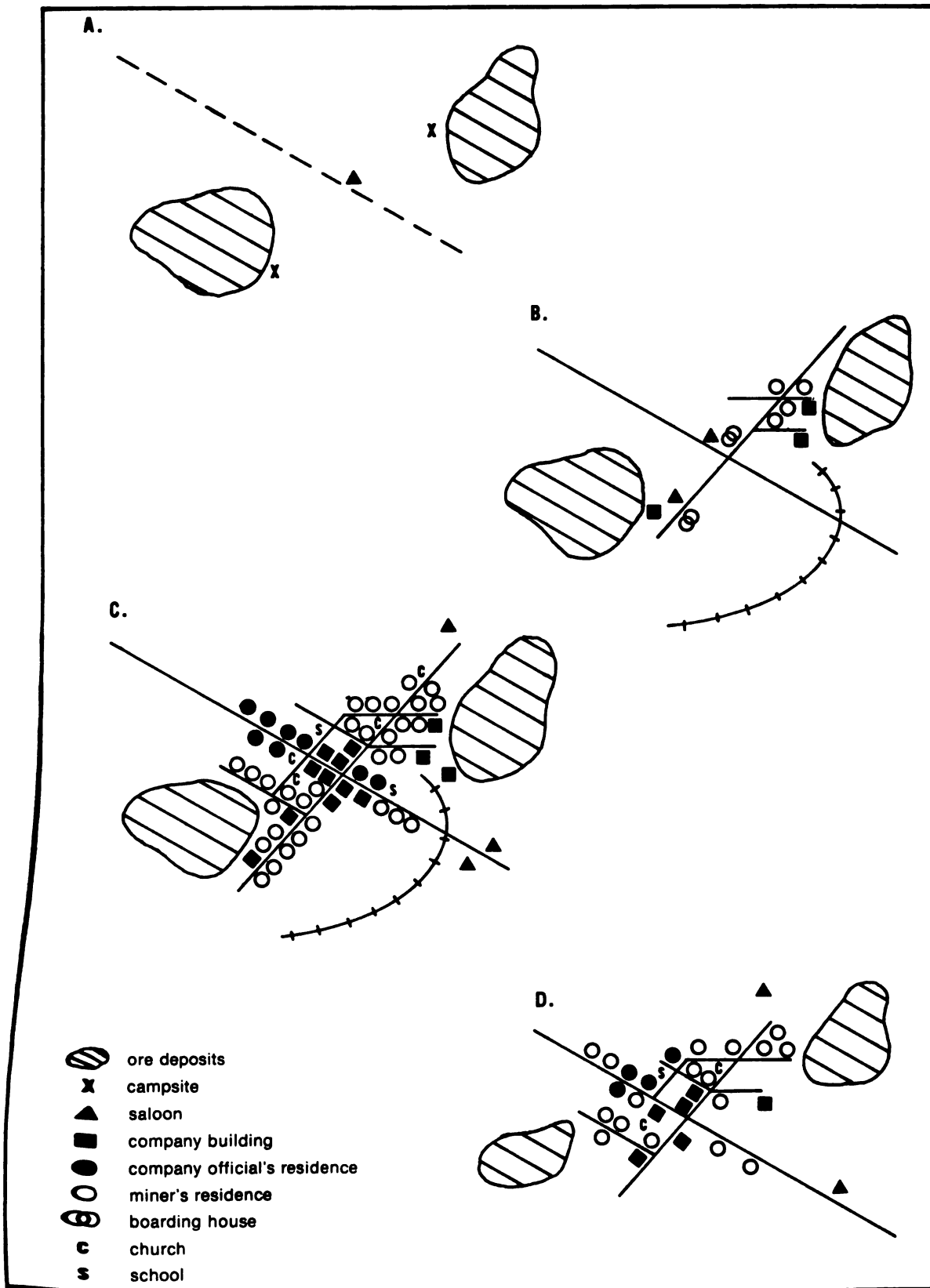


Figure 5.

buildings are constructed; shaft houses, repair shops, housing, plus roads or railroads connecting these to each other and to the outside, some of the first spatial and economic considerations on the part of the company. Most of the housing constructed consists of boarding houses which become increasingly segregated internally, and eventually externally, along ethnic lines as growing numbers of men and women sharing a common language and cultural background prefer and/or are forced to live in ethnic enclaves. Saloons, a hotel, and a general store are constructed either by or with the assistance of the mining company or by private entrepreneurs. At this point even though a minimal degree of town planning is exercised, it does create the settlement form which directs subsequent growth. Where immigration of many people, often as families, is accompanied by the ascendancy of a single mining company, the spatial organization of the town may have a more planned appearance. This form usually takes the appearance of a grid-iron pattern. Efforts are also initiated to construct houses, churches, and schools, all which reflect early attempts at social-spatial planning (Figure 5b).

Although the actual beginning and end of the transition stage are somewhat fuzzy, the mature stage is reached by the time that the demographic makeup of the region approaches a normal sex/age balance and the settlement pattern within the company town are well established. More buildings are constructed to meet the needs of continually expanding mining operations. Such buildings as offices, a railroad terminal, stores (often a single all-purpose company store) and assorted buildings for the repair of machinery and processing of ore are constructed (Figure 5c). At the same time buildings to serve community needs are erected, for

example, schools, churches, homes, a health center, a police-fire station and other municipal buildings. The residences in company towns built during this stage are of several types. Large well built single family dwellings for key company personnel are located along the main streets and on hill tops. Smaller identically built single and multiple family row houses for the miners are located along the side streets. The boardinghouse for single miners is located at a distance from the homes for company officials. These residential areas are divided into ethnically segregated neighborhoods. During the mature stage, the company's position as employer, town planner and developer, protector, and provider are firmly established. Thus the spatial morphology largely depicts the interests of the company working in combination with changing demographic and social organization. Prohibition of saloons on company property in the town results in their erection immediately outside of the town limits.

The transition of a company town from a period of directed spatial expansion and organization to a period of declining growth and instability is marked by a reversal of the previous social and spatial processes. The construction of new housing and other buildings halts. Less and less effort is put into maintaining the existing structures by the company due to their eroding position of authority and responsibility. Since various economic and social functions are no longer needed in the town, the establishments which housed them are abandoned or converted to other uses. The first functions to close are those which serve no significant purpose to an aging community, for example, elementary schools, and those which the company no longer is financially willing



to maintain as a service to the community, such as recreation halls and extraneous community services. Also closed are those buildings and functions that are no longer needed in a period of economic decline, for example, mining shafts and change houses at exhausted mines, railroad terminals, and processing plants.

During the growth of the company town, the company alone has the major role of determining the town morphology and social geography. Conflict and pressure from the increasingly independent community coupled with the company's feeling about their own social and economic obligations direct the spatial devolution of the company town. The company not only decides which buildings are to be sold off as operations wind down and what employees are let go, but also when, where, and how this will happen (Figure 5d). Stagnation and decay typify these last stages in a company town's evolution. The only remaining functions are those which are essential to maintaining the remnants of a rapidly dwindling town. The company closes its operations, transfers or releases its employees, and sells off its holdings. Abandoned houses and company related buildings are left to decay because there is little reason to remove or reuse them, and transportation routes into the region are neglected or closed down. The region itself returns to a state of relative isolation.

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## CHAPTER IV

### Methods of Analysis

This chapter will present the methodological bases, procedures, and sources that are used to satisfy the objectives and test the three specific generalizations outlined in Chapter I. To test specific processes and patterns of ethnic assimilation in a mining frontier and company town ethnic residential segregation, a study area is required where large numbers of immigrants arrived to work and live on the mining frontier and where historical residential location data are available. The area selected to test these generalizations is Michigan's Copper Country, specifically Calumet, Michigan. Numerous immigrant groups were attracted to the mines in this area throughout its development from a frontier mining region into its mature stage. Calumet was selected because it is considered a representative company town originating in the late frontier period and because historical data on the town's ethnic residential distributions are available.

#### The Mining Frontier: An Ethnic Melting Pot?

The first generalization deals with whether the frontier melting pot idea held vis-à-vis immigrant settlement in the northern Michigan mining frontier. Several procedures are used to examine immigrant experience in the Keweenaw mining frontier and their social and spatial organization. To determine whether rapid assimilation occurred in the frontier stage

of copper mining in the Keweenaw Peninsula, it is first necessary to identify this stage. From this the initial social and spatial patterns can be discerned to demonstrate whether rapid assimilation was characteristic.

Some of the procedures used to determine the length of the frontier stage are adopted from previous frontier research. Simple quantitative information including age distributions, sex ratios, percentage of foreign born, and population growth rates, all available from early Census reports, illustrate the demographic composition of the initial Keweenaw population. Since the model has incorporated within it key demographic features which change, as well as certain social and spatial features, various stages can be distinguished. Although it is difficult to designate specific years for the opening and closing of any stage, a combination of standard quantitative information coupled with basic qualitative information, like that described in the social cycle of the model, makes it possible to construct general time frames.

In addition to the demographic and social indicators already mentioned, several spatial indicators can be used to signal the end of any particular period. Transportation and communication linkages including mail and telegraph service, railroads, canals, and roads reflect the end to relative isolation. The appearance of a service sector within the towns, that is, the appearance of banks, post offices, barber shops, insurance agencies, and a variety of shops, also connote social and spatial development; these functions mark the termination of the frontier stage (Mitchell, 1976).

Determining and understanding the process of assimilation in the Keweenaw mining frontier is a much more difficult task. Variables such as the degree of ethnic residential segregation, the degree and rate of naturalization, the ability to speak English, and the rate of intermarriage between ethnic groups are frequently used as correlates of ethnic assimilation (Boal, 1976). They are not particularly helpful in measuring assimilation during the frontier period because such data are generally unavailable. Therefore, other indicators of ethnic assimilation are sought.

References to inter-ethnic relations that are cited in local histories and travel accounts often provide the most information on assimilation during the frontier period. Strong ethnic solidarity verses mutual appreciation and acceptance or intense rivalry verses frontier cooperation are considered valid benchmarks from which to measure the degree of assimilation occurring on the Keweenaw mining frontier. The appearance of emerging ethnic institutions and separate ethnic living quarters, or conversely, the rapid acceptance of the varied and diverse frontier lifestyles and the erosion of cultural-ethnic distinctions would also reflect the degree and rate of frontier assimilation. Inasmuch as quantitative measurements of specific correlates of the assimilation process are not possible for the frontier period, descriptive information obtained from Copper Country literature during this period is used to document the assimilation process.

Company Towns: Company Imposed Ethnic Segregation?

The second generalization tests the validity of the commonly seen statement that company towns are typically divided into well designated ethnic or racial neighborhoods (Magnusson, 1920; Porteous, 1974; 1977). Both previous scholarly research on company towns and descriptions of ethnic, racial, or socioeconomic residential segregation appearing in novels, magazine articles, and newspapers have tended to support this statement. That is, these accounts reinforce the characterization of company imposed residential segregation. In order to test this generalization in Calumet, data on the residential location of Calumet's townspeople between 1890 and 1930 were obtained from the Calumet and Hecla Mining Company lease records. The entire population of Calumet who rented their homes from this company during these years is considered. Excluded are residents of nearby Laurium or Red Jacket, as these areas were not owned by Calumet and Hecla. Nearly three thousand family surnames were recorded by lot number and year.

Once the surname data were tabulated, surnames were classified according to their ethnic grouping through the use of genealogies (Reany, 1958; Cottle, 1967; Smith, 1969) and assistance from individuals knowledgeable regarding European ethnic names (Matley, 1978). Although more than a dozen individual ethnic categories were identified, several were grouped into a larger and more general categories. Still others with few members were dropped from the mapping and subsequent analysis. Any surname that could not be accurately identified with an ethnic group was excluded. The six largest ethnic groupings were used: British (English, Welsh, Cornish, Scotch), Finnish, Scandinavian (Swede and Norwegian), German, Italian, and Slavic (Czech and Yugoslav).

### Mapping procedures and analysis

Since the date when a family began and terminated its lease of a particular residence is shown on the lease record, it is possible to construct a series of maps depicting ethnic residential distributions for each year between 1890 and 1930. The examination and analysis of such a rather unweildy number of maps is unnecessary inasmuch as long term residential patterns and the degree of spatial variation among the major groups are the main objectives. Thus, the six ethnic groupings are plotted by ten year intervals: 1890, 1900, 1910, 1920, and 1930. In adopting this procedure a family could have moved into a residence in 1921, left in 1929, and not appear on the map. Likewise, a family could have moved into a residence in 1919, stayed until 1921, and be included. Neither of these situations is felt to greatly affect the overall residential patterns and preclude determining whether ethnic residential segregation was apparent in Calumet. A similar procedure, which examines static cross-sections of continuously changing patterns, has been used previously to illustrate spatial processes in historical geography (Clark, 1954; Newcomb, 1969; Jakle, 1971).

