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SENSE OF PLACE IN THE PRAIRIE ENVIRONMENT SETTLEMENT AND ECOLOGY IN RURAL GEARY COUNTY, KANSAS

NINA VEREGGE

Many people who drive across Kansas on the Interstate or on Route 50 see the state as a single, unchanging stretch of treeless plain. A more perceptive observer witnesses the gradual transition from the east to the west: from rolling hills and wooded vales to wide open grassland and sage plain; from corn to winter wheat; from farms to ranches and feedlots; from running streams to dry washes; from humidity on a summer day that is relieved only by constant wind to dry heat blown across grassland untempered by stream valley microclimates. It appears a seamless transition where distinctions are lost in the relentless warp and

weft of roads marking section lines across the state.

Geary County is different. Moving about the county permits observations of patterns in the landscape—not rote repetition of identical elements, but similar forms and relationships in human habitation of the natural landscape. There is a predictability to Geary County, Kansas. What is over the next rise or around the next bend in the road can be anticipated. Eventually familiarity allows for farmsteads or their foundations, changes in vegetation, and the presence of a creek or a limestone ledge running level along the hillside like the high watermark of a reservoir, all to be sensed.

There is a dichotomy to Geary County: either one is “up on” the prairie, surrounded by a sea of grasses waving in the constant wind, or “down in” one of the stream valleys, amidst or near a narrow, linear stretch of woods following along the creekbed. The change from one to the other is abrupt, in fact, even dramatic, because it is unexpected in the Kansas landscape. Heading up a valley causes an awareness of a subtle rising in relation to the line of the flat ridgetops. The final transition,

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however, is quick. Suddenly one rises above the horizon and is confronted with the familiar Kansas—a continuous ground plain and continuous sky. On top, the dendritic pattern of drainages is lost to the eye, and the tallgrass prairie appears to stretch without interruption in all directions; only occasional glimpses at the head of an incipient valley provide a reminder of the lower world. This visual sensation is reinforced by aural and tactile senses—the woodland birds are gone and the wind is stronger, more persistent.

The experience of moving in the other direction, of driving along a section line road where the whole of the prairie is in sight, then turning and beginning a barely noticeable descent down a draw, is equally striking. Suddenly there is a cut bank, an exposure of rock, and the world narrows to the immediate environment of a particular draw. Its oak and hackberry, perhaps some red cedar, and the understory of shrubs and herbs emerge abruptly. The glint of sunlight striking water momentarily blinds, birds chatter, and, during summer, trees create corridors of shadows winding along the creek's edge.

Throughout Geary County, stone buildings—houses, barns, schools and churches—share this landscape, mostly in the valleys, but occasionally on the uplands as well. Some are ruins, evoking a sense of the past. Others reveal changing uses and styles in their alterations. Still others epitomize the ideal of conservation in their carefully maintained materials and details. Newer buildings are in evidence, but for the most part their disparate styles, materials and sitting leave little trace on the memory.

This essay, however, concentrates on the historical development of the spatial order of human settlement in Geary County rather than the present. An analytical framework that emphasizes relationships between human activity and the region's ecology will be used to examine nineteenth- and early twentieth-century landscape evolution. This analysis suggests that Geary County's strong sense of place rests on these cultural-ecological associations.

GEARY COUNTY AND THE FLINT HILLS CONTEXT

Although there have been several important studies of the Flint Hills region that focus on various aspects of the history of Euro-American settlement and agriculture,¹ very little has been written about either the settlement history of Geary County or its cultural landscape. While a traditional history of the county—of who settled where and when, and of what events had a lasting impact on the character of the county—would make a contribution to the collective history of the state of Kansas, it may not be the most important thing to be learned from rural Geary County. Instead, an exploration of the evolution of its cultural landscape in order to understand its strong place identity may be more significant. Geary County's sense of place in fact derives from the integration of physical and human environments, the daily association of human activity and natural environment that produced a cultural landscape whose identity rests on the resulting physical patterns: farmsteads in association with water and topography, fields and pastures in association with topography and soils, building materials in association with geology and vegetation, and roads in association with topography.

Consideration of the relationships between place identity and the cultural landscape begins with a recognition of the context of this particular landscape. Geary County is in north central Kansas, at the northern end of the Flint Hills (Fig. 1). It is at the western edge of the original extent of tall-grass prairie, and along with the rest of the Flint Hills, contains some of the largest remaining tracts of this ecosystem.² The county's topography is a dissected plain, its creeks tributaries to the Smoky Hill and Kansas River. Less than 15 percent of the county consists of tillable bottom lands; the balance is in moderately to steeply sloping hillsides and bluffs and nearly level upland plains.

It is a small county by Kansas standards, with just a few more than 400,000 acres. Most

