

Rayon and its impact on the fashion industry at its introduction, 1910-1924

by

Carmen N. Keist

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Program of Study Committee:
Sara J. Kadolph, Co-Major Professor
Sara. B. Marcketti, Co-Major Professor
Amy S. Bix

Iowa State University

Ames, Iowa

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ABSTRACT

Rayon was and continues to be an important fiber to the textile and fashion industry. Prior to rayon's invention, only natural fibers such as cotton, silk, flax, and wool were available for clothing and home furnishings. Rayon, invented in 1846, began to be manufactured in the United States in 1911. Called artificial silk until 1924 when the name rayon was coined, rayon was a less expensive alternative to silk clothing and accessories.

This paper focused on the time period of 1910-1924. The start date 1910 was selected because rayon production in the United States started in 1911. The year 1924 was chosen as a stop date for this project because acetate was invented in 1924 making rayon no longer the only manufactured fiber. This topic was important to study because little to no research had been done to address how rayon was introduced to consumers and to assess its impact on the fashion world. Seven research questions guided the research. These questions were: What was the early history of rayon production and introduction to the public? What names did manufacturers use when selling rayon? What type of products featured rayon? How were the above products promoted to the public? What were the stated advantages of rayon during this time period? What were the stated disadvantages of rayon during this time period? Why was rayon perceived as inferior to silk? This study utilized a grounded theory and content analysis to analyze data collected from the retailers' newspaper *Women's Wear*, the woman's fashion magazine *Harper's Bazar*, and the woman's home magazine *Good Housekeeping*.

Manufacturers and the industry used a variety of names to describe rayon which seemingly caused confusion for the consumer. The terms artificial silk, art silk, fiber (fibre) silk, fiber (fibre), chemical silk, manufactured silk, scientific silk, rayonner, and rayon silk

were all used to describe one type of fabric. The majority of products made of rayon were hosiery; along with sweaters, draperies and curtains, embroidery and trim, bed spreads, dresses, scarves, blouses, women's suits, hats, and socks.

During the time period of 1910-1924, many advantages and disadvantages were apparent. The major advantage of rayon was its luster; the second major advantage was cost. Rayon was lower in cost than silk. Other advantages of rayon included its ability to cover and it wore well as dress trimmings and embroidery. In spite of these advantages, there were many disadvantages. Rayon was susceptible to heat and moisture, only one-eighth as strong as silk, and weaker when wet. Women who purchased rayon did not know how to properly care for the fiber. Rayon fibers were coarser than silk which produced a coarser weave, had poor elasticity, poor abrasion resistance, poor dye affinity, and lacked the necessary qualities to produce a twistable yarn.

Rayon was seen as inferior to silk for four main reasons. First, was the industry's portrayal of the fiber rayon. Terms such as "real" and "true" silk made consumers think that silk was the optimal choice, but that they might have to settle for rayon, the imposter. Cost perceptions was the second major reason rayon that was seen as inferior. The majority of rayon products were priced less expensively than silk products. For many consumers, cheaper prices equaled lower quality. Third was confusion about the terminology used. A variety of terms were used to describe rayon: artificial silk, art silk, fiber (fibre) silk, fiber (fibre), chemical silk, scientific silk, rayonner, wood silk, and rayon silk. With this list of terms, consumers would not necessarily know what specific product they purchased or the correct fiber content. The fourth, and final reason, was poor information provided about rayon to the consumer.

CHAPTER ONE: INTRODUCTION

“The rayon industry is a striking case of the triumph of synthetic chemistry combined with modern engineering skill.”¹ Clothing is a basic human need. Before the turn of the 20th century, the four natural fibers used to make clothing were cotton, linen, wool, and silk. With the introduction of rayon, a manufactured fiber, science revolutionized the fashion and apparel industry. The concept of a manufactured fiber was new to the 20th century and many people were not well informed of this modern invention.

Rayon was invented in 1846 when Christian Friedrich Schönbein “accidentally treated cellulose with a mixture of sulfuric and nitric acids and produced a cellulose derivative that he called guncotton.”² Rayon, originally called “artificial silk,” imitated the properties of silk while being easier to care for and less expensive.³

Though rayon was the first manufactured fiber, little research has been conducted on how rayon impacted the fashion world at its introduction. Secondary sources like fashion history books and journal articles discuss rayon’s use for clothing starting in the 1920s, though few mention its availability in the preceding years. This topic is important to study because little to no research has been done to describe the impact rayon had on the fashion world. Both primary and secondary sources describe rayon as inferior to silk, it is important to find out why these claims were made. This research begins to address those topics.

This thesis focused on the time period of 1910-1924, including the beginning of production of rayon in the United States in 1911 and “its first era of serious use” from 1918 to

¹ Taussig, F. W. and H. D. White. “Rayon and the Tariff: The Nurture of an Industrial Prodigy.” *The Quarterly Journal of Economics* 45, no. 4 (1931): 588-621, 588.

² Kauffman, George B. “Rayon: The First Semi-Synthetic Fiber Product.” *Journal of Chemical Education* 70, no. 11 (1993): 887-893, 888.

³ The term rayon will be used throughout this research except when discussing data found specifically using different terminology such as artificial silk, art silk, fiber silk, etc.

