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# From Fibers to Fieldwork: A Multifaceted Approach to Re-examining Amish Quilts

Nao Nomura and Janneken Smucker

In this article, we use three methods of investigation—fiber and fabric analysis, genealogy, and fieldwork—to re-examine Amish quilts from the Henry and Jill Barber Collection of Amish quilts from Mifflin County, Pennsylvania, at the International Quilt Study Center (IQSC) at the University of Nebraska–Lincoln. We use our data to confront unsubstantiated assumptions—most notably the idea of a classic period of Amish quiltmaking prior to 1940—that quilt enthusiasts have perpetuated over the past several decades. Our research reveals that about half of the quilts in the collection, most of which arrived at the IQSC with estimated dates prior to 1940, were actually made later than originally thought. The research demonstrates that Amish quiltmakers in Mifflin County continued to make classic Amish quilts long after 1940.

Amish quilts, once found almost exclusively in Amish homes as valued objects of utility and beauty, are now found on collectors' walls as *objects d'art* and in museum collections. Prominent collections, such as the Lancaster (PA) Quilt and Textile Museum's Esprit quilts and the International Quilt Study Center's Holstein Collection, now are housed in state-of-theart storage facilities designed specifically for the quilts. With the current influx of Amish quilts into public institutions, this is an appropriate time to re-examine what we know about Amish quilts and confront unsubstantiated assumptions and romanticized stories with evidence.

For this article, we re-examine quilts, using diverse methods, such as fiber and fabric analysis, genealogy, and fieldwork.1 To demonstrate this approach, we studied the Henry and Jill Barber Collection of Amish quilts from Mifflin County, Pennsylvania—a recent acquisition of the International Quilt Study Center. Mifflin County, in the mountains of central Pennsylvania, is a thirty-mile-long valley, locally known as Big Valley. Unlike the widely known Amish community in Lancaster County in southeastern Pennsylvania, Big Valley is largely free from the encroachments of tourism and commercial development. In addition, this community is home to twelve distinct divisions of Mennonite and Amish believers, ranging from quite conservative to progressive.2 To the outsider, three distinct groups of Old Order Amish are easily apparent and are often given the nicknames black topper, yellow topper, and white topper, named for the distinctive colors of their horse-drawn carriages. The white toppers are also known as "Nebraska" Amish—so called because in 1881 Bishop Yost H. Yoder, an Amish bishop in Nebraska, helped mediate a disagreement in Big Valley leading to the succession of this conservative splinter group. Within Big Valley the white toppers are the most conservative in dress, adoption of technology, and use of modern amenities. Somewhat less conservative are the yellow toppers, or "Byler" church, who, unlike the white toppers, tend to have painted houses, to have well-kept gardens, and to make limited use of tractor power in farming. The third recognizable group, the black toppers or "Renno" Amish, relate closely to the Amish church in Lancaster County and have likewise adopted many more modern amenities and technologies, such as indoor plumbing.3 The Barber collection contains quilts attributed to each of these three groups.

Throughout this paper, we use the term "classic Amish quilt" to refer to traditional-looking Amish quilts that have been popular among collectors and other enthusiasts for several decades. These quilts feature dark, rich colors, intricate quilting, and relatively simple geometric patterns—such as Center Diamond, Nine Patch, and Bars. When made in Lancaster County, these quilts appear with unaided observation to be made from wool; in most Midwestern communities, cotton. While styles, patterns, and colors vary from community to community, these are the dark Amish quilts many Americans picture when thinking about Amish



quilts—those that appear in numerous coffee-table books, calendars, and postage stamps. In contrast, non-classic Amish quilts feature lighter-colored or printed fabrics, complex patterns, appliqué, or a look that simply does not *feel* Amish to the casual observer.

Classic Amish quilts attracted much attention throughout the 1970s and 1980s, due in part to their perceived resemblance to modern art, as identified by early collectors such as Jonathan Holstein and by New York art dealers and critics. Holstein suggests that the small size of most Amish quilts conformed easily to the walls of New York apartments. One interior design magazine published a photo spread of Amish quilts hanging in Phyllis and Richard Haders' light-filled apartment, demonstrating the modern appeal of this historic craft. This paradox, of nostalgia for the simple past manifested in a seemingly modern work of art, appealed to many early collectors of Amish quilts. A proliferation of media attention elevated classic Amish quilts to the limelight and created a booming market for these objects.

In the early years of the quilt revival, several beliefs developed that helped shape common understandings of Amish quilts. For example, in 1977, one quilt dealer wrote that Amish women made quilts from home-grown wool and dyed the cloth using berries, barks, and roots found in the countryside. More recent scholarship indicates that Amish quiltmakers purchased fabric from traveling salesmen and mail-order catalogs, a fact that produces a much less pastoral image than shearing sheep and dyeing wool. This misconception about the origin of Amish quilting fabrics, like many of the common fallacies that surround American quiltmaking, provides a romantic image of this historic craft. Other, subtler misconceptions, fostered romantic beliefs and may have perpetuated inaccurate information about Amish quilts.

Although Robert Bishop and Elizabeth Safanda acknowledged the difficulty of precisely dating Amish quilts in *A Gallery of Amish Quilts*, they were also the first to set forth a date range for what they called "Amish quilts of the traditional types." Often-repeated, their date range was 1870 to 1935. They did not cite evidence for these dates, other than one quilt with a fabric produced as early as the 1830s. <sup>10</sup> Some of the same authors who espoused such cut-off dates also offered up fallacies given little credence today, such as the use of dyes from nuts and berries and



the practice of making a deliberate mistake in quilts.<sup>11</sup> Throughout the past thirty years, authors continued to offer a cut-off date for desirable Amish quilts, usually around 1930 or 1940.<sup>12</sup> Although Eve Wheatcroft Granick recognized that post-1940 quilts made in both Midwestern communities and in Mifflin County are more difficult to distinguish than Lancaster Amish quilts, these dates received frequent use.<sup>13</sup> We hypothesize that in this environment, dealers and collectors may have estimated and assigned dates on the "classic" side of 1940, perhaps to increase the value of the quilts. We argue that in Big Valley, and possibly elsewhere, Amish quiltmakers continued to make these classic Amish quilts long after 1940.

#### The Henry and Jill Barber Collection

The Henry and Jill Barber Collection at the International Quilt Study Center at the University of Nebraska-Lincoln consists of thirty-eight quilts attributed to three distinct Amish groups in Mifflin County, Pennsylvania's Big Valley. When the IQSC acquired these quilts, each had a pre-1940 estimated date, with the exception of three quilts with 1945-1950 dates. The collection came with the collector's observations and descriptions of the characteristics of each church group's quiltmaking traditions, which differed from the more widely known Amish communities in Lancaster County, Pennsylvania, and the Midwest. For example, the descriptions characterized Nebraska Amish (the most conservative group among the three) quilts as rather "crude" in execution, with use of scraps and recycled fabrics, which add a "folk art" appearance to the quilts. The collector described Byler Amish quilts as often featuring bright "bubble gum" pink as an accent combined with more traditional colors and described Peachy Amish quilts as constructed with more complex patterns. In addition to such descriptive information, what was most unusual and important about the Barber Collection was documentation that accompanied about half the quilts in the collection. Some of the quilts came with the quiltmakers' and users' names as well as purposes for which they were made.14 The International Quilt Study Center staff was excited about future research possibilities using documented infor-



mation to enhance knowledge and understanding of this lesser-known group of Amish quilts.