After mapping the six groups in five time intervals is completed, the residential patterns are then compared for each year to discern the degree of ethnic clustering or mixing. Both the specific location of an ethnic group within the town itself and that group's actual residence within a neighborhood are also considered. The residential patterns are also examined throughout the forty year period to detect changes in neighborhood composition and the maintenance of certain ethnic patterns. Cartographic display and visual comparison of the

ethnic residential patterns form the basis for identifying and analyzing historical ethnic segregation in Calumet.

Ethnic Segregation: An Index of Assimilation in a Company Town?

The third generalization tested examines the relationship between ethnic residential segregation or mixing and the spatial-social process of assimilation. If the premise that company towns are characterized by imposed ethnic residential segregation is accepted, then the appearance of ethnic clusters is not indicative of the individual's, or collectively, the group's desire to retain their ethnic identity. Most likely such a residential pattern would be a better indication of company perception and attitude than that of an ethnic group or individual. On the other hand, Hawley (1943) points out that the relationship between spatial organization and assimilation is reciprocal. That is, the spatial form of ethnic residential segregation may actually prohibit or inhibit social interaction or eventual assimilation into the dominant-host society. The important question raised regarding Calumet is whether the imposed spatial separation of ethnic groups (assuming this existed) negatively affected assimilation and inhibited inter-ethnic social interaction. Given the assumption that "the greater the degree of difference between spatial distributions of groups within an area, the greater their social distance" (Peace, 1975, 1), one might expect to see little ethnic assimilation in company towns even though this condition would have been artificially created by the company. The resulting pattern might affect social interaction and the potential degree of

assimilation, but this interaction cannot be completely discerned from the residential patterns of ethnic groups. To answer questions regarding social assimilation not only is information on spatial patterns in Calumet necessary, but also some indication of the social organization within the town itself.

#### Procedures

Using the maps that were generated to depict ethnic residential distribution, the next step is to examine other correlates of ethnic assimilation. In the past scholars have considered ethnic institutions as correlates of assimilation. Maintenance of separate ethnic churches, schools, newspapers, self-help societies, and clubs reflect "institutional completeness" or little group assimilation (Breton, 1964). The disappearance or lack of ethnic institutions reflect the degree and rate of assimilation of a particular ethnic group. By examining various ethnic institutions in Calumet from 1890 to 1930 as well as their strength and longevity, some degree of ethnic cohesiveness and maintenance can be determined. For the most part, local social histories and government documents are the most useful sources of information on ethnic relations, ethnic perception, and group identification.

In conclusion, this chapter has explained the methodology used to construct and test the lifecycle model and to test the three generalizations that are the thrust of this research. The evidence which supports or refutes these generalizations is presented in the succeeding chapters. First the initial social geography of the Copper Country will be looked at during its frontier stage by focusing on ethnic



relations and assimilation. Next the social and spatial lifecycle of the company town of Calumet will be investigated to determine (1) whether there was a social and spatial pattern apparent in its evolution, (2) if ethnic residential segregation was apparent in Calumet, and (3) if the spatial organization of ethnic residences was related to ethnic social distance and assimilation.

## CHAPTER V

### Social-Spatial Evolution of the Keweenaw Mining Frontier and Calumet: 1840s to 1930

The primary objective of this chapter is to reconstruct what took place in the evolution and development of the Copper Country from its inception as a rich frontier mining region in the 1840s to its impending demise as a major copper producer in the 1920s. First the initial settlement of the Keweenaw mining frontier is investigated to identify and delimit the frontier stage and to determine the nature of frontier inter-ethnic relations. The second section examines the birth of Calumet at the end of the mining frontier and its social-spatial evolution. Demographic, social and spatial characteristics of Calumet in the transition and maturity stages are examined. The last section focuses on the question of imposed ethnic residential segregation during Calumet's mature stage. Using the Calumet and Hecla lease records, the ethnic residential patterns of six ethnic groups are mapped from 1890 to 1930 and described.

#### The Keweenaw Mining Frontier: 1843 to 1866

...the country is bleak, barren and savage without any signs of cultivation or civilization except the appearance of bedbugs and whiskey... (Sawyer, 1911, 210).

Frontier settlement and development in the Copper Country was initiated during the 1830s when geologic expeditions determined that

this area was rich with copper ore. Although copper had been discovered there centuries earlier by the local Indian tribes, it was not until the cessation of Chippewa landrights in 1843 that the region was considered safe for eager explorers and prospectors (Dersh, 1977; Rowe, 1974). Equally as important, prior to the 1840s the demand for copper in the United States was not sufficient to warrant the physical risk of severe winters and extreme isolation without a steady source of food supplies.

Because travel on the Great Lakes was impossible during the winter and overland routes across the swampy wooded terrain of northern Michigan and Wisconsin proved equally difficult, the earliest settlements consisted of a few scattered seasonal campsites (Gates, 1951). It was not until after the spring of 1844 when there was a surge of exploration and prospecting that nearly one thousand miners and explorers entered the region. Some came through the Great Lakes portaging at the Sault Ste. Marie rapids; others, including a group of Cornish miners from the southern Wisconsin lead mines, traveled overland (Rowe, 1974). Year round mining and residency were uncommon during the earliest years (Gates, 1951).

Between 1845 and 1850 the real mining boom in northern Michigan began. Even though labor shortages and transportation problems were obstacles to rapid copper exploitation, the population in Copper Country steadily increased and a series of boom towns appeared in the wilderness (Robson, 1966, 13). The demographic makeup of the population at this time was akin to other frontier environments that were evolving. Single men, predominantly young, were attracted to the mining frontier and

"money was the object which induced (them) to forego the blessings of home in a better land, (to) endure the deprivations of the wilderness" (Childs, 1974, 84). Isolation in those early years was extreme; mail came by dog train from Green Bay twice a winter in the early 1840s (Childs, 1974, 83) increasing to once a month during the 1850s (Dersh, 1977). Since few men brought their families with them, not many women or children were found in the region, partly explaining why in 1850 no schools or churches had yet been erected (U.S. Bureau of the Census, 1850). Although the construction of necessary surface buildings for mining operations had begun by this time, including blacksmith and carpenter shops, storehouses, rockhouses, stamp mills, and bunkhouses (Gates, 1951), life for the miners was not particularly settled or stable. Childs (1974, 84) believes that it was the frontier environment itself which had an unstabilizing effect on the miners:

The influences which surrounded them tended to weaken them (and) many abandoned themselves to drinking and gambling...wickedness prevailed.

Through the 1850s the population increased rapidly as copper production expanded (Gates, 1951). An overall labor shortage due to the region's remoteness and conscription of men for the Civil War, contributed to a very mobil and unstable labor force (Gates, 1951). These conditions may have extended frontier conditions in the region longer than expected. Rowe (1974, 59) points out that an immediate following of non-miners (farmers, entrepreneurs) and their families to the mining frontier once ore was discovered, failed to occur in the Copper Country. In Wisconsin, by contrast, when the Cornish miners moved into the lead

mining region bringing with them advanced mining skills and knowledge, other immigration occurred which precipitated frontier development and permanent settlement (Rowe, 1974). But in the Keweenaw frontier, Cornish settlement had a different effect. Copper Country's transition from a frontier stage to permanent settlement proceeded at a much slower rate.

The opening of the canals at Sault Ste. Marie in 1855 marked a turning point in the development and settlement of the Keweenaw mining frontier. Easier transportation of people to and copper out of the region resulted in both increased immigration, a more permanent labor force, and higher ore production. The Keweenaw region became more attractive to potential miners from the United States and abroad. Foreigners were encouraged to immigrate to the Copper Country by mining company promoters throughout the frontier period, but particularly from 1860 onwards (Gates, 1951; Kaups, 1975; Dersh, 1977).

By 1864 significant demographic, social, and spatial changes had already taken place in the region; there were larger numbers of very young and old people and a more equal balance of sexes. Sex ratios approaching five men to each woman in 1850 declined to three to one in 1854 and almost two to one in 1860 (Table 1). The large numbers of foreign immigrants became apparent in the 1860s; there were 9,246 foreign born residents out of a total population of 13,821 for the copper district (Houghton and Keweenaw Counties) (U.S. Bureau of the Census, 1860).

Significant changes in the number of inhabitants contributed to changes in the social and spatial organization of frontier society

Table 1. Copper Country Demographic Composition 1850-1890.  
(Houghton and Keweenaw Counties)

Total for District	1850	1854	1860	1864	1870
No. of people	1,097	6,492	13,821	18,811	18,088
Percentage male	74.9	72.3	66.7	60.0	55.7
Percentage foreign born			66.9		55.4

Total for District	1874	1880	1884	1890	1894
No. of people	24,445	26,743	30,813	38,283	46,980
Percentage male	58.3	54.7	54.3	55.3	54.2
Percentage foreign born		48.5	49.2	47.4	45.2

Source: Gates, 1951.

itself. Prior to 1860 groups of men lived in company maintained bunkhouses "often communities of as few as twenty-odd men and half a dozen women and children" (Gates, 1951, 103). As the district opened up to permanent settlement, communities of 1000 to 1500 people developed (Gates, 1951). The increasing number of women and children altered existing frontier social mores and social organization. For example, the first churches and schools were built in the early 1860s by the mining companies and saloons within the town limits were prohibited (Gates, 1951). Mining company influence in the community life also expanded; it became the law enforcer, town developer, and provider of basic community services. These demographic and social characteristics are very similar to those outlined in Chapter III as representative of the frontier stage of the lifecycle model. Changes in these characteristics likewise indicated the closing of the frontier stage.

#### Frontier ethnic relations

Between the time when the first prospectors tromped through the Keweenaw wilderness in search of the mother lode in the early 1840s to the mid 1860s, certain social and spatial patterns began to emerge among and within the various immigrant groups. As indicated above large numbers of foreign born arrived during the frontier period. By far miners from the British Isles, in particular the Cornish, outnumbered all other ethnic groups during the frontier stage (Turner, 1974). The earliest Cornish came in 1844 from southern Wisconsin, but by 1846 Cornish miners were being lured directly to the region by overseas

promoters who hoped to bring in skilled laborers to exploit the mineral wealth (Rowe, 1974). The Cornish comprised nearly all of the mining population at the Cliff Mine in 1849 (Gates, 1951), the major copper mine in the Keweenaw Peninsula at that time.

Prior experience in hard rock mining was responsible for Cornish miners quickly moving into managerial positions in the Keweenaw frontier (Benedict, 1952; U.S. Immigration Commission, 1911; Derish, 1977). Even though their position as managers and laborers contributed to the rapid economic and social development of the Keweenaw frontier, neither this common goal nor a common cultural heritage tended to unify them as one group (Rowe, 1974). Instead Cornish clannishness soon led to internal friction in the mines and settlements. If the frontier environment indeed was supposed to generate cooperation between dissimilar groups of people, as Turner suggests, then early Cornish antipathy among their own group members would seem to challenge that hypothesis.

A more realistic test of frontier assimilation can be made where several ethnic groups met under frontier conditions. In a study dealing with ethnic social and spatial assimilation, not as a frontier but in an urban setting, it has been shown that until an immigrant ethnic group is large enough to be a visible segment of a particular community, it will tend either to merge or quickly disappear into the larger dominant society (Jakle and Wheeler, 1969). If that immigrant group's size becomes substantial, then group consciousness is retained, a socially and spatially separate ethnic subcommunity is created, and assimilation is retarded. The particular assimilation process occurred in many of the western frontier mining towns in the United States where no one



ethnic group was large enough to form a special clique which might have hampered frontier assimilation by creating ethnic comradeship and inter-ethnic rivalry (Smith, 1967). Thus, a number of small ethnic groups living together in a frontier setting might produce an "ethnic crucible" similar to what Turner envisioned. But the situation also may be entirely different when the number of groups is sizeable or, if in the case of the Keweenaw frontier, when one group outnumbers the others and internal cohesion does not occur.