1928.⁴ The year 1924 was chosen as a stop date for this research because acetate was invented in 1924 making rayon no longer the only manufactured fiber. The researcher was interested in this time period because it was before rayon production exceeded that of silk (in the 1920s) and wool (in the 1930s) and it was the only manufactured regenerated fiber available to consumers.⁵

Research Questions

The goal of this research was to determine how rayon was marketed to consumers and retailers along with exploring how Americans experienced rayon during daily life between the years 1910-1924. Each research question was structured to address the previously stated goals. Answering these questions fills a gap in apparel industry history of the period 1910-1924. The questions guiding this research were:

1. What was the early history of rayon production and introduction to the public?
2. What names did manufacturers use when selling rayon?
3. What type of products featured rayon?
4. How were the above products promoted to the public?
5. What were the stated advantages of rayon during this time period?
6. What were the stated disadvantages of rayon during this time period?
7. For what reasons was rayon perceived by consumers as inferior to silk?

Chapter Two focused on the literature about rayon. Topics discussed included: rayon chemistry, production of rayon, rayon products, the ready-to-wear industry, and finally, fashion styles from the years 1910-1924. These categories help the reader understand why rayon was an important manufactured fiber during this time. Chapter Three focused on the research methods used for this study. A grounded theory method along with a content analysis was used. Chapter

⁴ Kadolph, Sara J. *Textiles*. 10th ed. Upper Saddle River, NJ: Pearson Prentice Hall, 2007, 102. Farrell-Beck, Jane and Jean Parsons. *20th-Century Dress in the United States*. New York: Fairchild Publications, Inc, 2007, 66.

⁵ Markham, Jesse W. *Competition in the Rayon Industry*. Cambridge, MA: Harvard University Press, 1952.

Four focused on the results and discussion. The three primary sources used for this study were *Women's Wear*, *Good Housekeeping*, and *Harper's Bazar*.⁶ Chapter Five provided the conclusion and summary.

DEFINITIONS OF TERMS

The following definitions derive from contemporary and older sources. The 1939 definitions of rayon, though not of the time period studied, were the most complete found. All definitions are in their original form taken directly from primary sources. This ensured language used during the time and to note slight differences between years.

Art Silk (1967)—“A name applied fairly broadly during the early part of the twentieth century and into the [1920s] to describe what is today known as rayon and acetate. It was an abbreviation of the term “artificial silk,” which was contracted by some to “art silk.” Quite often the period was dropped; in fact, sometimes even the word “art” was used. Feeling that this usage was deceptive, an industry committee working in conjunction with the National Retail Dry Goods Association was set up in 1925 and established the word ‘rayon.’”⁷

Artificial Silk (1939)—“See Rayon. The word Rayon has taken its place, since 1924. Now obsolete.”⁸

Artificial Silk (1967)—“A term formerly used in this country and in England to describe what is now known as rayon and acetate. It was frequently shortened to “art silk.” It was abandoned in

⁶ *Women's Wear* did not become *Women's Wear Daily* until 1927; *Harper's Bazar* did not add the extra “a” to Bazaar until 1929. Therefore, I will use the original, contemporaneous to this study spelling: *Women's Wear* and *Harper's Bazar*.

⁷ *Fairchild's Dictionary of Textiles*. Edited by Isabel B. Wingate. New York: Fairchild Publications, Inc., 1967, 28.

⁸ Mauersberger, Herbert R and E. W. K. Schwarz. *Rayon and Staple Fiber Handbook: A Practical Reference Book for the Producer, Manufacturer, Processor, Distributor, Dry-Cleaner, Launderer, Economist, and Student*. 3rd ed. New York: Rayon Handbook Company, 1939, 782.

1925 in the United States when the term “rayon” was agreed upon. According to the Federal Trade Commission, “artificial silk” is not a proper description of the product.”⁹

Cellulose (1939)—“A carbohydrate of complex molecular structure, a constituent of plant cells and walls, used as a principal basic raw material of all existing commercially successful processes for making rayon.”¹⁰

Cellulose (2007)—“is a polymer of glucose found in all plant fibers.”¹¹

Cuprammonium Rayon (1939)—“Filaments composed of a regenerated cellulose which has been coagulated or solidified from a solution of cellulose in ammoniacal copper oxide.”¹²

Cuprammonium Rayon (2007)—“is a rayon produced in Europe by the cuprammonium process.”¹³

Fiber (fibre) Silk—See “rayon.”

Lisle (1967)—“A hard spun, two-ply cotton yarn made of long staple, combed cotton. It generally is twisted wet to give a compact yarn with a minimum of protruding fibers. It often also is gassed and given a glazing treatment called polishing which further enhances the smooth effect. Principal use: men’s hosiery; other uses: knit gloves and underwear, principally men’s undershirts.”¹⁴

Lisle (2007)—“is a high-quality jersey made of fine two-ply combed-cotton yarns.”¹⁵

Mercerize (1939)—“Treatment of cotton yarn and goods with strong caustic soda and stretching so as to impart a silk-like luster. Increases strength and affinity to dyestuffs.”¹⁶

⁹ *Fairchild’s Dictionary of Textiles 1967*, 28-29.

¹⁰ Mauersberger and Schwarz, 785.

¹¹ Kadolph, 463.

¹² Mauersberger and Schwarz, 787.

¹³ Kadolph, 466.

¹⁴ *Fairchild’s Dictionary of Textiles 1967*, 340.

¹⁵ Kadolph, 475.

¹⁶ Mauersberger and Schwarz, 793.

