

THE I HOUSE IN OKLAHOMA: A GEOGRAPHIC
STUDY IN FOLK HOUSE
TYPOLOGY

BY

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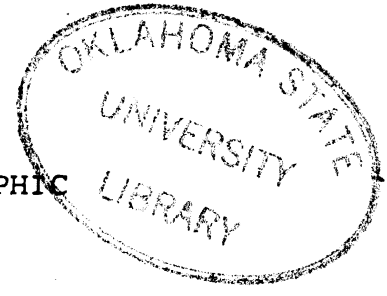
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PREFACE

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CHAPTER I

INTRODUCTION

Cultural geography is the study of spatial variations among cultural groups and the spatial functioning of society. It focuses on describing and analyzing the way cultural phenomena vary or remain constant from one place to another. Folk culture is comprised of people who retain traditional norms. Every folk society produces its own distinctive cultural landscape, and one of the most obvious and visible aspects of the folk landscape is the architecture. The products of folk architecture are derived not from the drafting table of professional architects, but from the collective memory of a traditional people. The buildings, whether dwellings, barns, churches, or mills, are not based on blueprints, but on mental images that change little from generation to generation. Folk buildings are an extension of people and their region. Buildings help provide the unique character or essence of each place and reflect cultural regions, cultural diffusion, and cultural ecology. Cultural ecology consists of the interaction of people with the natural environment. Cultural diffusion is the movement of people and their cultural traits and ideas through space

and time. A cultural region is a definable unit in space, characterized by relative internal homogeneity in regard to certain criteria within its limits.

Folk architecture differs from high-style architecture because high-style is designed by an architect or master builder and follows a set of stylistic rules to produce a rather distinctive, easily recognizable kind of building. Recent field investigations by folklorists and cultural geographers demonstrate that early settlement patterns in much of the eastern United States are reflected in the older buildings of major folk regions (Montell and Morse, 1976). For people in most cultures, Lewis (1975) explains that a house is the single most important thing they ever own or buy. Houses serve the most pressing need of settlers which is for shelter, but also reflect the ideas of the people who build them, the availability of construction material, and the local natural environment.

The product of folk architecture is a basic expression of unspoken cultural values and comes from the collective memory of people (Jordan, 1978). If people migrate to a new land, they carry their preferred house types with them, often as conscious reminders of their homeland (Lewis, 1975). According to Kniffen (1963), no observable feature is more readily diagnostic of cultural background than the types of folk architecture that dominate different regions of a country.

The I house is one of the most persistent folk house types in America in both chronological and spatial terms (Carney, 1986). The I house was first recognized in Indiana in 1930 as constituting a link with the Middle Atlantic cultural source area (Kniffen, 1965). Its spatial distribution is widespread across the United States. The I house originated in the Chesapeake Bay-Delaware Valley region (Noble, 1985) and diffused across the Upland South, the northern Tidewater South, the Midwest, and the Great Plains (Carney, 1986). All I houses have the same basic floor plan: two full stories, one-room deep, 2-3 rooms wide, and side facing gables, but features of the I house vary from region to region. The one room cottage is the basic building unit of the Pennsylvania folk house series, just as it is the core of the New England and log house series (Pillsbury and Kardos, 1980). As materials became more plentiful, these simple houses were enlarged by adding another full floor, making the house two floors high. This became known as the "one-over-one" (Pillsbury and Kardos, 1980). As families grew and building materials became more available, the one-over-one was expanded by the construction of a mirror image wing at one side, thus creating an I house.

The I house varies in construction material from brick and stone to frame and logs. Chimneys may be central, inside end, outside end, or paired on the ridge,

with regional dominance of specific practices. The floor plan is highly variable. Lateral and rear appendages, front and rear porches, galleries, and even classical columns appear in great variety (Kniffen, 1965). Because of the variation in origins of the I house styles, it can be used as an indicator of the origins of the historical settlers within Oklahoma.

The term "I" is one of the few used house names which was not logically derived on the basis of tradition or form. (Pillsbury and Kardos, 1980). The I house was first named in 1936 by Fred Kniffen in recognition of Indiana, Illinois, or Iowa origin of many of its builders (Kniffen, 1965). Kniffen (1965) writes that the "I" seems to be an appropriate symbol in view of the tall, shallow house form it designated. The I house is termed the "Farmer's Mansion" because it represents the fine houses built by prosperous and ambitious farmers, some of whom were slaveholders (Marshall, 1981). Many of the farmers were able to erect fine I houses as their first dwellings. Rather than build and use a temporary house, early settlers preferred to make do with canvas wall tents pitched against mover wagons until a proper house, an I house, could be finished (Marshall, 1981). Early in its movement southward, the I house became symbolic of economic attainment by agriculturalists and remains so associated (Kniffen, 1965).

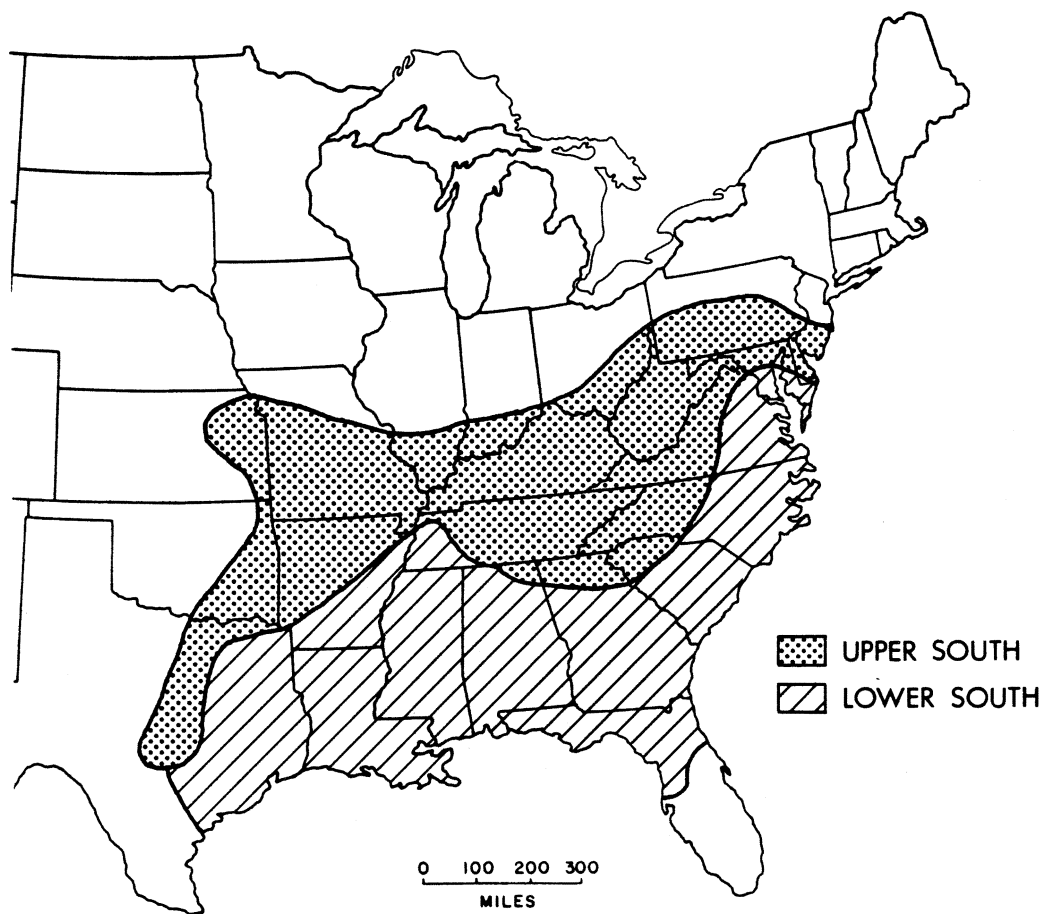
Justification and Need for Study

Houses can be useful factors in the analysis of the cultural landscape because they are found in all places where people lived (Rickert, 1967). To the cultural geographer, single family folk residences can be an important source of information because they indicate general cultural diffusion patterns and culture regions in the country (Shortridge, 1980). Kniffen (1965) indicates that there is a strong element of urgency in dealing with folk housing, for it is largely unchronicled. Its overwhelmingly wood composition makes it highly vulnerable to destructive forces, leaving behind little record of its character. Zelinsky explains in his 1951 paper that the inventory of the cultural landscape of our country is still highly incomplete. The systematic surveys of the distribution of particular types of folk structures are limited in number and incomplete in terms of areas covered (Bastian, 1977). Therefore, more studies of folk house types are needed in order to analyze cultural regions, cultural diffusion, and cultural ecology of the United States.

A model of folk architectural diffusion is illustrated for the eastern United States (Kniffen, 1965; Glassie, 1968; Lewis, 1975). This model identifies the distribution of folk building forms and methods of construction by describing source areas, paths of

diffusion, and regions of distinctive folk architecture. Bastian (1977) claims that this model requires testing, especially in the Midwest and the South. In his 1977 study, Bastian tests the reliability of the model by means of a survey of the rural folk architecture of Indiana. The model proves inadequate to provide a true description of the pattern of distribution for I houses in that area. These culture regions are specifically studied in the general patterns of diffusion from the eastern United States hearths. This study determines if the Kniffen-Lewis-Glassie model retains validity for Oklahoma by using the I house types as an index.

In determining where Oklahoma fits into the culture region mosaic of the United States, one must examine the various culture regions map that have been produced. Culture region maps for the continental United States were developed in different studies by scholars such as Zelinsky (1973), Gastil (1975), Roark (1979), Doran (1974), and Jordan and Rowntree (1986). In order to delineate the cultural regions, a variable number of factors were used in each study. House type was just one of the many factors considered. Kniffen (1965), Glassie (1968), and Lewis (1975) used house types as their only factor in the making of their folk architectural diffusion model. Jordan (1967) divided South into Upper and Lower regions based on census data (Figure 1). Kniffen and Glassie used folk house types in their interpretation of



Source: T. Jordan, "The Imprint of the Upper and Lower South on Mid-Nineteenth-Century Texas," Annals of the Association of American Geographers (1967).

Figure 1. Upper and Lower South

the Upper and Lower South division. Roark (1979) and Doran (1974) did not divide the South into upper and lower regions, instead they identified it as one region called "Southern."

Problem Statement and Hypotheses

This study focuses on the following questions:

- 1) What is the distribution of I house types within Oklahoma?
- 2) What I house type is most prevalent in Oklahoma?
- 3) What is the relationship between the distribution of I houses in Oklahoma and the cultural area maps of Oklahoma done by Zelinsky, Roark, Gastil, Doran, and Jordan and Rowntree?
- 4) How reliable is the Kniffen-Lewis-Glassie model of architectural diffusion within Oklahoma?
- 5) What is the relationship between I house types and the natural environment of Oklahoma?

The purpose of this research is to identify the regions within Oklahoma where each I house type is prominent and compare these findings with the historical settlement of Oklahoma and also with the Kniffen-Lewis Glassie model of architectural diffusion of the United States. The primary hypotheses evaluated within this study are:

1) The types of I houses found in Oklahoma follow the pattern illustrated by one of the cultural maps of Oklahoma shown by Zelinsky (1973), Gastil (1975), Doran (1974), Roark (1979), or Jordan and Rowntree (1986). There are three defined cultural hearths for folk architecture: New England, the Middle Atlantic, and the lower Chesapeake. As settlers migrated from these areas into Oklahoma, they brought their ideas for I houses which differ according to each source area. New England characteristics were transported by the northern settlers who came to settle in the northern area of Oklahoma. Middle Atlantic qualities diffused to the Upper South and were carried by settlers into eastern Oklahoma. The southern area of Oklahoma was settled by people from the Lower South who came from the lower Chesapeake source area.

2) The Kniffen-Lewis-Glassie folk architectural model is not reliable in its assessment of the diffusion of the I house types within Oklahoma. The boundaries of the folk architectural zones of diffusion using this model are not shown in Oklahoma. In the literature, all maps illustrating the Kniffen-Lewis-Glassie folk architectural zones start along the eastern seaboard of the United States and end in a north-south line along the eastern borders of Wisconsin, Illinois, and Louisiana. In this study, the I house is used as an index to test the architectural model within Oklahoma even though the zones

terminate before they reach Oklahoma. This test includes mapping the distribution of Oklahoma I houses and identifying the dominant I house type within each area. These results are then compared to the Kniffen-Lewis-Glassie maps of folk architectural diffusion in order to find any similarities or differences.

3) The most prevalent I house type in Oklahoma is the Virginia I. Since Oklahoma is located in the Southern area of the continental United States, the Middle Atlantic source area will be the most influential for I house types. To be more specific, most Oklahoma I house types will be those that diffused west through the Upper South into the state. The Virginia I follows this diffusion route from the Middle Atlantic source area, through the Upper South, and then into Oklahoma.

4) The natural environment of Oklahoma has some influence on the types of I houses located within the state. Southern characteristics such as end chimneys, floors raised above the ground, and the presence of porches are common on the Oklahoma I houses. These folk house qualities reflect the warm, moist climate of the South.

Definition of Terms

There are many terms used when alluding to folk housing which are unique to that field. A standardized

nomenclature has not been achieved for folk architectural terms and many terms are virtually interchangeable or have more than one usage (Newton, 1975). To prevent any confusion or misunderstanding of the terms used within the text of this study, the following terms are defined: I house (general definition), Pennsylvanian I, Virginia I, Hill Plantation I, Carolina I, Midwest I, and subtypes I, II, III, and IV.

I House (general) - All I houses, regardless of their facade or decoration, have certain basic floor plans and form characteristics: side-facing gables, one-room depth, 2-3 rooms wide, and two full stories in elevation (Noble, 1985). Construction material is generally of timber, but they may also be built of brick, log, or stone. The average size may be taken as sixteen to twenty-four feet deep by twenty-eight to forty feet wide by twenty to twenty-four feet in height (Noble, 1985). The interior's shape follows the basic floor plan, but it can be divided into rooms in different ways. Several variations could be made to the basic I house plan, to suit personal desires for more space, more rooms, or a certain preference for the location of the chimney. The porch, if the house had one, and the facade windows were the primary features in the identification of an I house type. Photographs of each type are shown in Appendix B.

Pennsylvania I - The early Pennsylvania I usually had four windows in the second floor, and either one or two

doors in the front (Pillsbury and Kardos, 1980). This presented an unbalanced look so the newer houses were corrected by lengthening the facade to make room for a fifth window in the second floor, thereby making the house look balanced. A single front door was usually located in the center. This symmetry was attained inside by adding a central staircase in the hallway (Figure 2).

Virginia I - The Virginia I house is basically quite similar to the Pennsylvania I, except for peculiarities in regional construction. Basic differences in construction includes the use of frame construction, use of end or paired Georgian chimneys, and elevation of the house off the ground (Pillsbury and Kardos, 1980). The Virginia I has three windows along the upper floor facade, instead of five like the Pennsylvania I. The Virginia I also tends to be more linear than the Pennsylvania I (Figure 3).

Hill Plantation I House - These contain the general I house plan along with end chimneys, generally outside the walls, usually a two-story gallery across the front, and a two-story shed across the rear (Figure 4). These may be raised above the ground one to three feet (Newton, 1971).

Carolina I House - These have basically the same traits as the Hill Plantation I house (Figure 5). The exception is that this version always has a one-story gallery across the front and a one-story shed across the back (Newton, 1971).