After the initial Cornish settlement in the Keweenaw mining frontier, other groups began to arrive including Scandinavians, Irish, Germans, and French Canadians (Rowe, 1974). From the very beginning frequent disputes between these groups were common; the Cornish fought the Irish and the Germans sided against the French Canadians (Rowe, 1974). Socially, if not spatially, these groups were seaparate throughout this early settlement period. It was only when certain nationalities gradually grew in number, like the Swedes and Finns in the later frontier period, that other groups became socially closer and loyalties appeared, as with the Cornish and Irish (Rickard, 1910). It is unclear how members of these groups sorted themselves out within the bunkhouses and boarding-houses erected at this time. Given that there was a shortage of housing and beds were occupied in shifts spatial segregation may not have been possible. Yet according to Finlan (1975, Chapter 4) the spatial patterns were for the most part "set. . .from the outset":

For the first fifty years, everyone accepted these options, since they had little choice. The Finns lived in "Finn towns," the Italians developed their own "communities," and the Cornish theirs.

Unlike other frontier regions that depended on growing rural population densities, permanent agriculture, and increased commercial activity to progress beyond the frontier stage, the Keweenaw mining frontier was quasi-urban in nature. It was dominated by single men who were mostly foreign born and it depended on the development of one economic enterprise to push it beyond the frontier period. In referring to other types of urban frontiers, Wade (1959, 104) states that "the continual introduction of people with different backgrounds, attitudes and cultures hampered assimilation." This comment might also explain what occurred in the Copper Country during its period as an "urban" mining frontier. Thus the Keweenaw mining frontier may have been less of an example of a frontier melting pot and more indicative of separate ethnic identities that existed and were maintained through cultural pluralism. The fact that inter-ethnic and intra-ethnic harmony was not characteristic of this period suggests that the Keweenaw mining frontier was not the ethnic melting pot that Turner postulated.

#### Calumet From 1866-1890: Genesis and Development of Its Social Geography

By the mid 1860s, the Keweenaw mining frontier had undergone several major demographic, social, and spatial changes. The most enduring social and spatial patterns in the lifecycle of Calumet were established in the late 1860s and early 1870s when the Calumet and Hecla Mining Company was formed and when the company town of Calumet was developed.

One of the most significant demographic changes in the region's transitional period is attributed to the active recruitment overseas by mining company agents. This action was profitable not only because it assured the copper mining companies of a constant labor supply, which in turn contributed to rapid economic development and population growth (Gates, 1951), but it had a stabilizing impact on the region's demographic makeup. Company agents were especially successful in encouraging Scandinavians to emigrate (Derish, 1977). These immigrants arrived largely as families or, if they were single men, they sent home for their wives and families soon after landing in Michigan (Derish, 1977; U.S. Bureau of the Census, 1870). The immigrant groups who arrived near the turn of the century came often as single men and did not immediately send home for their families (U.S. Immigration Commission, 1911). Therefore, since Scandinavian immigrants comprised a large portion of the immigration during the 1870s, they initiated and contributed to changes in the area's demographic composition and social organization (Turner, 1974; U.S. Bureau of the Census, 1880). In the 1870s the sex ratio began to balance. There were more children brought into and born in the region and with increasing numbers born of foreign parents, the overall percentage of foreign born began to decrease. Overseas immigration, however, remained high through the 1910s, a situation that contributed to its growth (Table 2).

By the 1880s, when considerable numbers of Poles and Italians arrived (Turner, 1974), much of the internal social organization of Calumet was already established. The first school was built in 1867 and the first hospital in 1870, both by the Calumet and Hecla Mining

Table 2. Growth of Calumet Area

Location	1870	1880	1890	1900	1910	1920
Calumet township	3182	8299	12529	25991	32845	22369
Red Jacket		2140	3073	4668	4211	
Laurium			1159	5643	8537	
Calumet			8297	15680	20097	

Source: Thurner, 1974; U.S. Bureau of the Census, 1890, 1900, 1910.

Mining Company (Thurner, 1974). Several churches were also built in the very early years of Calumet's existence. The English-Cornish Methodist Church was erected in 1869 (Thurner, 1974), the Finnish Apostolic-Lutheran Church in 1871 (Kaups, 1975) and the Swedish Baptist Church in 1877. According to the 1870 Census Report there were no less than sixteen "Church edifices" in Houghton County: six Methodist, six Catholic, three Baptist, and one each Lutheran, Episcopal, and Congregational. Thurner (1974) points out that in Calumet when a new group arrived that was too small to organize its own congregation, it often joined another group's church services. The Finns joined the Norwegians in the early 1870s (Kaups, 1975), the Italians joined Poles, and Croats joined Slovenians (Thurner, 1974). Thurner (1974) also reports that several Calumet ethnic churches had associated with them their own schools at one time or another.

Other ethnic based social organizations quickly appeared in Calumet besides schools and religious congregations. Foreign newspapers and ethnic temperance and benevolent societies were common (Thurner, 1974; Kaups, 1975). The Finns established a weekly newspaper as early as 1879, a mutual aid society in 1878, and a Temperance Society in the same year (Kaups, 1975). At the turn of the century, Italians, Swedes, Slovenians and Croats all had their own newspaper publication (Thurner, 1974). The German Aid Society was founded in 1871 and in the following decades Swedes, Poles, Italians, Hungarians, and Slovenians set up separate self-help societies (Thurner, 1974). The role that these institutions played varied. Thurner (1974, 25) saw them as:

...bastions of security for newcomers, catering to the language, customs, and predilections of the immigrant; at the same time they served to educate immigrants in the ways of American culture...(acting as) halfway houses between cultures.

From the preceding descriptions, some general characteristics of the demographic and social organization of Calumet into the 1880s emerge, and their trends are apparent. The demographic transition is very similar to that outlined in the lifecycle model. In Calumet and the model, the proportion of foreign born drops off into the mature stage. Many social organizations were similarly established during this stage both in Calumet and in the model.

The degree and nature of social interaction in Calumet's early years is somewhat more difficult to discern. Ethnically separate institutions were characteristic into the twentieth century. As each new ethnic group settled in Calumet, it quickly set up its own social organizations. Usually land and some financial support was given by the company to ethnic groups wishing to erect their own institutions (Thurner, 1974). Social interaction in a setting with a multiplicity of languages and ethnic institutions was not always harmonious. As during the frontier period, clashes between ethnic groups were common (Thurner, 1974). Likewise, ethnic rivalry and changes of discriminatory practices by the company resulted in workers' strikes as early as the 1870s (Sullivan, 1959). The fact that many Finns left Calumet during this period, because the mining company refused to listen to workers or grant any concessions, illustrates both the firm hold that the company had over the community and the degree of antipathy present in the community itself (Kaups, 1975).

## Spatial development

With the discovery of the Calumet Copper lode in 1864 and the subsequent formation of the Calumet and Hecla Mining Company, in the early 1870s, the town of Calumet was developed. Its site was determined by the location of the copper ore. One of the main reasons for Calumet's initial formation was the lack of housing for miners. The rush of incoming miners after the discovery of the rich Calumet mine meant that the few scattered boardinghouses were soon very overcrowded. This arrangement not only proved unsuitable for the increasing numbers of miners who had families, but to the newly developed mining company who saw as its responsibility the discouragement and phasing out of these "rowdy" sometimes drunken places (Turner, 1974). Numerous single family homes were erected by Calumet and Hecla after 1871 (Turner, 1974). Prior to that time the mining company was concerned with constructing the necessary mining buildings at each of the shafts (Gates, 1951). In 1874 housing construction began full scale:

Calumet (became) a large, sprawling village with only a few streets graded and drained and long rows of pine-board miners cottages, all alike and painted red, with stove pipes sticking out through the roofs (Gates, 1951, 110).

Calumet in its early days had a relatively unplanned haphazard appearance (Turner, 1974); the few streets that existed radiated from the vicinity of the mines where the surface buildings had been erected. Contrasting sharply with this pattern was a portion of non-company owned land further from the mines which became known as Red Jacket (Figure 6). By the time that Calumet and Hecla turned its attention to housing in

**Figure 6. Location of Calumet's Residential Areas.**



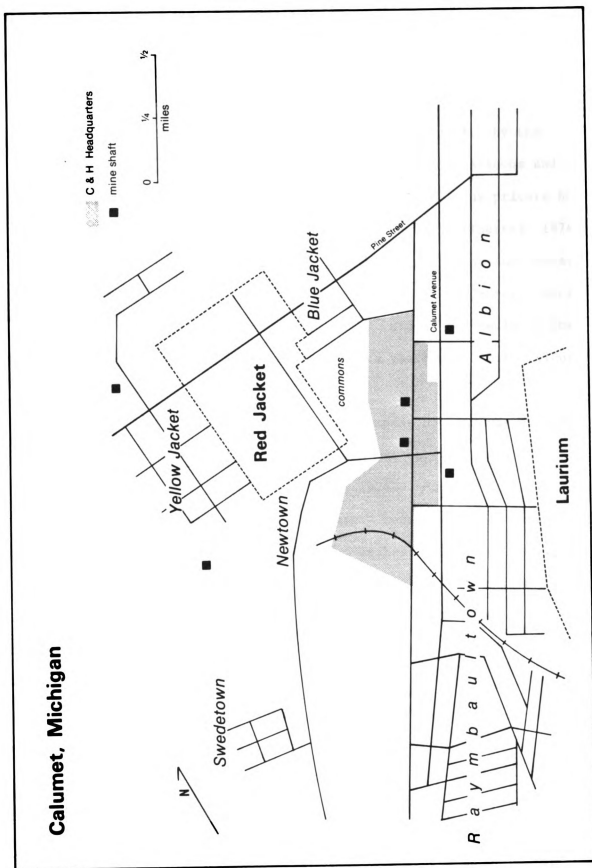


Figure 6.

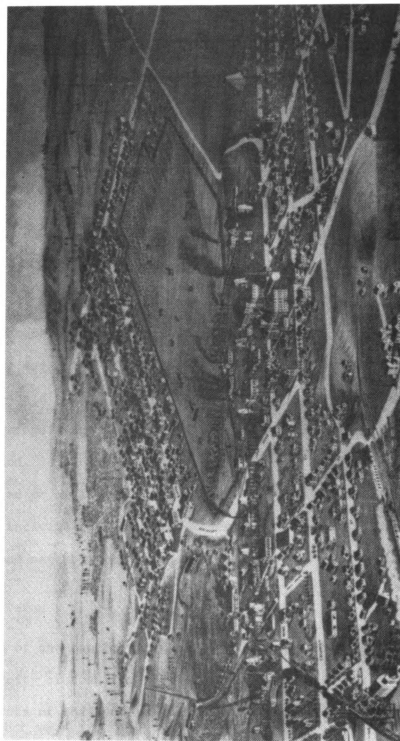
the early 1870s, a small privately built business and residential area had burgeoned. Red Jacket remained separate and uncontrolled by the mining company. In the late 1860s Calumet was platted and streets were laid out on a north-south, east-west grid (Thurner, 1974). By the early 1870s, the main street was clustered with numerous saloons and stores. On streets leading away from the main street, many private homes had been constructed to meet the demand for new housing (Thurner, 1974). Given this area's original impetus and independence, it was incorporated in 1875 as the separate, self-governing community of Red Jacket. Because the land surrounding Red Jacket was bought by Calumet and Hecla in the early 1870s, expansion of Red Jacket in future years was limited (Thurner, 1974).

In the areas surrounding Red Jacket, company housing was eventually built; the location and time of construction was determined by the development of new mining shafts (Thurner, 1974). Not all company employees, however, lived in areas of company housing. Local businessmen and miners alike built homes inside of Red Jacket, which resulted in overcrowding by the late 1880s and 1890s (Thurner, 1974). Kaups (1975) reports that in 1880 there were seventy-seven homes privately owned by Finns; often the owners rented out rooms to single Finnish males. By 1893, a Calumet and Hecla Report indicated that on company land there were 941 privately owned homes compared to 698 company built ones (Benedict, 1959). Residence outside of company housing, then, was quite common from the very beginning of Calumet's lifecycle. As Gates (1951) points out, not only was the company lenient about permitting workers to build their own homes on rented land, but these employees

were often better housed "than employees in company built homes" (115).

A sketch map of Calumet in 1881 illustrates the extent of town development to that time (Figure 7). Noteable are the contrasting street patterns between Red Jacket and the part of Calumet first developed. Most mining buildings mark the site of the town's initial development. A considerable number of homes and businesses have been built in Red Jacket and in the areas near mining operations. Also visible on the above figure is the area of town between Red Jacket and the mines set aside as the town commons by the company.