Mercerization (2007)—“is a finish in which sodium hydroxide is used to increase cotton’s absorbency, luster, and strength.”¹⁷

Nitrocellulose (1939)—“The first method in historical order of making rayon, now abandoned, in which the product is a regenerated cellulose.”¹⁸

Radium Silk (2007)—Definition of radium. “A plain weave, supple, manufactured fiber or silk fabric generally made with filling yarn containing extra twist to give the fabric crispness and draping qualities. Uses: blouses, draperies, lingerie, linings. Synonym: *radium taffeta*.”¹⁹

Rayon (1939)—“(1) The generic name, adopted about 1924, to mean the “Filaments made from various solutions of modified cellulose by pressing or drawing the cellulose solution through an orifice and solidifying it in the form of a filament, or filaments, by means of some precipitating or coagulating medium.” (2) Federal Trade Commission definition: “The generic term for manufactured textile fibers or yarn produced chemically from cellulose or with a cellulose base, and for threads, strands or fabric made there-from, regardless of whether such fiber or yarn be made under the viscose, acetate, cuprammonium, nitro cellulose or other process.” (3) (General) An artificial, man-made material, originating from wood pulp or cotton linters, and made into cloth (textiles).”²⁰

Rayon (1967)—“A generic term for man-made fibers composed of regenerated cellulose derived from trees, cotton and woody plants. Originally known as “artificial silk,” “wood silk,” and “glos.” It is characterized by high absorbency, bright or dull luster, pleasant “feel” or “hand,” good draping qualities, ability to be dyed in brilliant colors and superior strength in high tenacity

¹⁷ Kadolph, 476.

¹⁸ Mauersberger and Schwarz, 794.

¹⁹ *Fairchild’s Dictionary of Textiles*. 7th ed. Edited by Phyllis G. Tortora and Robert S. Merkel. New York: Fairchild Publications, 2007, 457.

²⁰ Mauersberger and Schwarz, 796.

types. Uses: women's apparel, linings, outerwear fabrics in blends, carpets, draperies, automobile tires, conveyor belts."²¹

Rayon (2007)—“is a manufactured fiber composed of regenerated cellulose in which substituents have replaced not more than 15 percent of the hydrogens of the hydroxyl groups.”²²

Silk (2007)—“is the fiber produced by several varieties of caterpillars, including *Bombyx mori*, *Antheraea mylitta*, and *Antheraea pernyi*.”²³

Tub Silk (1967)—“A term sometimes used for washable silk.” Wash silk—“Any of a number of silk fabrics that can be washed easily without damage, generally made with little or no weighting. In addition the dyes are fast to washing. When very popular in the early twentieth Century the fabrics often were yarn dyed. Used for dresses and blouses. Also called shirting silk, tub silk, washing silk.”²⁴

Tub Silk (2007)—also called washable silk. “1. Silk fabric that has been treated with a resin finish to prevent wrinkling and shrinkage during laundering. 2. A general term for silk fabrics without special finishes that can be washed easily, without damage, and which are colored with dyes that are fast to washing. Examples from the early 20th century often were yarn dyed. Synonyms: *shirting silk*, *tub silk*, *wash silk*, *washing silk*.”²⁵

Viscose Rayon (1939)—“The third method (historically) of producing rayon filaments by which about 83% of the world's rayon was produced in 1938. The product by this method is regenerated cellulose, which has been coagulated or solidified from a solution of cellulose xanthate.”²⁶

²¹ *Fairchild's Dictionary of Textiles*. Edited by Isabel B. Wingate. New York: Fairchild Publications, Inc., 1967, 473.

²² Kadolph, 482.

²³ Kadolph, 484.

²⁴ *Fairchild's Dictionary of Textiles 1967*, 602, 633.

²⁵ *Fairchild's Dictionary of Textiles 1967*, 622.

²⁶ Mauersberger and Schwarz, 801.

Viscose Rayon (2007)—“is the most common type of rayon.”²⁷

Wood Silk (1967)—“A name formerly applied to products now known as rayon; term is considered unacceptable at present. The term was derived from the fact the raw material was wood cellulose.”²⁸

²⁷ Kadolph, 489.

²⁸ *Fairchild's Dictionary of Textiles* 1967, 645.

CHAPTER TWO: LITERATURE REVIEW

Rayon Chemistry

In today's language, the Federal Trade Commission (FTC) defines rayon as a "manufactured fiber composed of regenerated cellulose, as well as manufactured fibers composed of regenerated cellulose in which substituents have replaced not more than 15 percent of the hydrogens of the hydroxyl groups."²⁹ The earliest definition of rayon that could be found by the researcher was published in 1927. That reference defined rayon as "the generic name of filaments made from various solutions of modified cellulose by pressing or drawing the cellulose solution through an orifice, and solidifying it in the form of a filament, or filaments, by means of some precipitating medium."³⁰ In 1939, the FTC defined rayon as "the generic term for manufactured textile fibers or yarn produced chemically from cellulose or with a cellulose base, and for threads, strands or fabric made there-from, regardless of whether such fiber or yarn be made under the viscose, acetate, cuprammonium, nitro cellulose or other process."³¹

Rayon was the first regenerated manufactured fiber. A regenerated fiber is not produced by nature in its fiber form such is the case with cotton, flax, wool, and silk, but derives from materials found in nature.³² The raw materials, either cellulosic or protein, need to be processed in order to create the fiber. Manufactured regenerated fibers along with synthetic fibers (which are synthesized from small simple molecules) are unique in the fact that they may be modified during processing. While manufactured fibers are not as easily modified in shape as synthetic melt-spun fibers, size modifications are relatively simple and inexpensive to produce.

²⁹ Kadolph, 104.

³⁰ Avram, Mois H. *The Rayon Industry*. New York: D. Van Nostrand Company, 1927, 105.

³¹ Mauersberger and Schwarz, 796.

³² Kadolph, 20.