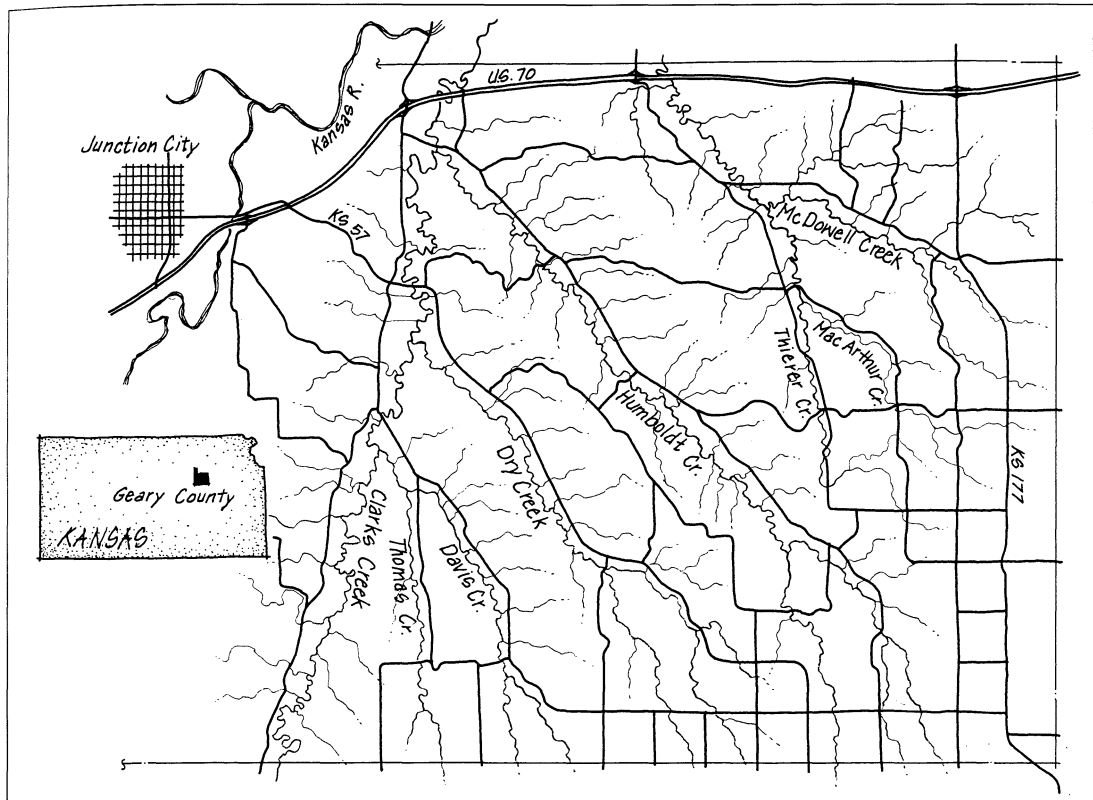


FIG. 1. Map of eastern Geary County, Kansas. Map courtesy of Nina Veregge.

of its population is concentrated in and around Junction City, giving the bulk of the county a decidedly rural character. The southeastern "body" of the county has a physical and human landscape distinct from its northwestern "arm," which contains Milford Reservoir and abuts the Fort Riley Military Reservation. This difference was recognized early in the county's history when a traveling news correspondent penned this interpretation in 1855: "On the south side of the Kansas [River] the romantic hills of Clark's Creek loom up dimly in the distance, resembling the appearance of a panorama on a large scale by an accomplished artist." By comparison, the landscape to the north was seen as "high rolling prairies, wide plains and broad valleys."³ A description

provided in the 1876 State Board of Agriculture Report was less evocative but still observant of the difference: "The general surface of the upland country is undulating in the western, and broken and bluffy in the eastern part of the country."⁴

Euro-American occupation of the area began when Fort Riley was established in 1852. Its situation midway between the Oregon and Santa Fe Trails was intended to provide protection for travelers on those overland routes. The first civilians came to the area in 1853 or 1854, reportedly settling along the flood plains of the Smoky Hill and Republican Rivers, and near the lower reaches of Clark's Creek. Small civilian settlements grew up around the fort with Pawnee, Ogden, and

Junction City serving in turn as primary suppliers to both the military and to settlers, traders, and explorers moving west along the river courses.

Several towns were founded or at least planned with the conception of Kansas Territory. Federal and territorial townsite laws encouraged individuals to form town companies and purchase tracts of land for development. Towns chartered included Pawnee in 1854, Chetolah in 1855, Cedar Point in 1858, and Ashland (now in neighboring Riley County) in 1859.⁵ As often happened with "paper towns," none survived, and other names on the map like Wreford, Olson, and Moss Springs, which developed from slight concentrations of farms to include a post office and school, never grew further.

SENSE OF PLACE AND PATTERNS OF ASSOCIATION IN THE LANDSCAPE

Landscape analysis frequently proceeds "from the ground up," beginning with the bedrock geology and progressing through a sequential description of climate, soils, vegetation, fauna, and finally, human constructions such as roads, fields, and buildings. For each of these categories, the relevant features of a particular landscape are described. In this case study, Geary County's Permian age limestones formed a plain dissected by small stream valleys, its tallgrass prairie species and oak-hackberry woodland associations. Such a listing of landscape *elements*, however, adds up to something less than the whole; it tells nothing about the sense of place. "Sense of place" is a holistic quality that requires definition on a different level. Christian Norberg-Schulz writes that "A place is . . . a qualitative, 'total' phenomenon, which we cannot reduce to any of its properties, such as spatial relationships, without losing its concrete nature out of sight."⁵

Reflections on Geary County's landscape over time provide the basis for an alternate model that begins with the individual elements, but then shifts the focus to their inter-

relationships, thus defining a set of *associations*. Another way to state this is that it is not the element itself, such as the annual precipitation or dominant species of tree, that creates meaning in the landscape, but rather the relationships between elements that constitute the character of a place. Where an association is repeated in a predictable way throughout a landscape, it becomes a *pattern*. *Patterns of association* are material expressions of relationships within the biophysical and cultural environments that have spatial dimension.

For example, a deeply eroded arroyo might be read as an association between soils, vegetation, runoff, and overgrazing by an introduced species. In this case, the specific soils, rainfall pattern and grazing cattle are elements that exist in relation to one another and can be taken together as an association. A whole landscape characterized by such arroyos presents us with a pattern of association, which in turn contributes to the overall place identity.

There are an infinite number of associations in a given landscape; however, some of them contribute more to a sense of place than others. Although patterns that convey meaning by embodying cultural icons, such as covered bridges or grain elevators, tend to contribute most to a sense of place, landscapes devoid of human constructions can also be imbued with cultural meaning, as Norberg-Schulz has pointed out.⁶

Because this is an analytical model rather than an attempt to capture the "whole" of a particular place identity, it relies less on "images" than on an explication of physical relationships that have spatial dimension and scale. The analysis thus lends itself to illustration by plan views or maps—formats that allow abstraction of relevant characteristics—as well as by photographs. Further, because the *process* of landscape evolution is of concern, maps are a good medium insofar as they can show sequence.