Both the sketch map (Figure 7) and Figure 6 depict the evolution of the spatial morphology of Calumet and Red Jacket prior to 1890. Based on these and the description already given, certain patterns emerge which closely resemble those outlined and diagrammed in the spatial evolution of the lifecycle model prior to the mature stage. The only major differences apparent between the model's and Calumet's spatial forms are the early development of Red Jacket as a separate business and residential community. Calumet and Hecla chose not to develop a business district and purposefully kept this sector outside of company ownership and control (Thurner, 1974). Thus no company stores were erected. Also inasmuch as Calumet and Hecla established early their support of private house ownership and Red Jacket's residential areas grew up independent of the company, ethnic residential patterns could not totally be directed by the company. References in the literature cite cases where there was ethnic residential segregation in boarding houses catering to specific groups and where families rented out rooms to their own ethnic group (Thurner, 1974; Kaups, 1975).



Calumet, Hecla, and Red Jacket, Michigan, 1881

Figure 7.

Source: Thurner, 1974, frontispiece.

### Calumet from 1890 to 1930: Ethnic Residential Patterns

The final section of this chapter deals specifically with the residential patterns of Calumet's ethnic groups. One of the features included in the spatial cycle that characterizes company towns is company imposed ethnic, racial, or socioeconomic residential segregation. Although there are some references to the spatial patterning of Calumet's ethnic population in the literature, most are very generalized. For example, "The Finns lived in 'Finn towns,' (and) the Italians developed their own 'communities' " (Finlan, 1975, Chapter 4). Therefore, to understand whether or not there was a pattern of residential segregation, it must be determined if: (a) there are neighborhoods (blocks or streets) where one group resides exclusively, (b) there are neighborhoods where the majority of the residents are of one ethnic group, and (c) there are neighborhoods with a mixture of ethnic groups. Any number of different distributional patterns could appear and, depending on the size of the unit being examined, a segregated or mixed pattern might be visible. To circumvent this problem individual places of residence are looked at in conjunction with broad neighborhood and area patterns.

#### 1890 patterns

One of the most obvious features of the 1890 ethnic map series is the scarcity of total households. Due to loss or destruction by fire at the turn of the century, many of the 1890 and 1900 lease records were missing. Even though complete coverage is not possible for these two time periods, sufficient records exist to ascertain the extent

of housing development and the general location of ethnic groups.

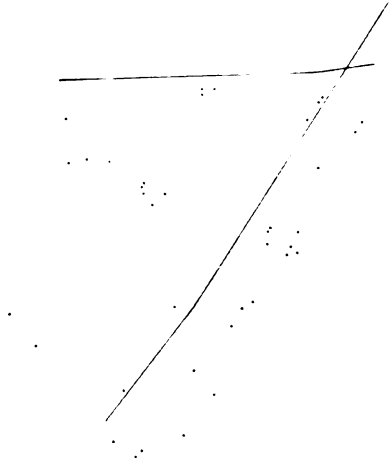
In comparing all of the six ethnic residential patterns together in 1890, several general features surface (Figure 8). In all but one of the mining locations there are records of people residing in company housing. None is exclusively occupied by a single ethnic group. Two areas however, Swedetown and Newtown, are dominated by one group; these areas and others are identified on Figure 6. Apparent also is the relatively vacant area near the junction of Pine Street and Calumet Avenue in Albion. None of the six ethnic groups is located in one easily defined segregated neighborhood.

If the residential patterns within each of the separate residential locations is examined in more detail, some ethnic clustering appears. In Swedetown, where Finnish households outnumber all others combined, the Finns live on only one street, although not side by side. Their dominance is interrupted by both an Italian and Scandinavian household. Two British households on two different streets are the only other households in Swedetown represented on the 1890 lease records. The only other residential location dominated by one group is Newtown where the British outnumber all others. Like the Swedetown pattern, three other ethnic groups are scattered throughout this location amongst the British.

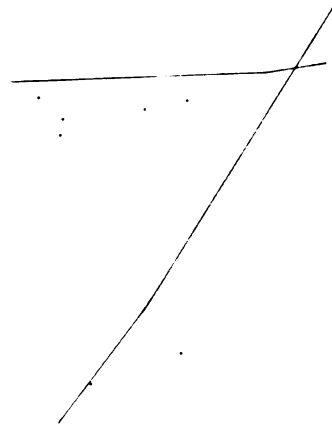
Additional areas within Calumet, when looked at more closely, also exhibit some significant patterns. The relatively vacant area in the northern part of Albion is inhabited by several British, a couple Scandinavians, and one Italian households; no other groups are found in this area. The only group that resides on Calumet Avenue (the main street) is the British. Conversely, in Raymbaultown each

## Ethnic Residential Patterns: Calumet, Michigan, 1890

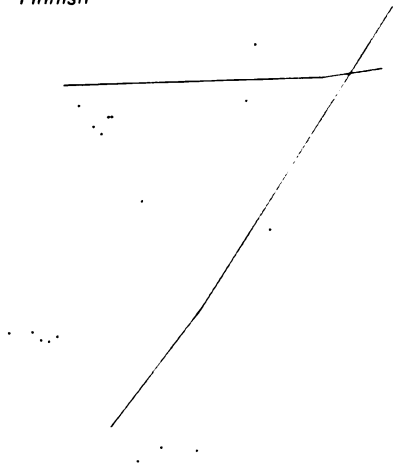
*British*



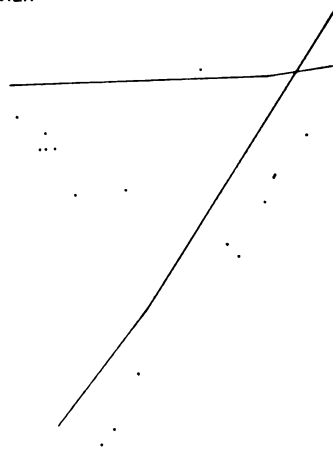
*German*



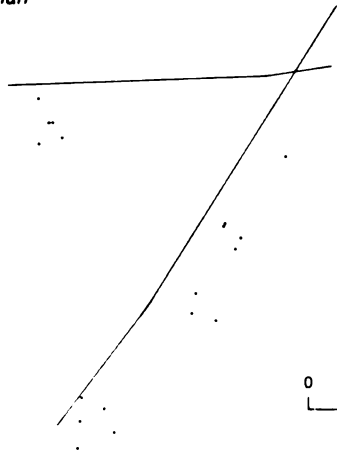
*Finnish*



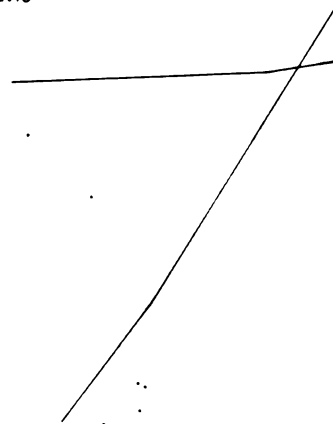
*Scandinavian*



*Italian*



*Slavic*



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Figure 8.

group is represented. Although all of the groups are basically intermingled in Raymbaultown, the Finns reside primarily in the southernmost part. The many Italians and Slavs also living in this southern fringe are dispersed over several different streets. In the northern part of Raymbaultown, where it merges with Albion, are two somewhat definite clusters of Italian households. The only other location with some semblance of ethnic residential clustering in 1890 is Yellow Jacket. Here three British households are positioned along the southernmost street. Exhibiting a similar linear pattern are the few Finnish, Scandinavian, and Italian households, but rather than being dispersed on all sides of Yellow Jacket like the several Slavic households, members of these three groups are located on one or two streets, some as next door neighbors.

In summary, the dominant patterns of note in the 1890 map series are the presence or absence of specific groups in one of the six mining locations and their appearance on certain streets within these locations.

#### 1900 patterns

By 1900 the layout of Calumet's street pattern is beginning to emerge as the numbers of each group increases and residences are occupied and included in the lease records. Like in 1890, some very general patterns are readily observable. For one, the concentration of Finns in Swedetown remains, but the British concentration in Newtown has disappeared. A few households now appear in northern Calumet, but relatively few are located at the junction of Pine Street and Calumet Avenue. Even though every group but the Slavs is represented



in each of the various mining locations and no rigidly segregated neighborhoods are visible, still some pockets of ethnic clustering exist. These results suggest that ethnic residential segregation may be occurring by 1900 (Figure 9).

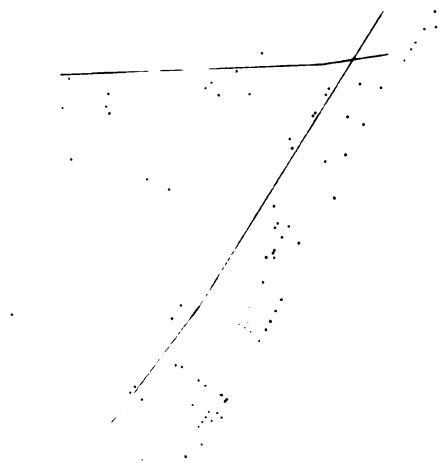
A closer inspection of the map series for 1900 illustrates the type of residential patterning that is taking place. Beginning with Swedetown, the increase in Finnish households is the first readily visible feature. Four out of the five residences occupied by Finns in 1890 remain leased by Finns in 1900. The additional nine new Finnish households are located one street south of the original cluster of residences; several are adjacent to one another. The only other ethnic group of any size in Swedetown are the Italians, who although dispersed, reside on the east side of Swedetown.

In Albion the numerous British residents occupy company homes throughout the area; they remain the only group living on the stretch of Calumet Avenue extending through Albion. The almost total absence of Germans and complete absence of Slavs in Albion is striking. Both the Finns and Scandinavians are dispersed along the streets west of Calumet Avenue, yet the Italian residences are clustered in one or two pockets. These are the same two clusters visible in the 1890 map of Italian residential patterns. By 1900 the clusters had grown and more of the residences either faced each other on the street or were lined up along one segment of a street.

Raymbaultown and Yellow Jacket are the most multi-ethnic residential locations. Not only are all of the six groups represented there, but often within each group the households are distant from one another.

## Ethnic Residential Patterns: Calumet, Michigan, 1900

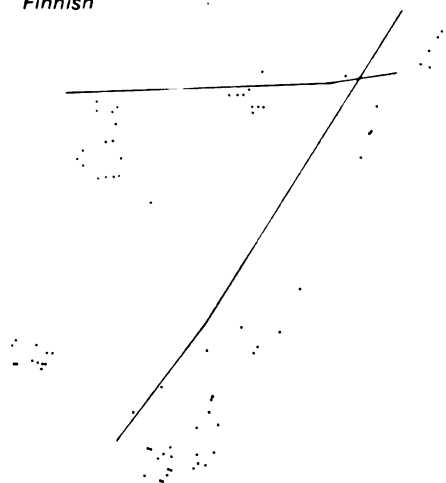
*British*



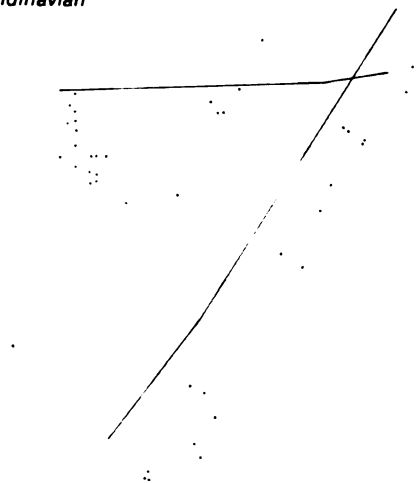
*German*



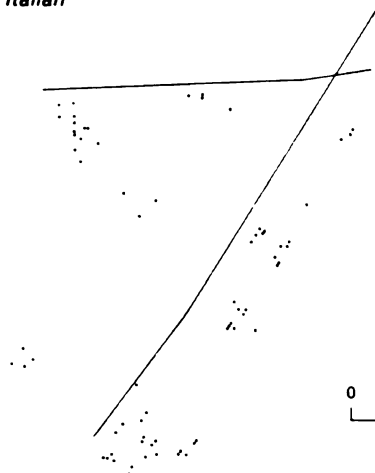
*Finnish*



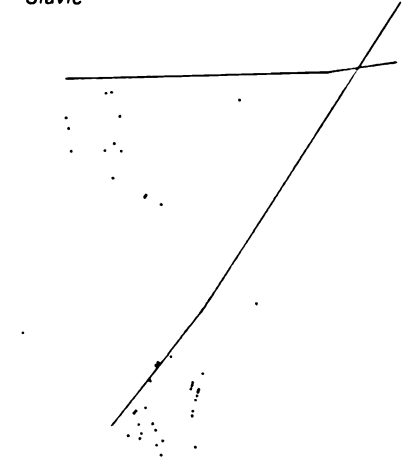
*Scandinavian*



*Italian*



*Slavic*



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Figure 9.