Manufacturers are able to produce manufactured regenerated and synthetic fibers to mimic some natural fiber characteristics and properties with the ease of controlling the process.³³

Rayon was considered a substitute for silk and was often called “artificial silk,” “fiber silk,” “chemical silk,” “manufactured silk,” or “wood silk,” among others.³⁴ These terms can be misleading because the chemical composition is much different than that of silk, which is a natural protein fiber composed of amino acids.³⁵ The first manufactured rayon fibers were appealing to individuals who could not afford more expensive silk fibers, but rayon was viewed as an “inferior silk substitute.”³⁶ Rayon did not wash well and was too lustrous. Early artificial silk fibers had a metallic luster and were coarser than silk.³⁷

Negative views of rayon at its introduction appeared in secondary sources like Jesse Markham’s book *Competition in the Rayon Industry* and positive views appeared in articles published in *The Journal of Home Economics*. According to Markham, in an analysis of competition in the rayon industry, “Prior to World War I rayon was, at best, regarded as an inferior substitute for silk; by the outbreak of World War II rayon had practically displaced silk in the production of many style fabrics and had made serious inroads in a number of cotton fabric markets.”³⁸ As published in the *Journal of Home Economics*, there were many positive qualities associated with rayon. In 1917, Irene Bjorklund, described it as “possessing a luster

³³ Kadolph, 86-87.

³⁴ Gibbs Baker, Charlotte. “Discrimination in Buying.” *Journal of Home Economics* 8, no. 5 (1916): 251-255, 253; “Spanish Firm Would Like to Import Artificial Silk Thread.” *Women’s Wear*, 20 Feb. 1911, 7; Bjorklund, Irene. “Manufactured Silk.” *Journal of Home Economics* 9, no. 8 (1917): 377-382, 377.

³⁵ Silk is a natural protein fiber and contains the protein fibroin while rayon is 100% cellulose and is more similar to cotton. The term “artificial silk” was used to refer to the feel or hand of the fabric produced.

³⁶ Jarmin, Ronald S. “Learning by Doing and Competition in the Early Rayon Industry.” *The RAND Journal of Economics* 25, no. 3 (1994): 441-454, 443.

³⁷ Tortora, Phyllis and Keith Eubank. *Survey of Historic Costume*. 3rd ed. New York: Fairchild Publications, 1998, 387. Gibbs Baker, 253.

³⁸ Markham, 4. Many improvements to rayon were made between World War I and World War II. These improvements included production of a finer and smoother yarn, improved production techniques, new types of rayon such as high-tenacity rayon and high-wet-modulus rayon, and producing rayon as a staple fiber and crepe yarn. Markham; Kadolph.

exceeding that of true silk, together with the ability to take dyes easily and beautifully and the all important qualification of cheapness, manufactured silk has only to prove its durability and adaptability.”³⁹ Consumers understood that rayon would not be as superior as silk, but the economic value of the product would increase its desirability.

Author Jacqueline Field (2001) linked World War I dye shortages to the rise of rayon production in the United States in her article “Dyes, Chemistry, and Clothing: The Influence of World War I on Fabrics, Fashions and Silk.” Before the start of World War I, the United States received the majority of dyes and chemical supplies from German imports. Because the United States was “neutral” until America’s involvement in 1917, the United States did not anticipate war time shortages. But on March 1, 1915, the English blocked all German ports making it impossible for America to obtain dyes and chemical supplies. The United States scrambled to create their own dye industry, but the effects were still felt. Wartime dress manufacturers used smaller amounts of dyes that resulted in striped fabrics or diluted dyes and creating pastel colors instead of bold colored garments previously seen.⁴⁰

Field hypothesized four reasons that the rise in the U.S. production of manufactured fibers was an indirect outcome of World War I. First, prior to 1914, America was not concerned with manufacturing textile products because of abundant availability from Europe. Second, with the outbreak of war, the United States realized that they were not competing in a modern industry because they had a large body of chemists that they were not utilizing properly. Third, if dyes were prevented from the Atlantic side of the ocean then raw silk might be cut off from the Pacific. And fourth, “in pre-war years banks and financiers could not imagine anything

³⁹ Bjorklund, 377.

⁴⁰ Field, Jacqueline. “Dyes, Chemistry and Clothing: The Influence of World War I on Fabrics, Fashions and Silk.” *Dress* 28, (2001): 77-91.

substituting for silk and thus had no interest in investing in artificial silk.”⁴¹ Because of these reasons, rayon production increased dramatically and explains the lack of rayon products prior to the late 1910s.

Naming the Fiber Rayon

Formerly called “glos” by trade organizations and the silk industry, the name “rayon” was coined in 1924 and was most commonly used in Great Britain and the United States in 1924.⁴² The name change was proposed because manufactures of real silk faced competition and consumers and retailers found the term confusing.⁴³ The National Retail Dry Goods Association appointed a committee to create a more appropriate term and Kenneth Lord of Gale and Lord “proposed ‘RAYON.’ The committee endorsed the name change almost unanimously “because it was simple, easy to remember and euphonious.”⁴⁴ One author explained that the term was created because it “Convey[ed] the meaning of the radiance of bright sunshine, tempered with the soft glimmer of rippling waters in moonlight.”⁴⁵

There was much discussion in *The New York Times* during 1924 over the name change. On May 1st, a statement in the “Business World” section announced the “Executive Committee of the Silk Association of America” would hold a meeting to accept or reject the proposed name of rayon to replace artificial silk. A letter from S. A. Salvage of the Viscose Company asked that the silk association accept the name because the “Special Committee of the National Retail Dry

⁴¹ Field, 86.

⁴² Kauffman, 887.