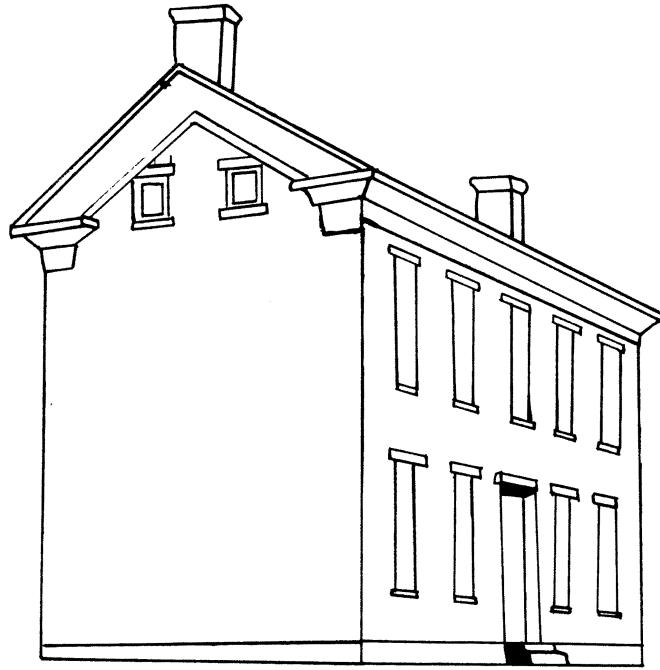


Figure 2. Pennsylvania I House

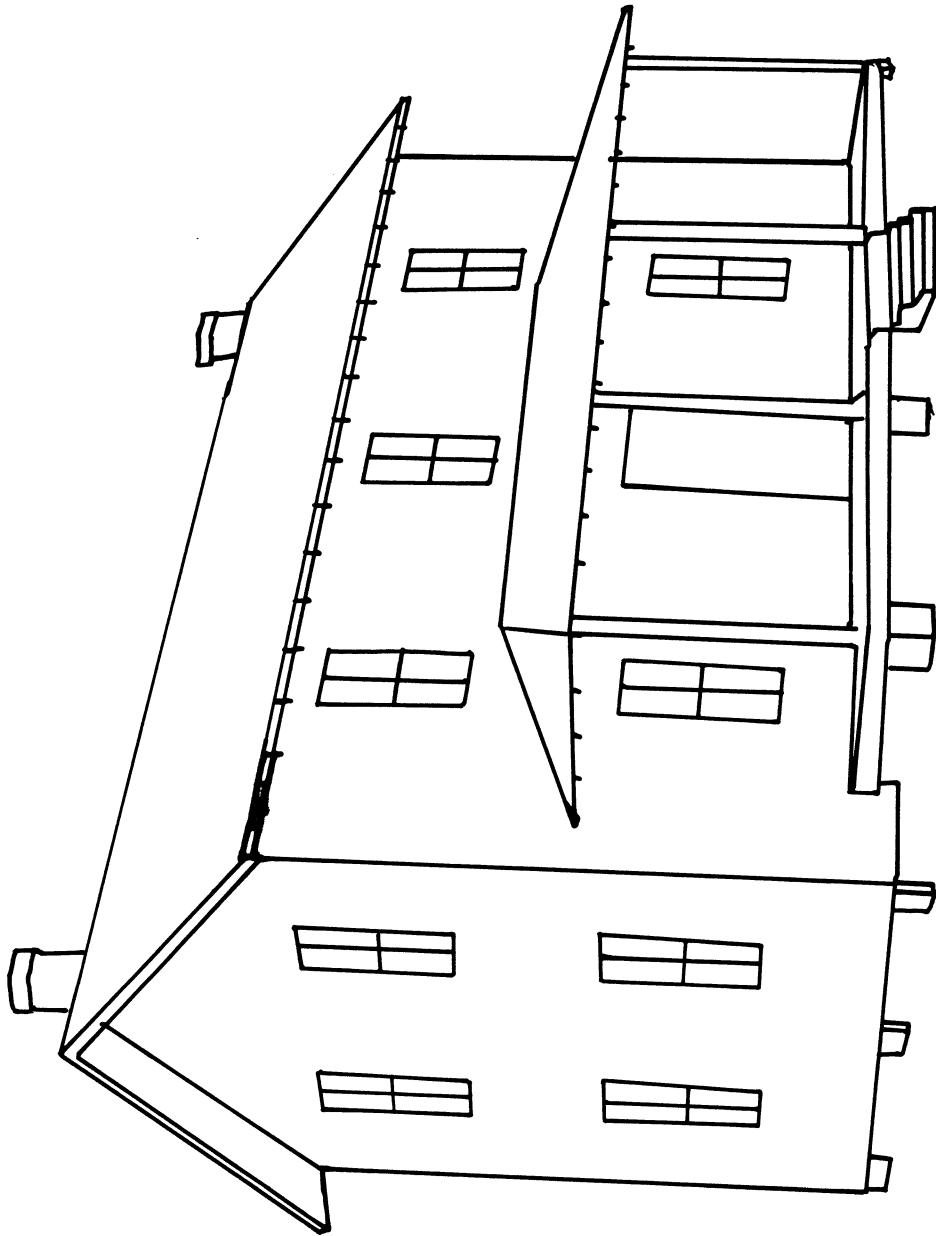


Figure 3. Virginia I House

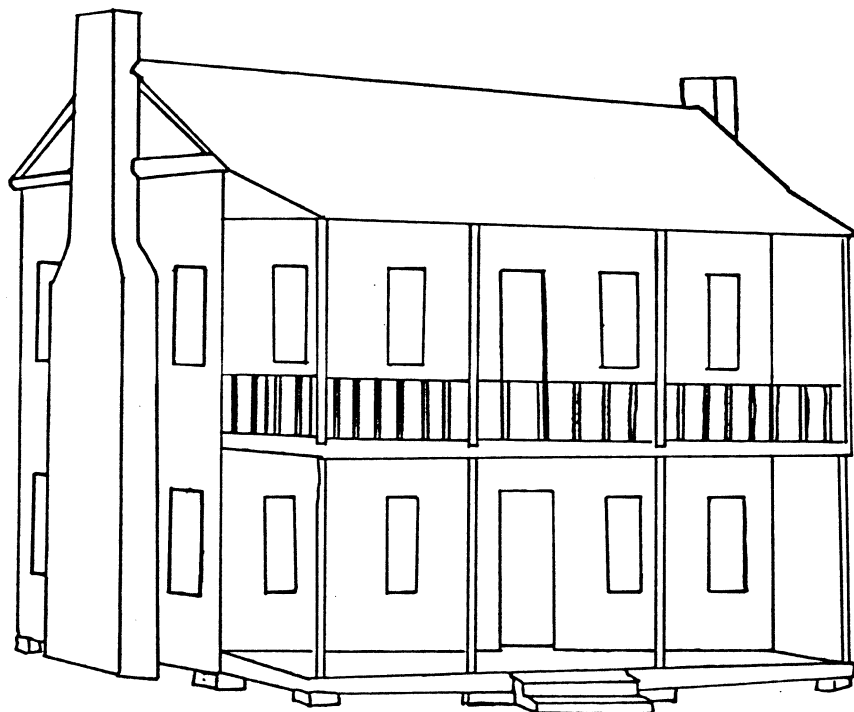


Figure 4. Hill Plantation I House

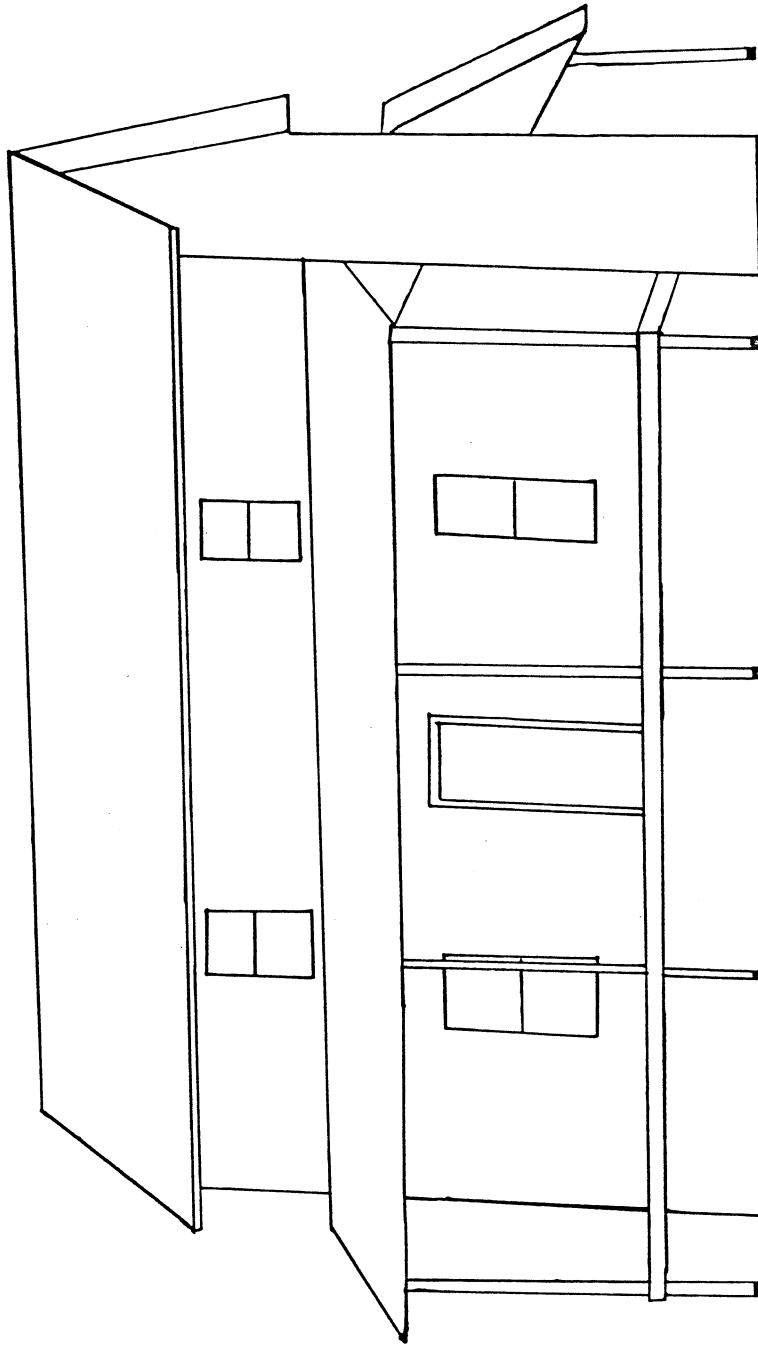


Figure 5. Carolina I House

Midwest I House - This type is quite plain, usually lacking the superficial trim and the porch (Figure 6). If there is a porch, it is a small projection over the door. Rear sheds are generally lacking (Newton, 1971).

All I houses can also be divided into separate subtypes which Noble (1985) defines as Subtypes I, II, III, and IV (Figure 7).

Subtype I - This type possesses a floor plan of two equal sized rooms separated by a central hallway. Each room is heated by gable-positioned hearths enclosed within the house walls. The facade usually contains three openings in a balanced composition, although windows in the gable ends are typically off center (Noble, 1985).

Subtype II - This type is similar to subtype I except that the placement of chimneys and hearths are located on either side of the central stairs and the gable windows are usually centered. A small gable is often centered in the facade (Noble, 1985).

Subtype III - This type does not possess a central hallway and the two rooms are of unequal size. The gable chimneys are located outside the walls, three to five openings are typical, and the facade is not always symmetrically arranged. A long, one-story verandah usually masks the facade. This house type with the verandah may be referred to as a Shenandoah house.

Subtype IV - This type has a simple arrangement with only a single chimney in the middle of the structure. The

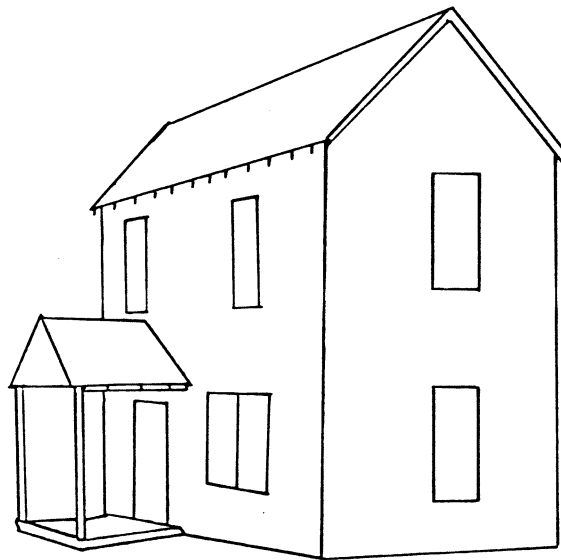
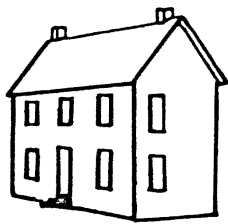
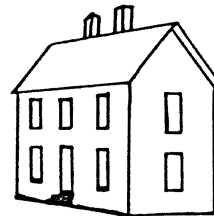


Figure 6. Midwest I House



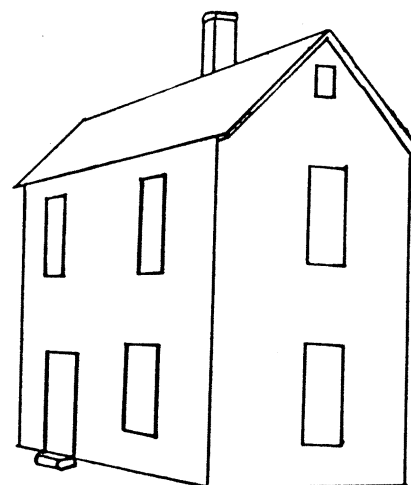
Subtype I



Subtype II



Subtype III



Subtype IV

Source: A. Noble, Wood, Brick, and Stone (1985).

Figure 7. I House Subtypes

facade is generally unbalanced with two to three openings per floor and the front door is set in a plain frame which opens into a small hallway in the front of the chimney (Noble, 1985).

Scope

This study includes only I houses and no other house types. The study area covers the state of Oklahoma, but trying to find every I house within the state is not feasible due to lack of time and money. The chances of finding every I house is extremely slim, if not impossible. In order to determine what types of I houses are found in different sections of the state, seven towns were selected that are distributed with an areal coverage of the northeast, north-central, northwest, southeast, south-central, and southwest. These towns are Altus, Woodward, Stillwater, Miami, Poteau, McAlester, and Durant (Figure 8).

At the time of Oklahoma's statehood in 1907, the population in these towns ranged from 1,726 in Poteau to 8,144 in McAlester and were still growing (Table I). All of the towns are currently within the population size of 7,000 - 39,000. This population size was selected because if the city is too small and mainly from a non-farm origin, there may not be any I houses. Older house types may have been razed in order to make land available for newer buildings.

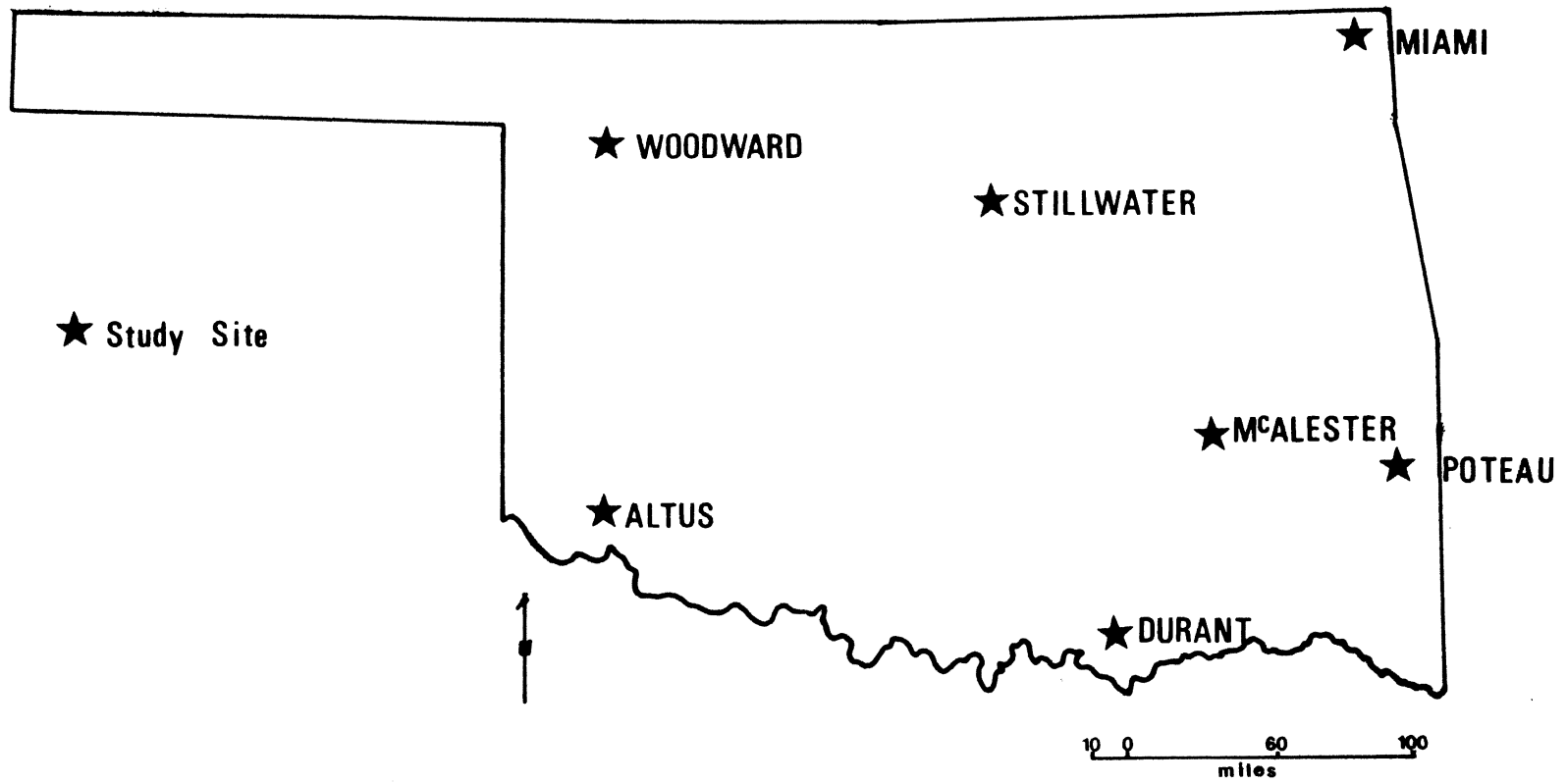


Figure 8. I House Study Sites

TABLE I
POPULATION OF STUDY SITES
1900 - 1910

CITY	1900	1907	1910
ALTUS	--	1927	4821
DURANT	2069	4510	5330
MCALESTER	4125	8144	12954
MIAMI	1527	1893	2907
POTEAU	1182	1726	1830
STILLWATER	2431	2577	3444
WOODWARD	--	2018	2696

I houses within the present day city limits of these towns were located by doing a reconnaissance survey. This study included only I houses that exist now. When each of the cities within the study were surveyed, the results of each city were compared to each other and also to the cultural area maps of Oklahoma. The Kniffen-Lewis-Glassie model was tested to determine if Oklahoma I houses fit its framework.

CHAPTER II

LITERATURE REVIEW

Folk Architecture

Folk architecture is largely a relict form in the cultural landscape of the United States. Many folk dwellings survived in the landscape, reminders of the rich American legacy in folk architecture. One way to classify folk houses was by the type of building material used in construction. Environmental conditions, particularly climate, vegetation, and the type of building material locally available, strongly influenced the choice of construction material. Folk houses, as a rule, were beautifully suited to their environment. Centuries of trial and error taught their builders how to construct dwellings that provided comfort and protection from the extremes and hazards of local weather. Material composition, floor plan, and layout were all important ingredients of folk architecture, but there were numerous other characteristics that were used to classify farmsteads and dwellings. The form or shape of the roof, the placement of the chimney, and even such details as the number and location of doors could be important classifying criteria.

Folk architecture was generally defined as having traditional construction techniques. A folk house was built by someone who carries a learned model of the way houses should look when finished; the construction techniques for such a house have been taught to him by a neighbor or a parent (Baird and Shaddox, 1981).

Upton (1986) wrote that folk architecture was regional architecture. Local builders would take new ideas into account but were not overwhelmed by them. The builders incorporated new ideas into the traditional design.

Folk architecture can be evidence of human behavior. Diffusion of the folk architecture was a cultural process as shown by intermixing of building elements from different identifiable hearths. Candee (1975) stated that the early Appalachian settlers erected their buildings in such a way as to copy, as nearly as possible, the familiar features of their previously settled existence.

It was difficult to do precision dating of folk architecture. The American landscape was dominated by folk buildings, so the first thing to do was to know what existed. Glassie claimed that the behavior of people was not determined by their environment, tradition or national taste. Instead, people interacted with their environment to materialize their concepts. They also accepted new ideas, made decisions, and selected and creatively adapted their architecture. American architecture was the

materialization of the American identity and the particular tensions that characterized our national being.

Folk designers were no less creative than contemporary designers; they just created differently. It was distinguished from modern design process because it was a nonliterary method of design that stored its complex traditions, not in drawings, but in the minds of its builders. Folk designers operated in a narrow, culturally defined field of possibility that was structured by tradition (Hubka, 1986). There were advantages of having a narrow field of method design, for example, problems were small and manageable, but not insignificant. There could be a significant degree of individual interpretation and variety of design.

Folk buildings were constructed according to local custom to meet the personal requirements of the individuals for whom they were intended (Carson, 1974). Carson (1974) also claimed the buildings took the form that best served their owner's occupations and household habits. Through time, fewer customs usually predominated because they were better suited or more adaptable than the rest.

Barley (1961) claimed that the movement of ideas in folk architecture was a complex interplay of tradition, social pretension, and practical considerations. The use of folk features was not ended by the advent of machinery and the application of mass production methods to building

construction. It was impossible to date the disappearance of the folk tradition, but it occurred gradually as buildings were no longer a current reflection of family life and working habits (Barley, 1961).

English house-types came to colonial America, partly because most colonists came from different parts of England (Lewis, 1975). By 1790, as American settlers moved west, there were three well defined cultural source areas on the Atlantic seaboard: New England; the Middle Atlantic, centering on southeastern Pennsylvania; and the lower Chesapeake, centering on Tidewater Virginia (Kniffen, 1963; Glassie, 1968; Lewis, 1975; Jordan and Rowntree, 1986). Pillsbury and Kardos (1980) explained that because each housing form was in reality an idea, the distribution of folk housing forms followed the same rules of movement as any other idea.

Settlers tried to reproduce familiar features, such as their house, in unfamiliar territory (Rees and Tracie, 1978). The English origin of most of the houses of early American colonies was so well-known that the buildings derived from other national groups were apt to be disregarded (Miller, 1928). The Dutch and the Swedes left their native contributions in New York and Delaware, and the Germans colonists had characteristic buildings in Pennsylvania (Miller, 1928). During the post-Revolutionary period, Pennsylvania farmhouses were originally simple, rectangular buildings with single

openings (Embury, 1911). The marked features of variance from the English prototype arose mainly from the different materials employed and the extensive use of porches and verandahs which in England were practically non-existent.

Agriculture in the United States is characterized by individual farms with the focal point being the homestead with its single-family dwelling. Trewartha (1948) stated that nearly one percent of the still existing farm houses are of log construction indicates that the pioneer period is not so far in the past.

In the United States, major and minor house styles were associated with separate construction areas. Bastian (1980) stated that generally, but not always, styles spread across the United States in a hierarchical manner which meant at first the new style would spread between larger cities, but as time passed it would be adopted by smaller communities. Three variables pertinent to hierarchical diffusion were distance from the source, population of each community, and rate of population change in each community (Bastian, 1980). Population size and rate of growth combined was an indicator of the demand of new house construction. Bastian (1980) explained that house styles were also spread by means of fragmentary fields of communication which, in other words, means one person telling or showing another.

Very little scholarly study has been done of variations in house styles west of the Mississippi, nor

studies of current variation of styles (Gastil, 1975). House styles varied widely in the West and some variation could be due to the difference in climate and soil conditions or the availability of materials. One reason that there could be a focus on the study of farmhouses is their abundance in North America. For many years, farming was the leading occupation in the United States (Kauffman, 1975).

Gastil (1975) also discussed the three centers of diffusion. As house styles became dominate in each area they tended to diffuse West or Southwest during their period of dominance. New Englanders developed clapboarding or siding at an early date rather than using log structures. In the Middle Atlantic region, log construction was used on the frontier, but more developed farmhouses were often of brick or stone. The Tidewater South of Lower Chesapeake Bay origin had a frame and half-timbering tradition which commonly had a covered front porch (Gastil, 1975). Brick was a favored material for the plantation houses of the South. One reason for the use of brick was the availability of local clay for brick making.

Many settlers were too busy battling for survival than planning elaborate architecture. In the eighteenth-century, a house was more likely designed to be representative of a certain social group, not so much for an individual. It was not until the 1820's that settlers

discovered that a house might be created for an individual instead of a group (Andrews, 1978).

Settlement patterns, as reflected by building types, were spread by the process of cultural diffusion (Rickert, 1967). Kniffen (1979) explained that the I house was an easy detector and it was possible to examine the architectural type to discover the cultural ancestry of any given part of the country. Change of the cultural landscape was discussed by Jackson (1972), while West (1976), Denny (1983), and Hugil (1980) explained that original house types in America have changed through time. According to Jordan and Rowntree (1986), changes occurred because of time and distance decay from their source areas on the eastern seaboard, westward across the United States.