For Geary County, this general model of elements, relationships, and resulting patterns of association produces the following specific

patterns of association: exposed ledges of underlying geologic strata; nearly parallel valleys; a “typical” valley section; natural vegetation coincident with landform; upland pastures and cultivated bottom lands; roads that follow valleys; farmsteads at tributary drainages; and stone and wood farm buildings. Some of these patterns are the result of interrelationships between physical elements (climate and bedrock geology, for example), some between physical and biological (soils and vegetation), and some between cultural, biological, and physical (cultivated crops and soils). While many of these associations hold throughout the Flint Hills, two of them give eastern Geary County a distinct identity *within* the region: the particular system of nearly parallel stream valleys and the proportions of the typical valley section.

EXPOSED LEDGES OF UNDERLYING GEOLOGIC STRATA

The underlying geology explains the characteristic landforms that make for a consistent spatial experience as one moves about Geary County. Nearly horizontal beds of Permian marine limestones and mudstones of the Chase and Council Grove groups have been eroded in a dendritic pattern, with the more resistant limestone ledges often forming visible “contour lines” in the upland landscape (Fig. 2). Erosion of the underlying rocks has been uniform, producing repetitive landforms of similar dimensions, which adds cohesiveness to create a sense of the whole.

The spacing of tributary drainages to the main creeks is fairly regular, as can be seen in Figure 1. Those entering from the northeast consistently have a more westerly orientation, while those tributary drainages entering the valleys from the southwest have a northerly trend. It is also evident on this map that the uppermost branches of West McDowell, Humboldt, Dry, and Davis Creeks all have one branch which continues the southeast to northwest direction of the main valley, and one branch with a north-south axis. This con-



FIG. 2. Subtle exposure of limestone ledge traces landscape contours. Photograph courtesy of Nina Veregge.

sistency of spatial dimension and repetition of landform is an important contribution to the overall imaginability of the landscape.

The landforms produced by erosion have a characteristic profile throughout the area: a strong, level horizon, bending to an approximately thirty-five-degree slope over an exposed ledge, and dropping into a gently sloping creek bottom. The 1959 Soil Survey describes this as the “typical Flint Hills topography of ridgetops, strong sideslopes and small stream valleys.”⁷ Visually, the landscape is a satisfying one, combining the restful, extensional qualities of strong horizontal lines with the dynamics of diagonal sideslopes.

NEARLY PARALLEL VALLEYS

This pattern, that of nearly parallel valleys, is the result of relationships on a regional scale between the bedrock geology and surface runoff. The fact that Davis, Dry, and Humboldt Creeks, and the main branch of McDowell Creek are all roughly parallel, trending southeast to northwest, takes on meaning as one moves through the landscape and repeatedly encounters small “places” that are similar relative to landform and compass orientation. This is experienced from the direction of sunlight and prevailing winds. There are, for example, many small “places” where the sun strikes the south-facing bank of a tributary

drainage as it joins the main valley, and also many places where a road bends east to climb up and out of the end of a valley (Fig. 1).

This pattern could be cause for disorientation if not for the hierarchy inherent in the drainage system. Thomas, Davis, Dry, and Humboldt Creeks feed into Clarks Creek, which in turn empties into the Kansas River. Although nearly parallel in actual orientation, the valleys in the eastern part of the county can be conceptualized as forming a radial pattern, emanating roughly from Junction City. This pattern emerges through the road system as roads appear to converge on Junction City. In actuality, the upland separating Clarks Creek from the Smoky Hill River forms something of a physical barrier, and roads connect over this ridge. As a mental image of the county's spatial organization, though, the concept of a series of valleys coming together at Junction City contributes to the overall imaginability. In this regard, eastern Geary County is distinct within the Flint Hills. In Chase County, by comparison, tributaries to the Cottonwood River flow in a multitude of compass directions, and present no immediately identifiable pattern.⁸

THE "TYPICAL" VALLEY SECTION

Equally distinct within the Flint Hills landscape is the particular shape and proportions, or cross-section, of Geary County's valleys. Typically, one side slopes steeply from an upland pasture down to a meandering creek and the other side steps back and rises gently over a series of receding ledges. The creek is hard up against the steep slope, and the valley floor slightly elevates toward the more gentle side-slope. This asymmetry is attributable to the dip of the underlying limestone beds. In Humboldt, Dry, and Thomas Creeks, the steep slope and creek are on the southwest side of the valleys. The beds underlying these areas dip gently in that direction, encouraging a gradual shift in position to the creek. A cross-section of the county included in the 1960 Soil Survey shows a leveling of the strata un-

der Clarks Creek where the position of the creek is reversed, with the wooded, steep side-slope on the east side of the valley.⁹

The scale and proportion of the valley sections are similar throughout, averaging one-half mile wide, and with approximately 150 foot change in elevation from valley bottom to ridgetop near the mouth of the creeks. The overall change in elevation from the southeast corner of the county to the lowest point where Clarks Creek joins the Kansas River is approximately 350 feet.

Added to the physical elements of this association are the biological and cultural ones. Soil and vegetation patterns occur in consistent relationships with the landforms, as do the location of human artifacts such as fields, roads, and farmsteads. Although the three-dimensional aspect of this is not visible in an aerial photo, Figure 3 clearly shows the horizontal patterns of these elements.

GEARY COUNTY VEGETATION COINCIDENT WITH LANDFORM

Reinforcing the consistency of landforms are the two primary ecosystems of the Flint Hills region, gallery forests, and tall-grass prairie. Gallery forests are so called because they follow stream corridors; while they may run for several miles, they are usually less than 1000 feet wide. Grasslands, of course, dominate in terms of land area, covering more than 90 percent of the region, but the intensity of growth in the forest makes for a more significant percentage of biomass overall.¹⁰ The edge between grassland and forest is well-defined, as expansion of forest into grassland is stopped by periodic fire, while grass incursion into the forest is limited by the shade of the forest canopy.