#### Fiber Analysis and History

Many quilts survive with little or no provenance; valuable documentation about quilts' makers and users does not often accompany quilts as they shift out of users' and collectors' hands into the care of institutions. Technical analysis—fiber and fabric identification in our case study—offered an effective method for exploring these objects. A thorough examination of fibers particularly helped to narrow possible manufacture dates of this lesser-known group of Amish quilts from Mifflin County, Pennsylvania.

Identification of fibers through visual means alone may be misleading. Manufactured fibers, especially when they are blended with natural fibers, are difficult to identify with the naked eye, because many of them were developed to imitate natural fibers. Rayon, for example, earned the name "artificial silk" because early development aimed to produce a substitute for the luxury fiber, silk. <sup>15</sup> Natural fibers, too, often deceive experienced researchers' eyes. Using a microscope is the best method to identify the physical structure of natural fibers, each of which has a distinctive visual feature.

Surface convolutions—or ribbon-like twists—characterize cotton. Flax features crosswise markings, called nodes, resembling bamboo. Silk is transparent and has a smooth but irregular rod-like shape. Its tubular shape may look like synthetic fibers, but silk shows none of the speckles from delustrant (titanium dioxide), which is often used in the manufacture of synthetic fibers to achieve a dull finish. Scales covering the surface of a fiber distinguish wool. Microscopic analysis also may confirm the presence of manufactured fibers like viscose rayon and acetate, both of which—when examined under a microscope—have striations because of their serrated surface. These two fibers look similar, but acetate can be identified with a solubility test, because it dissolves in acetone and rayon does not. Synthetic fibers that appear in quilt fabrics or threads such as nylon, acrylic, and polyester have a smooth, regular, tubular



shape. <sup>16</sup> Without additional solubility tests, which require highly toxic or corrosive chemicals and thus more destructive analysis, it is impossible to positively identify the type of synthetic fiber. However, deductive analysis combined with fiber content analysis can help to determine probable fiber contents. For example, when a synthetic fiber is blended with cotton in lightweight fabrics used commonly for quiltmaking, the synthetic fiber is likely polyester, because cotton/polyester blends are more widely manufactured and commercially distributed than any other cotton blend.<sup>17</sup>

To collect as much accurate data as possible, we analyzed fibers from every fabric (both warp and weft directions of the weave) used in each quilt in the Barber Collection, including quilting and sewing threads and batting. In addition to fiber microscopy, we conducted simple solubility tests in acetone and hydrochloric acid (HCL) when necessary. Nylon dissolves completely in HCL.

As a result, we have identified numerous fiber samples for the Barber Collection, including 694 from 362 fabrics, twenty-five from quilting thread, sixteen from sewing thread, three from embroidery thread, and twenty-seven from batting (see Appendix A). We recorded the location from which each fiber sample was taken for future reference. 18 Analysis and research confirmed the presence of numerous fibers and fiber combinations—acetate, cotton, cotton/flax blend, cotton/flax mixture, cotton/ polyester blend, cotton/rayon mixture, cotton/rayon blend, cotton/wool mixture, nylon, rayon, rayon/synthetic mixture, rayon/synthetic blend, polyester and wool. 19 A blend is a fabric consisting of two or more different fiber types spun together to form a yarn, and a mixture is a fabric with yarns of one type of fiber in the warp and yarns of another type of fiber in the weft.<sup>20</sup> Since natural fibers such as cotton, flax, silk, and wool have been used for centuries, their presence does not provide a substantial clue in dating Amish quilts. However, the presence of manufactured or synthetic fibers can suggest the earliest possible date of manufacture for a particular quilt (see timeline in Appendix B).

It is important to know when different manufactured fibers became commercially available when attempting to corroborate or refute dates of a given quilt's origin. The commercial production of rayon, for example, began after Count Hilaire de Chardonnet patented the fiber in



1884. Americans imported rayon goods as early as 1908. The commercial production of rayon began in 1911 in the United States, but imports from Europe still dominated the market.<sup>21</sup> By the mid-1920s, eight different companies manufactured rayon yarn in the United States. During its early years of production, consumers used rayon mostly for braids, trimmings and ornaments, hosieries, ribbons, and millinery.<sup>22</sup> With a few exceptions, the only satisfactory way to use rayon in woven fabrics was in combination with another natural fiber: for instance, rayon filling woven with a cotton warp or by alternating it with another yarn. Not until about 1924 or 1925 did manufacturers learn how to produce durable rayon for use in beautiful dress fabrics woven entirely from rayon; however, large quantities of these 100 percent rayon dress fabrics were not widely available to consumers until about 1930.<sup>23</sup>

The rayon industry continued to make significant advancements into the late 1920s. In 1926, producers introduced rayon crêpe dress fabrics as well as dull and semi-dull rayon yarn, treated with delustrant. During the early 1930s, delustered rayon became common, and by 1936, half the rayon produced in the United States was dull and semi-dull yarn. <sup>24</sup> In 1927, the Du Pont Rayon Company developed a staple fiber. With this development, manufacturers could spin rayon with other fibers to create blended yarns. <sup>25</sup> When examining rayon fibers under a microscope, it is important to record detailed information such as the presence of delustrant. The use of 100 percent rayon fabric in quilts possibly suggests a post-1924 date, more likely post-1930, because of limited availability in the early years. When a delustered fiber or crêpe fabric is present in a quilt, the earliest date of manufacture is 1926. Likewise, the presence of staple rayon fibers blended with another natural fiber indicates a post-1927 date.

Acetate, like rayon, is another manufactured fiber first produced in Europe. Acetate was first used during World War I as a varnish for airplane wings. Commercial use of acetate filament yarn for textiles began in 1924. By that year, the United States had imported as much as one million pounds of acetate from Europe. Domestic commercial production began in 1925. The acetate industry expanded rapidly in the late 1920s, especially in 1929, when the du Pont Rayon Company entered the field. Acetate's primary uses in woven textiles included satins, sharkskin,



taffeta, and as the warp in viscose rayon/acetate crêpe fabric. Lustrous acetate fabric was available as early as 1924; however, the price was considerably more expensive than viscose rayon yarn prior to 1934. For example, in 1926 producers sold rayon for \$1.45 per pound while acetate sold for \$2.90. Even after expansion of the acetate industry in 1929, acetate was still almost double in price. The American Viscose Company first introduced dull acetate yarn in 1932 at a premium price, which soon fell to the same price as lustrous yarn. The presence of acetate fabric may indicate a post-1924 date but more likely suggests a post-1934 date due to cost.