Folk House Types

The New England folk house types were of wooden frame construction. Among the oldest of New England types, dating to colonial times, was the "Large" house, a dwelling of two-and-a-half stories built around a central chimney. An addition to the rear of the New England large produced the "Saltbox" house. Other New England homes were the "Cape Cod" and the "Upright and Wing."

Lowland Southern folk houses were generally of wooden frame construction, but differed from the New England in

their much smaller size, addition of front porches, and high foundations, all of which resulted from a warmer climate. Examples of the Lowland Southern houses were the Tidewater raised cottage, the "dogtrot" house, Louisiana "Creole" house, and the "shotgun" house.

The most distinguishing trait of the Middle Atlantic folk architecture was log construction. The simplest folk house of the Middle Atlantic was the single-pen log house, or the one-room dwelling. The addition of a second log room to the chimney end of a single-pen house formed the "saddlebag" house. Other Middle Atlantic folk houses included the "Cumberland" house and the "I" house.

Building Materials of Folk Houses

Folk buildings grew out of very humble beginnings and building materials varied from region to region based on their availability. The first structures built with any degree of permanency were log cabins. The earliest English colonists of Virginia and Massachusetts did not live in log houses because in Europe, the log house was native to Scandinavia, Russia, Switzerland, and parts of Germany. It was introduced to the New World by the Swedes who settled along the Delaware River in 1638 (Lancaster, 1961). It was readily constructed from indigenous materials, trees that had to be removed in clearing the land for cultivation, loose surface rock and mud for

closing any gaps. Only in the Upland South was log construction the accepted practice. A log house can be identified by its material, method of construction, and function (Zelinsky, 1953). In a climate where frame, stucco, and brick structures rapidly deteriorated, well-seasoned logs of a good log house would endure.

By 1800, people living in log houses began to have them covered with siding of shiplapped boards and painted which provided protection from the weather. With the accessibility of clapboards, houses no longer needed to have walls of solid timber. Weatherboarding the outside of the walls increased as more sawed lumber became available. Changes in the architecture of the log house were gradual which made dating them difficult. After learning the craft from Pennsylvania Germans, English frontiersmen spread it rapidly westward and southwestward. Zelinsky (1953) also wrote that the incidence of log houses in a given locality seemed to be inversely proportionate to the tempo of traffic in people, goods, and ideas.

Timber was in great abundance for building houses in Louisiana. In the timber industry, the native population provided the bulk of the labor force and most of the jobs needed little training (Stokes, 1957). The timber industry became large because of the high demand and easy logging conditions. Numerous wood company houses were built and in some cases, the house type was dictated by

custom. Some of the basic house types found in Louisiana reflected the routes along which they entered Louisiana. For example, the bungalow was built by southern Louisiana farmers and carried northward and the shotgun house was introduced by lumber companies in northern Louisiana and French farmers in the South (Stokes, 1957).

Building materials which were commonly used in Europe declined in importance as the frontier moved westward from the timber-rich eastern United States between 1790 and 1850. New Englanders built with wood, and the stone construction of eastern Pennsylvania and the brick of Tidewater Virginia disappeared rapidly away from these nuclear areas. Techniques of wood construction were modified in the United States, but their European ancestry was certain. Framing was so old in Europe that it became the dominant method of building in the English settlements (Kniffen and Glassie, 1968).

Many of the older folk houses have survived because frames were built of very heavy timbers. Balloon framing was devised in 1830 (Kniffen and Glassie, 1968). It consisted of using much smaller and lighter timbers set closely together. Half-timbering was common in the early seaboard settlements, but the timbers were frequently covered with siding because of the abundance of cheap wood. The most common method of construction, especially in the Upland South, was construction in which the individual members were placed horizontally, close

together, and one above the other (Kniffen and Glassie, 1968).

In Kentucky, quarried limestone was obtained around Lexington from very early times for use in foundations, stoops, copings, chimney caps, date corbels, and modified keystones. The limestone was also used for outside steps and window sills, where a material more permanent than wood was desired. Introduction of improved tools made possible more and better work in housebuilding and detailing.

One medieval type of architecture known in earliest Virginia was timber-framing. Forman (1948) defines timber framing as where posts, studs, and sills were tied together with wooden pegs. Wattle-and-daubing was not used extensively because the interior of the house would be too hot in the summer. By 1611, several other types of insulation or coverings were used, for example, brick nogging, plaster, shingle tiles, or weatherboard. Southerners usually built the kitchen as a separate building, but this was a very inconvenient arrangement since the food had to be carried outdoors. One theory of explaining this phenomenon was stated by Forman (1948) who said that slaves should be kept at a distance.

In folk housing, the owner was often the designer and builder. The materials for folk houses were native, for example, beams were hewn and boards sawed from trees that grew on the site. Often the owners would have their own

clay-pits so bricks were made locally. The individuality and versatility of the workman would be shown in the differences in the shape of the mouldings which created much of the charm of the buildings. In Vermont, the forests were a hindrance to the pioneers because no farming could be done until the land was cleared. Log cabins were a result of the clearing of the forests, but the ambitious farmers replaced them with a sturdier frame house. Few log cabins are left in Vermont because the bottom logs tend to rot and cause the entire structure to collapse. Congdon (1940) also stated that the relationship of length, breadth and height of the main mass, the careful proportioning and placing of the door and window openings, were matters of thoughtful study, not chance. Chimneys built entirely within the ends of the houses created bulky projections into the rooms.

Masonry houses were not as numerous in heavily forested areas such as Vermont because laying brick or stone was more of a specialized craft than woodworking in a countryman's life (Congdon, 1940). In brick houses, the brick was bonded or laid in the wall, so the different rows or courses were tied together in order that the wall need not depend on the adhesion of the mortar for its solidity. Older houses were generally laid in Flemish bond. Brick structures have been unjustly ignored as indicators of cultural change and cultural diffusion (Trindell, 1968). In the seventeenth-century, brick

production was thought to be of little consequence and bricks too scarce for use as a building material except in chimneys or perhaps a foundation. Several major colonial towns of the Atlantic seaboard became noted for their brick architecture and eventually extended to areas adjacent to the Middle Colonies. The brickwork usually had ornate patterning with the English bond and the Flemish bond most common. West New Jersey builders would plaster over brick perhaps to imitate stone or keep out the cold and dampness (Trindell, 1968).

The I House as Folk Architecture

The I house was a folk house type that was brought into America when the colonies were established. It originated in the Chesapeake Bay-Delaware Valley region and diffused across the Upland South, the northern Tidewater South, the Midwest, and the Great Plains. Because of the variation in types, the I house can be used as an indicator of the origins of the people who built it.

The local availability of building materials as well as the building traditions imported by the earliest settlers of an area resulted in strong contrasts in the structure and form of folk houses from region to region (McAlester, 1984). The three major source areas of the I house had differing climatic extremes, therefore, when the I house diffused further west and southwest, the materials

and facades changed as a response to the physical environment.

In New Jersey, the first settlers to arrive were usually in their late twenties or thirties, with young families (Gowans, 1986). They would erect modest shelters out of whatever materials were available. The only other building consisted of additions or enlargements to their first shelters. In southern New Jersey, I houses were typically made of brick and glazed headers worked into elaborate diamond and zigzag patterns and into date and initials- a mode of decoration that was common in Tudor England and occasionally along the southern Atlantic coast (Glassie, 1986). The I house concept underwent expansion through various kinds of shed and ell additions to the rear. The I houses flourished with patterned-brick end walls during the 1700's, but by the late nineteenth century the patterned-bricked house of south Jersey had been forgotten (Gowans, 1986). The appeal of the I house was its consistent set of proportions and living space. According to Gowans (1986), the I house was a primordial image of "rightness." This broader and more universal kind of symbolism carried the I house across the country, subsuming local folk styles like the south Jersey types, or merging with high style architecture like the Georgian or Greek Revival (Gowans, 1986). As long as there were new landed families, the I house continued to be built.

I houses built in the Delaware Valley were studied by Henry Glassie (1986). In some cases, the I houses had two front doors with one of them leading into the kitchen. Another front door led to the parlor and was rarely used. The second door was an attempt for symmetrical arrangement on the facade. Large central chimneys were replaced by chimneys in the gables. I houses were frequently stuccoed in the Delaware River area. Glassie (1986) explained that the people were willing to disguise the exterior of the house so as to be accepted into the community, but they would not change the arrangement of the rooms or their proportions.

In New England, the central chimney form was most common; in the Chesapeake Bay area, west British external chimneys were most characteristic (Glassie, 1986). In the Mid-Atlantic area, the chimneys were built within each gable wall. The New England tradition was to build linear-plan houses with heavy timber frames covered with boards or shingles. Wooden clapboard was most common since the glacial boulders of New England were hard to handle, and brick clay in that glacial country was unreliable (Lewis, 1975). Most of the Mid-Atlantic I houses were frame, although those on the region's frontier were log. Wood was plentiful for building. The I houses in the area were better adapted to severe and confining winters. The early Pennsylvania I usually had four windows on the second floor, and either one or two doors

on the front (Pillsbury and Kardos, 1980). This presented an unbalanced look so the newer houses were corrected by lengthening the facade to make room for a fifth window on the second floor, thereby making the house look balanced. The introduction of the Georgian form with the I house in the Delaware Valley also resulted in the standard five opening facade. A single front door was usually located in the center along with a central staircase which separated rooms of similar size. The Pennsylvania I commonly had a great central chimney with fireplaces located on both stories. This was the major source of interior heating. The Northern I house types were larger than the Southern I house types because interior space was needed for large families and long winters. The gables of early I houses were normally blank, though an off-center window per floor became common on later Pennsylvania houses (Glassie, 1986). Two windows were often on each floor throughout southern New Jersey and the Maryland eastern shore. Row houses were common in Baltimore, Philadelphia, and Boston. Windows were impossible on the sides of a row house unless one wanted to look at the blank walls of neighbors' houses (Lewis, 1975). Front porches were not common in crowded centers of the older towns because doors opened immediately to the street and there was no space for them.

Middle Atlantic styles developed in the vicinity of Philadelphia and expanded over a very large region to the

west and south. At their farthest expanse, Middle Atlantic derivatives dominated an area from central Indiana to central Alabama (Gastil, 1975). The difficulties of adding on to a log house had a great deal to do with determining the original design. While there was much mixture of styles in the West, a version of the Middle Atlantic I house became characteristic of nineteenth-century Morman housing. As log construction was used on the frontier, more developed farmhouses were often of brick or stone as opposed to the New England use of wood. Although there was a mixture along the Middle Atlantic Southern border around Chesapeake Bay, the line between Tidewater and Upland South (Middle Atlantic tradition), and between frame and log structure, was generally sharp (Gastil, 1975).

The Tidewater South tradition was also the linear plan, but in contrast to the Northern colonies, the buildings were constructed with brick masonry because of an abundance of brick clay. Massive timber-frame construction, like that in the Northern colonies, was also used in the South and these early wood-frame houses were commonly modest folk dwellings (McAlester, 1984). The Southern I houses were more linear than in the Northern colonies because of the milder climate and the fact that people were able to spend more time outdoors. Porches were a Southern phenomenon that were common throughout the Middle Atlantic and Tidewater zones. The covered front

area allowed people to sit outside during warm evenings and also to help keep the people dry when it rained. The full-width front porch was sometimes an addition, but more often an integral part of the house (Lewis, 1975).

Another room could be added by enclosing a portion of the front porch, but it was not commonly done because it blocked off some of the breezes which cooled the front porch and the house. Kitchens were usually found as an addition which made the house "T" or "L" shaped. There were two main advantages to having the kitchen away from the main part of the house. One of these was that it removed the unwanted heat from the interior of the house and the second advantage was that if a fire occurred, it would hopefully be extinguished before the main part of the house burned. Cross ventilation would be provided by a small window on each side of the kitchen. Gable end chimneys, or paired chimneys, were also used instead of the central chimney so that heat was not concentrated in the interior of the house. Southern houses were commonly built on stilts and kept off the ground. This helped prevent flooding and also lessened the instances of the floor rotting out due to the moisture between the floor and the ground. Having the house off the ground also provided ventilation for the long, hot summers.

The Southern region is divided into two architectural zones: the Upland South, also referred to as the Upper South, and the Lowland South, also referred to as the

Lower South. The Upper South consists of Virginia, Kentucky, Tennessee, Arkansas, and North Texas while leaving North Carolina, South Carolina, Georgia, Alabama, Mississippi, Louisiana, and East Texas in the Lower South (Newton, 1974).

The Virginia I is considered an Upland South style house. The floor plan is basically quite similar to the Pennsylvania I, except for peculiarities in regional construction. The basic differences were the use of frame construction, the employment of end or paired Georgian chimneys, and the elevation of the house off the ground (Pillsbury and Kardos, 1980). The Hill Plantation I House and the Carolina I are Lowland South house types.

As settlement spread across the treeless plains of the West, new building techniques had to be developed. The most arid western areas lacked trees altogether. Short timbers for roof support were provided by small trees found along streams. Once the railroad expanded west, wood became available for houses. Crude masonry was used, and although brick clays were available, the fuel required to fire the bricks was not (McAlester, 1984). Underlying rock was not used because thick soils of the best agricultural lands covered it.

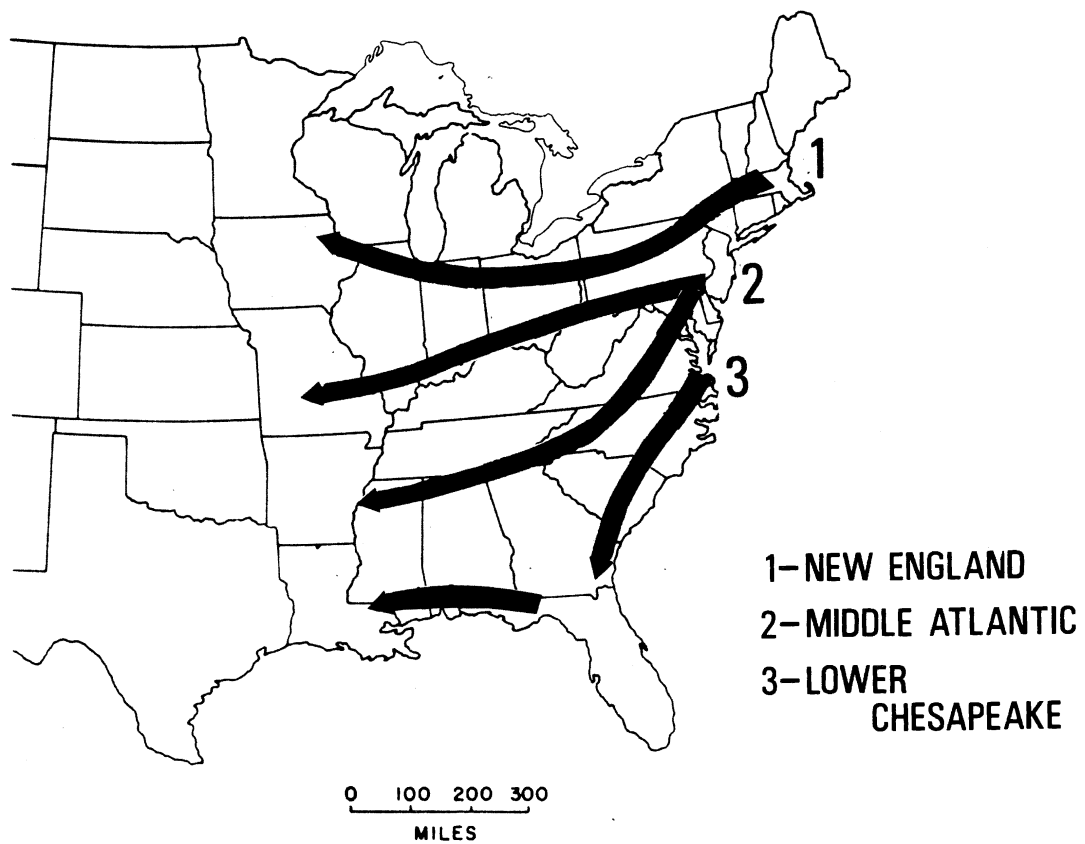
The goal of architecture should be to achieve comfort in housing through harmony with nature. By utilizing readily available building materials and designs suitable for a particular climate, climatic potentials were taken

advantage of and climatic extremes were somewhat controlled. The I house, as a prominent form of folk housing, came to reach that goal as it diffused across America.

Kniffen-Lewis-Glassie Model

Fred Kniffen explains in "Folk Housing: Key to Diffusion" that it is still possible in the United States to distinguish the initial occupance patterns established by migrants from the seaboard source areas: New England, the Middle Atlantic, and the lower Chesapeake (Figure 9). Initial occupance patterns can be identified faithfully only where the time involved is relatively short, as in the United States. In Kniffen's study, consideration is limited to the wooded eastern United States to avoid the complications introduced by the grasslands milieu. The contributions of the Hudson River Dutch and the Delaware Swedes are lost in a sea of alien culture. Therefore, they do not constitute source areas.

Farthest north is the New England extension westward, with a very distinct boundary to the south. This is essentially an area of frame buildings, log construction being regarded as a pioneer expedient hardly worth of any considerable care. The permanent frame house is one of the evolutionary series appearing in New England.



Source: F. Kniffen, "Folk Housing: Key to Diffusion," Annals of the Association of American Geographers (1965).

Figure 9. Kniffen's Source Areas and Routes of Diffusion

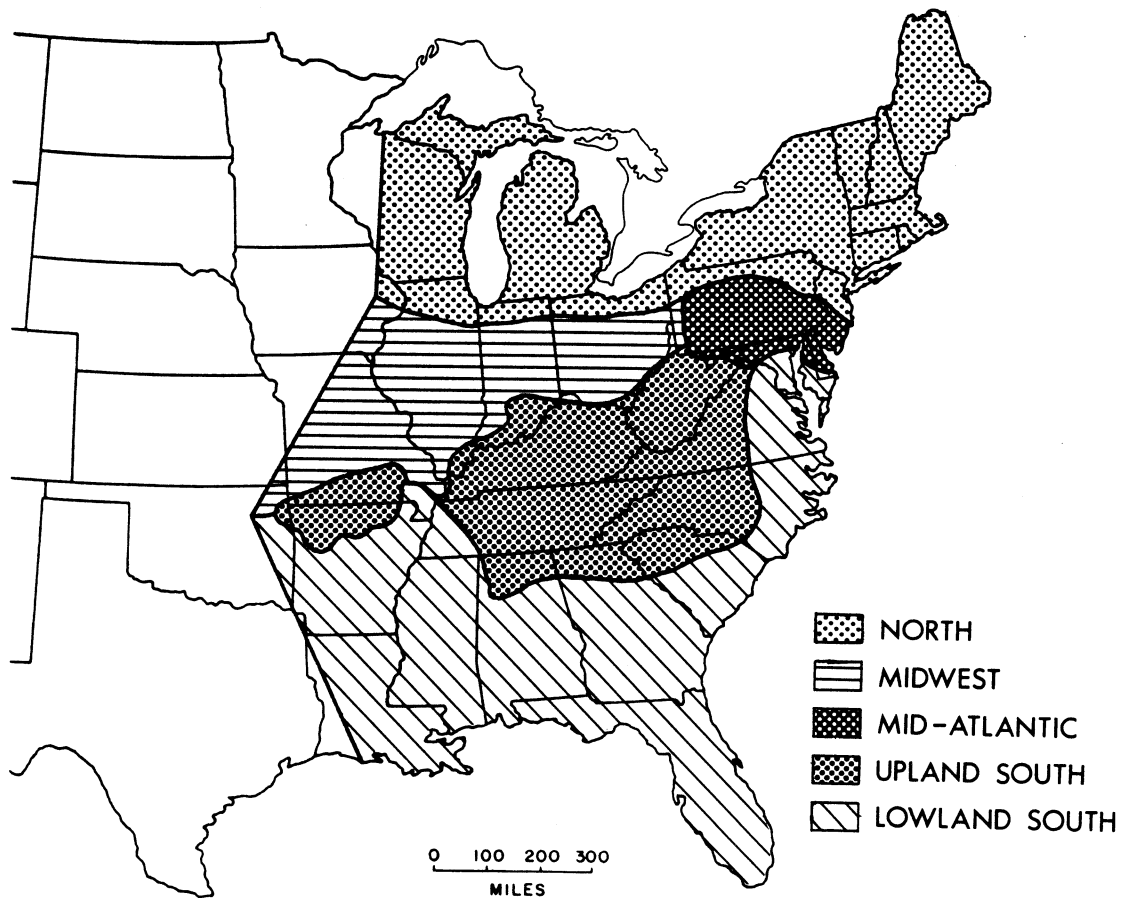
The Middle Atlantic source area has easily the most widespread influence of all three major source areas. The major directions of propagation are southward along the Appalachian axis, with offshoots in every direction, and westward across Pennsylvania, eventually to dominate everything south of the New England stream except for a generally thin Tidewater strip along the outer coastal plain. By the time the log house reaches the Valley of Virginia it has essentially lost its original form.