The characteristic species of the Flint Hills grassland is big bluestem (*Andropogon gerardii*), mixed with several other species including little bluestem, side oats grama, switchgrass, and Indian grass (*Andropogon scoparius*, *Bouteloua* sp., *Panicum vergatum*, and *Sorghastrum nutans*). The widely recognized "Flint Hills-Bluestem pasture" is a pattern of association



FIG. 3. Aerial view of lower Humboldt Creek. Several patterns of association are visible: exposed limestone ledges, roads that follow valleys, upland pastures and cultivated bottomlands, and typical valley section. Courtesy of Soil Conservation Service, 1955.

between these native grasses, climate (including lightning-induced fires), the underlying limestone rocks, and the historical development of the cattle industry. The value of the uplands as pastures was not recognized initially. It grew in relation to the demand for beef and as the location potential of this region between southwestern rangelands and stock-

yards in Chicago and Kansas City became recognized. The idea that the upland soils were thin, “flinty” (chert nodules left from decomposing limestone), and poorly suited to cultivation was established early and prevailed as late as 1960.¹¹ A more careful examination of the soils map for the county, however, and observation of contemporary use belies this

generalization. Ladysmith-Irwin soils in the flat, extreme southern part of the county, and those on the upland between Clarks and Lyon Creeks are in fact of a quality and depth to permit cultivation of crops.¹²

A smaller-scale pattern of association occurs between outcropping limestone ledges and the growth of shrubs and herbaceous plants. The ledges provide a microclimate that allows the growth of plants that would otherwise be crowded out by the dense rhizomal mat of grass roots. Furthermore, the ledges provide homes for woodrats (*Neotoma floridana*) and other small mammals who store, consume, and excrete varied seeds, nuts and berries, furthering the plant growth along the base of the ledge.¹³

The gallery forests, representing an association of topography, hydrology, soils and vegetation, are actually composed of three strata—an upper tree canopy, a middle layer of shrubs, and a layer of herbs at ground level. Plants below the canopy are adapted either to grow with a minimal amount of light or do their photosynthesizing early in the spring before the canopy is leafed out. Associations of Chinkapin and bur oak, or bur oak and hackberry (*Quercus muehlenbergii*, *Quercus macrocarpa*, and *Celtis occidentalis*) are common in the forests, while ash, elm, box elder, and walnut (*Fraxinus sp.*, *Ulmus Americana*, *Acer negundo*, and *Juglans nigra*) are also found in limited numbers. Suppression of wildfires in the last century has led to succession of the more shade-tolerant species—elm and hackberry—as the climax species in the forests.¹⁴

Intermingling with the gallery forests where steep sideslopes meet valley bottoms near creek beds are red cedars (*Juniperus virginiana*). The red cedar is also an invasive species from former pasturelands. Protected from periodic burning by topography in the case of the slopes, and by disuse in the case of abandoned pasture, cedars currently are characteristic of these two patterns of association throughout the county.

While these patterns of vegetation and landform can often be observed from a single vantage point, it is by moving along one of the

stream valleys from top to bottom (or the reverse) that one can experience the larger order of the landscape: the sense of being “down in,” enclosed by the canopy of a gallery forest or moving along its edge, or of climbing up and out of the valley to the expanse of the upland pastures.

UPLAND PASTURES AND CULTIVATED BOTTOMLANDS

This pattern is not limited to Geary County, but is widespread throughout the Flint Hills. It is one of the distinguishing characteristics that represents an association between nearly all elements—geology, hydrology, soils, vegetation and human culture. The uplands and gentle slopes of 15 percent or less are predominantly pastures of native grasses. The Ladysmith, Irwin, Dwight, Florence, and Sogn soils on these areas in Geary County are derived from colluvial limestones and shales, with local pockets of Pleistocene age loess. The Dwight and Ladysmith soils, which have an A-horizon of silty clay loam, are generally deep enough to till and have been developed in parts of the county as cropland. Soils of the Florence and Sogn series are the hallmark of the Flint Hills—shallow, stony soils suitable only for grazing.

The Tully and Hobbs soils in the valley bottoms developed in depositional environments. Tully soils evolved from the erosion of shale beds in adjacent sideslopes, and the Hobbs soils came from generalized upland erosion, including organic materials deposited by frequent spring flooding. The silty loam A-horizon of Hobbs soils is twenty to thirty inches deep, moderately permeable and well-drained, and thus, they are suitable for cultivation. Early immigrants to the area recognized the value of these soils and established their farms in the valley bottoms.

The predictability of one's experience in driving through the county is especially dependent upon this pattern of association. One expects to encounter fields of winter wheat, milo, or corn bordered by gallery forests in the

stream valleys and open prairie grassland with occasional fields on the uplands (Fig. 3). As mentioned above, being able to predict what lies ahead and encountering the familiar “around the next bend” is a large part of the imagability of a place.

ROADS THAT FOLLOW VALLEYS

The single most important pattern of association between the natural landscape and the cultural landscape that gives Geary County its strength and legibility are roads. Roads in eastern Geary County either follow the length of valleys or cross over the uplands to connect one valley with the next (Fig. 1). These roads relate movement to the shape of the land, and thus they intensify a visual quality into a kinesthetic one (Fig. 4). This condition is rare in Kansas, and the particular pattern that distinguishes Geary County shows up readily in Homer Sokolofsky’s and Huber Self’s map of “All Rural Roads in Kansas.”¹⁵ The Flint Hills region is discernible on this map due to fewer roads through the big pasture country along the length of the region. Geary County stands out within that area because of the radial pattern of roads leading toward the Kansas River and Junction City.

The history of this road system has not been documented. Evidence points, however, toward a combination of factors in the county’s settlement history that have resulted in a pattern of association. The characteristics include the coincidental establishment of Fort Riley and Council Grove relative to the existing drainage pattern, settlement of some valleys prior to imposition of the land survey, and the culturally-embedded perceptions and traditions of immigrants.

The latter two factors were common to settlement throughout eastern Kansas. The tillable soils of the stream valleys were claimed first, and the uplands became desirable only after the value of the grazing resources was recognized. Early settlement of Kansas proceeded up the Kansas River and its tributaries, both because the rivers were natural corridors



FIG. 4. *The characteristic experience of traveling through Geary County is moving along one of its six stream valleys.* Photograph courtesy of Nina Veregge.

of movement and because their resources—plentiful water, soils rich in humus for agriculture, and riparian woodlands that provided a source of building materials as well as habitat for game—appealed to immigrant farmers from the East. Numerous expeditions used the Kansas River as an initial route westward from the Missouri, branching out along tributaries or overland as destination required.