Rayon and acetate are both manufactured *regenerated* fibers that are produced from naturally occurring polymers. These polymers are processed into fiber form because they do not naturally exist as fibers. Synthetic fibers, a subset of manufactured fibers, are made from synthesized polymers. The major difference between manufactured regenerated fibers and synthetic fibers is in the raw material.

The first synthetic fiber, nylon, was invented by the du Pont de Nemours & Co. (Inc.) in the 1930s. The company sold experimental sewing thread made from this new fiber on a limited basis beginning in 1937. At the end of 1941, the du Pont Company introduced nylon darning and sewing thread to the commercial market. However, in 1942 the War Production Board allocated the entire production of nylon for military use, although nylon sewing thread seems to have been available through the war years. He du Pont Company also introduced nylon shirts made from recycled parachute cloth in 1944. However, nylon woven fabric was probably not available on the commercial market until after the war. Then, the du Pont Company completely revived the production of nylon yarn for civilian needs. The use of nylon sewing thread confirms a post-1941 date, and the presence of nylon fiber in woven textiles probably indicates a post-1945 date.

Polyester, introduced by du Pont as Dacron®, is another important synthetic fiber that often appears in quilting and sewing thread, batting, and fabrics of twentieth-century quilts. 32 Coats and Clark introduced sewing thread made of this new fiber in 1952. In the following year, Brooks Brothers, an American apparel company, introduced the first polyester/cotton-blended fabric in their shirts. 33 Coats, a brand owned by



Coats and Clark, invented cotton-wrapped polyester core thread, "Dual Duty," which became available in 1962.<sup>34</sup>

Natural and manufactured materials were available to Amish women through various suppliers, including mail-order catalogs, such as Chicago-based Montgomery Ward Company and Sears Company and through local stores and traveling salesmen.<sup>35</sup> Mail-order catalogs published throughout the twentieth century illustrate a variety of available textiles and related sewing materials and reflect advancements in the textile industry. A 1908 Sears Catalog listed a wide range of dress fabrics including several types of "Henrietta" and "mohair," both names Amish quiltmakers used for fabrics they commonly used in classic Amish quilts. 36 Henrietta is a lustrous dress fabric originally made with silk warp and wool weft in a twill weave.<sup>37</sup> Available products included "Colored Henrietta All Cotton" (\$0.15 per yard) and a more expensive "German Henrietta" (\$0.87 per yard), "Yard Wide Colored Mohair," and "All Wool Batiste." These fabrics were available in dark colors (black, brown, navy blue, and tan) as well as light colors (old rose, light blue, and pink) or vivid colors (cardinal, myrtle green, royal blue, and wine). The description of one of the Henrietta fabrics offered in this 1908 catalog stated, "In the face of an advancing market, we are still able to sell this high grade strictly all wool Henrietta at the old price of 51 cents."38 This description might indicate that the development of new fibers was already starting to affect the production of conventional materials at the beginning of the twentieth century.

Rayon dress fabric appeared in a 1926 Montgomery Ward catalog as a "Novelty Rayon Fabric" that is "very new and attractive for women's and children's dresses." The same catalog featured many wool dress fabrics, such as crêpe, broadcloth, and flannel, in dark colors, light colors, vivid colors, as well as new soft colors—like powder blue and Copenhagen blue. A 1927 Sears catalog offered inexpensive cotton and wool fabrics but only limited styles of "half rayon" dress fabrics woven with cotton, wool, or silk yarn.

In this catalog, Sears guaranteed "Quick Shipments Anywhere in the United States," a promise to ship goods within twenty-four hours from the closest store after they received orders. By then, they had ten stores



nation wide, including one in Philadelphia. Residents in rural Pennsylvania, including Mifflin County Amish women, therefore, had access to a wide range of textiles for quiltmaking, including cotton sateen and chambray, wool crêpe, serge and batiste, cotton/wool dress fabrics, and rayon mixed dress materials. In fact, at least three quilts in the Barber Collection feature cotton/rayon mixture dress fabrics, much like those described in these mail-order catalogs. A variety of 100 percent wool goods were still available during the 1930s and early 1940s, although rayon and rayon/wool blend dress goods began to replace all-wool fabrics by the mid-1940s. In 1941, Sears offered a wide range of traditional fabrics in rayon and rayon/wool blends including flannel, gabardine, and herringbone.

As a result of this technical analysis and research on the history of manufactured fibers, we assigned dates later than originally estimated to nine quilts in the Barber Collection due solely to the presence of various manufactured fibers. We have identified nineteen quilts in the Barber Collection containing rayon or acetate fibers, three quilts with unidentified synthetic fibers, and six quilts with what is likely cotton/polyester blend. With a myriad of fiber blends and mixtures available to Amish quiltmakers throughout the twentieth century, it is impossible, using only the naked eye, to accurately determine the presence of these fibers that are so helpful in estimating dates of Amish quilts.

## The Baskets Quilt

One example of this process is our analysis of the Baskets quilt (see Figure 1) that came to the IQSC with a circa 1940 date and no provenance. The description provided simply said, "Black Topper baskets of chips crib quilt 1940 with chain quilting." The quiltmaker pieced this traditional pattern in a classic Amish setting using a conservative color combination—turquoise blue baskets and inner frame on a dark gray ground—features that should lead no one to question its estimated date at a first glance. For this quilt, only the materials could provide evidence regarding the quilt's origins. It was, however, a challenging piece for microscopic fiber analysis because of its pristine condition. After carefully examining the object, we spotted a section where we could pull a few



fibers from each direction in the plain-weave gray background fabric. We found both cotton fibers (ribbon-like, convoluted fiber) and very smooth, rod-like shape fibers with delustrant (dark speckles throughout) on the slide. We knew from experience conducting fiber analysis that foreign particles could sometimes contaminate clean slides, so we tested two more samples of the gray fabric taken from different areas of the quilt. All three samples had the same result—cotton blended with a synthetic fiber. This result alerted us that the originally assigned date was inaccurate and that we needed more fiber analysis to establish the earliest possible date for this quilt. We managed to take samples from two different quilting threads, one of which contained cotton and synthetic fibers. We tested this suspicious brown quilting thread from two different areas, and again the results were the same—cotton with synthetic fiber. The Baskets quilt contained fibers that disproved the original assigned date.

Although we have not positively confirmed that the synthetic fiber used in the gray fabric is polyester, it likely is polyester because that is the most common fiber blended with cotton for such lightweight fabric. We feel more confident in confirming that the brown quilting thread is a cotton/polyester blend, likely Coats and Clark's Dual Duty produced after 1962. Jenny Yearous's extensive research on the development of sewing thread provides estimated dates for cotton, rayon, nylon, polyester, and cotton/polyester threads, but she did not find evidence of thread made of cotton blended with any other type of synthetic fiber. He Based on the result of fiber analysis, we have assigned a date range of 1960–1980 for this quilt. This is the best estimated date that we can provide at this time with available information. It is possible that this quilt could have been made much later than this date range, but further investigation is needed to confirm the date. He

#### Nine Patch Quilt

A Nine Patch quilt is another example of a discovery using fiber analysis (see Figure 2). It features one of the most popular designs among the Nebraska Amish. <sup>48</sup> The maker pieced the quilt from small scraps of fabric in dark colors such as black, grays, purples, blues, and navy blues accented with bright turquoise. The quilt also came with little information and

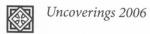


Figure 1. Baskets crib quilt, 37 by 25 inches, 1960–1980. International Quilt Study Center, University of Nebraska–Lincoln, 2003.010.0007.