For the Tidewater South as a whole, there is a tradition of frame construction, with much early half-timbering. The simpler folk construction is typically clapboarding over frame rather than log. Kniffen compares his findings of the three distinctive source areas based on house types to regions arrived at on some other bases, but still with a cultural-historical orientation. He compared a regional dialect map and regions based on social organization and finds agreement to be surprisingly close. He uses the results of the map comparisons to attest to the validity of his conclusions.

Glassie explains in his book Pattern in the Material Folk Culture of the Eastern United States that his conclusions on regional sections and those of Kniffen are roughly parallel in purpose and content with many similar conclusions. Glassie believes that Kniffen greatly underestimates the Tidewater influence on the inland South. Kniffen's maps are based mainly on house types,

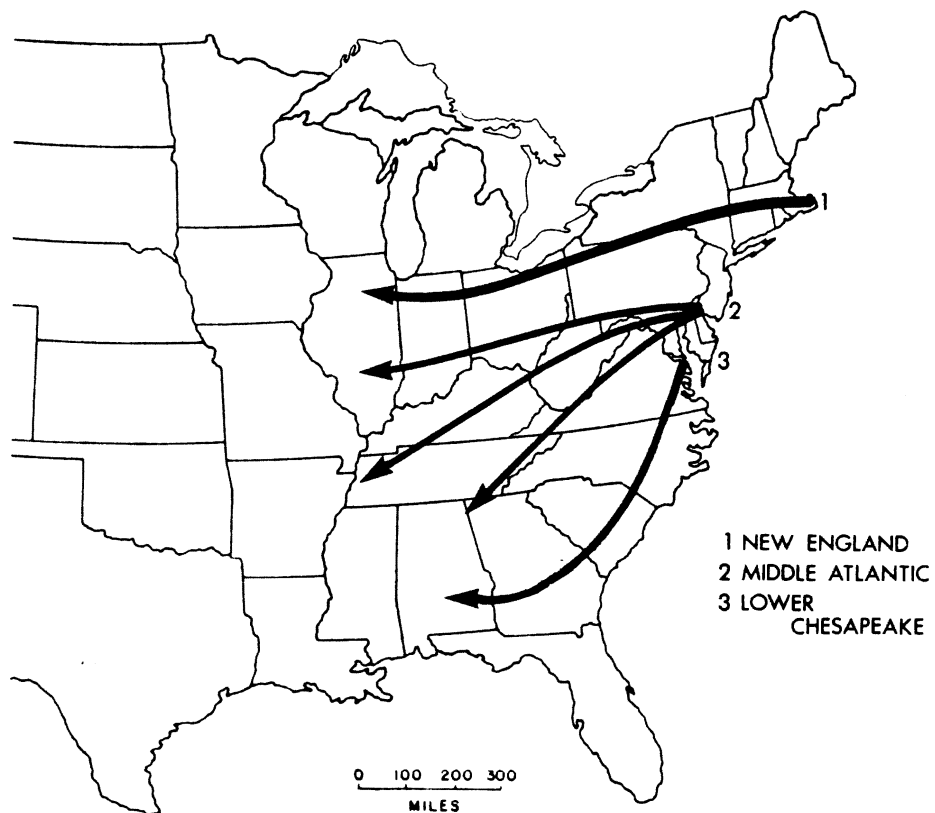
barn types, and construction, whereas Glassie attempts to employ more criteria, but primarily uses architecture (Figure 10). The I house is discussed within the context of each region in Glassie's study.

Pierce Lewis writes in "Common Houses, Cultural Spoor" that cultural pressure is so strong that people will often adhere to a certain house type, even though its design makes no environmental sense at all. Most domestic house types, like culture itself, spring from the past, and that is exactly why house types make such a reliable cultural spoor. In much of the country, notably the Midwest and the West, collected data amount to little more than impressions and wild guesses. Lewis theorizes that the I house emerged in America by the juxtaposition of individual log-cribs which are subsequently walled in. This idea differs from Glassie who suggests that the I house is derived from folk sources in sixteenth-century Britain. Victory in the Revolution and the clearing of Indians from western lands opened avenues into isolated places. As the migrant wave struck the Appalachians, it was deflected and funneled into three primary channels, each connected with quite a different segment of the Atlantic seaboard, each with its own distinctive architectural personality, and each increasingly unrelated to the other two (Figure 11). One migrant stream heads due west along the line of the National Road for Wheeling, Zanesville, Columbus, Indianapolis, and even as far as St.



Source: H. Glassie, Pattern in the Material Folk Culture of the Eastern United States (1968).

Figure 10. Glassie's Cultural Regions of the United States



Source: P. Lewis, "Common Houses, Cultural Spoor,"
Landscape (1975).

Figure 11. Lewis's Routes of Architectural
Diffusion

Louis. A second deflects southwest from Pittsburgh by way of the Ohio River toward Cincinnati and Louisville. The third stream extends down the Shenandoah Valley. The Pennsylvanian cultural domain is extreme in size and conservative in its architecture. Toward the end of the nineteenth century, the southern Midwest had begun to adopt some of the less daring national forms. According to Lewis, the South is a different matter in architecture because there is no single Southern stream issuing from a single point of coastal origin. There is no Southern city through which cultural and architectural tradition is funneled and formalized. Cultural streams are diluted through time and distance weakens ties with old hearths.

Cultural Regions of the United States

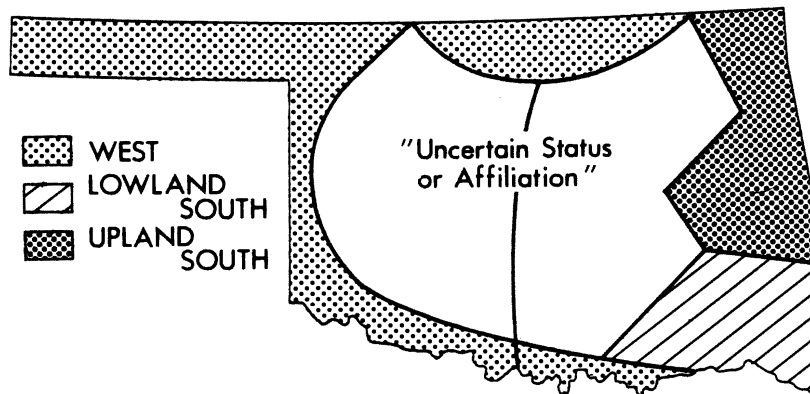
Several writers before Zelinsky (1973) attempted to outline culture regions within the United States, but none of them ventured to create a culture region map of the United States as a whole. These region maps were limited to the East, as a result of the extent of the writer's familiarity with the areas. Jordan (1967) based his map mainly upon historical readings (Figure 1). Glassie's 1968 map was based mainly upon architecture and other material culture such as furniture, agricultural implements, and food (Figure 10). Glassie was strongly influenced by his association with Kniffen, who earlier

offered a regionalization based on years of travel and investigation of folk housing east of the Mississippi River (Doran, 1974). In general, Glassie sees more continuity than Kniffen between Lowland and Upland South, but more of a break along the Ohio River between South and North. Thus Glassie distinguishes North, Mid-Atlantic, Midwest, Upland South and Lowland South regions (Gastil, 1975).

The first attempt ever made to delimit culture areas for the entire continental United States was done by Zelinsky in 1973 (Figure 12). This map divided the United States into five major regions and many subregions. Although Zelinsky discussed each region briefly, he made no attempt to show through trait analysis exactly why he placed his regional boundaries where he did (Doran, 1974).

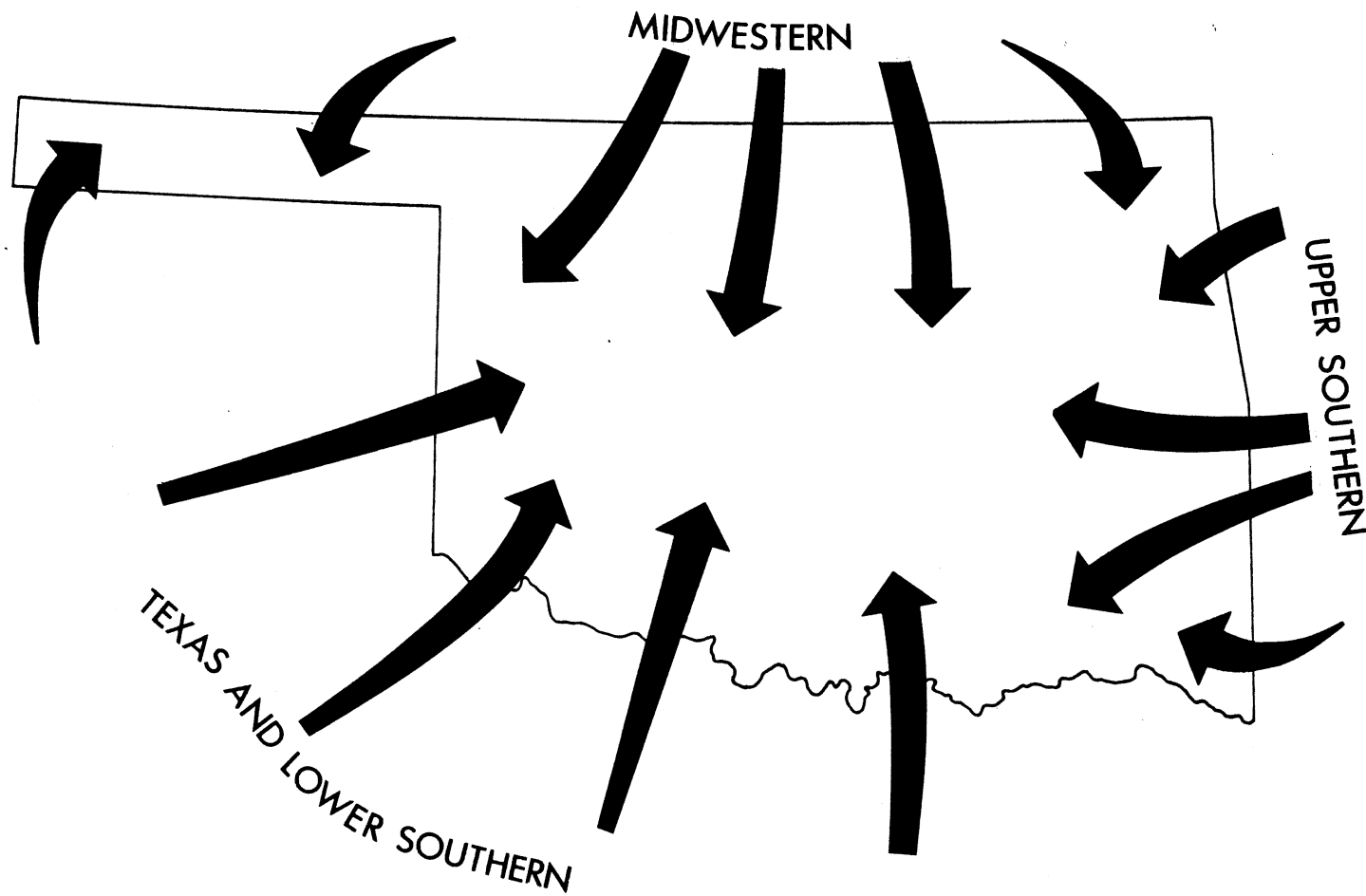
Culture Regions of Oklahoma

Oklahoma's culture regions have been extremely difficult to classify. Roark (1979) explained that this dilemma was produced by the settlement of migrants from the three major regional cultures surrounding the state: Midwestern culture in Kansas and other plains states, Upper Southern culture in Missouri and Arkansas, and Lower Southern culture in Texas (Figure 13). The first attempt at defining culture regions in Oklahoma was presented by Zelinsky in 1973. He correctly perceived Oklahoma as



Source: W. Zelinsky, The Cultural Geography of the United States (1973).

Figure 12. Zelinsky's Oklahoma Culture Areas

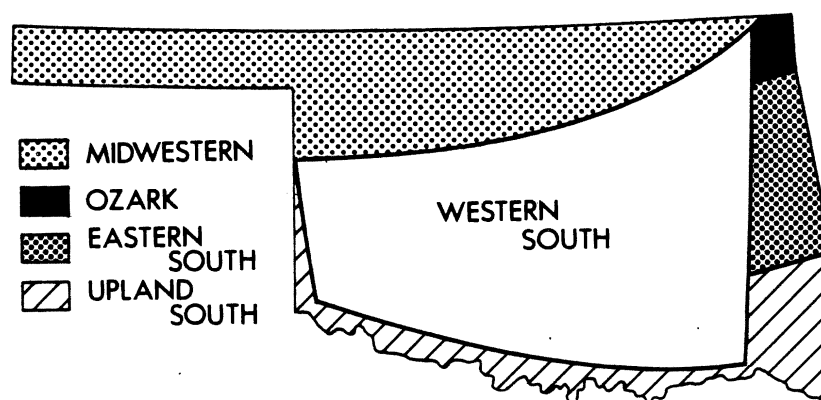


Source: M. Roark, Geography of Oklahoma: New Perspectives (1979).

Figure 13. Migrant Streams into Oklahoma

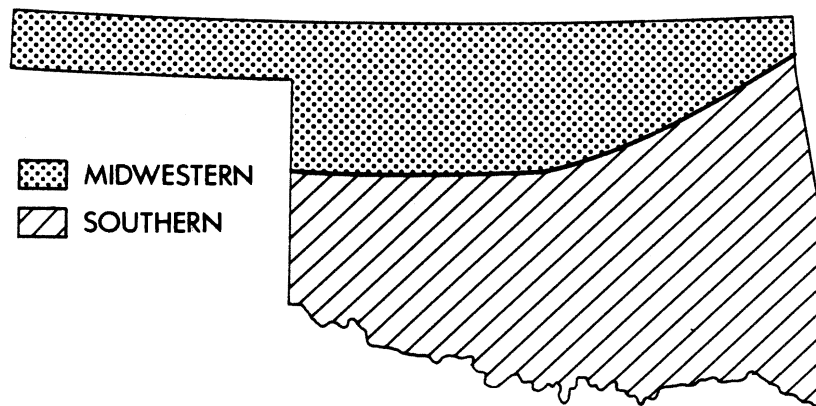
being a meeting place of the Upland South, Lowland South, and the Midwest, but could not exactly state how they came together (Doran, 1974). He classified Oklahoma as a "region of uncertain status or affiliation". Roark (1979) explained that Zelinsky's map displays its ambiguity by showing the area as lying at the intersection of three first order regions, the Midwest, South, and West. Zelinsky then encircled the intersection with a possible second order subdivision representing a fusion of the Upland South, Lowland South, aborigines, and the Middle West, in order of importance (Roark, 1979). Zelinsky (1973) proposed that Oklahoma was an indistinct subregion, but the Indian element merited consideration.

Gastil (1975) and Doran (1974) both attempted to classify Oklahoma's culture regions. Both of these author's maps identified the northwestern part of the state as part of the Midwestern culture region and the rest of the state being Southern. Unlike Zelinsky, neither said there was an intermingling of culture regions within the state, instead there were two distinct zones of Midwestern and Southern. Gastil considered Oklahoma to have been mainly settled by Southerners and justified his reasoning on the basis of population origin data (Figure 14). Doran's study concluded that Oklahoma was composed of Midwestern and Southern divisions which were direct extensions of adjacent culture areas (Figure 15). Doran (1974) explained that there were two distinct cultural



Source: R. Gastil, Cultural Geography of the United States (1975).

Figure 14. Gastil's Cultural Map of Oklahoma

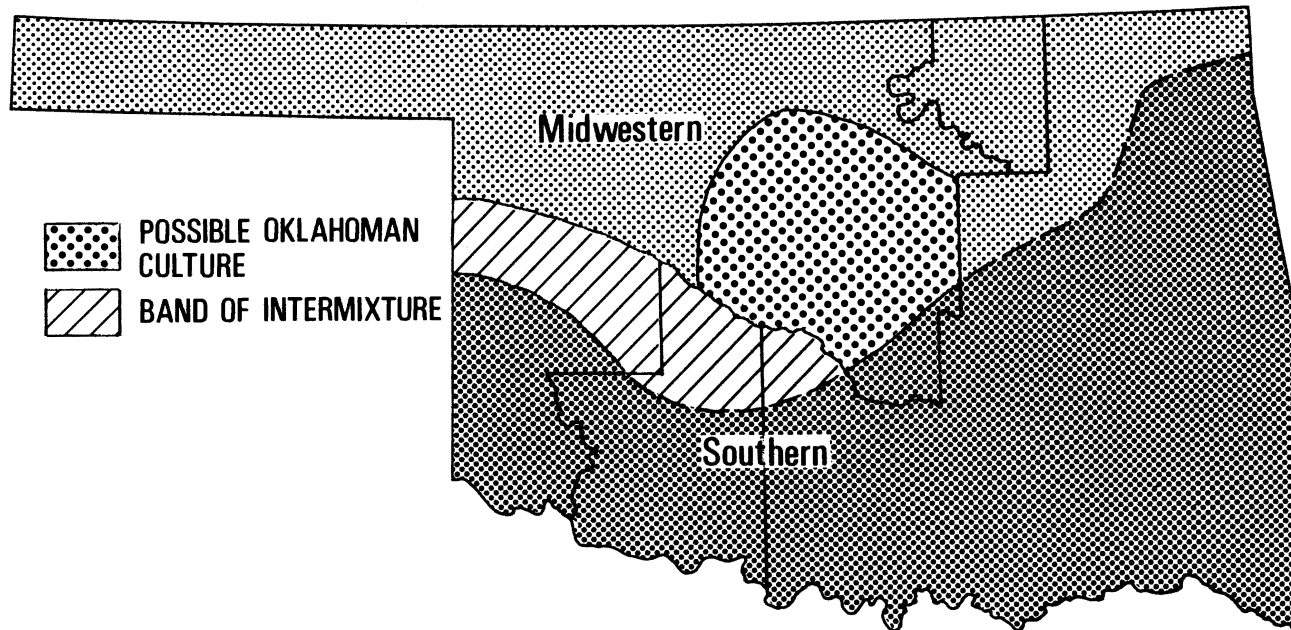


Source: M. Doran, "Origins of Culture Areas in Oklahoma, 1830 to 1900," unpublished dissertation (1974).

Figure 15. Doran's Culture Areas of Oklahoma

areas within Oklahoma with no overlap. Roark's study in 1979 was done to test the question of whether there was any intermingling of Midwestern and Southern migrants. By examining the population data from the 1900 federal manuscript census for Oklahoma Territory, Roark mapped his results for Oklahoma's cultural regions (Figure 16). Roark explained that his cultural area map was a compromise between Zelinsky's rather vague and too extensive "Oklahoman" subdivision and Gastil's and Doran's sharp division into opposing Midwestern and Southern regions. Zelinsky's "Oklahoman" subdivision represented the fusion of the Upland South, Lowland South, aborigines, and the Middle West.