In Geary County, settlement occurred first in rich bottomlands of the Smoky Hill and Republican Rivers, lands close to and hence protected by Fort Riley and most easily served by trade routes that ran through Junction City. Lyons Creek, Clarks Creek, and McDowell Creek, tributaries to the Smoky Hill and Kansas River, were probably settled next. Other studies have treated the perceptions and previous experiences of arriving settlers relative to the open Plains environment of Kansas.¹⁶ There is no need here to resubstantiate that work except to note that the pattern of preference for wooded areas (stream valleys) held for Geary County as well. This is evident in the earliest map of the entire county, published in 1875, which showed occupied and vacant lands. In the southeastern part of the county, settlement was largely limited to stream valleys.

The road pattern is more directly the result of the coincidence of the locations of Council

Grove, on the Santa Fe Trail, and Fort Riley, and the southeast-northwest trending pattern of drainages. Shown on the 1852 "Chart Accompanying the Report of the Board of Officers to Select a Site for a Military Post at the Mouth of the Republican Fork of the Kansas River" is a route along "Clarke Creek" to the "Santa Fe and Independence Road."¹⁷ This route, then, was established prior to imposition of the land survey system and the legislature's provisions establishing road rights-of-way along section lines. The fact that Clarks Creek was already named also suggests that it experienced some settlement before 1854.

The earliest detailed map of portions of the area dates from 1868-69.¹⁸ It shows established routes up Davis and Humboldt Creeks to Council Grove, along with roads up Clarks Creek and Lyons Creek. One map error has the Union Pacific Railroad located near Davis Creek when it was actually built in the valley of Lyons Creek. This natural pattern of association between topography and routes of travel, then, was established early, and it has resisted alteration to conform to section line roads as in the rest of the state.

The grid of section line roads that is typical of Kansas and other Plains states extends into the southeastern corner of the county. The roads serve as a zone of transition between two systems of movement. They climb out of valleys and bend to come into correspondence with section lines. There is a further association that is evident here—that between soils and roads. The soils proven suitable for crops are also the areas where the standard grid of roads holds sway in the county. The southeastern corner and the western upland area between Clarks and Lyons Creeks developed a system of roads most suitable for access to fields on relatively flat lands, while other upland areas which have remained primarily pasture have sustained a system of few roads. Those following the valleys give access to narrow bottomland fields or infrequently cross over uplands.

The correspondence between topography and travel in Geary County is reflected in how

residents talk about location within the county. A grid system of roads somehow neutralizes and renders meaningless the experience of landform. Orientation in the landscape is an abstraction based on compass direction rather than on features of the landscape. A farm is on County Road 502 rather than "up Clarks Creek." Indeed, to listen to locals talk about the county is to hear constant reference of location to the valleys—"I hear they're gettin' 70 bushels an acre over on Humboldt Creek" or "Her family's got a place up Dry Creek." Use of the word "over" is in reference to how one gets directly from one valley to another, and "up" implies a sense of the lowest end of Clarks Creek, or perhaps Junction City, as a reference point.

FARMSTEADS AT JUNCTIONS OF TRIBUTARY DRAINAGES

Early homesteads were located in the valley bottoms, situated to both take advantage of and avoid water. The creeks are subject to spring flooding, so houses and other farm buildings were best located on high ground within the valley. Access to water for household and farmyard use was achieved by choosing sites near the small drainages that come into the main valleys. Presumably ground water was closer to the surface. Many of these drainages also have water much of the year for livestock.

This pattern of association between landform, hydrology, and human settlement is a particularly strong component of Geary County's sense of place, and it warrants a more detailed examination. Lending consistency to the pattern is the relatively constant spacing of tributaries along valleys and the constancy of claim size (40 acres up to 1860, and 160 acres thereafter until 1900) in the early settlement history of the county. Early maps of the county show patterns of land ownership and approximate locations of farms. When superimposed on a topographical map, the results show us much about the choices made by early settlers (Fig. 5).