⁴³ Silk Men to Act on “Rayon.” *New York Times*, 1 May 1924, p. 23. Mauersberger and Schwarz, 12-13.

⁴⁴ Kenneth Lord was a committee member. Mauersberger and Schwarz, 13. Euphonious means pleasant sounding and agreeable to the ear, <http://en.wiktionary.org/wiki/euphonious>.

⁴⁵ Avram, 15. “Glos Gives Way to Rayon.” *Textile World* 65, (1924): 28.

Goods Association” already had, although final action would not be taken until May 21 of the same year.⁴⁶

On May 4th, Directors of the National Knitted Outerwear Association refused the adoption of the name rayon. They stated that, “ ‘ the continued use of the words ‘artificial silk’ as permitted by the Federal Trade Commission, be approved and recommended to all manufacturers and dealers in artificial silk products and that a copy of this resolution be forwarded by the secretary to all parties and organizations interested in the matter’.”⁴⁷ However, on June 11, 1924, as reported in *The New York Times*, the Board of Managers of the Silk Association of America along with the National Retail Dry Goods Association accepted the name “rayon” and “it is expected that following the action announced yesterday immediate steps will be taken to carry out a campaign to familiarize consumers with the term.”⁴⁸ After this decision, a “cable” was sent to the Silk Association of Great Britain and Ireland by the Silk Association of America asking them to preserve the name “rayon” for artificial silk and the Silk Association of Great Britain and Ireland accepted the name.⁴⁹

Rayon Processing and Production

During the 19th century there were many attempts to create rayon. Three major types of rayon include: nitrocellulose rayon, cuprammonium rayon, and viscose rayon. Nitrocellulose was first produced in France by Count Hilaire de Chardonnet in 1889.⁵⁰ Some processes were more successful than others. The first type of rayon marketed was called “Chardonnet silk” and

⁴⁶ “Silk Men to Act on “Rayon“.” *New York Times*, 1 May 1924, p. 23; “Business Notes”.” *New York Times*, 11 May 1924, p. E11.

⁴⁷ “Refuse to Adopt “Rayon”.” *New York Times*, 4 May 1924, p. E15.

⁴⁸ “Silk Association Favors Rayon.” *The New York Times*, 11 June 1924, p. 34.

⁴⁹ “Ask British Aid for “Rayon“.” *The New York Times*, 22 Sept. 1924, p. 32; “Business Notes.” *The New York Times*, 11 Dec. 1924, p. 33.

⁵⁰ Kadolph, 102.

first manufactured by the Chardonnet Silk Company in Besancon, France.⁵¹ The process in which this first rayon was produced was dangerous and difficult to create because the manufactured rayon became highly explosive.⁵² This rayon production technique was discontinued in 1949 because it was explosive and flammable.⁵³

Cuprammonium rayon is no longer produced in the United States because of the damaging environmental factors such as water and air pollution, but is still produced in other parts of the world.⁵⁴ Viscose rayon “accounts for most of the world’s total rayon production” and “the raw material may be cotton linters or soft wood pulp from northern spruce, western hemlock, eucalyptus, or southern slash pine.”⁵⁵

Production of Rayon

In 1911, viscose rayon was first produced in the United States although large quantities of rayon were not heavily produced until 1918.⁵⁶ According to Markham, “From 1911 to 1920 all rayon produced in the United States was 150-denier viscose yarn.”⁵⁷ The production and consumption of rayon increased steadily during the twentieth century. United States consumption exceeded two million pounds in 1911 with more than 1,800,000 pounds imported from Europe.⁵⁸ Within two years, rayon production increased to 6.5 million pounds with

⁵¹ Kauffman, 887, “Artificial Silks--Says Companies Working the Gun Cotton Process Are Not Making Any Money.” *Women’s Wear*, 9 Sept. 1912, 4.

⁵² Kadolph, 102.

⁵³ Kadolph; Kauffman, 889.

⁵⁴ Kadolph, 106.

⁵⁵ Kauffman, 891.

⁵⁶ Kadolph, 102; Field, 86.

⁵⁷ Markham, 1. Denier refers to a yarn’s weight in grams of 9,000 meters; the lower the number, the finer yarn. Today, sheer hosiery usually has a yarn denier size of 20. A yarn denier size of 150 would be used in outerwear and draperies; Kadolph. Rayon products during this time period were fairly coarse.

⁵⁸ Mauersberger & Schwarz, 9.

2,450,000 pounds imported with a price approximately \$3.00 per pound.⁵⁹ By 1938, “U. S. rayon consumption was 300 million pounds and exceeded wool consumption for the first time.”⁶⁰

From 1910 to 1924, three major companies produced rayon in the United States: Viscose Corporation, DuPont Nemours and Company, and Tubize Artificial Silk of America.⁶¹ The first American viscose plant, The American Viscose Company⁶² was established in 1910 and was located in Marcus Hook, Pennsylvania. They produced a 150 denier filament yarn that sold for \$1.85 per pound. In 1911, The American Viscose Company produced 362,544 pounds.⁶³

Nitrocellulose Rayon

In 1846, Christian Friedrich Schönbein “accidentally treated cellulose with a mixture of sulfuric and nitric acids and produced a cellulose derivative that he called guncotton” which was the “first practical progress toward producing a synthetic fiber.”⁶⁴ This first cellulose derivative was proposed as an explosive rather than as a fiber. In 1855, the first English patent for producing rayon was awarded to Swiss born chemist George Audemars. He accomplished this by extruding strands from an ethanol-ether solution of cellulose nitrate.⁶⁵ It was not until Count Hilaire de Chardonnet obtained his first French patent in November of 1884 for his work with the nitrocellulose method of rayon production that the first practical form of the fiber was seen.⁶⁶

Cuprammonium Rayon

According to *Rayon and Synthetic Yarns* which was published by the Brooklyn Museum in 1936, cuprammonium rayon fibers are “filaments composed of regenerated cellulose which

⁵⁹ Mauersberger & Schwarz, 10.