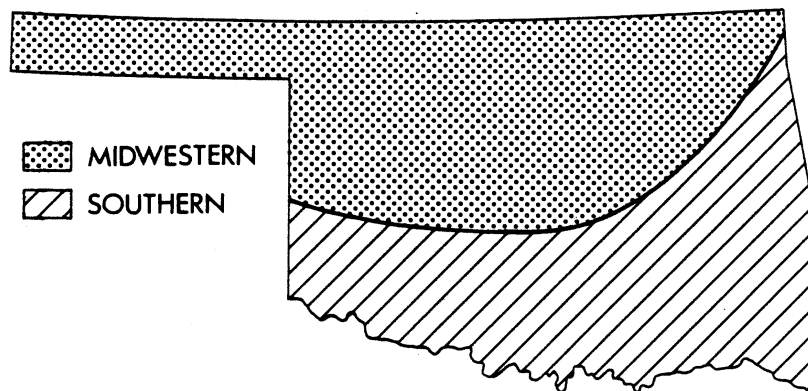
Jordan and Rowntree (1986) have also delineated culture areas within Oklahoma as part of a larger map that illustrated traditional rural culture areas of the eastern and central United States. They explained that formal culture regions are the geographer's somewhat arbitrary creations. Jordan and Rowntree's map identified the three major American culture areas; New England, Middle Atlantic, and Lower Southern. Each culture area was divided into formal subcultures and has a nucleus where it first took shape. According to their map, Oklahoma was entirely within the Middle Atlantic culture region. The state was further divided into two regions which classified the northern and northwestern part of Oklahoma as lower Midwest with overlay of nineteenth-century



Source: M. Roark, Geography of Oklahoma: New Perspectives (1974).

Figure 16. Roark's Culture Areas of Oklahoma

Europeans and the southern and eastern areas as Upper South middle-class lowland farmers (Figure 17). This latter region was subdivided even further to include small pockets of Upper South Oklahoma Indians and Upper South Mountaineer Southerners. Jordan and Rowntree did not explain the basis of their culture area boundaries.



Source: T. Jordan and L. Rowntree, The Human Mosaic: A Thematic Introduction to Cultural Geography (1986).

Figure 17. Rural Oklahoma Culture Areas

CHAPTER III

HISTORICAL REVIEW

Settlement of the Oklahoma Frontier

The current state of Oklahoma was part of the Louisiana Purchase of 1803. This land was set aside to be home for the Indians, especially members of the Five Civilized Tribes. These tribes consisted of the Cherokee, Chickasaw, Choctaw, Creek, and Seminole. Beginning in the 1840's, they were forced by the Federal government to leave the Southern states and move to the new land. Thousands of Indians, especially the Cherokees, followed the "Trails of Tears" in their migration. Following the Civil War, an area known as Indian Territory became established in what is now the eastern part of Oklahoma. Each of the Five Nations organized their own national capitals and began the development of resources such as minerals, lumbering, and agriculture. These activities gave start to the first towns and cities in Indian Territory and building of railroads through the area stimulated the growth process.

The western lands of the Creeks and Seminoles and the Leased District belonging to the Chickasaws and the

Choctaws were reclaimed by the Federal government so as to be used as reservations for Plains Tribes. The only villages developed at this time were formed around government centers. The areas known as the Unassigned Lands and the Cherokee Outlet remained unsettled. Unstable economic conditions and public demand resulted in this land being allotted as individual holdings which in turn led to the land becoming permanently settled.

These western lands became known as Oklahoma Territory and were opened for homesteading by a series of runs, lotteries, and sealed bids beginning in 1889. Oklahoma Territory was the last organized territory in the continental United States (Roark, 1979). This area was seen as the last chance to attain good land at low prices.

White settlers were forbidden to live in Indian Territory, except with permits from the resident tribes, but thousands of illegal intruders entered the area for settlement. Federal troops were used in an attempt to evict these illegal residents. The thick grasses which covered the prairies were the foundation for the range-cattle industry in Oklahoma during the 1870's and 1880's. The Indian's refuge was used extensively by the cattle ranchers, and major cattle routes such as the Chisholm Trail and the Great Western route were developed. The Indians made profit by charging fees for grazing privileges. Homesteaders eventually overcame the cattleman's stronghold on the land both numerically and politically.

Settlement across Oklahoma Territory was rapid, but the economic foundation of the area was very unstable. Railroad companies urged the opening of the Territory to settlement. They unsuccessfully demanded land grants, but still built lines through the area in order to connect Texas with Kansas and the Midwest.

Migrant population in Oklahoma Territory in 1900, which was native-born to the United States, was 52 percent Midwestern and Northeastern and 47 percent Southern (Roark, 1979). Illinois, Indiana, Iowa, Ohio, Kentucky, Missouri, and Tennessee contributed the greatest number of settlers. The initial rush into Oklahoma saw both the Northerners and the Southerners converging upon the area by the most direct means available, whether rail or road (Roark, 1979).

Since Europeans generally arrived in Oklahoma later than other migrant groups, they settled in areas which had been opened after the Unassigned Lands (Roark, 1979). They had an impact on local society, because many of the foreign migrants concentrated in a few townships. Many factors motivated emigrants to enter Oklahoma. General social, political, or economic conditions which adversely affected thousands, encouraged some emigration; personal factors influenced others, while coal mining affected many (Rohrs, 1981). The United States was attractive to emigrants because of economic opportunities. The typical homesteader had previously resided in at least three states (Blessing, 1980).

After the discovery of oil in 1905, many boom towns emerged. Thousands of people flocked to the oil fields from 1905 to 1930 to work, but once the boom was over, many of these boom towns ceased to grow and others became ghost towns.

Approximately two decades separated the settlement of Oklahoma and the Indian Territory from their eventual joint statehood. The Enabling Act of 1906 started Oklahoma toward statehood. The two territories were combined into a single state and Oklahoma was granted claim as the forty-sixth state in 1907.

The earliest years of Oklahoma's territorial settlement were replete with events that, except for their rapidity, were not altogether unlike those of other recent frontiers (Goble, 1980). The method of opening the area of settlement, the land run, produced greater confusion over land titles than was normal. Pre-existing railroad networks in areas of Oklahoma stabilized the urban structure to a greater degree than was the case for much of the American frontier (Roark, 1979). Speculation was a common feature of the settlement of new areas. The making of cities, their settlement, growth and influence on the economic, political, and social life of new settlers was what the settlement history of Oklahoma was all about.

History of the Study Sites

The cities of Altus, Durant, McAlester, Miami, Poteau, Stillwater, and Woodward are the study sites selected for this paper. The sites are located in the northeast, north central, northwest, southwest, south central, and southeast regions of Oklahoma. Since Oklahoma land was opened at different times through a series of land runs, bids, or lotteries, each city had its own slightly unique history of settlement.

Altus is the county seat of Jackson County, located in the southwestern corner of Oklahoma. The current population of the city is 23,101, and many of these people are military personnel from Altus Air Force Base. It was the tall grass, open prairie which first attracted pioneers to the Altus area. Another attraction for this land was that it was also the settler's last chance to own land without having to purchase it. The first farming was done there in 1889, but the area was in drought and the crops were poor. Prairie fires were a great hazard to settlement. The townsite plat was filed on January 3, 1900 with only two acres reserved for the town square. Altus was named by W.R.Baucum because he formally lived in Altus, Arkansas and was familiar with the Latin meaning of the word which is "the high place" (Chesser, 1971). In the area surrounding Altus, wheat farming was less important than cotton because cotton was more apt to

withstand the months of dry weather and hot sun. By 1900, farmers raised wheat, cotton, hay, and grain and by 1901, the farmers and the railroad started working together. At least four railroads went through Altus and by that time the crops were good. The soil was rich and fertile and soon cotton oil mills, cotton gins, and feed lots were thriving. Water was a problem, but the town was several hundred feet below the level of the Quartz Mountains, so gravity flow brought water to the town.

The name "Durant" is of French origin and it was originally spelled and written "DuRant." The city is located in Bryan County and is located slightly east of the south central section of the Texas/Oklahoma border. The current population is 11,972.

In the beginning, a family of French-Choctaw origin followed the immigration of the Choctaw Nation from the Mississippi River along the "Trail of Tears" (Durant Centennial Book Staff, 1973). Pierre Durant and his four sons made the trip to the southeastern part of the Choctaw Nation in 1832. Dixon Durant is recognized as the founder of Durant. Durant was in a suitable and beautiful location with streams, timbered country, pecans and walnuts, and a large prairie region to the south and west. The first building in the city was constructed in 1833. The city was in the fertile bottom lands of the valleys of Blue, Boggy, Washita, and Red Rivers. The coming of the railroads assured Durant's place as a major marketing

place and shipping point for the area. Building of the Missouri, Kansas, and Texas (Katy) Railroad opened a new frontier for the non-citizens from many sections of the United States and the tide of immigration began to flow in earnest. Immigration was bitterly opposed by many of the leading Choctaw citizens. They wanted to retain their country and customs of life for themselves unmolested by what many of them termed "white adventurers", and develop it as they desired (MacCreary, 1945). Neither Durant nor other potential cities along the Katy route had much of a chance to grow before the dissolution of the Choctaw Nation and the end on restrictions on white settlers which hampered economic development of the region. End of restrictions came in 1898 and settlers for the farms and towns doubled the population. Much crop cultivation brought about a need for market processing at harvest time, so cotton gins and grist mills were built. Cotton cultivation began to decline in the 1920's, and it was accompanied by a decline in cultivated land which was then compensated by the growing importance of the livestock industry to the area.

Located in south central Oklahoma is McAlester with a current population of 17,255. This city is the county seat of Pittsburg County. In 1872, the Katy Railroad went through the McAlester area. This city was named after J.J. McAlester, a coal operator. Coal mines were immediately opened at Krebs, one mile away. The Rock

Island Railroad went through the area one and a half miles south of the Katy Railroad which led to the appearance of South McAlester in 1889. Originally, there was bitter rivalry between the two towns, but eventually they united in 1906. The growth of McAlester was due to coal, although some area agricultural production existed. Many of the settlers were foreign, especially Italians. By the 1920's the mines were abandoned, and fuel consumption shifted from coal to petroleum. Cotton and corn were the most important agricultural crops in the beginning, but production later shifted toward beef cattle.

Miami has a current population of 14,237 and is the county seat of Ottawa County in the extreme northeast corner of Oklahoma. The city of Miami was approximately fifteen years old when Oklahoma became a state, but Miami's official founding was on March 2, 1891 (Neiberding, 1983). Miami was named for a small Indian tribe that was living on site in the nineteenth-century. A trading post was also located in the area. By 1906, the area farmers were primarily growing tobacco and strawberries. Cattle raising was also common in the area. Miami did not just suddenly appear as a city, instead it was carefully planned. The people who came to settle there were young, ambitious professionals (Nieberding, 1983). There was none of the wild, noisy race for land which was common in Oklahoma Territory runs. The town profited immensely from the Tri-State mining boom and it

was one of the country's most important lead and zinc producing regions (Ruth, 1977).

Present day Poteau is the county seat of Le Flore County and is located in southeastern Oklahoma with a population of 7,089. The word "Poteau" is a French word which means "post." It is not clear whether the name of the city comes from the word meaning trading post or from the same French word meaning stake in the ground (The Officers and Members of the 1913 Study Club, 1986). It is generally assumed it means trading post since trade grew in the area. The town could also have derived its name from the Poteau River. The coming of the Frisco Railroad in 1887 led to the establishment of the town (Peck, 1963). By this time, some farming was carried on. Coal mining was the first important industry to supplement farming and by 1895 many coal companies were established in the area. Later, lumbering grew in importance.

Stillwater is located in the north central region of Oklahoma. The city presently has a population of 38,268 and is the county seat for Payne County. Stillwater's early settlement began in 1889, when thousands of pioneer families eagerly grouped at the Kansas border in order to participate in the first official land run. The Unassigned Lands were opened to white settlement on April 22, 1889. The people who entered the area before it was officially opened were known as "Boomers". David L. Payne, for whom Payne County was named, was the most

prominent leader of the Boomers (Chapman, 1948). By May, 1881, Payne had already been residing in what is now the Stillwater vicinity, but was forced to leave when the district court ruled that the area was not public land. Payne died in 1884 and William Lewis Couch became the leader of Payne's Oklahoma Colony of Boomers (Chapman, 1984). By 12:45 p.m. during the Run of 1889, Robert Lowry, John Barnes, and David Husband were some of the first men to legally claim the land of Stillwater. The Stillwater Town Company had previously been formed and their objective was to lay out a townsite in the vicinity of Stillwater Creek. On August 24, 1889 the Oklahoma Standard published the Charter of the City of Stillwater, Indian Territory. The Oklahoma Agricultural and Mechanical College was opened December 14, 1891 in the Congregational Church of Stillwater with an enrollment of about forty-five students. Stillwater became the wholesale and retail center for a productive area. A few agricultural industries such as cotton gins, flour milling, elevator service, and farm machinery repair developed almost as soon as farm production started (Morris, 1979).

The county seat of Woodward County is Woodward which has a current population of 13,610. With the growth of the cattle industry in Texas and the lack of railroads in the 1860's and 1870's the cattle were driven across Oklahoma to Dodge City and Abilene, Kansas. During this

period, northwest Oklahoma was a battleground between the cattlemen and Indian tribes. In 1868, the Federal government established a fort, called Camp Supply, at the junction of Beaver River and Wolf Creek. Before the opening of the Cherokee Strip, the depot on the Santa Fe Railroad was already built and it was determined by the government to locate the county seat and land office at or near this point (Rainey, 1933). The name of the city of Woodward was either to honor a railroad official or the boss of the railroad construction crew. Woodward grew into a community of at least 140 people before the land run six years later (James, 1981). At the time of statehood in 1907, nothing but grass and a few trees grew in the county which was divided into 4660 farms.

CHAPTER IV

METHODOLOGY

The seven cities of Altus, Durant, McAlester, Miami, Poteau, Stillwater, and Woodward were initially selected from a state map of Oklahoma. These cities were chosen in order to assure areal coverage of the state. Throughout the summer of 1986, each of the study areas was surveyed with the exception of Stillwater which was surveyed during the fall of 1985.

Upon arrival in each city, the City Chamber of Commerce was visited first. In these offices, current maps were obtained along with any information about the history of the area. Archival work was then completed with the public library serving as a major source for city histories. Interviews with the city librarians were sometimes helpful. If there were any museums or historical societies located within the city, they were also visited in order to obtain more information about the area.

I houses within the present day city limits of the city were located next by doing a reconnaissance survey of the area. A reconnaissance survey consisted of slowly driving on every street within the city limits. To insure

that all streets were covered, the driving was done in a systematic fashion by driving on all the east-west streets first and then the north-south streets. As each street was surveyed, the same street was highlighted on the city map so as to illustrate which streets had been covered and which ones had not. Again, this helped to insure complete coverage of the entire city, so no streets were missed. When an I house was found, its location was designated on the city map. If the owner or the person who leased the property was at the house or easily located, a personal interview was conducted in order to check on the date that the house was built or any other facts about that particular I house. One interesting fact about an I house found in Poteau was that it had been in the same family for approximately 85 years and the house was "known" to be haunted by a female spirit. Many times a personal interview resulted in a tour of the interior of the I house.

As each I house was located, two or more slides were taken of every house with each slide illustrating different elevations of the house, i.e., the facade, gable ends, and rear which may have included additions. For every photograph taken, the name of the city, frame number, roll number, address, and direction that the camera was facing was recorded in a photo log.

Once every street within the city limit was surveyed, the photo log, which had the address of every I house

found, and the city map which illustrated the exact location of the I houses, were taken to the county court house. All of the seven study sites were county seats and government records were readily available. All the addresses were matched to their lot and block numbers by using plat maps and tax records in the county clerk's office or the county assessor's office. By using lot and block numbers, each property was traced back to the original acquisition of the land. By careful examination of warranty deeds and mortgage records, a date or circa date of the year the house was built could be determined. A cross-check of the accuracy of this method was done by tracing through historic government records for building dates for houses and comparing with dates already acquired from the owner or leaser. County abstract offices were consulted if there was any doubt or any problem with dating a property.

The next procedure was to complete a survey form for each individual property by viewing all of the slides. Slides of the I houses were extremely important because they were a visual record of the data that were found and were readily available for examination throughout the entire study, therefore, each city had only to be visited one time. Visits to each of the cities lasted from two to four days with survey time depending upon the size of the city.

The survey form consisted of twenty primary variables with extra space left for notes, descriptions, sketches, or any additional information (Appendix A). Once all the survey forms were completed, the next step was to produce a data file of the seventy-three observations (I houses) and the variables from the survey forms. Two of the variables listed on the survey form, dimensions and lot placement, were not used as part of this study. The working data file contained the following variables:

- 1) OBS: frame number of the slide for each I house.
- 2) DATE: year that the house was built.
- 3) LOC: city in which the I house was located.
- 4) CONST: construction material on the exterior of the I house.
- 5) ROOF: roofing material on the I house.
- 6) FOUND: foundation material of the I house.
- 7) ADD: additions to the house and their location (rear "T", rear "L", side, or front).
- 8) ULW: number of windows on the upper story facade and lower story facade respectively.
- 9) LRW: number of windows on the left gable end (number of upper and number of lower respectively) and number of windows on the right gable end (number of upper and number of lower respectively).
- 10) DOOR: number of doors on facade and their location (centered or off-center).

11) CHIM: number of chimneys and their location (centered or end walls).

12) PORCH: type of porch, such as porchless, attached porch, or two-story porch and the size of the porch across the facade, for example full-width, three-quarter width, or just over the door.

13) DEC: decorations on the I house. Shed, gable, and hipped dormers were also noted within this variable and whether they were centered or off-center.

14) OCC: occupancy of the house.

15) PAINT: what color the house is painted, if it was painted at all.

16) MAINT: condition of the house, i.e., excellent, good, fair, or bad.

17) HTYPE: I house type, such as the Pennsylvania I, Carolina I, Virginia I, Midwest I, or the Hill Plantation I.

18) STYPE: I house subtype, such as subtypes I,II,III,and IV.

This working file was used for chi-square testing of the data in order to determine if there were any relationships among the variables. For 2X2 tables, Fisher's Exact Test was also included. The low number of observations made the chi-square test inappropriate for many of the variable combinations. In view of this, tables illustrating the percentages of each variable found within each city and for the entire state were included.

CHAPTER V

ANALYSIS

Distribution of Oklahoma I Houses

I houses were farm houses and usually located in rural areas, but they were also found in urban areas. There were several reasons why a farm house was located in town. If a town was a major agricultural area, Stillwater for example, many farmers lived and worked in town to be closer to the market and railroad and brought the I house idea with them. Sometimes, the farmer would live in town and still grow crops on land out of town. Stillwater and McAlester each had one I house which was actually constructed on farms in a rural area, and when the owners moved to town, they literally moved their house with them. Such was the case with Mr and Mrs. Rock of Stillwater who moved their I house into town from approximately twelve miles outside of the city limits. Mrs. Rock stated that her parents built the house on their farm and they were not going to leave it. Another reason for I houses to be located in urban areas was due to the shifting of city limits through time. When a town was originally platted, land incorporated may had only been a total of a few blocks. This study used the present-day city limits. All

of the study sites had an increase in population since they were founded and, therefore, city limits were enlarged as the towns grew. This change resulted in rural lands becoming part of town. Any I houses present on the once rural land could have been engulfed by the city.

A total of 73 I houses were identified during the reconnaissance survey of the seven study sites. All five I house types, the Carolina I, Virginia I, Hill Plantation I, Pennsylvania I, and the Midwestern I were located within the state, however, no one study site contained all five types. Photographs of each I house type are shown in Appendix B. Stillwater and McAlester had the most variety of I house types with four each. The only I house type not found in these two cities was the Pennsylvania I. The distribution of I house types and the number of I houses analyzed within each study site are shown in Figure 18. Locations of I houses were mapped within each city and a cluster pattern appeared in each town, except Durant and McAlester. Clusters of I houses were near the courthouses because I houses were being built as the towns were originally being settled. This resulted in the location of I houses in the first and oldest part of town centered around the courthouse. McAlester and Durant had essentially the same pattern except the I houses were not quite as tightly clustered around the courthouse. Instead they were distributed more along the railroad tracks. Some settlers originally migrated to new towns by way of

the railroad. If they wanted to live within the city, settlers would lay claim to the first available land as they departed the train. Lumber for houses was shipped by rail and the closer the property to the tracks, the least distance they had to transport the lumber. Hence, many of the I houses were located near the railroad tracks.

Poteau had the fewest number of I houses with only one Pennsylvania I house located within the city (Figure 19). The noticeable absence of I houses in this area was because the coal mining and lumber industries were the major contributors to the area's economy. Some farming was done, but not on a large scale. Poteau's terrain was not the most suitable for extensive farming. Surrounding the entire city was a physical landscape consisting of mountains, forests, and rocky soil. The combination of mountains, trees, and rocks resulted in a lower number of farms in the area, therefore, fewer I houses.