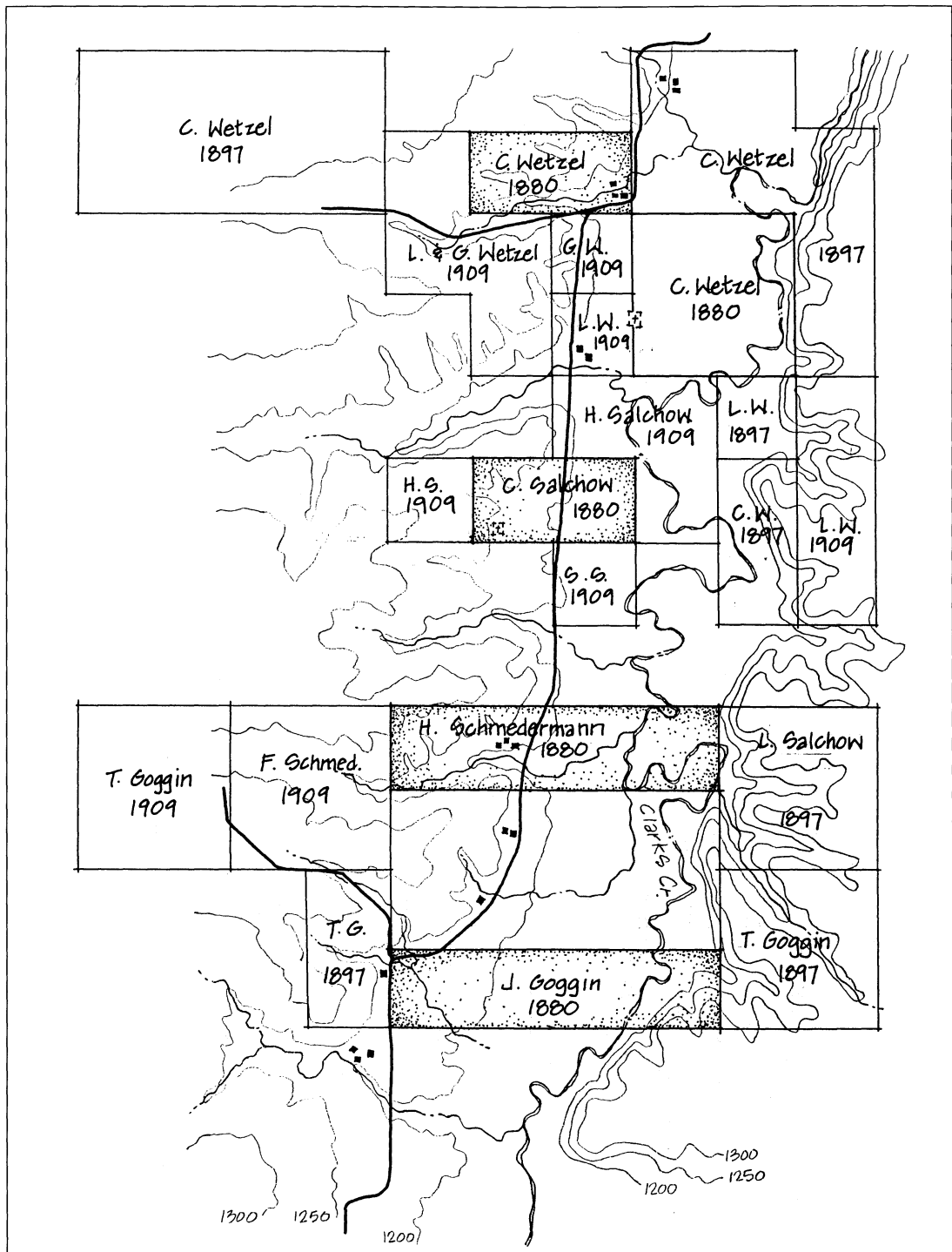


FIG. 5. Land acquisition by four families along Clarks Creek. Original claims are shaded, dates refer to county maps on which ownership first appeared. Map courtesy of Nina Veregge.

It is evident in the 1875 map that initial settlement in the southeastern portion of the county was primarily confined to valley bottoms of the main drainages and their tributaries. As noted above, this is consistent with the settlement history of the Plains west of the Mississippi. Settlers were farmers looking for cropland and environmental circumstances similar to what they had left behind. Valleys of the Kansas, Republican, and Smoky Hill Rivers and their tributaries such as Clarks Creek afforded soils rich in organic matter, water, and trees.

Most of the earliest claims in these valleys were small. A few larger claims were made in the extreme southeastern corner of the county, corresponding to upland topography and soils. According to figures from the U.S. Census, the majority of farms in Geary County were between 20 and 50 acres (probably 40-acre parcels) in 1860. This changed by the 1870 census, with 160-acre claims predominating, a condition that remained constant through 1900. Subsequent changes reflected shifts in technology and regional economy.

Configuration of the claims maximized bottomland with respect to two spatial organizations—topography and the survey grid, one natural and one man-made. The topography, as described above, is dominated by southeast-northwest drainages and their tributaries, which generally intersect the main valleys at approximately ninety-degree angles. This three-dimensional spatial pattern is at a diagonal with respect to the survey grid. Consequently, claims in the valley bottoms cumulatively had a “step” pattern along the edges.

Individual claims were also frequently oriented to acquire the most cropland. There were numerous examples of 80-acre claims arranged either east-west or north-south, depending on the topography, to capture the Hobbs and Tully soils of the flood plains. One such example was a 160-acre parcel on the Briggs Branch of Swede Creek. It appears as a somewhat nonsensical claim on the 1875 map until it is correlated with topography—the Briggs

Branch runs almost due west. Similarly, another long, thin, 160-acre claim, this one running north-south, appeared along a tributary to McDowell Creek. Frequently, what look to be curious jogs in claims along valley edges prove to be related to tributaries and the resultant additional area of cropland when they are overlaid on the topographical map.

There are only a few instances in Geary County where property lines did not correspond to the survey grid. One was where a claim ran along McDowell Creek; another was where property lines ran perpendicular to Humboldt Creek midway along its length. Both of these instances occurred in stream valleys, and the non-corresponding property lines ran perpendicular to the creek. This kind of scheme has many precedents in older parts of this country and in other cultures, and it is the simplest way of ensuring equal access to a water source. It may be reasonable to conclude that these are remnants of claims filed prior to the establishment of the survey office in Junction City in 1854.

Between 1875 and 1880, growth was in the form of expansion outward from the main valleys, up tributaries to the creeks and into the uplands. Along Humboldt Creek, in particular, there is a fairly consistent checkerboard pattern of claims showing a preference for “free” government lands over railroad lands, which cost anywhere from \$1.50 to \$5.00 per acre in the 1880s. The lands that were still in the public domain in 1909 were almost all railroad grants.

Comparisons of county maps from 1880, 1897, and 1909 showed that increase in farm size was more often achieved through acquisitions of non-contiguous parcels than through consolidated expansion. Figure 5 contains examples of both for four families who had farms on Clarks Creek during this period. In 1880 C. F. Wetzel had two separate claims along Clarks Creek. By 1897 he owned another half-section of upland separated by a quarter of a mile from his first claim, along with 280 contiguous acres in the valley. Also in 1897 Louis Wetzel owned 40 acres adjacent to

his father's land. Subsequent acquisitions by Louis and George Wetzel by 1909 gave the extended family approximately 1320 acres in contiguous land on both sides of Clarks Creek. In 1989 Albert and David Wetzel still separately held title to approximately 650 acres. Similar patterns can be observed for the Salchow, Schmedermann, and Goggin families.