Figure 2. Nine Patch crib quilt, 48 by 35 inches, 1950–1970. International Quilt Study Center, University of Nebraska–Lincoln, 2003.010.0011.



an estimated date of 1935–1940, again within the cut-off date for classic Amish quilts. The collector simply described this quilt, "Nebraska nine patch in grid crib quilt 1935–40. Even though there is no border on this quilt the grid provides the quilt movement, almost giving a woven effect like a basket."

We analyzed twenty-nine fabrics, batting, and sewing thread from this quilt. Sampling was easier on this quilt because many blocks had visible fraying along the seams. Among these twenty-nine fabrics, only five were woven entirely from natural fibers: four were all cotton and one was a cotton/flax mixture fabric. The rest were cotton/synthetic blends, likely cotton/polyester, except for two rayon fabrics. Slide after slide, we found cotton and delustered smooth fibers under the microscope. Technical analysis revealed that this quilt, although made in a classic Amish setting, could not have been made prior to 1953. 50

#### Double Nine Patch Quilt

Another quilt, shown in Figure 3, came with documentation as well as detailed information stating, "Nebraska double nine patch 1930.... The back is cotton sateen and the one patch has some rayon cotton believed to have been produced at a mill in Lewistown that burned in the early 1900s." Our microscopic fiber analysis discovered no cotton/rayon fabric (neither blend nor mixture) but did reveal all rayon material, cotton/wool mixtures, wools, and cotton sateen backing. Since rayon dress fabrics were available by 1930, technical analysis alone could not refute or corroborate the originally assigned date. However, the description about the mill and the presence of rayon in many of the Barber quilts urged us to look into the history of the rayon manufacturing company in Lewistown—the American Viscose Company.

## American Viscose Company and History of Rayon

Amish quilt expert Eve Wheatcroft Granick posited that rayon fabrics began to appear in Amish quilts made in Mifflin County, Pennsylvania, much earlier than quilts from other Amish communities because of their proximity to the American Viscose Company's factory in nearby Lewis-



Figure 3. Nine Patch quilt, 80 by 71 inches, possibly made by Barbara (Speicher) Hostetler, 1970–1975. International Quilt Study Center, University of Nebraska–Lincoln, 2003.010.0017.

town. The factory's outlet store supposedly supplied rayon goods to local residents and "the Amish from all of the church groups . . . were quick to adopt this new material for both clothing and quilts." In her seminal work, *The Amish Quilt*, Granick cites a particular rayon fabric available at the factory outlet store as a clue for identifying Amish quilts from Big



Valley.<sup>54</sup> However, a careful study of the history of American Viscose Company reveals that the Lewistown plant manufactured yarn, which it sold to other firms; the company did not produce its own textiles.<sup>55</sup>

Samuel Courtauld and Company, an English silk manufacturing firm, founded the American Viscose Company in Marcus Hook, Pennsylvania, in 1910. Commercial production of rayon yarn in the United States began in the following year. The American Viscose Company was the only manufacturer of rayon yarn and monopolized domestic production until 1920. Necessitated by increased market demands for "artificial silk," the company established its third yarn plant in 1921 in Lewistown, Pennsylvania, near Big Valley Amish communities. Unlike Samuel Courtauld's company in England, they limited their business in the United States to the manufacture of yarn for sale to other firms and did not attempt to weave or knit textiles themselves.<sup>56</sup> Although the company could have had outlet stores near its Lewistown plant to promote their materials, these textiles would have been easily available through other suppliers and not exclusive to an American Viscose Factory outlet store. If the use of rayon fabrics in early years was truly unique to Mifflin County Amish quilts, other factors probably affected their choice of materials. Further research, including comparative analysis of materials used in Amish quilts made in other geographic areas, will help to explore the subject.

## Genealogical Investigation and Fieldwork

When the IQSC first acquired the Barber quilts, fifteen of thirty-eight quilts had some sort of basic attribution, such as family name or initials. Genealogical research among the Amish is tricky; only 126 surnames are represented in the North American Amish population, and in some of the largest Amish communities, more than half the population is represented by just five last names. The challenge is particularly notable in an isolated community such as Big Valley, where the white toppers have only three last names: Hostetler, Yoder, and an occasional Zook, and the other two groups are dominated by Peachey, Kanagy, Byler, Swarey, and Yoder. Our extensive search through Amish genealogy databases revealed that the names accompanying many of the quilts either did not correspond to people, or, if they did, a handful of individuals with the



Figure 4. Nine Patch quilt, 75 by 61 inches, made by Miriam D. (Hostetler) Yoder, 1960–1970. International Quilt Study Center, University of Nebraska–Lincoln, 2003.010.0015.



name existed. To compound this roadblock, the estimated dates initially accompanying these quilts often did not relate to the individuals' genealogical information.

For example, one quilt, pictured in Figure 4, with documentation stating it was made for a Miriam Hostetler who married a Yoder around 1925 prompted us to find genealogical information for Miriam B., Miriam D., and Miriam S., each a Hostetler married to a Yoder, with birthdates in 1951, 1952, and 1960, respectively.<sup>59</sup> These women, however, were all too young to have been the recipient of a quilt with an estimated date of 1925. Our contacts in Mifflin County introduced us to insiders in the Amish community, to whom we asked, "Do you know Miriam Hostetler Yoder?" Locals consistently were astounded we would ask such question without using a middle initial. Community members utilize middle initials as well as nicknames, such as "Red Christ" Yoder, to differentiate one Miriam Hostetler Yoder or Christian Yoder from others with identical names.<sup>60</sup>

Members of the white topper/Nebraska church do not publish a church directory with addresses, but members personally know all their co-religionists as well as where they live. 61 One helpful contact gave us oral instructions for traversing the winding roads through Big Valley to the home of one Miriam Hostetler Yoder. While this woman did not recognize any of the photos of quilts we brought with us, she recalled selling a quilt her mother made to a local dealer. She also knew where we could find another Miriam Hostetler Yoder and sent us down the valley to meet another Miriam. Here we met the correct Miriam. She remembered helping make the quilt shown in Figure 4 a few years prior to her marriage in 1970. Microscopic analysis of the quilt's fabrics indicated the maker constructed it from all cotton materials, and the fabrics could predate the quilt's construction by many years. In this case, technical analysis did not contradict the early date; one could easily use this evidence, along with its simple graphic pattern, to categorize the piece as a "classic Amish quilt," but, in fact, Miriam, with the help of female relatives, made this quilt with all cotton materials well past the perceived cut-off for classic Amish quilts. This is just one example of a quilt constructed in the 1960s or 1970s in a classic Amish quilt style using fibers available for many years prior. Amish mothers or aunts made many of these quilts to give to their daughters, sons, nieces, or nephews when they left home to get



married or live on their own.<sup>62</sup> These recipients, now in their fifties and sixties, recalled selling these quilts when money was scarce and outsider interest in Amish quilts was high.<sup>63</sup>