⁶⁰ Kauffman, 887.

⁶¹ Field, 86.

⁶² Changed in 1915 to The Viscose Company

⁶³ Mauersberger & Schwarz, 9.

⁶⁴ Kauffman, 888.

⁶⁵ Kaufman, 889.

⁶⁶ Mauersberger & Schwarz, page number.

has been coagulated or solidified from a solution of cellulose in ammoniacal copper oxide.”⁶⁷ A second type of rayon, cuprammonium was based on the discovery by Swiss chemist Eduard Schweizer.⁶⁸ Cuprammonium rayon is “more silk like than any of the other celluloses” but is more expensive than viscose rayon to produce.⁶⁹ Cuprammonium rayon is no longer produced in the United States because of its damaging environmental factors.⁷⁰

Viscose Rayon

According to *Rayon and Synthetic Yarns*, viscose rayon fibers are “filaments composed of a regenerated cellulose which has been coagulated or solidified from a solution of cellulose xanthate.”⁷¹ Viscose rayon production accounted for the majority of the all rayon productions and is the most inexpensive rayon to produce.⁷²

Viscose rayon was developed by Charles F. Cross and E. J. Bevan in Great Britain who obtained patents for it in 1892. According to Markham, the author of *Competition in the Rayon Industry*, it was used in the manufacture of “incandescent lamps, linen and curtain fabrics, door handles, valve wheels, cellulose film, and artificial leather.”⁷³ The Viscose Company was founded in 1910 and for over twenty years was the largest producer of rayon in the world.⁷⁴ During the 1910s, viscose rayon was the least expensive type of rayon to produce and “practically the only kind manufactured in the United States.”⁷⁵

⁶⁷ Brooklyn Museum. *A Brooklyn museum handbook compiled for the industrial art exhibition of rayon and synthetic yarns*. New York: Brooklyn Museum Press, 1936, 73.

⁶⁸ Kauffman, 889.

⁶⁹ Needles, Howard L. *Textile Fibers, Dyes, Finishes, and Processes: A Concise Guide*. Park Ridge, NJ: Noyes Publications, 1986, 46.

⁷⁰ Kadolph, 106.

⁷¹ Brooklyn Museum, 72.

⁷² Kauffman, 891. Needles, 44.

⁷³ Markham, 8.

⁷⁴ Later changing its name to the American Viscose Corporation in 1937. Markham, 9.

⁷⁵ Bjorklund, 381.

Products

At first adapted only for trimmings, braids, and other items where brittleness, lack of tensile strength, and poor dyeing qualities were of little consequence, it came to be utilized in a great variety of commodities: cloths of every description from the sheerest fabric to heavy upholstery; hosiery, underwear, sweaters, and other knitted fabrics; laces, ribbons, lamp-shades, slippers, and a host of minor articles.⁷⁶

In 1917, the *Journal of Home Economics* projected that rayon would be manufactured into hosiery, skirts, hat braids, dress trimmings, knit goods novelties, sweaters, neckties, mufflers, caps, upholstery, viscose plush, and embroidery thread. Rayon stockings were durable enough for their intended use and less expensive to replace than silk. True silk sweaters cost more than most people could afford, but by using rayon, a larger percentage of the population could afford them. Embroidered garments and accessories that contained large areas of “silk” embroidery utilized rayon; though rayon could not be used for fine detail because of pliability issues.⁷⁷

During the 1920s when production of rayon sky rocketed, almost 75% of rayon was used in cotton mixes, hosiery, and underwear. Hosiery and underwear accounted for more than 50% of rayon production so “thanks to rayon it was inexpensive to dress, from the skin out, in attractive, silky clothing.”⁷⁸ These end uses were appropriate as rayon is a highly versatile fiber prized for its comfort, softness, and absorption capabilities.⁷⁹ Common advertisements included in the 1923 Sears & Roebuck Catalog featured two pairs of children’s socks made from rayon;

⁷⁶ Taussig and White, 595.

⁷⁷ Bjorklund, 377-378.

⁷⁸ Field, 86.

⁷⁹ Kadolph, 104-105.

one pair was black knit of a “fine quality artificial silk plated yarn” while the other pair featured white cotton socks with colored artificial stripes. The stripes came in sky blue, pink, brown, and lavender.⁸⁰ In August 1924, the *New York Times* reported that the sweater season was coming to an end along with a demand for white rayon garments and darker rayon garments in the West.⁸¹ By 1929, one-third of all rayon production was for underwear.⁸²

Life in the 1910s and 1920s

In order to appreciate the price difference between rayon and silk, it is important to understand the cost of living during the 1910s and 1920s. The average household income during the 1910s was \$750; \$1,236 was the average in the 1920s.⁸³ Woodrow Wilson was in office from 1913 and 1921, almost the entire length of this study; a gallon of gas cost 25 cents (\$5.01 in 2006 dollars); a gallon of milk cost 36 cents (\$7.22 in 2006 dollars); and the average price of a new home cost \$3,200 (\$64,158 in 2006 dollars).⁸⁴ Rayon sold in 1923 for \$2.80 a pound while silk sold for \$8.65 a pound.⁸⁵ Prior to the onset of World War I, clothing consumed on average, one-eighth of an average family’s income. After World War I, partly due to inflation, clothing costs consumed one-sixth of an average family’s income.⁸⁶

⁸⁰ 1923 *Sears, Roebuck Catalogue*. Edited by Joseph J. Schroeder, Jr. Northfield, IL: DBI Books, Inc., 1973, 225.