A total of three I houses were found within Durant representing three different types: Virginia I, Midwest I, and a Pennsylvania I (Figure 20). Since Durant was part of the Choctaw Nation until 1898, the number of farmers that were not Choctaw citizens was limited. The Choctaw citizens who originally settled this land after following the "Trail-of-Tears" did not tend to build I houses. The Choctaws were not as easily influenced by non-Choctaw cultural ideas or readily adopt them for fear of losing their own cultural traditions. Therefore, the

POTEAU

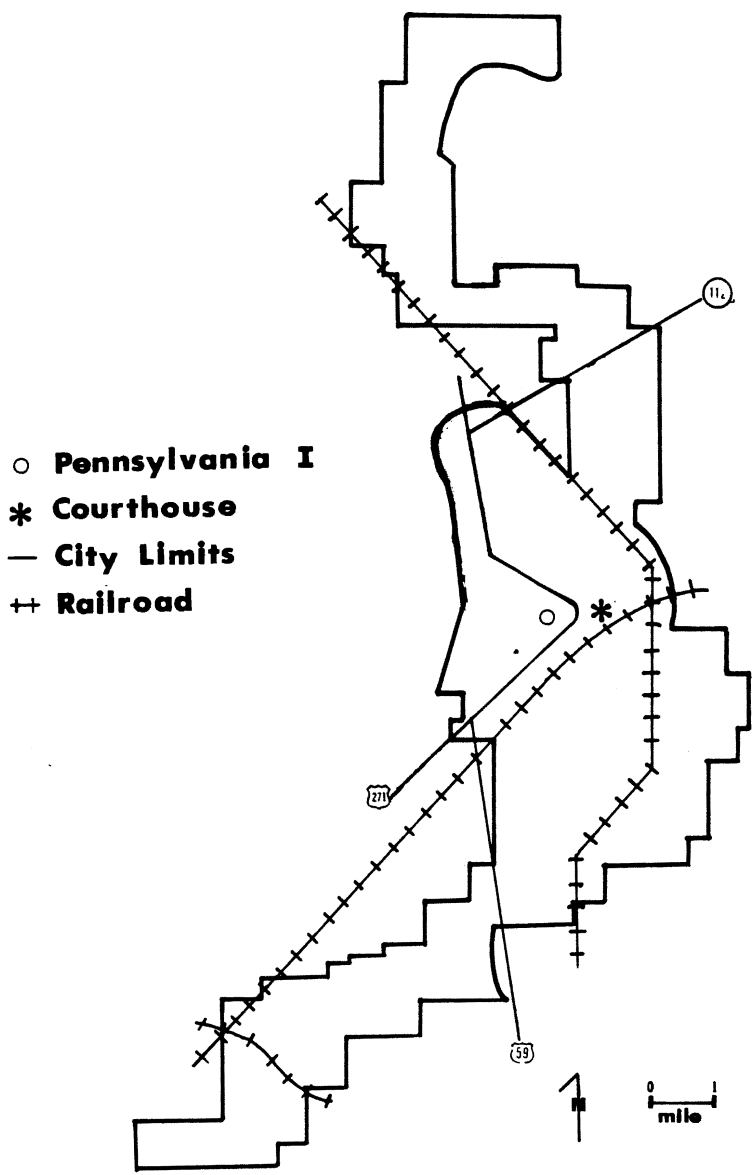


Figure 19. I House Location in Poteau

DURANT

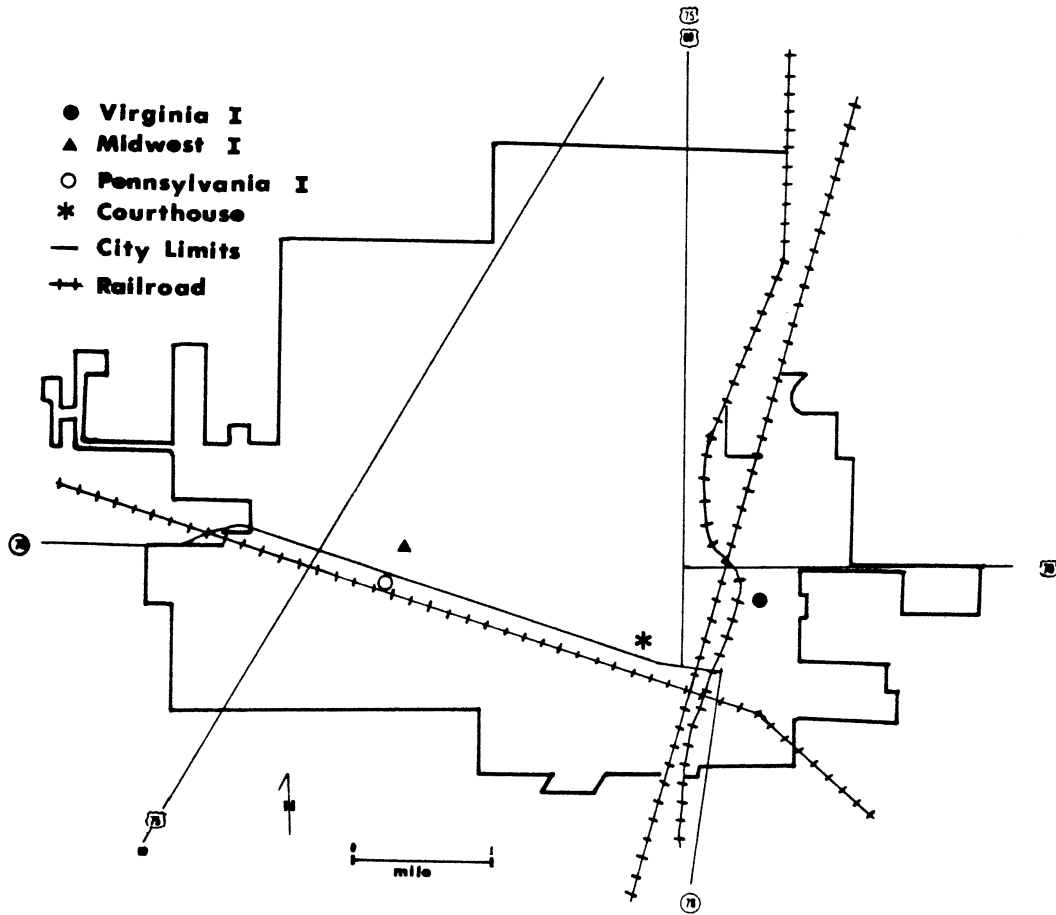


Figure 20. I House Locations in Durant

number of I houses in Durant was low. After Durant was opened for settlement in 1898, more white people settled in the area and the idea of the I house was brought with a few of them. The building dates on the three I houses located ranged from 1906 to 1909. When the crop cultivation began to decline in the twenties, the livestock industry grew in importance in the area.

A total of seven I houses was identified in Altus (Figure 21). Construction dates on these houses ranged from 1901 to 1928. It was the tall grass and open prairie that first attracted farmers to the area. By 1901 the railroad came through Altus and the farmers were able to ship their crops more easily. In the first few years that the town was being originally settled, a bad drought struck the area. Many farmers moved from Altus. A few years after the founding of the city, the drought ended and crops were more productive. Farmers moved back into the area and brought the I house with them. This could be the reason that I houses were found in the area, but not as many as might be expected.

Woodward was a thriving farm community by the time of statehood. A total of nine I houses were found within the city (Figure 22). It is possible that many more I houses would have been found except for a devastating tornado that swept through the town on April 9, 1947. More than a hundred city blocks were flattened leaving behind 107 dead, more than 700 injured, and property damage in excess

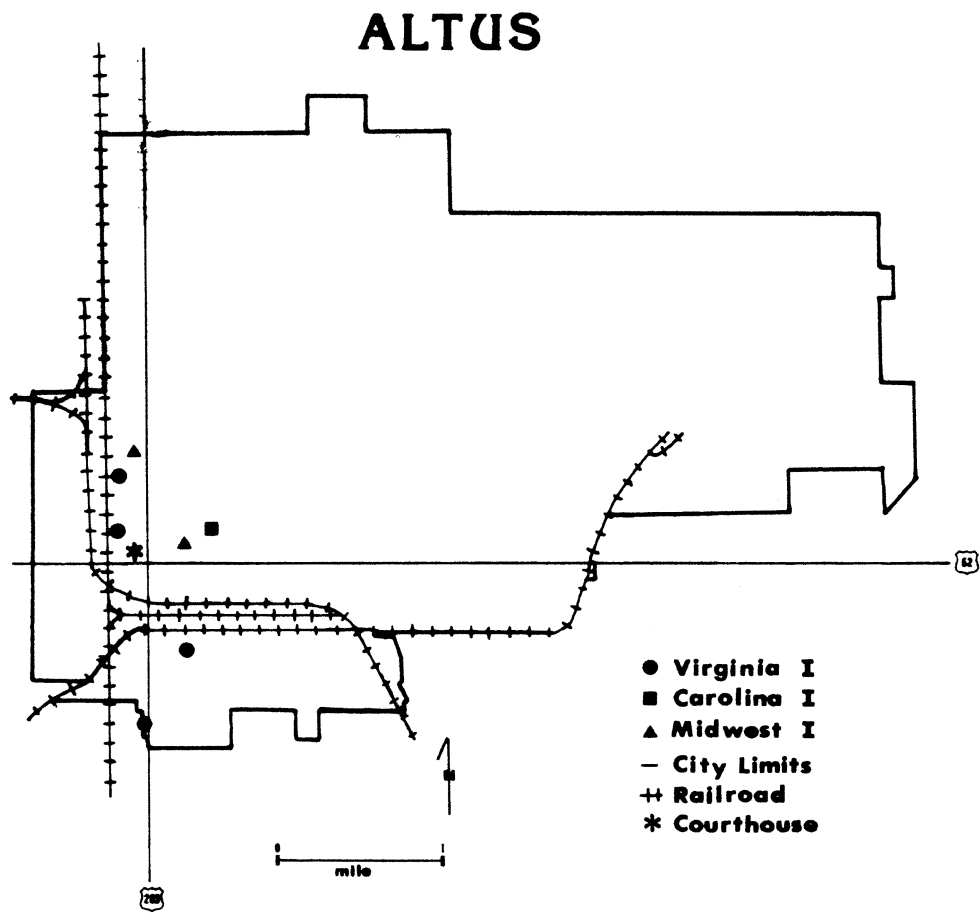


Figure 21. I House Locations in Altus

WOODWARD

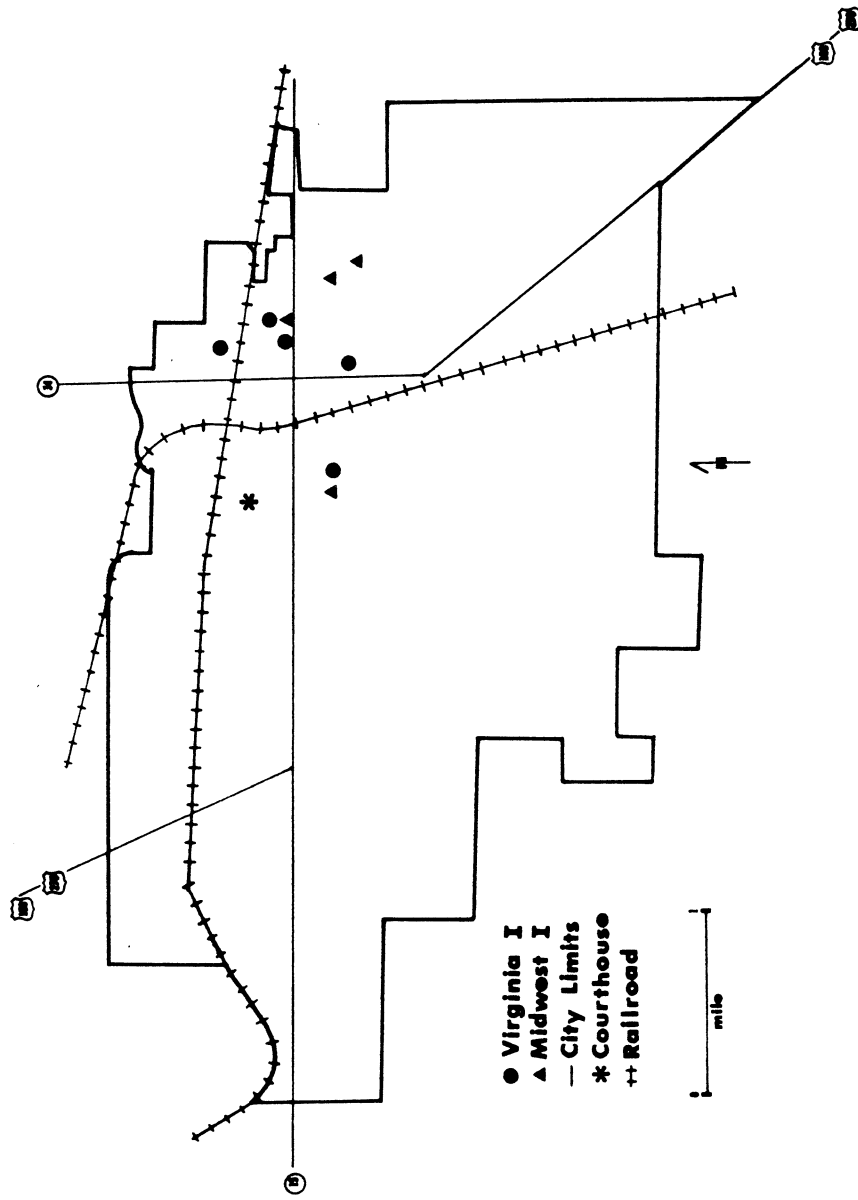


Figure 22. I House Locations in Woodward

of \$8 million (Ruth, 1979). The tornado's core was 1.8 miles wide and its path destroyed the western half of town. There were no I houses found on the western half of the city as illustrated by Figure 22.

Ten I houses were located within Miami (Figure 23). Farmers settled in the Miami area by the 1880's with their primary crops being tobacco and strawberries. Farmers prospered and the dates of the I houses built in the city range from 1908 to 1911. The mining boom struck the area just after the turn of the century. By 1919, the Miami economy shifted from farming to mining mainly because the labor force consisted of local miners.

A total of twelve I houses were located in McAlester (Figure 24). McAlester had boom town growth due to all of the coal mines in the McAlester/Krebs vicinity. The mines attracted thousands of foreign migrants such as the Welsh, Poles, Irish, Russians, and English, but mostly Italians. Many of them had previously worked in the Pennsylvania coal mines. As many of the migrants settled in various regions of the country before settling in Oklahoma, different cultural ideas, such as the I house, were learned and brought with them. McAlester was also a marketing center with a large cotton compress, cotton gin, grist mill, broom factory, and a flour mill. According to an interview with Dr. Robert Copeland, who came to McAlester with his parents in 1902 to farm, corn and cotton were the major crops (Copeland, 1986). In the late

MIAMI

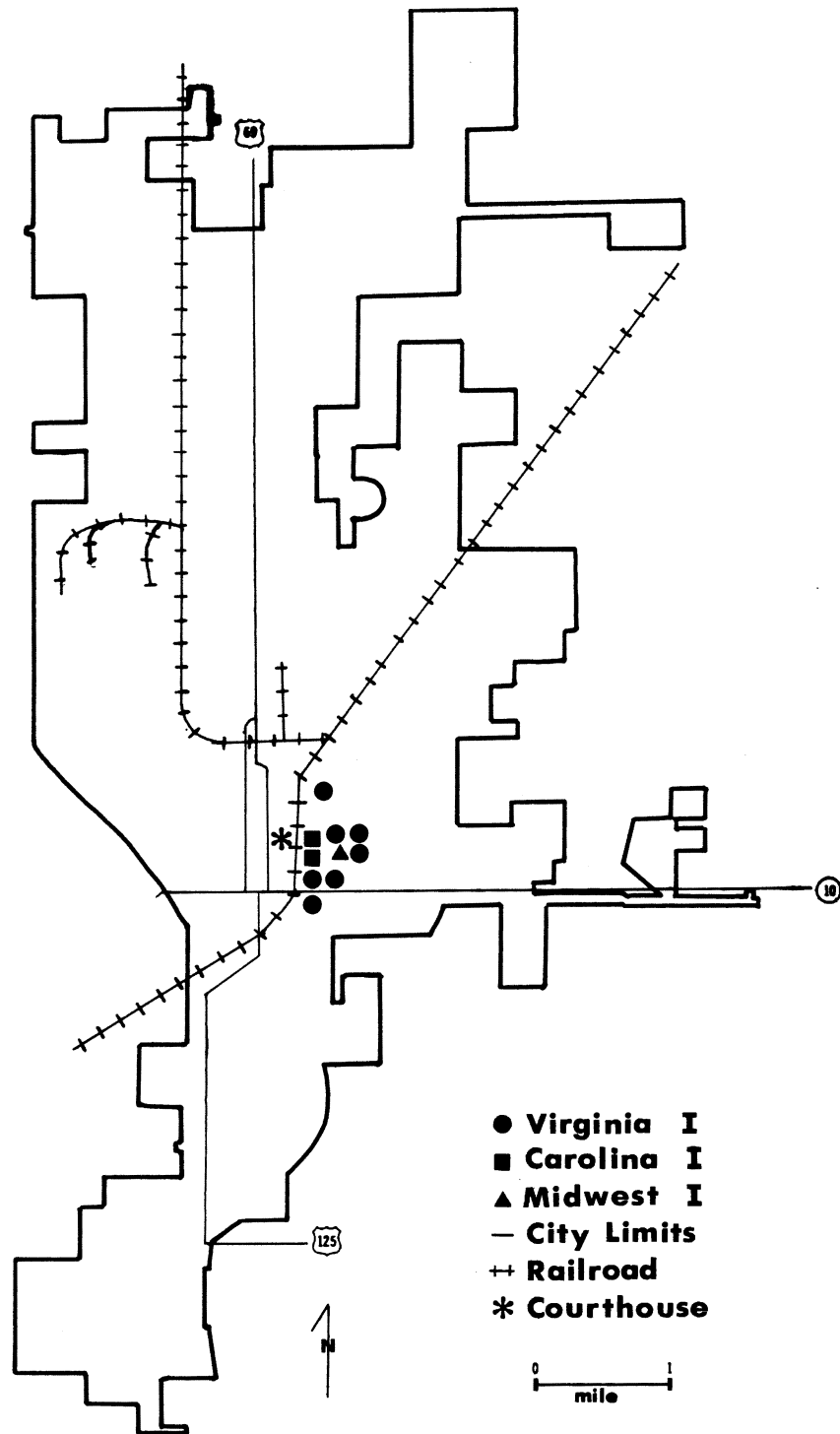


Figure 23. I House Locations in Miami

MC ALESTER

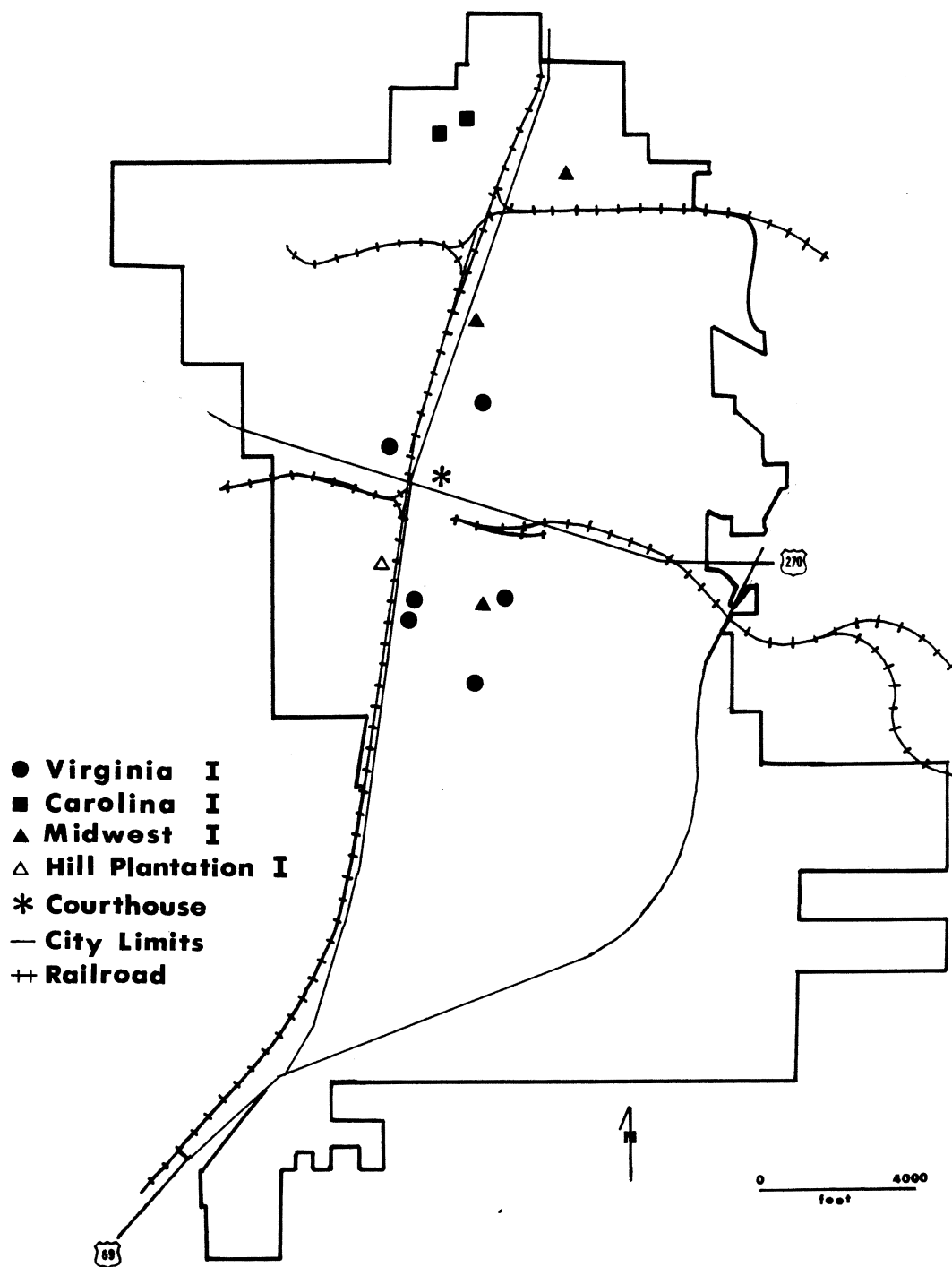


Figure 24. I House Locations in McAlester

1920's, crop cultivation started to rapidly decline. The decline was due to the constant use of the most fertile land with no conservation methods being practiced, therefore, severe erosion carried away the most fertile topsoil leaving behind poor soil for cultivation. The cattle industry grew in the McAlester area due to less crop cultivation. I house construction dates ranged from 1905 to 1929 which encompassed the peak farming era of McAlester.