One couple in particular regretted selling their family quilt to a dealer when they were short on money and later tried to buy it back, but it was too late. We learned this account while visiting Stephen and Annie Kanagy. At such visits we would often describe the project we were working on, explaining that we were trying to track down the makers of quilts that had been sold out of the valley twenty or so years ago. Microscopic analysis revealed that this quilt (see Plate 5), with documentation that it came from Stephen S. Kanagy, Jr., made circa 1930-35, was made of all-cotton materials. We began by checking in a database of Amish genealogies for the name Stephen Kanagy. We found one Stephen S., although he was not a "junior," and he was born in 1968. His uncle, however, was Stephen P., as was this Stephen's father. We next checked the Amish Directory for the area, a little pink book that serves as the church directory for the yellow toppers and black toppers, listing families with their addresses and birthdays. Here we found Stephen P. Kanagy, Jr., a black topper, with his address on Calico Lane. About five or so years ago, the county formalized the addresses in Mifflin County to aid in location during emergencies, so the valley is filled with charming road names, like Blue Bird Lane, Sunset Lane, Stone Barn Lane, and Calico Lane. But few residents know these names and continue to use other landmarks such as Plum Bottom, Blu Hollow, Zook's orchard, or the mulch shop to give directions. We identified Calico Lane using Mapquest; it is a driveway off of Back Mountain Road with a compound of Amish homes and outbuildings coming off the lane, similar to many farmsteads in the valley.

We decided to pay the Kanagys a visit. Greeted by farm dogs, we asked someone working in a garden which house belonged to Stephen P., and subsequently knocked on the door. Annie, Stephen's wife, answered and let us into the kitchen, where it was warm from baking. She was speaking in Pennsylvania German, the Amish dialect, to her very pregnant daughter. Meanwhile, Stephen came in from the smoke house where he had been tending meat. He sat down at the kitchen table and began picking the nut meat out of shelled walnuts. We made small talk until Annie finished and then got to the business at hand. We came armed with



a binder full of photos of the Barber quilts, including one that may have once belonged to a Kanagy. Both Annie and Stephen remembered selling a star-patterned quilt to a local dealer. They recognized it when they saw the photo and remembered selling the quilt in the early 1980s, when they were short on money. Stephen's mother, Katie (Peachey) Kanagy, made the quilt for Stephen before he left home and married Annie in 1961. Annie said that they only used the quilt "for good." Stephen really found it amusing that his quilt now resided in Nebraska. Annie looked at this photo for a long time, and we offered her the copy, a gesture that made her quite happy; she wanted the picture of the quilt as a tangible reminder of the gift they sold. 64 But not all the Barber Collection quilts were similar gifts from home; one quiltmaker in particular made quilts for a different purpose.

Microscopic examination of fibers showed that this maker constructed a crib quilt (see Figure 5) from rayon, cotton, wool/cotton mixture, and nylon sewing thread. The quilt arrived at the IQSC with documentation linking it to an Isaac Yoder and an estimated date of 1925.65 This evidence suggests a post-1941 date, based on the availability of nylon sewing thread. Genealogies listed four possible Isaac Yoders from Mifflin County, three of whom were no longer living.66 Helpful contacts in Big Valley gave us instructions to the home of the still-living Isaac Yoder: "down Church Lane, past schoolhouse on the right, sawmill on the left."67 On the front stoop of the Yoder home on Church Lane, a long dirt road free of high-wire electricity lines in a white topper enclave, we met Isaac and his wife, Leah, both in their early seventies. Leah estimated that she made this and other small quilts sixteen to twenty years prior (1984–1989) with the intention of selling them. 68 Nothing about the simple geometric pattern, the purple, blue, brown, and black solid-colored fabrics, or the materials used would necessitate a late twentieth-century date for this quilt, yet fieldwork in Big Valley proved otherwise.

Such a discovery raises provocative questions about Amish quilts, including whether quilts made for the consumer market merit the same preservation as historic quilts that were used in Amish homes. We also question what level of knowledge an antiques dealer may have had about the origins of this and other quilts. A conversation with one Amish quiltmaker indicated that sometimes women re-used old fabric to make



Figure 5. Four Patch variation crib quilt, 40 by 31 inches, made by Leah Y. (Hostetler) Yoder, 1984–1989. International Quilt Study Center, University of Nebraska–Lincoln, 2003.010.0005.



new quilts that would look old.<sup>69</sup> When evidence suggests such origins, does the value of the quilt in an institutional collection change?

The IQSC now has enhanced knowledge and understanding about the Barber Collection compared to the information the center had when it first acquired the quilts. Our research using a combination of technical analysis, genealogy, and fieldwork changed the original estimated dates for almost half of the collection. Among those, to date, we have identified fourteen quilts that were made after 1940, with known quilt dates ranging from 1962 to 1985, well past the popular cut-off date for classic Amish quilts. This knowledge also calls many additional estimated dates into question, because many Amish quilts may be misdated. Our research demonstrates that Amish quiltmakers in Mifflin County continued to make classic Amish quilts long after 1940.

Extensive fiber analysis conducted on the Barber Collection demonstrates that technical analysis can be an effective method in establishing more accurate dates for twentieth-century Amish quilts. A minuscule amount of fibers can sometimes provide significant information about anonymous, undated quilts. Carefully reviewing speculations based on unsubstantiated information illustrated the importance of conducting thorough research before accepting assumptions. A new insight into the history of American Viscose Company's Lewistown factory negated the speculation that Mifflin County Amish quiltmakers purchased rayon fabrics at the outlet store near the factory. Fieldwork, including conversations with former owners and users of some of the Barber Collection quilts, provided insight into these quilts' origins and elucidated the Amish practice of making classic Amish quilts for the consumer market.

Our proposed approach utilizing diverse methods enables exploration of Amish quilts from a variety of perspectives. These complementary approaches combine to provide more information than possible with a single method. Technical analysis suggesting later dates encouraged genealogical research based on these post-1940 dates, rather than just assuming that the documented names were incorrect. Similarly, knowledge about Big Valley quiltmakers creating quilts for the consumer market led to closer investigation into whether recycled older fabrics, such as mohair, found their way into more recently made quilts. Secondary research, including investigation into areas as diverse as Amish naming practices



and early fiber patents, can provide nuance to our understandings of twentieth-century Amish quilts.

An institution or collector might rightfully be disappointed by the realization that its objects are not as old as initially perceived, but the IQSC continues to appreciate not only the unique aesthetic and cultural qualities of these Mifflin County Amish quilts but also their use as valuable study pieces. As significant cultural artifacts housed in a public institution, these quilts have provided an opportunity to confront assumptions believed about Amish quilts for decades. These quilts, with their new documentation, deserve newfound appreciation for what they suggest about Mifflin County Amish quilts and Amish quilts in general. We no longer need to justify appreciation of Amish quilts by dating them prior to the unsubstantiated cut-off date for classic Amish quilts; we can value them as part of the continuing tradition of quiltmaking and the continuing process of making new discoveries about quilts.