⁸¹ “Sweaters of Artificial Silk.” *The New York Times*, 16 Aug. 1924, sec. 16.

⁸² Taussig and White, 595.

⁸³ Whitley, Peggy. “*American Cultural History - The Twentieth Century, 1910-1919.*” 1999.

<http://kclibrary.lonestar.edu/decade10.html> (accessed Oct. 14, 2009). Whitley, Peggy. “*American Cultural History, 1920-1929.*” 1999. <http://kclibrary.lonestar.edu/decade20.html> (accessed Oct. 14, 2009).

⁸⁴ U.S. Census Bureau, “Special Edition: 300 million.” *Facts for Features*. U.S. Census Bureau. 9 Aug. 2006. <http://www.census.gov/Press-Release/www/releases/archi...> (accessed Oct. 14, 2009).

⁸⁵ Field, Jacqueline, Marjorie Senechal, and Madelyn Shaw. *American Silk, 1830-1930: Entrepreneurs and Artifacts*. Lubbock, TX: Texas Tech University Press, 2007.

⁸⁶ National Industrial Conference Board, Inc. *The Cost of Living in the United States*. New York: National Industrial Conference Board, Inc., 1926.

Ready-to-Wear Industry

In a study of the beginnings of the clothing industry in the United States, Zakim stated, “If the clothing industry had an actual birth, it was in the emporiums and warehouses that appeared in New York and other American seaboard entrepots after the end of war and the reopening of European trade in 1815.”⁸⁷ Between 1815 and the turn of the nineteenth century, primarily men’s ready-to-wear clothing could be purchased. Women’s ready-to-wear clothing would not be available until the eve of the twentieth century. By the 1890s, Americans could purchase ready-to-wear clothing from mail order catalogs and in specialty shops and department stores.⁸⁸

After the U.S. Civil War, production of garment manufacturing advanced because of inventions like the sewing machine in 1846 and the long cutting knife in 1870 which cut multiple fabrics at one time. These inventions increased production of garments exponentially. Other machines that helped to increase production in the ready-to-wear business include the snap-fastening machine, felling machine, pinking machine, and the buttonholing machine.⁸⁹ Before ready-to-wear clothing was available, women would sew clothing for themselves and their family while middle and upper class women could hire a dressmaker to make their clothing at home. According to Parsons, “A skilled dressmaker offered not only a well-made garment that fit properly, but also convenience and status.”⁹⁰

Before the turn of the century, women were able to purchase ready-made staple goods, but were unable to purchase complete outfits. In the 1860s, women were able to purchase a few

⁸⁷ Zakim, Michael. “A Ready-Made Business: The Birth of the Clothing Industry in America.” *Business History Review* 73, no. 1 (1999): 61-91, 68.

⁸⁸ Farrell-Beck and Parsons, 2.

⁸⁹ Drake, Leonard A and Carrie Glasser. *Trends in the New York Clothing Industry: A Study Undertaken for the Mayor’s Business Advisory Committee and the Committee of Fifteen*. New York: Institute of Public Administration, 1942, 7. Drake and Glasser, 9.

⁹⁰ Parsons, Jean L. “No Longer a “Frowsy Drudge“Woman’s Wardrobe Management: 1880-1930.” *Clothing and Textiles Research Journal* 20, no. 33 (2002): 33-44, 35.

limited clothing items such as cloaks, crinolines, corsets, and bonnets.⁹¹ Underclothes and “wrappers” were soon able to be purchased and were followed by suits, dresses, and walking costumes. By the turn of the century, almost every article of female clothing was available for purchase and was “growing rapidly in the women’s dress and shirt-waist industries.”⁹²

The ready-to-wear industry advanced tremendously at the turn of the century through the 1920s because of unskilled cheap labor and an increase in communication. Between 1910 and 1920, it was customary for women to purchase ready-to-wear clothing.⁹³ The adoption of the shirtwaist along with women entering the workforce helped propel the ready-to-wear industry to the forefront. Women no longer had time to make clothing and needed an alternative. During this time, the majority of manufacturing of garments took place in New York City. The Census of Manufactures reported an “average of 83,800 workers employed in the production of women’s clothing in the United States in 1899. By 1924 this had increased to 168,900, a gain of 102 per cent.”⁹⁴ In addition to manufacturing products, New York struggled to create “fashionable” products that would compete with Paris. Readymade clothing items were available for purchase in department stores around the country. Consumption of disposable goods increased and garments were a less valuable resource. The prices of garments lowered and were available in every price point so lower, middle, and upper class Americans could purchase any type of garment.⁹⁵

In addition to the availability of ready-to-wear clothing, women’s roles expanded to include increased access to education, employment outside the home, and leisure activities such

⁹¹ Tortora and Eubank, 325.

⁹² Tortora and Eubank, 326; Parsons, 33.

⁹³ Kidwell, Claudia and Margaret Christmas. *Suiting Everyone: The Democratization of Clothing in America*. Washington D.C.: Smithsonian Institution Press, 1975; Parsons.

⁹⁴ Drake and Glasser, 8-9.