Some clustering by street, however, is clearly visible. The British occupy several adjacent homes along a few streets in Raymbaultown, where they are more numerous, but are dispersed in Yellow Jacket. Germans are scattered throughout both Raymbaultown and Yellow Jacket. The Finns are most concentrated on the same southern streets of Raymbaultown where they were clustered in 1890. Many of the Finnish households are close neighbors along a segment of a street. In Yellow Jacket a more dominant linear pattern has emerged for several groups. A row of houses along one side of a street occupied by one group appears in the 1900 residential patterns for the Finns, Scandinavians, and Italians. On one north-south street in Yellow Jacket, a row of Scandinavian households directly faces a like row of Italian households; on one street in Raymbaultown Slavs dominate both sides of the same street.

The last location to be considered is Blue Jacket, an area with very few residents in the 1890 map series. All the ethnic groups but the Finns are fairly well dispersed throughout this area; the Finns tend to be lined along one or two streets.

In summary, an examination of the 1900 map series indicates that every group (except perhaps the Germans) displays a residential pattern of some clustering or segregation along one street or in one segment of town. Each also displays a dispersed pattern in other areas of Calumet.

#### 1910 and 1920 patterns

The residential patterns for each of the six ethnic groups after 1900 become complex and difficult to summarize in part because the

numbers of households in each group have doubled or tripled. This increase is due to the arrival of new immigrants, natural increase, and the fact that more lease records are intact after 1900. The second reason for the difficulty in summarizing is that variation between groups at the town scale is not as great as the variation between groups in each location or at the neighborhood scale. Based on general patterns it is apparent that no one group is relegated to only one portion of the town where they can be discernably segregated from others. On closer inspection of neighborhood patterns some ethnic alignment or clustering does appear. The ability to define patterns as segregated or mixed is determined by the unit of observation. It is felt that qualitative rather than quantitative analyses and comparisons are the most helpful in assessing ethnic residential segregation/mixing in Calumet.

Six generalized patterns can be discerned for each of the ethnic groups in 1910 and 1920. First, the British dominate that portion of Calumet from the western fringe to and including Calumet Avenue between the railroad on the south and Pine Street on the north. Second, the Germans are evenly dispersed throughout Calumet. Third, the Finns dominate the Swedetown location. Fourth, the Scandinavians are fairly evenly dispersed except for a small clustering in Blue Jacket. Fifth, the Italians are loosely clustered in several locations, for example, the Raymbaultown-Albion area, Newtown, and western Yellow Jacket. And sixth, the Slavs are loosely clustered in two locations, Newtown and north of Red Jacket (Figures 10 and 11). Increasing numbers of households in each ethnic group occupy adjacent houses along segments

## Ethnic Residential Patterns: Calumet, Michigan, 1910

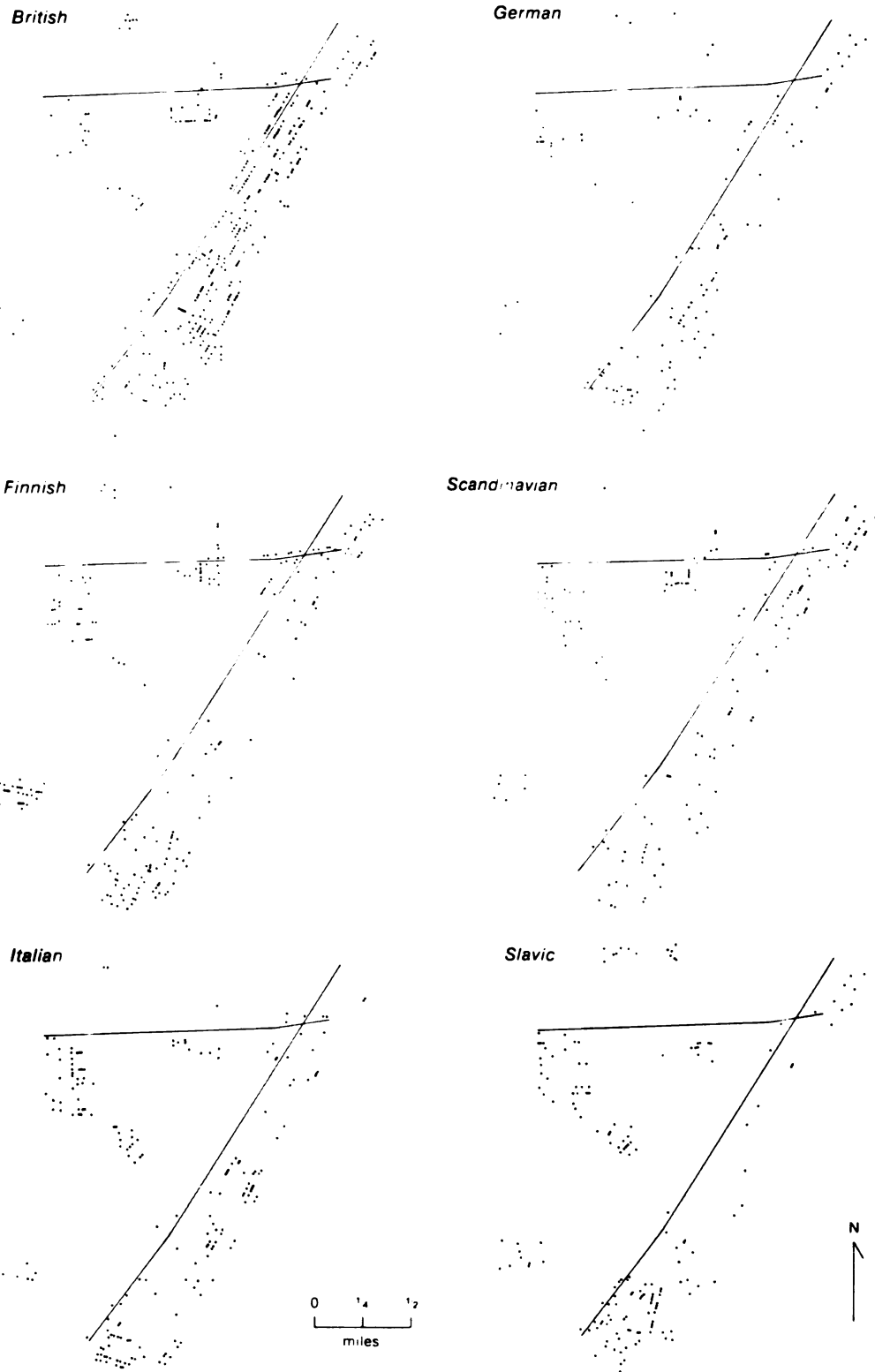


Figure 10.

## Ethnic Residential Patterns: Calumet, Michigan, 1920

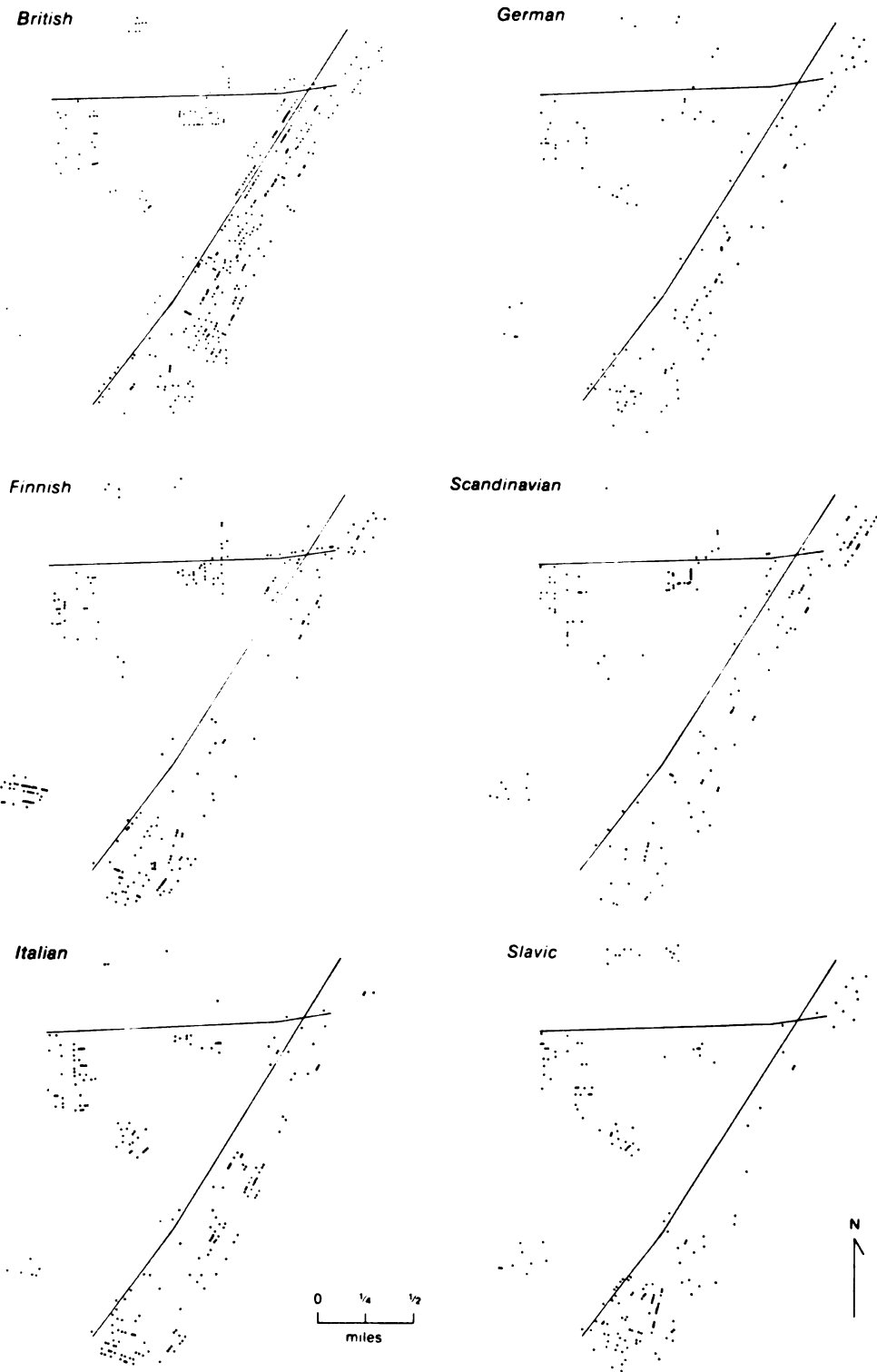


Figure 11.

or lengths of streets and on one or both sides of the same street. The patterns that existed for Calumet in 1910 remain relatively intact for the 1920 map series and for this reason the two years are treated together.

In Swedetown the Finns remain the dominant group. The British dominance of the central portion of Calumet west of Calumet Avenue is another noticeable feature. Also the homes along the northern and central portions of Calumet Avenue continue to be occupied primarily by the British.

In Yellow Jacket several streets are disproportionately occupied by a single ethnic group. This is particularly evident with the Italians and somewhat lesser so with the Finns. A similar pattern is apparent in Blue Jacket and Raymbaultown. In Blue Jacket the British reside along one street and Finns on another; across the street from the Finns are numerous Scandinavian households. Interspersed between these linear patterns in Yellow Jacket, Blue Jacket, and Raymbaultown are households from each of the other ethnic groups.

By 1910 the residential area built near the Red Jacket shaft immediately to the northwest of Calumet, begins to emerge on the ethnic maps. A clustering of British within the predominantly Slavic area is the dominant feature. Likewise, in Newtown several more British reside there in 1910 and 1920 than in 1900; however, the dominant groups in this location are the Italians and Slavs. These two groups appear to be fairly well mixed within Newtown.

The last location to be discussed is Albion. Once void of Slavs, by 1910-1920 more and more Slavs reside here. The only exceptions

to a rather dispersed pattern for all the ethnic groups in Albion are the Finns who occupy most of the houses along Pine Street and the British who dominate several streets.

The most noticeable changes in the neighborhoods since 1890 are the thinning out and filling in of several areas. This process in Calumet is comparable to the invasion-succession process characteristic of ethnic residential mobility in larger American cities. The filling in process is most visible in the southern part of Raymbaultown where the numbers of Italian households along three parallel streets have increased since 1890.