These examples also reflect changes in the valuation of pasture lands by settlers. As the Flint Hills region became a part of the developing national cattle industry, pasturelands acquired more value, and farmers extended their operation to include cattle. The number of cows in the county grew from 7809 in 1870 to 11,620 in 1885. While the number of acres in the county under cultivation remained relatively steady after 1880, the number of acres of fenced prairie not surprisingly grew from 12,952 in 1883 to roughly 20,500 in 1885.¹⁹

Related to this pattern of expansion into the uplands and overall increasing farm size is the "grain" of property configuration. In 1989 the finest grain, the smallest parcels, and the shortest boundary dimensions still existed in the valleys, a remnant of early settlement and a reflection of the fact that bottom lands, which comprise less than 15 percent of this part of the county, are a limited resource. The upland sections and quarter sections that were not claimed or held by the railroads in 1880 tended to remain as large parcels, apparently independent of whether they evolved as grazing or crop land. One of the largest parcels lies along the northeastern edge of the county, where seven and one-half contiguous sections that were not claimed until the turn of the century were still under single ownership as late as 1989.

Of course, subsequent changes in technology and regional economy have altered the basic pattern of farmsteads at the junctions of tributaries with the stream valleys. Many of the oldest farmsteads are in ruins or gone, and newer ones have been constructed in locations selected on the basis of different criteria. Still, there are instances where a new house has been built on or near the site of an old

one, retaining the association. Enough of these associations remain to maintain the pattern, and thus the character, of the county.

STONE AND WOOD FARM BUILDINGS

Settlers in Geary County, like many areas of the Plains, responded to the lack of timber by utilizing available resources for construction. Also consistent with settlement elsewhere on the Plains, the Germans and Swedes who came to Geary County brought traditions and skills in stone masonry construction to bear on local limestones. There were, of course, log buildings (one of the earliest of which has been relocated and preserved as an historic building), and wood was used for roof construction, outbuildings, and fencing. However, the limited nature of timber as a resource in the area led the *Junction City Union* to express the following opinion in 1865:

USE STONE. People in this country are perfectly reckless of their timber. Where such an abundance of splendid building stone exists, and timber comparatively scarce, the extravagant destruction of timber is without excuse. In building dwelling houses, outhouses, fences &c., use stone, thereby securing something permanent and adding to the wealth of the country by saving and cultivating wood. Turn the natural powers of the country to advantage. . . . Cease in every way possible the demand upon our timber.²⁰

Stone houses and barns (Figs. 6 and 7), churches (Fig. 8), and schools are still to be found throughout the county, many beautifully conserved. These houses were most often designed in the prevailing eclectic styles of the times. Some had Gothic dormers, some Italianate lintels, and others had Queen Anne detailing. The basic form of early houses was elongate with two rooms and a stair between to a half-story above, with the addition of a kitchen "ell" behind. Later houses had "four square" plans or other variations on cross-wing



FIG. 6. Stone house, original Wetzel farmstead, Clarks Creek. Photograph courtesy of Nina Veregge.



FIG. 8. St. Joseph's Church, McDowell Creek. Photograph courtesy of Nina Veregge.



FIG. 7. Stone and wood barn, Tully farmstead, McDowell Creek. Photograph courtesy of Nina Veregge.

plans. In this, Geary County differed little from the region around it or, indeed, from the nation. While the forms were the same, however, use of local, warm-hued limestones gave these buildings a strong visual and symbolic tie to the geology of the area, as seen in the

exposed limestone ledges. These stone buildings are artifacts of human activity that reinforce a sense of place.

The railroads brought dimensioned lumber to Geary County as they did to the rest of the West, and homes constructed after 1890 increasingly made use of this imported resource. Metal farm buildings also made an appearance in the county, but to a lesser extent than in areas outside the Flint Hills, probably because the scale of farming has not changed in the county as it has elsewhere in the Great Plains. It is reflective of the strength of the character of place, that at least four houses built in Geary County during the last two decades continue the tradition of stone construction, albeit as a veneer, in accordance with present-day technology and economics.

CONCLUSION

Some of the most successful portrayals of place identity are by either literary or visual imagery—an essay, a poem or photograph, for example, that captures the meaningful associations of individual elements in a regional landscape. Sense of place seems to defy

analysis, a “gestalt” that cannot be reduced to its constituent parts. While this may be fine for poets or painters, a method for identifying concrete aspects of place identity is necessary for historic preservation and planning, indeed in any situation where the goal is to maintain familiar and desirable qualities of a landscape.

The method presented here, while still inherently limited as an *analytic* tool to study a *synthetic* quality, transcends the purely reductionist result an inventory of landscape elements produces by focusing on characteristic *relationships* among the physical, biological, and cultural elements. As such, this method is also an attempt to reintegrate thinking about a physical, biological place and the human experience. It is an inquiry into the dialectic between human perceptions, decisions and actions, and their ecological context.

In the foregoing analysis, the eight patterns of association that together form eastern Geary County’s sense of place are described. While this landscape, like any other, has an infinite number of patterns of association, some play a more important role in the identity of the landscape than others. They are the ones that characterize the place—those that have particular visual or experiential impact, patterns that change at the boundaries and thereby distinguish the place from its context, and patterns that have a high degree of internal consistency throughout the particular place.

Geary County’s place identity derives from the historic integration of human activity with the natural environment; it is the result of Euro-American settlement under conditions of a subsistence economy. The value of this kind of place identity is important when considered in contrast to present patterns of settlement and human activity that have only distant and far-removed relationships with their physical and biological environments. Throughout most of the early period of Euro-American occupation of Geary County, human activity remained close to the resources necessary to that culture and its technology. Immigrants chose the best sites for fertile soils, access to water, timber, and routes of travel

leading to centers of commercial activity. The cultural-ecological landscape therefore reflected society’s relative valuation and exploitation of its different resources. By contrast, the suburban pattern of settlement of the latter half of the twentieth century reflects dependence on a different set of life-sustaining resources: wage labor and commercial centers where wages are exchanged for food, clothing, and shelter produced hundreds and thousands of miles from the particular place inhabited.

The lesson to be learned from the Geary County landscape lies in the importance of *locality* to sense of place. The most meaningful relationships between human endeavor and the natural environment generally occur at the local scale where daily human activities are bound up in direct relationship with the land. The shaping of the cultural landscape comes through a sustained process of reciprocal modification. Within the prairie environment, eastern Geary County has a distinct identity based on patterns that evolved from the particular associations between its biophysical environment and the history of human settlement.