Appendix A: Fiber Samples Identified in the Henry and Jill Barber Collection

	Direction	Direction		
Fiber Type	1	2	Total	
Fabric			MIN TOW	La reparticular
acetate	4	2	6	0.9%
cotton	239	218	457	65.9%
cotton/flax	1	0	1	0.1%
cotton/polyester	33	29	62	8.9%
cotton/rayon	1	1	2	0.3%
flax	0	1	1	0.1%
polyester	7	7	14	2.0%
rayon	47	41	88	12.7%
rayon/synthetic	3	1	4	0.6%
silk	0	1	1	0.1%
synthetic	2	1	3	0.4%
wool	24	29	53	7.6%
wool/synthetic	1	1	2	0.3%
Total fabric	362	332	694	100.0%

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	Direction	Dire	ction		
Fiber Type	1		2	Total	
Batting					
cotton	24		3	27	88.9%
cotton/rayon	3		1	4	11.1%
Total batting	27		4	31	100.0%
Quilting thread					
cotton	22				88.0%
cotton/polyester	1				4.0%
rayon	1				4.0%
synthetic (likely polyester)	1				4.0%
Total quilting thread	25				100.0%
Sewing thread					
cotton	15				93.8%
nylon	1				6.3%
Total sewing thread	16				100.0%
Total number of fiber samples:				766	

# Appendix B: Manufactured Fibers Timeline

- 1884 Count Hilaire de Chardonnet patented the nitrocellulose process "artifical silk" fiber in France.
- 1891 Count Hilaire de Chardonnet produced the first commercial and successful "artificial silk."
- 1894 Charles Cross and Edward Bevan discovered an industrial process for acetate production.
- 1910 Samuel Courtauld and Company, an English silk manufacturing firm, founded the American Viscose Company in Marcus Hook, Pennsylvania.
- 1911 Commercial production of "rayon" yarn in the United States began.
- 1912 The British Cellulose and Chemical Manufacturing Com-



- pany began commercial production of cellulose acetate yarn "Celanese."
- 1920 The American Viscose Company established its third yarn plant in Lewistown, Pennsylvania, near Big Valley Amish communities.
- 1924 The National Retail Dry Goods Association adopted the word "rayon" for a fiber previously known as "artificial silk."

  The Celanese Corporation of America bought patent rights to produce acetate yarns in the United States. Commercial use of acetate for textile production began.
- 1925 Commercial production of acetate yarn in the United States began.
- 1926 Rayon crêpe dress fabric was introduced.

  Production of dull and semi-dull rayon yarn treated with delustrant (titanium dioxide) began.
- 1927 The du Pont Rayon Company\* developed rayon staple fiber.
- 1928 The du Pont Rayon Company began production of cellulose acetate.
- 1932 American Viscose Company introduced dull acetate yarn (at a very high price).
- 1937 The du Pont de Nemours & Co. introduced experimental nylon sewing thread.
- 1941 The du Pont Company introduced nylon darning and sewing thread to the commercial market.
- 1941 British research chemists discovered a polyester fiber.
- 1946 The du Pont Company brought patent to a polyester fiber to the United States.
- 1952 Coats and Clark introduced polyester sewing thread.
- 1953 Full-scale production of polyester began in the United States.
- "Dual Duty" was invented by Coats, a brand owned by Coats and Clark, and became available on the market.

\*The du Pont Rayon Company became the Rayon Department of E. I. du Pont de Nemours & Co. in the 1930s. There were a number of divisions, departments, and subsidiaries under the umbrella of The du Pont de Nemours & Co.



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# Appendix C: Summary of Research Findings

IQSC#	Original Date Given with Quilt	Date Based on Fieldwork & Fiber Analysis	Research Findings	
2003.010.0001	1930	1950–1970	Cotton/polyester fabric.	
2003.010.0005	1925–1930	1984–1989	Made by Leah Y. (Hostetler) Yoder. Rayon fabrics and nylon sewing thread.	
2003.010.0006	1920	1930-1960	Rayon.	
2003.010.0007	1940	1960–1980	Cotton/polyester fabric and cotton/polyester quilting thread.	
2003.010.0008	1920-1925	1930-1960	Acetate.	
2003.010.0009	1930–1935	1940–1970	Rayon/unidentified synthetic blend fabric.	
2003.010.0010	1890–1895	1980–1990	A woman, who asked that we not use her name, thought this quilt looked familiar and recalled making quilts out of old fabric with the intention of selling them. This is not confirmed.  Cotton and cotton/wool fabrics.	
2003.010.0011	1935–1940	1950-1970	Cotton/polyester fabrics.	
2003.010.0012	1930	1950-1970	Cotton/polyester fabric.	
2003.010.0013	1920–1925	1970–1975	Probably made by Ruth S. (Yoder) Hostetler for her niece Mary Adeline (Hostetler) Yoder. (Confirmed by another relative; Mary Adeline was not available for confirmation.) Cotton, rayon, wool, and cotton/rayon fabrics.	

#### From Fibers to Fieldwork: Re-examining Amish Quilts



2003.010.0014	1925–1930	1950–1970	Rayon/synthetic blend and cotton/polyester fabrics.
2003.010.0015	1925	1960–1970	Made by Miriam D. (Hostetler) Yoder (possibly with the help of other relatives). Cotton fabrics and polyester quilting thread.
2003.010.0017	1930s	1970–1975	Possibly made by Barbara (Speicher) Hostetler for her son Moses E. Hostetler (quilt-maker was not available for confirmation). Cotton, rayon, wool, and wool/cotton fabrics.
2003.003.0021	1945–1950	1962	Made by Ruth S. (Yoder) Hostetler for her niece Nancy K. Hostetler. Cotton and rayon fabrics.
2003.010.0022	1930	c. 1970	Made by Lydia E. (Hostetler) Zook for her son Eli Y. Zook. Cotton, cotton/rayon fabrics.
2003.010.0024	1925	1930-1960	Acetate and rayon.
2003.010.0025	1930–1935	1961–1962	Made by Katie (Peachey) Kanagy for her son Stephen P. Kanagy, Jr. Cotton fabrics.

Note: For many of the quilts, we chose to assign a range of at least two decades to the estimate dates based on the results of fiber analysis. Based on the availability of fibers/materials, some quilts technically could not have been made at the assigned beginning dates; however, for various cataloging reasons, we chose to round the dates by decade.