#### 1930 patterns

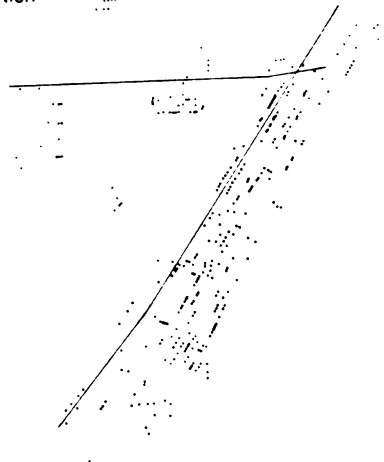
The final series of maps reveal patterns that closely resemble the 1910-1920 patterns (Figure 12). The only major difference apparent in the 1930 patterns is an overall thinning out of households throughout the town. This feature is in part evidence of Calumet's declining population. Some houses have been torn down by 1930. Another explanation for the declining numbers of company owned houses is that several were sold to their inhabitants during the 1920s, a transaction recorded on the terminated lease agreement in the company files.

In summary, the ethnic residential patterns for Calumet between 1890 and 1930 reveal very little residential turnover of company housing. Most of the patterns visible in 1930 continue to reflect patterns in existence by the turn of the century and are the result of increasing numbers of one ethnic group moving into an area originally settled by that group. This finding suggests that ethnic residential

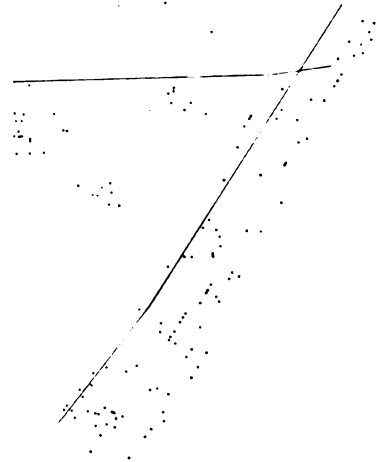


## Ethnic Residential Patterns: Calumet, Michigan, 1930

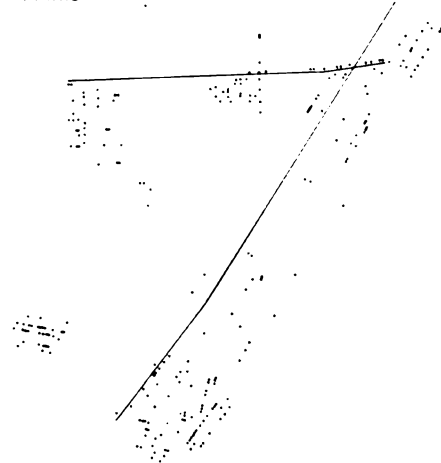
*British*



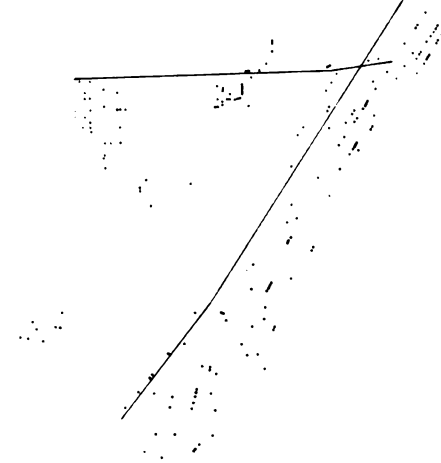
*German*



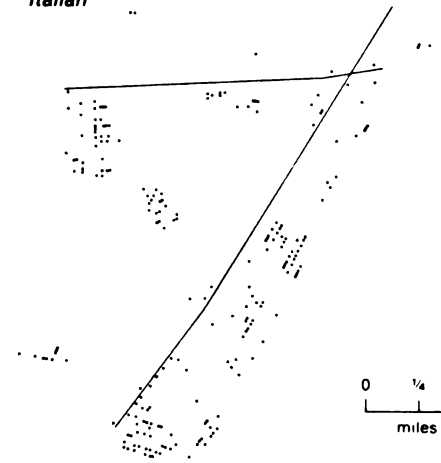
*Finnish*



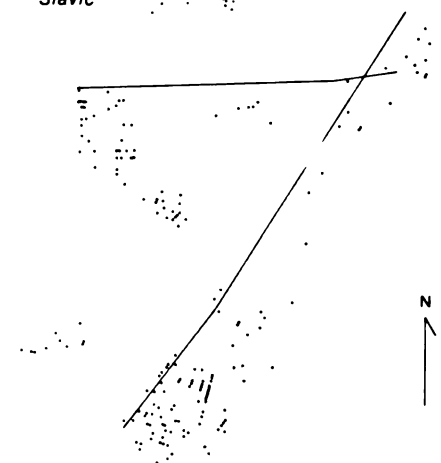
*Scandinavian*



*Italian*



*Slavic*



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Figure 12.

segregation initially existed and persisted at the neighborhood scale over time.

## CHAPTER VI

### Analysis of Patterns and Process

In the previous chapter three consecutive time periods in the social-spatial lifecycle of a frontier based company town were examined: the Keweenaw mining frontier (1843-1866), Calumet's genesis and early development (1866-1890), and Calumet's ethnic residential distributions (1890-1930). A major concern in analyzing each of these time slices was to reconstruct the demographic, social, and spatial patterns that were unfolding throughout the lifecycle stages of a company town. The scale of analysis progressively narrowed in the three discussions from the region, to the town, and finally the neighborhood. Analysis of these scales enables the broad demographic, social and spatial patterns to be discerned so that Calumet's lifecycle can be compared to the model advanced in Chapter III and facilitates understanding of the nature of ethnic residential patterns and ethnic residential segregation. The emphasis was on form, that is, the demographic form (age and sex composition, percentage foreign born, and population growth), the social form (types of social organizations, nature of group interaction) and, the spatial form (company town morphology and ethnic residential patterns). Little attention was directed to the underlying reasons for these forms and to the processes generating them. Even though any analysis of the specific processes underlying Calumet's demographic, social, and spatial patterns would be somewhat

conjectural, an examination of those processes needs to be treated in order to understand the distinct social and spatial patterns. The major objective of this chapter is to identify and interpret, insofar as possible, some of the internal and external factors that determined, influenced or encouraged the residential patterns for six Calumet ethnic groups between 1890 and 1930. These patterns and processes are considered within the total social and spatial evolution of Calumet.

### Housing in Calumet

One of the primary considerations that must be treated in an explanation of residential patterns in a company town is who decided residential location and on what basis it was assigned. No formal document stating Calumet and Hecla housing policy is known to exist. This makes it almost impossible to know precisely the official policy Calumet and Hecla adhered to in regards to immigrant housing. Existing reports and histories of the area and company, however, provide some insights about the general attitude of the company towards the social and spatial organization of the town during the 1890-1930 period. These perspectives establish a base from which the ethnic residential patterns that emerged can be assessed.

The actions and attitudes of the Calumet and Hecla Mining Company have been perceived differently, yet a reading of the appropriate literature records a prevailing characterization of the company as being "benevolent," "aggressive," "paternalistic," and "progressive" (Committee of the Copper Country, 1913; Gates, 1951; Benedict, 1952; Thurner, 1974;

Dersh, 1977). The type of community that grew up under the direction of such a company is described by Benedict (1952, 214) as:

...a self sufficient empire established wherein the corporation and men worked harmoniously for the common welfare according to the most advanced business ethics of the closing years of the nineteenth century....

Gates (1951, 109) supports this interpretation when he states that between 1867 and 1904 the Calumet and Hecla Mining Company had:

...established the reputation of following as enlightened policy of paternalism as that of any mining district in the world.

A partial reason offered for town development along these lines has been attributed to the personality of Alexander Agassiz, the general manager of Calumet and Hecla for several decades during its formative years (Benedict, 1952; Thurner, 1974). His views about the social and spatial organization of a mining company town and the views he instilled into the company's officers helped shape the type of evolution that took place. Agassiz's European and New England background resulted in the creation of a distinctive cultural landscape (Thurner, 1974, 7) where mining operations and the construction of their necessary buildings did not supersede the building of churches, schools, clubhouses, and hotels, or a library, hospital, bathhouse, theater, and town commons (Sawyer, 1911; Thurner, 1974). Calumet's "settled community living" and "remarkably well-conducted paternalism" were two of the features that Gates (1951, 94) lists for attracting the large numbers of immigrants to Calumet during the 1890s.

Calumet and Hecla's attitude towards housing per se was largely guided by their desire to quickly and satisfactorily provide

accommodation for their employees (Thurner, 1974; 1977). Provision of decent housing would assure a permanent and stable work force and in the eyes of one group of national social reformists at the height of the Americanization movement, it would "nuture. . .health and happiness and good citizenship," thus "abolishing. . . the source of the race riots and labor troubles. . .which obstructs Americanization" (Kellor, 1917, 2). Whether Calumet and Hecla prescribed to this particular recipe for promoting Americanization is not entirely known, but accessibility to the various mine locations and meeting a constant demand for more housing were two matters that the company readily dealt with (Thurner, 1974).

Throughout the development of Calumet, the company encouraged construction of privately owned homes on leased land (Gates, 1951; Thurner, 1974). A Calumet and Hecla report in 1893 indicates that more homes were privately owned than company owned at that time (Benedict, 1952, 89); likewise, Thurner (1974, 45) states that in 1891 nearly one thousand homes were built by their owners. Since Calumet and Hecla did not own or control the separate communities of Red Jacket and Laurium, Laurium being developed in the 1890s when Red Jacket became overcrowded (Sawyer, 1911), the company could not define who lived where. Nor could the company force any family or individual to reside in company built housing or in an undesirable residential location because other options were available. But Calumet and Hecla did require that if the owners of a home on company leased land moved that house had to be sold to the company. No lease transactions could take place outside of the company office (Thurner, 1974). Although some choice of housing was available

to incoming miners, many incentives for leasing a company home existed, among them free garbage collection and maintenance, low rental rates, and inexpensive water and heat (Thurner, 1974).

Having examined some of the factors that may have motivated or directed Calumet and Hecla's attitudes and actions towards housing, the next factor that must be looked at before assessing ethnic residential patterns are inequities in housing quality and discrimination by house assignment. For those families and individuals who lived in company housing, residential segregation by ethnicity, race, or class could have been imposed. Discrimination based on one of these features could have been demonstrated by inferior housing, a distinguishing feature used to characterize company towns (Porteous, 1977). Gates (1951, 110) indicates that an employee's residence in Calumet was not determined by his background at least during the early years; instead:

...house assignment was made in accordance with the size of family, responsibility of the tenant, and value of the man in his job, rather than the nature of his employment.

This is not to say that Calumet and Hecla could not have used family size, responsibility, or values to effectuate a segregated residential pattern or used this policy to legitimize residential segregation. If Rickard's (1905, 20) description of company housing in the Copper District is indicative of conditions in Calumet, then it appears that little differentiation in house quality actually occurred:

The companies built substantial dwellings, usually with stone foundations, arranged in orderly rows, whose neatness and regularity have not much of the picturesque, but bespeak far healthier conditions than that mingling of the squalid and romantic which characterizes other mining camps.

Some differences in housing were apparent in Calumet (Figure 13). Though basically identical, there were several different house styles; some homes were single family and others were duplexes. The space between houses also varied with the most spacious yards and houses located along Calumet Avenue (Figure 6, see p. 59).

#### Analysis of Residential Patterns

The parallel between construction at the site of a new mine shaft and the period when large numbers of a particular ethnic group arrived in Calumet is quite striking in the ethnic residential patterns that emerged. Because Calumet and Hecla attempted to house employees as close to their work place as possible, and large numbers of one ethnic group tended to arrive at the time of mine expansions, several ethnically segregated residential patterns appeared. This policy suggests that the generalization whereby company towns exhibit ethnic residential segregation is in part valid. The degree of actual segregation apparent from the patterns and a full understanding of the underlying reasons would not be obvious from the residential patterns alone. To test this generalization several ethnic residential patterns in the 1890-1930 map series are examined in regards to time of immigrant arrival, time of housing construction, and Calumet and Hecla's attitudes toward housing the immigrant worker.

Examination of the 1881 map of Calumet (Figure 7, see p. 62) indicates the extent of existing housing and the areas with the greatest concentration of houses. This concentration coincides with the locations where the first mine shafts were sunk and that part of the town where





COMPANY HOUSES RENTED TO EMPLOYEES, CALUMET & HECLA MINE.



LOG HOUSES, CALUMET & HECLA MINE.

Figure 13. Company Housing in Calumet, Michigan.