NOTES

Some years ago, while a visiting professor at Kansas State University, I was asked to do a preliminary survey of historic properties in eastern Geary County. A group of farmers who had organized to stop nearby Fort Riley from expanding into 100,000 acres of their lands wanted to identify properties that might be eligible for listing on the National Register of Historic Places as one element of their overall strategy. I soon found myself driving the back roads of the eastern part of the county with several graduate students and a senior faculty member in historic preservation, and I was immediately struck by the strong sense of place evoked by this environment.

While the need for the study became moot by the end of my year at Kansas State (Senator Nancy Kassenbaum’s office guaranteed the farmers in Geary County that the military reservation would not expand onto their lands), my own interest in its cultural landscape did not diminish. This has provided the motivation for further inquiry into the historical development of Geary County, its

physical geography and ecology, and the qualities of the human landscape that contributed to its sense of place. Especially useful were county maps from the period that showed the process of settlement and developing patterns of land tenure, written descriptions from nineteenth-century promotional pamphlets and local newspapers, and early photographs of the area.

1. See, for example, James Malin's "An Introduction to the History of the Bluestem-Pasture Region of Kansas: A Study in Adaptation to Geographical Environment," *Kansas Historical Quarterly* 11 (1942): 3-28; Walter M. Kollmorgen and Davis S. Simonett, "Grazing Operations in the Flint Hills-Bluestem Pastures of Chase County, Kansas," *Annals of the Association of American Geographers* 55 (June 1965): 260-90; Thomas Isern, "Farmers, Ranchers and Stockmen of the Flint Hills," *Western Historical Quarterly* 16 (July 1985): 253-64; and Joseph Hickey and Charles Webb, "The Transition from Farming to Ranching in the Kansas Flint Hills: Two Case Studies," *Great Plains Quarterly* 7 (Fall 1987): 244-55. One of the earliest published descriptions of the area's agricultural potential is H. F. Hilton, "The Bluestem Limestone Pastures of Kansas," *Twenty-sixth Biennial Report* (Topeka: State Board of Agriculture, 1927-28).

2. O. J. Reichman, *Konza Prairie: A Tallgrass Natural History* (Lawrence: University Press of Kansas, 1987), p. 6.

3. Greene and Bartell, *Real Estate Agents, Description and Narrative of Davis County, Kansas* (Junction City, Kansas: Junction City Union, 1882), p. 2. This view was recorded from the Pawnee townsite, and attributed to a correspondent from the *Cleveland Plainlander*, which may in fact refer to the *Cleveland, Ohio Plaindealer*.

4. *Annual Report* (Topeka: State Board of Agriculture, 1876), p. 136.

5. Riley County Genealogical Society, *Pioneers of the Bluestem Prairie* (Manhattan, Kansas, 1976), pp. 74-116.

6. Christian Norberg-Schulz, *Genius Loci: Towards a Phenomenology of Architecture* (New York: Rizzoli, 1980), p. 8.

7. Norberg-Schulz has dealt with the meaning and structure of natural landscapes in several of his works; see, for example, the introductory chapter in *Meaning in Western Architecture* (New York: Praeger, 1975) and the section on "Natural Places" in *Genius Loci*. An example of this concept is the Grand Canyon, which has a "big" pattern of associations between geology, rainfall and gravity, and has a strong place identity resting on the

repetition of this single association in an infinite variety of forms at smaller scales.

8. O. W. Bidwell, *Soil Survey, Geary County Kansas* (Washington, D.C.: USDA Soil Conservation Service, 1959), p. 3.

9. See Kollmorgen and Simonett, "Grazing Operations" (note 1 above), or William Least Heat-Moon, *Prairie Earth* (Boston: Houghton Mifflin, 1991) for a map of Chase County's drainage patterns. Although Least Heat-Moon was able to conceptualize the pattern as a "hand," the association is arguable.

10. Bidwell, *Soil Survey, Geary County, Kansas* (note 8 above), pp. 30-31.

11. Reichman, *Konza Prairie* (note 2 above), p. 115.

12. Kollmorgen and Simonett, "Grazing Operations" (note 1 above), p. 261.

13. Names of soil associations in this paper are in accordance with the 1959 soil survey of Geary County. A new survey, with reclassifications, was in draft form at the time of this writing.

14. Reichman, *Konza Prairie* (note 2 above), pp. 138-39.

15. *Ibid.*, pp. 115-24.

16. Homer E. Sokolofsky and Huber Self, *Historical Atlas of Kansas* (Norman: University of Oklahoma Press, 1988), p. 73.

17. Examples include, but are not limited to, the following: Walter Prescott Webb, *The Great Plains* (Boston: Ginn & Co., 1931); C. F. Kraenzel, *The Great Plains in Transition* (Norman: University of Oklahoma Press, 1955); Walter Kollmorgen, "The Woodsman's Assaults on the Domain of the Cattleman," *Annals of the Association of American Geographers* 59 (June 1969): 215-39; James L. Forsythe, "Environmental Considerations in the Settlement of Ellis County, Kansas," *Agricultural History* 51 (January 1977): 38-50; and Martyn J. Bowden, "Desert Wheat Belt, Plains Corn Belt: Environmental Cognition and the Behavior of Settlers in the Plains Margin," in *Images of the Plains: The Role of Human Nature in Settlement*, ed. Brian W. Blouet and Merlin P. Lawson (Lincoln: University of Nebraska Press, 1975), pp. 189-201.

18. Robert W. Baughman, *Kansas in Maps* (Topeka: Kansas State Historical Society, 1961), pp. 44-45.

19. Map of Davis County in a circular put out by the Davis County Emigration Society, portfolio 978.1-G26 B, Kansas State Historical Society, Topeka, Kansas.

20. *Annual Report* (Topeka: State Board of Agriculture, 1870, 1883); and *Biennial Report* (Topeka: State Board of Agriculture, 1886).

21. *Junction City Union*, 20 May 1865.