Stillwater had the greatest number of I houses located in the seven study sites. Thirty-one houses were located within the city limits (Figure 25). Since Stillwater was a wholesale and retail center for a very productive agricultural area, many farmers lived in the city or immediate area. Farming and its related activities were the mainstay of Stillwater's economy which resulted in the high number of I houses found within the city.

Hypothesis 1

The first hypothesis was that the types of I houses found in Oklahoma followed the pattern illustrated by one of the cultural maps shown by Zelinsky (1973), Gastil (1975), Doran (1974), Roark (1979), or Jordan and Rowntree (1986). None of these five cultural area maps were delineated by using folk architecture as an index. All of

STILLWATER

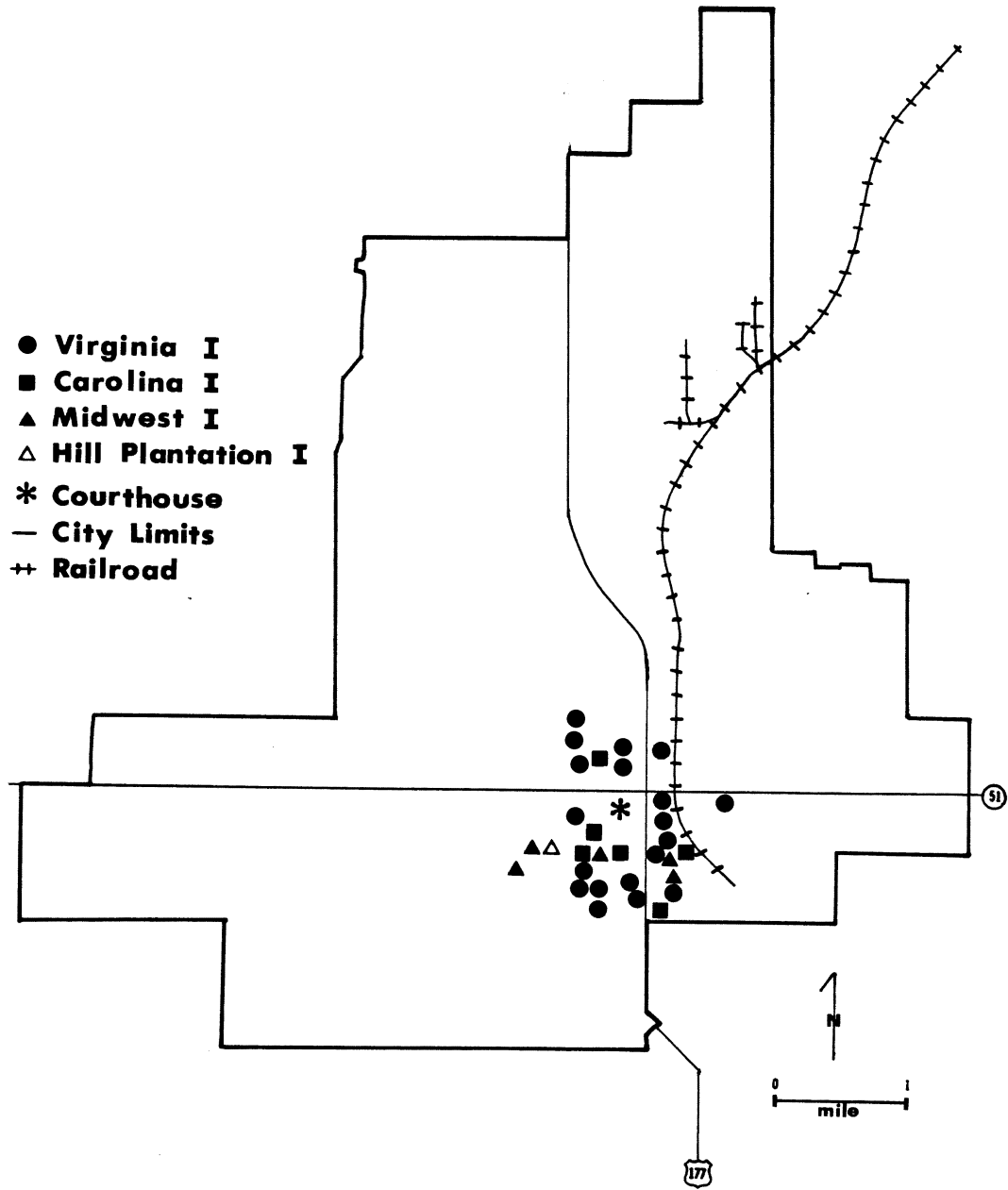


Figure 25. I House Locations in Stillwater

their cultural areas were based on historical reading or population origin data.

The I house was used as a cultural area index because of the five identifiable architectural types. The Pennsylvania I and the Midwest I were characteristic of the houses brought in with the settlers from the Midwestern states and Pennsylvania. The Virginia I and the Carolina I came with settlers from the Upper South while the Hill Plantation I came from the Lower South. I houses from the Upper South, Midwestern states, and Pennsylvania all diffused from the Middle Atlantic source area. The Lower South was part of the lower Chesapeake source area.

After mapping the distribution and number of the various I house types in Oklahoma, each study site was classified as Southern or Midwestern based on the predominate types in different regions. As a result of this study, Miami, Poteau, McAlester, Durant, and Altus were classified as being Southern because of the higher number of Virginia I's and Carolina I's. Poteau and Durant each had one Pennsylvania I. The Pennsylvania I was not a Southern house type, but these areas were still classified as Southern. Most of the migrants to these areas were attracted to the coal mines or timber industry. These settlers may have previously lived in a Pennsylvania farming area which had I houses. When they came to Oklahoma to work in the mines, the I house idea was

carried with them. Five of the seven houses in Altus were Southern. Miami, in the extreme northeast corner of Oklahoma, was classified by some of the cultural maps as being Midwestern. According to the I house types located within the city, Miami should actually be classified as Southern because nine of the ten I houses identified were Southern. McAlester had more of a mixture of different I types with three Southern and nine Midwestern.

An intermingling of Midwestern and Southern types was evident in Stillwater. Twenty-six of the thirty-one houses were classified Southern, however, a greater number of Midwest I's were identified with five of this type present.

The northwestern area of Oklahoma was classified as Midwestern. Woodward was almost equal in the number of Midwest I's and Southern types present. When examining the ratio of Midwest I's and Southern types found within each of the cities, Woodward's numbers displayed the Southern I types declining considerably while the number of Midwest I's was increasing.

By comparing the I house types and the cultural regions defined by Zelinsky, Gastil, Doran, Roark, and Jordan and Rowntree, it can be seen that the most prevalent I house type in every study site did not exactly match any of the cultural region maps. The closest resemblance was with Roark's (1979) general culture area map and Gastil's (1975) cultural area map. Roark shows

an intermixture area also along an east-west line through central Oklahoma, but he breaks it down further to state that part of this intermixture could be classified as "Oklahoman" (Figure 16). The two cultural classifications are not similar in the Miami area. Roark classifies Miami as part of the Midwest, but the results of this study show it to be Southern. Gastil's cultural map is also quite similar to the I house distribution except that he has a sharp boundary between the Midwest and the South. This study shows some intermingling of Midwestern and Southern types did occur.

Roark (1979) explained that the classification of Oklahoma's cultural regions was a dilemma produced by the three major regional cultures surrounding the state. The I house distribution was compared to his study since a specific I house type represented each of his three major regional cultures. This comparison proved them to be somewhat similar except for the extent of the Midwestern reach into the state. Roark displayed the influence of the Lower South to be much greater than that of the Upper South. The I house distribution presents the Upper South influence to be more dominant in southern Oklahoma.

The state of Oklahoma was an area of convergent migrant streams, therefore, the classification of cultural regions within Oklahoma has been exceedingly difficult. Since house types were a cultural trait, it was possible to use the distribution of I houses to determine which cultural region map portrayed Oklahoma best.

Hypothesis 2

The second hypothesis was that the Kniffen-Lewis-Glassie architectural model would not be reliable in its assessment of the diffusion of I house types into Oklahoma. This model was created for the eastern part of the United States and did not fully extend across Oklahoma. The Kniffen-Lewis-Glassie model provided the only study available that used architecture as the basis of diffusion routes. Glassie was the only one to begin an attempt to classify Oklahoma's regions. He identified extreme northeastern Oklahoma as being part of the Upper South and started a division line across the state with everything north being Midwestern and everything south part of the Lower South.

The actual lines mapped for the routes of architectural diffusion completed by Kniffen and Lewis stopped at the Mississippi River, however, their arrows did point toward Oklahoma. If the general trends of these diffusion arrows were continued across Oklahoma, the arrows at the ends of the diffusion routes could be used as starting points. These extended routes would only be speculation because something unforeseen could have diverted the routes, but it was better than starting with nothing.

• By examining the general trends of the Kniffen and Lewis diffusion routes, Oklahoma would fall entirely

within the Middle Atlantic source area. Diffusion waves extended into Oklahoma primarily from the north which were mainly Midwesterners. Northeastern and east-central Oklahoma routes were composed of Upper Southerners, and southern Oklahoma had diffusion from the Lower South.

In the comparison of the diffusion of I houses within Oklahoma and the extended routes of diffusion of the Kniffen-Lewis-Glassie model, there were differences in the Upper South and Lower South routes. Kniffen, Lewis, and Glassie mapped only the northeast and east-central part of the state as Upper South, but the I house types indicate that the Upper South influence reached across the entire area of southern Oklahoma. They also show the Miami area to be Midwestern, yet in this study the Upper South I house types, the Virginia I and the Carolina I, dominate. With the extension of the routes of architectural diffusion across Oklahoma, Kniffen's map would illustrate a stronger wave of Upper South and little influence of the Lower South in Oklahoma than either map of Glassie or Lewis. Therefore, Kniffen's map of the Kniffen-Lewis-Glassie model would be the best indicator of the extension of the folk architecture diffusion routes across Oklahoma. This study would add general validity to the Kniffen-Lewis-Glassie model of architectural diffusion, yet suggests that their diffusion routes are subject to further study as folk housing moved westward.

There were little or no studies done on architectural diffusion across the entire United States. Architectural information, especially on the states west of the Mississippi River, was extremely sparse. This I house study, therefore, is considered a valuable contribution in the eventual preparation of an architectural diffusion map of the continental United States.

Hypothesis 3

The third hypothesis was that the most prevalent I house type in Oklahoma would be the Virginia I. This hypothesis proved to be true with the Virginia I consisting of 57.5 percent of the total I houses located in this study. The diffusion route through the Upper South from the Middle Atlantic source area dominated southern and southeastern Oklahoma with both the Virginia I and Carolina I present. The Midwest I consisted of 21.9 percent of the houses and the Carolina I having 15.1 percent of the total. The Hill Plantation and the Pennsylvania I only made a showing with two houses of each type located.

Stillwater had the highest number of the Virginia I, Carolina I, and Midwest I than any other study site. The Pennsylvania I was only found in Durant and Poteau, whereas, the Hill Plantation I was located in McAlester and Stillwater.

Hypothesis 4

The last hypothesis was that the natural environment of Oklahoma would have had some influence on the types of I houses located within the state. Tables were created which listed each of the I house's primary features. Then each feature was divided further into subsets, for example, the primary feature "chimney" was divided into "one center, two center, two matching, two end, and none." The exact number of each of these features was listed and then the percentage of that feature compared to the total was computed. Tables were created for comparison within each individual city and also for the total number of I houses located (Appendix C). Southern characteristics were commonly reflected in the I houses located in Oklahoma since the state is located in the warm Southwest. It was desirable to be able to work with nature's forces and resources, not against them, to create better living conditions. In the examination of actual American climates, one striking characteristic emerges, i.e., the enormous variations in thermal regimes between one region and another and the large seasonal and diurnal fluctuations within a given region (Fitch, 1972). House types, building materials, and design were often used in diverse environments with little or no thought to their effect on human comfort. Folk housing helped to modify or replace structures with a style better adapted to human need.

The wall surface of a house provides partial support for the building as well as protection and privacy for people inside. The materials of the wall are most important in determining inside conditions; some materials prevent rapid transmission of heat while other materials offer hardly any barrier at all. For standard building materials, such as bricks, concrete, and stone, the indoor temperature was closely related to the thickness of the walls and internal partitions. Wood has always been America's favorite building material mainly because of its abundance and low cost. The most common wall finish on Oklahoma I houses was siding with 47.9 percent. Siding was commonly used on I houses as it became more available. Siding also provided better protection for the house and many times other construction materials, such as logs, would be completely covered with siding so that the original construction material could not be determined by just examining the exterior of the house. Weatherboard was the next material most commonly used with a total of 27.4 percent. Brick and stone would sometimes be utilized because it was so much less vulnerable to rust, fire, and weathering. Stone, brick, or block were used on only four of the I houses. The color of a surface gave a good indication of its absorptivity for solar radiation. Absorptivity decreases and the reflectivity increases with lightness of color. Approximately 93.2 percent of the houses were painted. Of those that were painted, white

was the most popular color with 53.0 percent, and yellow followed with 11.9 percent.

The orientation of the house, along with massive overhangs, and carefully placed openings, control the worst effects of summer heat by providing shade and window breezes, however, they do little for the inhabitants of the house during the cold deep winter. Positioning of windows was critical for winter and solar control during summer because it produced the largest effect on the heat-flow balance within a structure. The most popular placement of facade windows in Oklahoma I houses was two windows symmetrically arranged in both stories so as to keep the balanced appearance. The second most popular facade window arrangement was to have two windows in the lower story and three windows in the upper story. There were ten different arrangements found, but most of them were on individual houses and did not represent a group. The most common gable window placement consisted of 63.1 percent of them centered in each gable end with one window in each floor.

Subtype II was most common since the centered-gable windows and the central chimney were most predominate. Approximately 78.1 percent of all the I houses were subtype II.

To create airflow through a structure, windows do not have to be placed opposite one another because of different pressures inside and outside the structure.

Thus if two rows of openings were placed in all the external walls of a room, at two heights, and the air flow is induced by the thermal force alone, air would enter through those lower openings and will rise along the wall to leave at the upper openings, producing very little motion of the whole mass of air in the room (Givoni, 1969).

Dormers were found on 19.2 percent of the houses. Shingle roofs were most common with 93.1 percent. Composition and asbestos shingles were petroleum products. They were used to replace wood shingles since petroleum products were not in use until after many of the I houses were already constructed. Cement foundations were popular with a total of 76.7 percent. The use of cement was a twentieth-century idea which meant cement foundations on older I houses were not as common. The overall maintenance of the I houses had 41.1 percent of the houses rated as "good." This could be due to the occupancy rate of 91.8 percent. Only 12.3 percent of them were rated as "bad" and most of these were unoccupied.

A single, centered front door placement was found on 69.8 percent of all the I houses and two centered front doors were on 13.7 percent. Having the doors centered on the facade resulted in a more symmetrical appearance. Only 9.6 percent of the houses were asymmetrical.

Chimneys were common in many houses because they were used to store the heat of the fire during the day, and

then return it slowly in the house once the fire had burned out. Many of the chimneys were placed on the exterior ends of buildings because this allowed most of the heat to be lost to the atmosphere. When the chimneys were located in the interior they served as a major source of the structure's heating. Chimneys were not present on 61.6 percent of the I houses located for this study. This noticeable lack of chimneys could be due to modernization of the I houses through time. As modern heating and cooling systems became available, chimneys may have been no longer needed or used and so were eventually removed from the house. Of the chimneys that were present, 31.5 percent of them were located in the center of the house. Center chimneys were characteristic of Subtype II which was the most common subtype located throughout the study sites.

Colder regions would have structures placed together in order to conserve heat, whereas warm regions would separate structures so that the maximum amount of air was allowed to flow between them for better cooling. Balconies were common in warmer regions to provide shade and allow people to sit outside. The Hill Plantation I which was characteristic of the Lower South has a two-story gallery running across the entire facade. Since the Lower South was traditionally the warmest region, the I houses located there would have the largest porches which was true for the Hill Plantation I. The Carolina I, also

from a warm region, had a one-story gallery across the facade. The Midwest I and Pennsylvania I, which were from cooler regions, had either a small projection over the door or lacked a porch altogether.

Some type of addition was constructed on all but four of the I houses. Additions were to the front, rear, side or any of these combined. The additions were one-story, two-story, or sometimes both. On many houses, more than one addition was found. The most common addition style was to build a room on the rear of the house in the center creating a "T" shape. There were 46.5 percent one-story "T" additions and 24.6 percent two-story "T" versions. Sometimes the addition was built on the rear, but instead of being in the center, they were placed to one side creating an "L" shape. "L" additions were only found on 11.0 percent of the houses.

Kitchens were usually placed in the rear additions in the warmer climate areas so that less heat was trapped inside the house. Since Oklahoma has warm summers, it was not surprising to find many rear additions. The Virginia I, Carolina I, Midwest I, and the Hill Plantation I were not as wide as the Pennsylvania I. The Pennsylvania I was larger so that there was more space available for families during long, cold winters. Porches were common in the South so that people might sit outside in the summer and enjoy the breezes. The overhang of the porches also shaded the house thereby keeping it cooler. Porches were

found on 84.9 percent of the total number of I houses. The most common porch type was the attached porch that covers three-fourths of the facade. This was to be expected since the three-quarter porch was typical of the Virginia I and it was the most dominating I house type. There were almost the same amount of porches that ran the full length of the facade and those that were located just over the door. Because Oklahoma I houses are predominately Southern house types, they reflect the warmer climate.

Analysis of Regions

In order to analyze regional differences, Oklahoma was divided into Northern and Southern regions based on I house types. Stillwater and Woodward were identified as Northern, while Altus, McAlester, Poteau, Durant, and Miami were identified as Southern. Although Doran, Roark, and Jordan and Rowntree classified Miami as Midwestern, for purposes of this study, the city was classified as being Southern because nine of the ten I houses found were Southern. Zelinsky and Gastil had included Miami in the Southern region.

A chi-square analysis and Fishers's Exact Test were used to test the I house variables. These two tests were done to determine if there were any statistically significant relationships between the regions and the I

house variables. In each case, the null hypothesis assumed the crosstabulated variables to be independent of each other. The Fisher Exact Test was preferred over the chi-square test because it is an exact test designed for use with 2X2 contingency tables for small samples (Blalock, 1979). The Fisher test was used to obtain the probability of getting exactly the observed number of frequencies under the null hypothesis that there were no differences.