Source: Committee of the Copper Country, 1913.

most of the mining surface buildings were erected (Figure 6, see p. 59). Albion, Raymbaultown, and Red Jacket surround the center of company operations. By comparing the 1881 map with the 1890 map of ethnic residential patterns, the areas where housing was constructed in the 1880s can be discerned; most growth took place in Yellow Jacket, Blue Jacket and Swedetown.

Looking at the British settlement pattern for 1890 one sees that the British were concentrated in the older residential areas of Raymbaultown and Albion. This pattern corresponds with their early time of arrival in Calumet and the company's desire to locate miners close to the mine shafts. Yet there are also several British households in the newer areas of Newtown and Yellow Jacket in 1890, a pattern inconsistent with their early arrival. Observance of this pattern refutes statements that Calumet and Hecla placed immigrants in housing near their work place. If the 1881 map is closely examined, however, several homes can be detected in that area, suggesting that these homes were built in the 1870s when large numbers of British settled in Calumet. Taken by itself the 1890 ethnic residential pattern for the British would question company policy regarding housing assignment.

When the 1890 residential patterns are further examined another contradiction seems to appear between what the patterns indicate and what company policy was. In looking at the Italian residential pattern for 1890, one sees two somewhat weak clusterings in Raymbaultown and Albion next to the British. Based on spatial form alone the residential mixture of British and Italian households could be interpreted as an indication of Italian assimilation. A close inspection of the 1881 map

reveals tracts of open land in the areas where Italians have settled by 1890, which indicates that these pockets must have been developed while large numbers of Italians arrived in the 1880s. Like with the anomaly discussed in Yellow Jacket and Newtown for the British, the spatial patterns for the Italians in Raymbaultown and Albion could by themselves be misinterpreted.

A similar explanation for the concentration of Finns in Swedetown could be made. Because this area is not included on the 1881 map, it is uncertain when it was developed. The location of Finnish households along one street in Swedetown suggests that this street may have been the first with housing when they arrived. The Finns, besides residing in Swedetown, also concentrated in the southern part of Raymbaultown (Figure 8, see p. 65). Since the numbering system for the streets increases with greater distance from the center of town, it seems safe to assume that these streets were built up later. The Finns were more or less located in a defined area and a degree of ethnic residential segregation is apparent from the patterns. The reason for this segregation is not apparent.

If time of arrival and housing construction were the determinants of residential location, then two ethnic groups arriving in the same period should be located in a similar part of town. Theoretically the two groups should be mixed because not all immigrants arrived at exactly the same time, although groups travel on one ship (Gates, 1951; Kaups, 1975). Scandinavians and Finns arrived during the 1870s and 1880s, yet the 1890 map of Scandinavian and Finnish settlement patterns shows they remained separate. Why were there few Scandinavians in Swedetown, an area that apparently took its name from the Swedish

population? Part of the confusion with the name Swedetown could be due to the fact that many Finns were classified by census enumerators as Swedes or Norwegians because their place of birth was in one of those countries (Kaups, 1975, 60). This confusion could account for the established residents of Calumet referring to the Finnish settlement southwest of town as Swedetown, but it does not explain why the settlement pattern for the Finns was markedly different from the Scandinavians if the established residents' perception of them belonging to the same group. The question then is what determined the residential distribution of Finns?

Important to remember is that there were many more people who either saw themselves as Finns or were native Finns arriving in Calumet during the 1880s than Scandinavians (Swedes and Norwegians). A classification of nationalities in the 1900 census (U.S. Census, 1900, 760) illustrates that there were nearly three times as many Finns in the Copper Country as Swedes and Norwegians, the proportion of Finns in Calumet, which was their " 'pesapaikka' or nesting place in the United States" (Kaups, 1975, 64), would have been much larger than that of the Scandinavians. Thus, proportionally more Finns would be located in a newly developed area at their time of arrival than Scandinavians and a segregated residential pattern would emerge.

Another important consideration related to the Finnish settlement pattern in Calumet is the degree to which they wished to remain separate or the community and company wanted to segregate them. Thurner (1974, 18) points out that the townspeople displayed bigotry towards the Finns and that the Finns:

...saw themselves characterized by some non-Finns as clannish resisters of Americanization who refused to learn English, members of the lowest social strata, a strong breed of solemm, hardworking people, stubborn and peculiar.

These sentiments could have resulted in voluntary or involuntary segregation. Adding in the fact that Finns were relatively inexperienced in mining (Turner, 1974, 17), Calumet and Hecla could have used the clause that housing assignment was made "in accordance with the value of the man in his job" (Gates, 1951, 110) as a way of implementing internal segregation. To illustrate this point, during the strike of 1913-1914, Calumet and Hecla evicted the spearheaders of the unionization movement from their leased homes, a large portion who were Finns (Strike Investigation Committee, 1914; Sullivan, 1959). Also a recent study on occupational mobility in the Keweenaw copper mines indicates that the mining companies discriminated against certain groups; these groups failed to climb the company's occupational ladder according to the number of years they had worked for the company (Hannon, 1977). It is apparent that Calumet and Hecla held the power to create ethnic residential enclaves and at least on one known occasion used their authority to alter the settlement pattern of one group.

One of the last mine locations to be opened and subsequently built up with company houses was the area surrounding the Red Jacket shaft, an area northwest of the village of Red Jacket. The area opened in the 1890s and the ethnic group that concentrated there were Slavs who arrived in the 1890s and 1900s (Turner, 1974). Unusually in this area is the small cluster of British households and the several scattered German households. If employment structure required at a mine is

considered, British residence there is not unexpected as the British (often Cornish) were in the top positions within the company's occupational hierarchy (U.S. Immigration Commission, 1911; Thurner, 1974). British mining captains would have been in charge of overseeing operations at each shaft. The British group near the Red Jacket shaft would have been located there to be close to the mine although Slavs comprised the largest part of the mining crew.

British predominance at the top of the company occupational hierarchy is particularly evident in the residential patterns from 1890 onwards. The houses along Calumet Avenue at its central and northern portions, and on the southern side of Blue Jacket were almost exclusively British. The homes along Calumet Avenue were larger and the lots were bigger than elsewhere in Calumet and were, for the most part, reserved for employee's in the highest positions within the company including managers, engineers, and doctors. The street on the southern border of Blue Jacket, where large numbers of British lived, faced the town commons and was also considered a desirable location.

Explanations for the ethnic residential patterns in Calumet between 1890 and 1900 have been posited by using groups in several areas. Many other minor patterns could also be analyzed and interpreted using the factors already mentioned. Unexplained is the expansion of original settlement patterns after 1910 when the development of tracts of housing had all but ceased. A careful examination of the maps for 1910, 1920, and 1930 for all groups reveals that little spatial mixing was occurring. In fact, certain streets and portions of neighborhoods became increasingly dominated by one group. This finding suggests that

Calumet and Hecla did not consciously attempt to disperse ethnic settlements by locating later immigrant arrivals away from the original area or by relocating families who had been in Calumet for some time. To better understand these patterns it is necessary first to examine the internal constraints and external influences that were directing Calumet and Hecla's attitudes and actions at this time and second to show how these together may have shaped the ethnic residential patterns and town's social-spatial evolution.

#### Calumet after 1900: Internal and External Influences

By 1910 the surge of foreign immigration to the Keweenaw copper district had peaked. Calumet, including Red Jacket and Laurium, had grown to a city of nearly 33,000 people (Table 2, see p. 54). At the same time, copper production had dropped off considerably due to the declining production of lower grade ores and competition from western copper mines (Gates, 1951; Robson, 1966). Calumet and Hecla was forced as early as 1901 to enter a period of conservation of existing ore supplies, territorial expansion in search of new ore supplies and modernization to remove greater portions of ore from its existing supplies (Robson, 1966, 14). Immigration, however, did not subside for another decade, hence, a large labor pool was growing in spite of economic decline and a move by some groups of miners to unionize (Sullivan, 1959). These conditions created a situation where the established miners were beginning to become resentful of company paternalism, long working hours, and a dangerous work environment created

by relaxation of safety standards in an effort to increase production (Sullivan, 1959). The miners also felt threatened by newly arriving eager immigrants seeking work in the mines. A situation was created where the company had the leverage to replace disobedient miners. Some felt (Gates, 1951, 107) that:

...the mining companies encouraged this new immigration development in the hope that language barriers would forestall the growth of unionism and that the new worker would prove to be easily manageable.

As Gates (1951, 115) points out, this situation led to an increase in employee-employer difficulties based on nationality and language differences.

At the same time that Calumet and Hecla was entering a period of retrenchment, Calumet, including Red Jacket and Laurium, was going through rapid growth. Calumet became a very modern city with streetcars, paved streets, electric lights, and even a theater which catered to the upper class Bostonian families brought in to fill some of the top positions within the company (U.S. Immigration Commission, 1911, 83); Gates, 1951, 112). Any notion that economic decline was impending went unrecognized by the private entrepreneurs who erected numerous buildings in central Red Jacket between 1895 and 1905 (Thurner, 1974) and unvoiced by the company officials who probably wanted to maintain public confidence and authority in a period when continued growth was considered.

The large numbers of foreign immigrants that arrived in the Keweenaw copper district during the 1890s and 1900s were representative of an even larger movement of foreign peoples to the United States



during this period. The massive flow of predominantly southern and eastern Europeans to the United States was perceived by many Americans to be extremely dangerous to the internal composition of the nation. Large scale movements to Americanize the immigrant were taking place and when some fearful citizens became disillusioned with the progress that the immigrant was making to conform to American ways, there were suggestions that the government ought to end or restrict the flow (Higham, 1974). The Americanization movement, likewise, took hold in the Keweenaw peninsula where ethnic diversity was extremely pronounced. Between 35 and 50 percent of Houghton County's population in 1910 was foreign born, or of foreign or mixed parentage (U.S. Census, 1910, 601). Thirty-eight nationalities were represented on the Calumet and Hecla payroll (Rickard, 1905, 16) and "suspicion of lack of Americanization among Calumet's people (sometimes) festered" (Turner, 1974, 29).

Calumet and Hecla had to cope with both the immigrants and Americanization efforts. On the one hand, public distrust and resentment towards immigrants were growing and patterns of ethnic solidarity were being outwardly challenged in the advent of increasing suspicion that Americanization was not occurring. On the other hand, continued immigration and disunity were advantageous to the company economically. The manner in which Calumet and Hecla dealt with this potentially explosive situation is illustrated by a change in their attitudes and actions regarding their role in the social and spatial evolution of a company town.

The 1880s and 1890s were characterized by expansion and growth of mines and residential areas and by liberal control over the direction

of the town's social and spatial evolution. The company more or less accepted or accommodated each different ethnic group socially and spatially. Residential areas were not purposefully segregated or mixed, and each group was given the freedom to establish its own religious and social institutions often with the support of the company (Thurner, 1974). The ethnic churches, self-help societies, newspapers, parochial schools, and clubs that proliferated from the 1870s to well into the 1910s and 1920s may well have acted as "halfway houses between cultures (which) served to educate immigrants into the ways of American culture" (Thurner, 1974, 25). These institutions are frequently interpreted as signs of ethnic cohesion and maintenance, however (Gordon, 1964). Nevertheless, there was no move within Calumet to block the formation of such ethnic institutions for either the groups which arrived in the 1870s and 1880s or those who arrived later in the 1890s and early 1900s. The mines were productive and there was room to accommodate all groups and their social institutions. Any ambivalent feelings towards ethnic institutions and Calumet's great ethnic diversity did not surface until the 1910s and 1920s when "increasing pressures for assimilation and Americanization" forced many ethnic institutions to close (Thurner, 1974, 25).

The laissez faire atmosphere that typified the early social evolution of Calumet shifted during the first decade of the 1900s when, through the efforts of the company, an excellent public library and public school system were built, establishments such as a bathhouse and Y.M.C.A. were erected where members of all ethnic groups would interact, and adult English language classes were initiated (Thurner,

1974; 1978; Sawyer, 1911). Outwardly Calumet and Hecla supported the Americanization movement perhaps in part to minimize the growing schism between the company and disgruntled employees and residents. But there were limits to the extent to which the company would back all factions of the Americanization movement. One example was the banning of a book written by a company doctor in the early 1920s which intimated that some of the racial types in Calumet were undesirable due to genetic imperfection (Clark, 1976). Widespread acceptance of such a notion would have had serious consequences for Calumet and Hecla who wanted to maintain the flow of cheap labor from Europe.