#### **Notes and References**

- 1. Nao Nomura conducted technical analysis including extensive microscopic examination. Janneken Smucker investigated genealogical sources and conducted fieldwork in Big Valley. For ease of reading, the authors used the first person "we" throughout. Nomura wishes to thank Dr. Patricia Crews, Willa Cather Professor of Textiles and Director, International Quilt Study Center at the University of Nebraska–Lincoln for her invaluable advice. Smucker acknowledges the essential assistance of Big Valley residents Elaine Mercer and Betty Hartzler. Smucker also thanks the Robert and Ardis James Foundation for generously funding her research.
- 2. John A. Hostetler, *Amish Society*, 4th ed. (Baltimore and London: The Johns Hopkins University Press, 1993), 290.
- 3. Ibid., 292-94.
- 4. Jonathan Holstein, *The Pieced Quilt: An American Design Tradition* (New York: New York Graphic Society, 1973), 113; Rita Reif, "Antiques: Amish Quilts Abound," *New York Times*, 14 July 1973, 22.
- 5. Nao Nomura interview with Jonathan Holstein, 17 November, 2004, Lincoln, NE.
- 6. "Living with Art," House and Garden, Oct 1978, 142-43.
- 7. Barbara S. Janos, "Collecting: Amish Quilts," *House Beautiful*, March 1977, 24.
- 8. Patricia T. Herr, "Quilts within the Amish Culture," in *A Quiet Spirit: Amish Quilts from the Collection of Cindy Tietze and Stuart Hodosh* (Los Angeles: UCLA Museum of Cultural History, 1996), 55–57.
- Mythologized interpretations color not only Amish quilts but all quilts. For a helpful examination of this phenomenon see Virginia Gunn, "From Myth to Maturity: The Evolution of Quilt Scholarship," in *Uncoverings 1992*, vol. 13, ed. Laurel Horton (San Francisco: American Quilt Study Group, 1993), 192–205.
- 10. Robert Bishop and Elizabeth Safanda, *A Gallery of Amish Quilts: Design Diversity from a Plain People* (New York: E.P. Dutton, 1976), 15.
- 11. Barbara S. Janos, "Amish Quilts (1870–1940) a Dazzling Statement from a Plain People," *Quilt World*, April 1978, 4–5; Rachel and Kenneth Pellman, *The World of Amish Quilts* (Intercourse, PA: Good Books, 1984), 9; Bishop and Safanda, 19.
- 12. For some examples, see Robert Shaw, Introduction, *Amish Quilts 1880 to* 1940 from the Collection of Faith and Stephen Brown (Ann Arbor: University of Michigan Museum of Art, 2000), 9; Eve Wheatcroft Granick, *The*



Amish Quilt (Intercourse, PA: Good Books, 1989), 9; Ed Klimuska, "Collectors Pay Thousands for Local 'Folk Art' Antique Quilts," in Lancaster County: Quilt Capital USA (Lancaster, PA: Lancaster New Era, 1987), 3; Marie Shirer, "Lancaster County Celebrates Quilts," Quilter's Newsletter Magazine, July-August 1988, 27; Judy Kellar Fox, "Amish Quilts: Old Quilts and New, Both Part of the Amish Heritage, Are Found in Lancaster County, Pennsylvania," Fiberarts, March/April 1993, 28.

- 13. Granick, 79, 89.
- 14. Administrative file, the Henry and Jill Barber Collection, Accession Number 2003.010, International Quilt Study Center, Lincoln, NE.
- 15. Herbert R. Mauersberger, *American Handbook of Synthetic Fibers* (New York: Textile Book Publisher, Inc, 1952), 1.
- 16. Synthetic fibers are made from synthesized polymers while manufactured regenerated fibers like rayon and acetate are made from naturally occurring polymers. Sara J. Kadolph and Anna L. Langford, *Textiles*, 9th ed. (Upper Saddle River, NJ: Prentice Hall, 2002), 92. For photomicrographs of common textile fibers, see *American Association of Textile Chemists and Colorists Technical Manual* (Research Triangle Park, NC: American Association of Textile Chemists and Colorists, 2001).
- 17. With one exception of lace made of cotton, acetate, and nylon, cotton/polyester blends were the only cotton blend fabric available through Sears, Roebuck Catalogues published in 1951, 1956, 1961, and 1967.
- 18. We had only twenty-six samples of batting, all of which were cotton except for two rayon/cotton blends. Because of the small number of examples, batting is not included in the analysis of this paper.
- 19. The microscope used for this analysis is Reichert-Jung series 160 at objectives of 4/10, 10/25, and 43/55. Slides were prepared with distilled water. Acetone to identify cellulose acetate and HCL to identify nylon were used for the solubility test. Although special attention was paid while sampling fibers, microscopy fiber analysis is a destructive analysis to some extent. In order to preserve the important group of cultural objects, not all existing fibers could be sampled due to condition and/or construction of the quilts.
- 20. Kadolph and Langford, 394, 405.
- 21. Mauersberger, 4, 58; James Park and John Shore, "Dye and fibre discoveries of the twentieth century. Part 1: From the magic of electric light to the nightmare of world war," *Journal of the Society of Dyers and Colourists* 115 (1999): 157–58.
- 22. The 1908 Sears catalog listed "fancy" wood silk (rayon) braids for 6 cents to 22 cents, most of which were more expensive than silk braids. It suggests

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- that rayon decorative ornaments were still expensive items. Sears, Roebuck and Company, *1908 catalogue no. 117: the great price maker*, ed. Joseph J. Schroeder, Jr. (Northfield, IL: Digest Books, 1971), 1021.
- 23. C. H. Ward-Jackson, A History of Courtaulds: An Account of the Origin and Rise of the Industrial Enterprise of Courtlaulds Limited and of its Associate The American Viscose Corporation (London: Curwen Press, 1941), 140.
- 24. Mauersberger, 20; J. Merritt Matthews, *Matthew's Textile Fibers: Their Physical, Microscopic, and Chemical Properties*, 6th ed., ed. Herbert R. Mauersberger (New York: John Wiley & Sons, Inc., 1954), 815.
- 25. E. I. du Pont de Nemours & Co., *Milestones in the Du Pont Company's Textile Fibers History and Some Important Industry Dates*, 12th ed. (Wilmington: E. I. du Pont de Nemours & Co., Textile Fibers Department Product Information Center), unpaginated.
- 26. Matthews, 859-63. Mauersberger, 68.
- 27. E. I. du Pont de Nemours & Co, unpaginated; The 1941–1942 Fall and Winter Sears Catalog listed nylon thread in "31 lovely, high-fashion, WASH-ABLE COLORS." See Fall/ Winter 1941–42 Sears Catalog (Chicago: Sears, Roebuck and Company, 1941), 640.
- 28. E. I. du Pont de Nemours & Co., unpaginated.
- 29. Yearous found nylon thread listed in the Sears catalogs throughout World War II. Jenny Yearous, "Stitches in Time: The Development of Sewing Thread in the Nineteenth Century and Beyond," in *Uncoverings 1998*, vol. 19, ed. Virginia Gunn (Lincoln, NE: American Quilt Study Group, 1998), 171. Nylon stockings were available on the black market for \$8 to \$10 a pair during the war—more than six times more expensive than before 1942. See E. I. du Pont de Nemours & Co., unpaginated.
- 30. E. I. du Pont de Nemours & Co., unpaginated.
- 31. IQSC 2003.010.0005 contains nylon sewing thread.
- 32. Dacron is the Du Pont Company's trademark for its polyester fiber, the first type of polyester available in the United States. Mauersberger, 336.
- 33. E. I. du Pont de Nemours & Co., unpaginated.
- 34. Coats North America Website, www.coats.com/cna/company/history.html (accessed 12/29/05).
- 35. Granick, 57-71.
- 36. Janneken Smucker conversation with Leah N. Yoder Hostetler, 13 July 2004, Honey Creek area, Mifflin County, PA. Leah N. Yoder Hostetler called one type of wool fabric "mohair." Granick, 47. Jonathan Holstein, "The Aesthetics of Amish Quilts," in A Quiet Spirit: Amish Quilts from the Collection of Cindy Tietze and Stuart Hodosh (Los Angeles: UCLA Museum