Based on this study, there was no significant difference between region and type of I house. Southern I house types were dominant throughout most of the state. Woodward was the only study site which had an almost equal number of Southern and Midwestern I houses.

There was a strong relationship between region and subtype. A higher number than expected was found for subtypes I and II in the Southern region and for III and IV in the Northern region (Table II). Subtype II was the dominant subtype found throughout Oklahoma and it was most characteristic of the Virginia I which was the dominant house type. Subtype IV was characteristic of the Midwest I which would account for the higher number of this subtype to be located in the Northern region since nine of the sixteen Midwest I houses were located in Stillwater and Woodward.

There was also a strong relationship between region and the date the house was built (Table III). Time of

TABLE II
 CHI SQUARE ANALYSIS OF REGION
 AND SUBTYPE

REGION	SUB		
FREQUENCY	12	34	TOTAL
PERCENT			
ROW PCT			
COL PCT			
NORTH	29 39.73 72.50 47.54	11 15.07 27.50 91.67	40 54.79
SOUTH	32 43.84 96.97 52.46	1 1.37 3.03 8.33	33 45.21
TOTAL	61 83.56	12 16.44	73 100.00

Fisher's Exact Test PROB=0.004

TABLE III

CHI SQUARE ANALYSIS OF REGION AND
DATE OF CONSTRUCTION

REGION	TIME		TOTAL
	PRESTATE	STATE	
FREQUENCY			
PERCENT			
ROW PCT			
COL PCT			
NORTH	34	6	40
	46.58	8.22	54.79
	85.00	15.00	
	80.95	19.35	
SOUTH	8	25	33
	10.96	34.25	45.21
	24.24	75.76	
	19.05	80.65	
TOTAL	42	31	73
	57.53	42.47	100.00
Fisher's Exact Test		PROB < 0.0001	

construction was categorized as prestatehood, before 1907, or statehood, 1907 and later. Most of the I houses in the Northern region were classified as prestatehood, while most of the Southern houses were after statehood. This relationship would be due to the dates that Oklahoma land was opened for settlement. Land Runs opened Stillwater and Woodward in 1889 and 1893 respectively, which was the main reason why some I houses in these areas were built before statehood. Land in many of the other study sites was not opened for settlement until 1896 and later, so I house construction dates were later in the Southern regions than in the Northern.

The position of gable-end windows also showed some relationship to region (Table IV). Gable-end windows consisting of one-centered window per floor was the most common with twenty-three found in both the Northern and Southern region of Oklahoma. This type of gable window arrangement was characteristic of subtypes II and IV which were mainly the Virginia I and the Midwest I.

A relationship was also found between region and facade window arrangement (Table V). Facade windows were categorized by the number of windows found on the second story. The first category included either one window on the second-story facade or three windows on the second-story facade. The one window or three window arrangement was found more than expected in the Southern region of Oklahoma. The second category was two windows on the

TABLE IV

CHI SQUARE ANALYSIS OF REGION
AND GABLE-END WINDOW
PLACEMENT

REGION	SIDES		TOTAL
	EQUAL	OTHER	
NORTH	23	14	37
	34.85	21.21	56.06
	62.16	37.84	
	50.00	70.00	
SOUTH	23	6	29
	34.85	9.09	43.94
	79.31	20.69	
	50.00	30.00	
TOTAL	46	20	66
	69.70	30.30	100.00

Fisher's Exact Test

PROB=0.108

TABLE V
 CHI SQUARE ANALYSIS OF REGION
 AND FACADE WINDOW
 PLACEMENT

REGION	FACADE		TOTAL
	1/3	2	
FREQUENCY			
PERCENT			
ROW PCT			
COL PCT			
NORTH	8	23	31
	14.04	40.35	54.39
	25.81	74.19	
	38.10	63.89	
SOUTH	13	13	26
	22.81	22.81	45.61
	50.00	50.00	
	61.90	36.11	
TOTAL	21	36	57
	36.84	63.16	100.00

Fisher's Exact Test

PROB=0.054

second-story facade and was most common in the Northern region of Oklahoma.

Table VI illustrates the relationship between region and foundation material. Cement foundations were more abundant in the Northern region, while block foundations were prevalent in the Southern regions. A raised foundation was a Southern characteristic which could be the reason why a greater number of the Oklahoma I houses in the Southern region were raised on blocks.

Porch location and region were also somewhat related (Table VIII). The Northern region of Oklahoma had a higher number than expected of porches located only over the door or along the full length of the facade. The Southern region had a greater number of porches that covered three-quarters of the facade which was characteristic of the Virginia I. Five of the Midwest I houses were porchless and were not incorporated in this chi-square test.

In summary, the strongest relationships were found to be between regions and subtype, date of I house construction, facade window arrangement, and foundation material. Placement of gable-end windows, and porch location showed some regional variation. None of the other house type characteristics showed significant regional differences.

TABLE VI

CHI SQUARE ANALYSIS OF REGION AND
FOUNDATION MATERIAL

REGION	FOUN		TOTAL
	BLOCK	CEMENT	
FREQUENCY			
PERCENT			
ROW PCT			
COL PCT			
NORTH	2	37	39
	2.94	54.41	57.35
	5.13	94.87	
	16.67	66.07	
SOUTH	10	19	29
	14.71	27.94	42.65
	34.48	65.52	
	83.33	33.93	
TOTAL	12	56	68
	17.65	82.35	100.00

Fisher's Exact Test

PROB=0.002

CHAPTER VI

SUMMARY AND CONCLUSIONS

The overall objectives of this study were to determine (1) the distribution of I houses within Oklahoma; (2) the I house type most prevalent in Oklahoma; (3) the relationship between the distribution of I houses in Oklahoma and the cultural area maps of Oklahoma done by Zelinsky, Roark, Gastil, Doran, and Jordan and Rowntree; (4) the reliability of the Kniffen-Lewis-Glassie model of architectural diffusion within Oklahoma; and (5) the relationship between I house types and the natural environment of Oklahoma. These objectives were achieved by locating all the I houses in selected study sites within Oklahoma and then mapping and analyzing the I house data.

I houses were found in each of the study sites ranging from one house found in Poteau up to thirty-one houses in Stillwater. The I house was a symbol of prosperous and ambitious farmers which was why it was called the "Farmer's Mansion." It could be assumed that in areas with a greater number of farmers, farming activity, and a strong agricultural economy, the greater the number of I houses would be found. In areas where

there was not a strong agricultural economy, few I houses were found. This assumption was especially true for the Stillwater area. Stillwater was a major agricultural marketing center for a very productive farming area, therefore, this city had the greatest number of I houses. Altus and Woodward were also good farming areas, but not as many I houses were found in them. The low number of I houses found in Altus could be because in the few years that the town was originally being settled, drought struck and many farmers moved from the area. More I houses probably would have been found in Woodward except for the tornado that swept through the town in 1947 and destroyed half of the city. Miami was traditionally not known for its agriculture, instead it was known for lead and zinc mining. I houses were located in that area because before the mines were the economy's mainstay, tobacco and strawberries were major crops for the area. McAlester was also not traditionally known for its agricultural background. Rather it was reknown for its coal mines and the foreign migrants who migrated into the area making McAlester a boomtown. Blessing (1972) stated that the average migrant had lived previously in at least three states prior to settling in Oklahoma. This could mean that even if these settlers came to work in the coal mines, they could have previously lived in farming country. McAlester also had good fertile soil and the major crops were cotton and corn until the late 1920's

when erosion took its toll on the land. Thereafter crop cultivation declined drastically. Only three I houses were found in Durant even though it was located in fertile river valley lands. This area was part of the Choctaw Nation which meant that the Choctaw citizens owned the land of the Durant area. The Choctaws had their own cultural traditions and did not readily adopt other cultural ideas, such as the I house. It was not until restrictions were lifted for settlement in 1898 that there was any substantial white settlement in Durant. The cattle industry was significant in the Durant area. Poteau had only one I house within the entire city. This was not surprising because Poteau was not a large scale farming area. The rugged terrain of mountains, trees, and rocks was not suitable for farming, therefore, few I houses were found in the area.

The most prevalent I house type found in Oklahoma was the Virginia I which accounted for 57.6 percent of the total. Next was the Midwest I, 21.9 percent, and the Carolina I, 15.1 percent, but the Hill Plantation I and the Pennsylvania I only had four houses among them. The Virginia I, Carolina I, Pennsylvania I, and the Midwestern I were all from the Middle Atlantic source area. Of the 73 houses identified, 71 of them were from the Middle Atlantic source area which displayed just how much an influence this source area had on folk architecture within Oklahoma based on I house types. Two of the I houses were

from the lower Chesapeake source area and there were none from the New England area.

The I house was a learned idea and when settlers migrated to a new land, it was often brought with them as a conscious reminder of their homeland. Because of this, variations of I house types were used to lend credence to population origins in Oklahoma. If the dominating house type was the Virginia I, the Carolina I, or the Hill Plantation I, then that area was classified as Southern. If the dominating house type was the Midwestern I, then that area was classified as Midwestern. An intermingling of Southern and Midwestern was shown primarily in Stillwater, McAlester, and Woodward.

The distribution of I house types and the cultural area maps done by Zelinsky, Doran, Roark, Gastil, and Jordan and Rowntree were compared to determine if any of the patterns were the same. None of them matched perfectly, but the most similar map that the I house types followed were those delineated by Roark and Gastil. The difference with Roark's map was the classification of Miami. He identified Miami to be Midwestern, whereas this study identified it to be Southern due to the dominant I house type being from the Upper South. Gastil's cultural map was different because he had a sharp boundary between the Midwestern and the Southern, whereas the I house distribution showed an intermingling of the two. All of the culture area maps created by Zelinsky, Roark, Doran,

Gastil, and Jordan and Rowntree were based on culture traits other than folk architecture. This study helped show that folk architecture should be another culture trait worth consideration when analyzing Oklahoma's culture regions in the future.

The Kniffen-Lewis-Glassie model of architectural diffusion routes was not be reliable in its direct assessment of Oklahoma simply because the actual diffusion routes were not drawn across Oklahoma. But, if the general trends of the routes continued, they could be extended through Oklahoma. Extending the lines would be speculation, but the Kniffen-Lewis-Glassie maps are the only architectural diffusion maps available. None of them extended west of the Mississippi River, but this at least gives a starting point for mapping architectural diffusion across the rest of the United States. Glassie and Lewis showed most of southern Oklahoma to be influenced by the Lower South, but Kniffen shows it to be primarily Upper South. By examining the I house types found in this study, the diffusion routes of these houses were most similar to those illustrated by Kniffen. Kniffen's theory was the most relevant, but the Glassie and Lewis routes would not hold true for Oklahoma based on this study.

Oklahoma is located in the Southwest region of the United States where the winters can be fairly mild and the summers exceedingly hot. The predominate type of I house found was the Virginia I which has Southern

characteristics with regard to the climate. The Southern houses were more linear than the Pennsylvania I houses because more time was spent outdoors instead of in the house. Porches were common, again because people spent more time outdoors in the South than in the North. Chimneys were usually located at the gable ends so the heat did not stay within the house. Windows were common in the facades and gable ends so as to allow cooling breezes to flow into the house and provide good ventilation. Many of the houses were built off the ground so the floors did not rot from the moisture and were away from vermin and floods. The Oklahoma I houses were predominately white so they reflected solar radiation and remained cooler. The kitchen was usually found as an addition so as to keep the heat out and reduce the risk of fire in the main part of the house. These characteristics of Southern architecture were commonly found in many of the I houses in Oklahoma.

I houses can be used as an indicator of the origins of the historic settlers of Oklahoma because of the variation in architectural types. The I house is not the only type of folk architecture which may be used to indicate settler origins. Future studies in Oklahoma could include folk architecture such as shotgun houses, log structures, barn types, or fences. It is essential that more research be conducted west of the Mississippi River in order to provide information on architectural

diffusion for the continental United States before the older buildings are gone and a valuable geographic tool is lost without any record.

The presence of the I house tells us that Oklahoma was basically an agricultural state with a rural mentality. The economy was reflected in types of houses built by early settlers. Their I houses reflected the attitudes and values of common people from other areas of the country who were settling the state and bringing their ideas into Oklahoma. The state was a cultural "crossroads" with a cross-section of the Midwest and South. Oklahoma cannot be easily placed within one cultural region of the United States, instead it was a cultural mosaic of different regions. In that regard, Oklahoma fits those theories presented by Doran, Roark, Zelinsky, Gastil, and Jordan and Rowntree. The state was a zone of many cultures.

By studying the I house types in Oklahoma, something could be learned about the ideas of people during that "slice-of-time" in Oklahoma's history. Information could be gathered on the past cultures during the Runs of 1889 to 1930.

The I house faded as a popular house type within Oklahoma beginning in the late 1920's and by the 1930's, no I houses were built. Many of the older I houses are found today in both rural and urban areas. The I house within this area represents an unique time period in

Oklahoma history because its peak construction was when the State of Oklahoma was being formed.

There has been a revival of the I house within the past few years. They are being sold as prefabricated houses and are becoming visible in some of the latest housing additions. Basic folk architecture is economical, practical, and functional which may be the reason that the I house is being rejuvenated.

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APPENDIXES

APPENDIX A

I HOUSE SURVEY FORM

URBAN I HOUSE SURVEY

NO. _____

1. DATE BUILT _____
2. PERSON WHO BUILT _____
3. LOCATION _____
(TOWN, TOWNSHIP AND RANGE, OR VERBAL DESCRIPTION)
4. ADDRESS _____
5. LOT AND BLOCK NO. (OPTIONAL) _____
6. CONSTRUCTION MATERIALS _____
(CLAPBOARD, BRICK, OR OTHER)
7. ROOF COVERING MATERIALS _____
8. TYPE OF FOUNDATION _____
9. ADDITIONS: FRONT _____

BACK _____	TYPE (CIRCLE)	L	T
SIDE _____			
10. PLACEMENT OF WINDOWS:

UPPER _____
LOWER _____
LEFT SIDE _____
RIGHT SIDE _____
11. PLACEMENT OF DOOR: _____
12. CHIMNEY: (CIRCLE) ONE TWO
 PLACEMENT _____
 (INTERIOR, END, MATCHING, OR OTHER)
13. PORCH VARIATIONS: (CHECK)

PORCHLESS _____	FULL WIDTH _____
ATTACHED _____	OVER FRONT DOOR _____
TWO STORY _____	
14. DIMENSIONS _____
(IF POSSIBLE)

15. SET BACK OR LOT PLACEMENT (ESTIMATE) _____

16. ENVIRONMENTAL CONTEXT _____
 (RESIDENTIAL, INDUSTRIAL, OR COMMERCIAL)

17. DECORATIVE ELEMENTS (EXPLAIN) _____

18. PRESENT CONDITION OF HOUSE

OCCUPIED _____

PAINTED (COLOR) _____

MAINTENANCE _____

OTHER _____

19. ADDITIONAL COMMENTS _____

20. HOUSETYPE:

VIRGINIA I _____ SUBTYPE I _____

PENNSYLVANIA I _____ SUBTYPE II _____

CAROLINA I _____ SUBTYPE III _____

MIDWEST I _____ SUBTYPE IV _____

HILL PLANTATION I _____

21. SKETCH OF HOUSE PLAN (IF NEEDED)

APPENDIX B
PHOTOGRAPHS OF I HOUSE TYPES



Virginia I House, Altus, Oklahoma



Carolina I House, Stillwater, Oklahoma



Midwest I House, Woodward, Oklahoma



Pennsylvania I House, Durant, Oklahoma



Hill Plantation I House, McAlester, Oklahoma

APPENDIX C

NUMBER AND PERCENTAGES OF I HOUSE FEATURES

TOTAL FEATURES OF OKLAHOMA I HOUSES (N=73)		
Feature	Number	Percentage
WALL FINISH		
Clapboard	10	13.7
Weatherboard	20	27.4
Stone	1	1.4
Stucco	4	5.5
Brick	1	1.4
Block	2	2.7
Siding	35	47.9
FRONT DOOR PLACEMENT		
1 center	51	69.8
2 center (1 upper, 1 lower)	4	5.5
1 off-center	7	9.6
2 off-center (both lower)	10	13.7
4 off-center (1 upper, 3 lower)	1	1.4
CHIMNEY		
None	45	61.6
1 center	23	31.5
2 matching	1	1.4
2 center	1	1.4
1 end	3	4.1
OCCUPANCY RATE		
Occupied	67	91.8
Unoccupied	6	8.2
DORMERS		
Center gable	14	19.2
Off-center	8	10.9
Center shed	3	4.1
Off-center shed	1	1.4
Center hipped	1	1.4
Off-center hipped	1	1.4
None	45	61.6
RESIDENTIAL	73	100
Source: Reconnaissance survey of Oklahoma by author (June-December, 1986)		

TOTAL FEATURES OF OKLAHOMA I HOUSES (N=73)		
Feature	Number	Percentage
PORCHES		
Attached 3/4	23	31.5
Attached full length	17	23.3
Attached over door	18	24.7
Two-story full length	2	2.7
Two-story 3/4	2	2.7
Porchless	11	15.1
CONDITION		
Painted	68	93.2
Unpainted	5	6.8
HOUSE TYPE		
Virginia I	42	57.6
Carolina I	11	15.1
Midwest I	16	21.9
Hill Plantation I	2	2.7
Pennsylvania I	2	2.7
SUBTYPE		
I	4	5.5
II	57	78.1
III	8	10.9
IV	4	5.5
COLOR		
White	36/68	53.0
Yellow	8/68	11.9
Tan	5/68	6.9
Green	4/68	6.0
Cream	2/68	2.9
Gray	6/68	8.8
Brown	4/68	6.0
Red	1/68	1.6
Blue	2/68	2.9
SOURCE: Reconnaissance survey of Oklahoma by author (June-December, 1986)		

TOTAL FEATURES OF OKLAHOMA I HOUSES (N=73)		
Feature	Number	Percentage
MAINTENANCE		
Excellent	17	23.3
Good	30	41.1
Fair	17	23.3
Bad	9	12.3
ROOF		
Shingle	68	93.1
Shake	4	5.5
Asphalt	1	1.4
FOUNDATION		
Cement	56	76.7
Block	12	16.4
Brick	1	1.4
Stone	4	5.5
FACADE WINDOW PLACEMENT		
3 upper, 2 lower	15	20.4
2 upper, 2 lower	36	49.3
1 upper, 2 lower	6	8.2
0 upper, 2 lower	6	8.2
5 upper, 4 lower	1	1.4
3 upper, 4 lower	1	1.4
0 upper, 4 lower	1	1.4
6 upper, 3 lower	1	1.4
2 upper, 3 lower	3	4.1
2 upper, 1 lower	1	1.4
0 upper, 8 lower	1	1.4
None	1	1.4
Source: Reconnaissance survey of Oklahoma by author (June-December, 1986)		

TOTAL FEATURES OF OKLAHOMA I HOUSES (N=73)		
Feature	Number	Percentage
ADDITIONS		
One-story back "T"	34	46.5
Two-story back "T"	18	24.6
One-story back "L"	7	9.6
One-story side and back "T"	4	5.5
Two-story front and back "T"	2	2.7
One-story front and back "T"	1	1.4
Two-story side and back "T"	1	1.4
One-story front and back "L"	1	1.4
One-story side	1	1.4
None	4	5.5
SIDE WINDOW PLACEMENT		
Left gable:	Right gable:	
1 up, 1 low	1 up, 1 low	46
0 up, 1 low	1 up, 1 low	2
2 up, 2 low	1 up, 1 low	2
2 up, 1 low	1 up, 1 low	2
1 up, 2 low	1 up, 1 low	2
2 up, 2 low	2 up, 2 low	3
2 up, 1 low	2 up, 1 low	2
0 up, 0 low	1 up, 1 low	2
1 up, 4 low	1 up, 1 low	1
0 up, 1 low	1 up, 2 low	1
0 up, 0 low	2 up, 1 low	1
0 up, 0 low	2 up, 2 low	1
1 up, 1 low	1 up, 1 low	2
1 up, 1 low	2 up, 2 low	1
None		5
		63.1
		2.7
		2.7
		2.7
		2.7
		4.1
		2.7
		2.7
		1.4
		1.4
		1.4
		1.4
		2.7
		1.4
		6.9
Source: Reconnaissance survey of Oklahoma by author (June-December, 1986)		

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VITA

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