The company's outward efforts to assimilate the immigrant took place in the visible portion of the town's social organization, especially in its institutions. This change represented a departure from their previous attitudes and actions. At the work place, that is, the mines, company attitude was less supportive. Segregation of change houses into separate corners for Italian, Finn, British and Slav and the use of several different languages for signals were maintained (Rickard, 1905, 18). These policies would have had the effect of keeping ethnic groups quite separate and distinctive. They would be interpreted in two ways: as the company's way of complying with group consciousness and intergroup resentments and facilitating work operations or as the company's way of maintaining group differences so that:

If no one could understand anyone else and some could not speak English, then what unity could miners establish to voice their grievances (Turner, 1974, 34).

Either way, Calumet and Hecla's control over the social and spatial organization at the work place effectively held off attempts at

unionization until 1943.

In the neighborhoods Calumet and Hecla's attitudes and actions failed to concur with their move to encourage Americanization. An illustration is apparent in the 1920 and 1930 ethnic residential patterns; certain streets or neighborhoods were becoming increasingly dominated by one group. The initial area of ethnic settlement determined before 1910 had expanded on the extremities and been filled in by 1920 and 1930. Within a spatial context, Calumet and Hecla failed to implement a policy of purposefully mixing new immigrants with the residents of different ethnic groups. Instead areas where the original immigrants were located grew and filled in as other members of the group arrived in later years. This perpetuated ethnic group cohesiveness and accentuated their differences while outwardly supporters of Americanization were appeased by company efforts to assimilate the immigrant.

## CHAPTER VII

### Calumet in Decline: Summary and Conclusion

Travelling through the copper mining district of the Keweenaw Peninsula today, one continually sees remnants of a bygone mining era. The one time prosperous mines drew thousands of immigrants to this rugged peninsula to make their homes in the growing communities--communities which eventually were abandoned and left to decay once the ore was depleted. Like other districts where mining is the major economic activity, the imprint of the enterprise on the landscape is readily apparent. But it is not so widespread, disfiguring, or dominant as it could have been if the copper had been mined in open pits. The features which identify this as a mining area are much more subtle, and they have the tarnish of age: empty, sagging shaft towers with corroded metal roofs; rows of identically built, largely deteriorating timber and tar paper houses; abandoned stone buildings situated in a maze of unused railroad tracks; and, black sandy beaches along the shores of a once active port. All of these recall an important period in the history of the Copper Country that is markedly different from the appearance and economy of the region today.

#### Calumet after 1930

By the beginning of the 1930s significant changes in the demographic, social and spatial organization of Calumet were taking place largely in

accordance with those outlined in the lifecycle model. Foreign immigration had fallen off in the 1920s and Calumet and the adjacent towns of Red Jacket and Laurium were experiencing population decline (Table 3). The Depression had the effect of further encouraging company retrenchment programs that had been initiated some years earlier. Between 1930 and 1960, Calumet and Hecla gradually sold off many of their homes (Thurner, 1974, 104). This feature was also illustrated by the growing numbers of Calumet and Hecla leases for housing that were terminated because the house was sold during this period. Likewise, the company was forced to close down some of the institutions that it had established: the Calumet and Hecla Library was closed in 1944 and the public bath house that Calumet and Hecla built in the early 1900s was closed during the 1930s (Thurner, 1974). These social and spatial features support those outlined for the model.

Mining operations were similarly affected by the economic decline of the Depression and its parallel spatial devolution. In November 1930, Calumet and Hecla was forced to shut down its reclamation operations because the price of copper had fallen so low, and as a consequence, the numbers of working hours were reduced (Robson, 1966). By the 1940s, the company was attempting to diversify its interests; in 1942 Calumet and Hecla purchased the Wolverine Tube Company--a tube fabricating company out of Detroit; and in 1946 it joined with the Harshan Chemical company of Cleveland to manufacture copper chemicals (Robson, 1966). This series of attempts to expand its operations into other interests continued through the 1950s when Calumet and Hecla for a time tried some exploratory drilling of zinc and lead in Wisconsin,

Table 3. Population change in Calumet area: 1930-1970

Location	1930	1940	1950	1960	1970
Calumet township	16033	13362	10283	9192	8271
Red Jacket	1557	1460	1256	1139	1007
Laurium	4916	3929	3211	3058	2868
Calumet	9560	7973	5816	4995	4496

Source: Thurner, 1974.

took over a lumber company, and finally sold out to Universal Oil Products Company in 1968 (Robson, 1966; Thurner, 1974).

Economic decline and disbandment of company property and control affected the social organization of Calumet as well. Unionization in 1943 gave the miners a degree of freedom, and it was about this same time that Thurner (1974, 52) felt "marked one phase of the curtailment of paternalism by Calumet and Hecla." The close of company sponsored public institutions and overall growing community concern over their economic security may have had the effect of stimulating community cooperation. According to one couple who are present residents and business persons in Calumet, ethnic disunity today is not only uncommon but the era of ethnic resentment and suspicion died many years earlier; their "mixed marriage" of Italian and Finnish background in the 1940s or 1950s is one example of declining ethnic solidarity (Giacoletto, 1977).

It should not be assumed that the various ethnic groups in Calumet after 1930 either faded away into the arms of the Americanization movement or were melted together into a distinctly Calumet composite. Spatially and socially signs of ethnicity are evident by ethnic based churches, schools, insurance agencies, and clubs that remain in Calumet today. Remnants of one group's ethnic heritage are easily visible in the townscape; for example, saunas at the back of numerous residences in the Calumet area are a sign of the large Finnish community that came to settle in this area. Each of these features suggests that some degree of ethnic identity is apparent in Calumet today and that the assimilation goal that was prescribed and pressed for by the residents



of Calumet in the 1920s and 1930s, had not been reached by the 1970s.

Immigrant Experience in Michigan's Copper Country: Calumet, Michigan

How well do the generalizations outlined in Chapter I (Figure 2, see p. 7) apply to the situation in the Copper Country between 1840 and 1930? The first objective and generalization was to determine if ethnic residential segregation was characteristic of the company town of Calumet. The residential patterns from 1890 to 1930 illustrate some segregation by ethnic households. Although the strength of these patterns of segregation depends on the unit of observation, it is accurate to state that at the neighborhood scale numerous instances of ethnic residential segregation by street occurred. At the town scale, easily discernable patterns of ethnic residential segregation are less detectable. Most patterns depicting residential segregation at this scale are based on one's position in the company hierarchy rather than by ethnicity.

The second objective was to formulate a descriptive social-spatial lifecycle model of a company town and to compare it to the evolution of Calumet, Michigan. Tested was the generalization that a standard set of social and spatial patterns are visible in the lifecycle of a company town. After examining the demographic, social, and spatial characteristics of the Keweenaw mining frontier and stages in the evolution of Calumet, it was concluded that the lifecycle model portrayed the processes and patterns occurring there. Some deviations from the model appeared, however. For one, Calumet did not evolve as

a company town completely isolated from other independent towns. Red Jacket and Laurium both may have acted as escape valves for discontented employees who wished to live outside company property. Since Calumet and Hecla encouraged private home ownership this may have caused the company to relinquish some of its hold on the spatial evolution of the town's ethnic residential patterns. Even though many families chose to live on noncompany property their lives continued to be affected by company policy and attitude:

You can buy land outright in Red Jacket or Laurium and build the house of your choice, but your independence amounted to little more than a gesture (Murdoch, 1964, 153).

The third and last objective was to examine corporate attitudes and actions and ethnic group perception and behavior. The purpose of this objective was to determine whether any internal or external factors paralleled the social-spatial lifecycle of Calumet. Also assessed was the influence that these factors may have had on the direction of Calumet's social and spatial evolution. This type of analysis provides some insights into the processes generating the social and spatial organization of Calumet's ethnic groups. By examining Calumet's ethnic residential patterns between 1890 and 1930 in light of changing company attitudes and policy, time of immigrant arrival, and ethnic group behavior and perception, it is possible to reconstruct some of the processes that may have directed the observable spatial patterns. From this type of analysis it was determined that spatial pattern alone does not accurately represent the assimilation process. Likewise, explanation based on spatial form may be less than completely satisfying.

Internal situations, external pressures and company goals all affected the form that spatial patterns in Calumet took. Coincidence of construction of new housing and group arrival was one explanation given for ethnic residential patterns prior to 1900. After that point internal and external pressures directed the attitudes and actions of Calumet and Hecla's social and spatial policies; the patterns visible after 1910 tend to affirm this point. Other factors were also important in the social and spatial evolution of Calumet from 1890 to 1930. The individual goals and personality of the company manager, the state of copper in the region at this time, a diverse ethnic community, the rapid influx of immigrants plus their perception of one another and the company, and the growth of adjacent independent communities all had some impact on the social geography of Calumet's social-spatial lifecycle.

Immigrant assimilation in Calumet was probably also affected by internal and external pressures and perceptions and by company social and spatial management. Each ethnic group, as well as the company, had a different impression of what the immigrant experience in a company town should be. These views also changed over time. Any reconstruction of the social and spatial patterns using demographic, social and spatial information and their interpretation must consider individual and company attitudes and aspirations. An analysis needs to consider both the patterns themselves and the underlying processes generating them.

In conclusion, much needs to be learned about the social forces, or process, working in the lifecycle of a company town before final

assessment of ethnic assimilation can be attempted. Spatial form, in terms of ethnic residential congregation or mixing, is just one variable indicating the nature of ethnic group interaction. In a company town the validity of this variable becomes questionable unless simultaneously some information and understanding can be gained about the factors directing the spatial patterning. Since assimilation is a dynamic process, which can be interpreted in various ways, it is doubtful whether a static view of one spatial pattern is a better way to comprehend the processes occurring and expose those generating the patterns. Yet even this may lead to the wrong conclusions if other factors are not considered.

All in all the social-spatial lifecycle of Calumet resembled that portrayed in the model. This suggests that similar processes take place in the evolution of company towns. Company interests and goals are illustrated in the social and spatial organization of the company town. Therefore the social-spatial evolution of company towns may vary according to the personality of the person or persons in charge of decision-making. Since a frontier based company town originates in an isolated region where company control and direction are required to build up the region's economic, social and spatial infrastructure, its social and spatial evolution can be closely monitored by the company. Once the town leaves this stage rigid control over the social and spatial evolution of the town and its residents may be more difficult. Murdoch (1964, 229) points out for the Calumet area:

Despite its isolation and its self-sufficiency, the range had outgrown paternalism. The day of the all-powerful corporation, clucking over its workers as though they were children, was passing...(just) as it had already passed in other industrial centers.

Comparative research of several types of company towns would reveal their common links as well as their differences. It would also provide some useful insights into the ways that social processes are spatially depicted in a closed system such as a company town. If the impact of ethnic behavior and perception, corporate attitudes and interests, and broad social goals can be detected in the spatial patterning of the company town, then it suggests numerous possibilities for explaining and understanding the processes underlying the spatial patterns we see today in other environments. Moreover, if a series of stages or trends can be established for these social and spatial patterns, and the reasons for them can be explained, then it may be possible to predict future processes and patterns. The justification for conducting research of this type in geography is accepting, incorporating, and clearly understanding subjective variables. Ley (1977, 8) states that "to understand a landscape or a locational decision is an invitation to encounter the values and attitudes of the groups who acted in its formation." To do this there is a need for "geographic methodology to become reflexive, encompassing within its paradigm the conduct of man the scientist as well as man the geographic agent" (Ley, 1977, 8).

By purposefully formulating objectives that examine different levels of social reality (Figures 1 and 2), it was necessary to use

various methods. To analyze the ethnic residential patterns of Calumet it may have been more objective, "scientific," to use one of several types of indices that have been devised to describe residential segregation. There are some difficulties in using this methodology. Deciding the size of specific units of observation in a relatively small town such as Calumet, and managing to situate the unit so that some areas did not include stretches of vacant land while others contained only occupied land are both problems. Since the spatial form of Calumet's ethnic groups was only one of the objectives of this research, descriptive analysis of those patterns itself provided some useful results.

The social-spatial lifecycle model was valuable for portraying the expected social and spatial evolution of the company town of Calumet. It was not able, however, to reveal the nature of ethnic assimilation. It did suggest that there may be set processes occurring in the evolution of company towns which can be detected and perhaps applied to the evolution of other types of towns.

Social histories, maps, photographs, lease records and documents are valuable sources of information for geographers attempting to uncover some of the reasons for observed spatial patterns. Also important is an understanding of the historic context of those sources. Interpretation and reconstruction of past landscapes and attitudes requires a great deal of time for indepth investigation taking on values foreign to the observer, and using subjective facts as variables in the research. Since there are few accepted and established methods for conducting research from the phenomenological perspective, there

is some question about the predictability of such research. The value of this perspective no doubt will emerge in the future as scholars incorporate such methodologies into their studies.

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