- of Cultural History, 1996), 86. "Mohair" does not necessarily refer to the fiber of Angora goat commonly known as mohair.
- 37. Encyclopedia of Textiles, 2nd ed. (Englewood Cliffs, NJ: Prentice Hall, 1972), 201. Henriettas were made in all wool and all cotton by the early 1900s. Sears, Roebuck and Company, 1897 Sears Roebuck Catalogue, ed. Fred L. Israel (New York: Chelsea House Publishers, Lochsley Hall), 254–55. 1908 Sears Catalog, 906, 912.
- 38. 1908 Sears Catalogue, 906.
- 39. Montgomery Ward, 1926 Sale Book (Oakland, CA: Montgomery Ward, 1926), 3.
- 40. Ibid., 25.
- 41. Sears, Roebuck and Company, *1927 Edition of the Sears*, *Roebuck Catalogue*, ed. Alan Mirken (n.p.: Crown Publishers, Bounty Books, 1970), 258.
- 42. Rayon/cotton mixture fabrics were present in IQSC, Barber Collection 2003.010.0013, 2003.010.0014, and 2003.010.0029.
- 43. Fall/Winter 1941–42 Sears Catalog (Chicago: Sears, Roebuck and Company, 1941), 599–604. All wool fabrics such as crêpe, flannel, and serge were still available in a variety of colors in this catalog.
- 44. Rayon was found in IQSC, Barber Collection: 2003.010.0002, 2003.010.0005, 2003.010.0006, 2003.010.0009, 2003.010.0011, 2003.010.0012, 2003.010.0013, 2003.010.0014, 2003.010.0016, 2003.010.0017, 2003.010.0019, 2003.010.0020, 2003.010.0021, 2003.010.0022, 2003.010.0023, 2003.010.0024, 2003.010.0029, 2003.010.0035, and 2003.010.0037. Unidentified synthetic fiber was found in 2003.010.0009, 2003.010.0012, and 2003.010.0014. Probable polyester was found in 2003.010.0015. Probable cotton/polyester blend was found in 2003.010.0001, 2003.010.0007, 2003.010.0011, 2003.010.0012, 2003.010.0014, and 2003.010.0023.
- 45. Administrative file, the Henry and Jill Barber Collection, Accession Number 2003.010. 0007, International Quilt Study Center, Lincoln, NE.
- 46. Yearous, 177-78.
- 47. The presence of cotton/polyester quilting thread confirms a post-1962 date. This quilt technically could not have been made at the assigned beginning date; however, for various cataloging reasons, we chose to round the dates by decade.
- 48. Granick, 92.
- 49. Administrative file, the Henry and Jill Barber Collection, Accession Number 2003.010.0011, International Quilt Study Center, Lincoln, NE.
- 50. The presence of cotton/polyester fabrics confirms a post-1953 date. We



- chose to use rounded years for various reasons including database management and exhibition labels.
- 51. Administrative file, the Henry and Jill Barber Collection, Accession Number 2003.010.0017, International Quilt Study Center, Lincoln, NE.
- 52. Luckily, the initials "MEH" were embroidered onto this quilt. Genealogical investigation and fieldwork in Big Valley indicates that "MEH" may refer to Moses E. Hostetler, a Nebraska Amish church member born in 1950, suggesting a possible later date. Genealogical information obtained from the Swiss Anabaptist Genealogical Association, James C. Hostetler database; Janneken Smucker conversation with Hostetler's daughter-in-law and Leah N. Yoder Hostetler, 13 July 2004.
- 53. Granick, 94-102.
- 54. Ibid., 94.
- 55. Ward-Jackson, 103.
- 56. Ibid, 98–103. At least at the time this book was published, the American Viscose Company did not have facilities to manufacture woven textiles. The Lewistown plant was in operation until 1972 when Hurricane Agnes caused the worst recorded flood and damaged the area. Mifflin County Planning Commission, Commercial and Industrial Study for Mifflin County, Pennsylvania: An Inventory and Analysis of Commercial and Industrial Activities (Lewistown, PA: The Commission, 1977), 167.
- 57. Hostetler, Amish Society, 244-45.
- 58. Stephen H. Petersheim and Fannie R. Yoder, *Old Order Amish Directory of Mifflin and Juniata Counties Sinking Valley and Beaver, Ohio*, rev. ed. (Mifflintown, PA: S. H. Petersheim, 2002). At the time of this fieldwork, the white topper/Nebraska church did not publish a church directory. Our evidence of three last names is based on fieldwork in Big Valley, including conversations with many Nebraska church members and with our non-Amish contact, Elaine Mercer of Belleville, PA.
- Administrative file, the Henry and Jill Barber Collection, Accession Number 2003.010.0015, International Quilt Study Center, Lincoln, NE; Genealogical information from the Swiss Anabaptist Genealogical Association, James C. Hostetler database.
- 60. For more on Amish name differentiation and abbreviation, see Hostetler, *Amish Society*, 246.
- 61. A directory of the Nebraska/white topper church is now available for the first time.
- 62. For additional examples of quilts given "from home" to Amish young adults in the 1960s and 1970s, see IQSC 2003.010.0013 and 2003.003.0021 (quilts made by Ruth Yoder Hostetler for her nieces Mary Adeline Hostetler Yoder



- and Nancy K. Hostetler), IQSC 2003.010.0022 (quilt made by Lydia E. Hostetler Zook for her son Eli Y. Zook), IQSC 2003.010.0025 (quilt made by Katie Peachey Kanagy for her son Stephen P. Kanagy).
- 63. Janneken Smucker conversations with Stephen P. and Annie M. (Swarey) Kanagy, 6 April 2004, Eli Y. Zook, 4 May 2004, and Nancy K. Hostetler, 7 May 2004, all at their homes in Mifflin County, PA.
- 64. Janneken Smucker conversation with Stephen P. and Annie M. (Swarey) Kanagy, 6 April 2004.
- 65. Administrative file, the Henry and Jill Barber Collection, Accession Number 2003.010.0005, International Quilt Study Center, Lincoln, NE.
- 66. Genealogical information from the Swiss Anabaptist Genealogical Association, James C. Hostetler database.
- 67. Janneken Smucker, fieldnotes, 5 May 2004.
- 68. Janneken Smucker conversation with Leah Y. Hostetler Yoder, 5 May 2004, Reedsville, PA.
- 69. Janneken Smucker conversation with Leah N. Yoder Hostetler, 13 July 2004, Honey Creak area, Mifflin County, PA.