⁹⁵ Leach, William. *Land of Desire: Merchants, Power, and the Rise of a New American Culture*. New York: Vintage Books, 1993.

as sports as well as increased urbanization, and new approaches to advertising.⁹⁶ This along with the perception of home sewn garments as inferior, allowed for the acceptance of ready-to-wear clothing. Women had problems with custom made clothing and home sewn garments because of the time spent making and waiting for them, their cost, and styling issues.⁹⁷ With fashion styles changing rapidly, manufactured garments were able to change to the new styles easier. Though the quality of ready-to-wear clothing could be worse than homemade clothing, “the desire to keep up with rapidly changing styles led to a philosophy that quality was less important than being up-to-date.”⁹⁸ Factors that affected the acceptance of ready-to-wear clothing during this period included shifting roles for women, new employment patterns for women and men, increased urbanization, and new approaches to advertising. Coinciding with the ready-to-wear industry was the rise of American designers which propelled woman’s consumption of fashion.⁹⁹

During the 1910s, because of or in spite of the ready-to-wear industry, clothing was seen as disposable and not expected to last more than a couple of seasons. The ready-to-wear industry made clothing cheap and available to a vast number of people. Because of this shift from handmade to readily available, rayon provided women with products that would last for a season or two at inexpensive prices. These low prices allowed women to change with the seasons without worry about durability. With rapidly changing fashions, women were more inclined to purchase cheaper clothing and more of it opposed to higher quality products at higher prices. Rayon was the perfect fiber to achieve this purpose. Rayon hosiery was less expensive than silk.

⁹⁶ Blackwelder, Julia. *Now Hiring: The Feminization of Work in the United States, 1900-1995*. College Station, TX: Texas A&M University Press, 1997.

⁹⁷ Parsons, 35.

⁹⁸ Parsons, 39.

⁹⁹ Parsons, 34. Marcketti, Sara B and Jean L. Parsons. “American Fashions for American Women: Early Twentieth Century Efforts to Develop an American Fashion Identity.” *Dress* 34, (2007): 79-95.

The lower price came with the expectation that the hosiery would not last as long, but could meet changing style and fashion demands.¹⁰⁰

The August 1917 *Journal of Home Economics* gave the example of the demand for cheap silk stockings. Women wanted silk stockings at inexpensive prices. By making silk stockings cheaper, the quality suffered and the hosiery became more transparent. Silk stockings could not become sheer enough to make the price low enough and a substitute was needed. Rayon stockings sold for 50 cents, half the price or more for silk stockings.¹⁰¹

Fashions of the Time

During the time period from 1910-1924, ready-to-wear fashion was widespread and easily available due to technologies available. With the use of newspapers and magazines, women were able to see the latest fashions more quickly than in years past.¹⁰²

Fashion for Women: 1910-1914

During this period, known as the Age of Opulence, women who could afford it usually changed their clothing at least four times a day. They had different clothing for each time of the day: morning, early afternoon, tea time, and evening. Morning and early afternoon wear consisted of skirts, jackets, and coats and were worn for socializing along with wrappers when at home. Tea gowns were worn during tea time and were discontinued during the First World War. Tea gowns gave women a break from tight fitting corsets and restrictive clothing. These gowns were “long, flowing and sometimes voluminous, giving the body room to relax.”¹⁰³ Empire

¹⁰⁰ Bjorklund.

¹⁰¹ Bjorklund, 377.

¹⁰² Ewing, Elizabeth. *History of Twentieth Century Fashion*. London: B. T. Batsford LTD, 1974.

¹⁰³ Mendes, Valerie and Amy de la Haye. *20th Century Fashion*. London: Thames and Hudson, 1999, 29. Tea time was usually around five o'clock. Mendes and de la Haye, 31.

waists were popular for evening wear in strong and assertive colors and made from fabrics such as tulle, chiffon, and crepe de chine.¹⁰⁴

Tailored jackets and skirts became popular during the 1910s. More women were working and needed more sensible clothing. The jacket of this ensemble was cut loose and comfortable and the skirt was raised to ankle length so that it did not drag on the ground. This provided women with more mobility and freedom of movement, though some adapted the latest fashion fad, the hobble skirt. The hobble skirt, endorsed by Paul Poiret, constricted movement of the knees and ankles.¹⁰⁵ In 1912, tunics were popular with empire waist and skirts that were “draped closely round the figure in subtle folds.”¹⁰⁶ Collars changed from the high boned ones of the 1900s to round necklines and the appearance of Peter Pan collars. Hats were in vogue. Picture hats were large and decorated with ostrich plumes, flowers, and other decorative items. Some hats reached as wide as three feet across and were secured by large hat pins.¹⁰⁷

With the help of Paul Poiret, the corset became less fashionable. Poiret prescribed a more “natural” form using a brassiere to form the body as opposed to the tight restrictions of corsets. Opposed to the exaggerated “S” curve of the early 1900s, a more natural and straight silhouette was ideal. The corset did not vanish from fashion; it simply changed shape. The new style of corset sat lower on the body and looked more like a girdle. It helped to slim the hips while creating a more “natural” waistline. Though this new corset no longer emphasized the bust and hips while cinching the waist, it was not more comfortable nor less restricting. This new

¹⁰⁴ Laver, James. *Costume & Fashion*. London: Thames and Hudson, 1995, 220.

¹⁰⁵ Ewing; Mendes and de la Haye, 40.

¹⁰⁶ Ewing, 69.

¹⁰⁷ Ewing; Mendes and de la Haye, 36.

corset prevented women from sitting comfortably for it went down to almost a woman's knees.¹⁰⁸

Fashions for Women: 1914-1918

These years represent the time that the world was at war, though the United States did not enter World War I until 1917. "Radical developments were most evident in women's dress and had a particular impact on daytime and workplace clothing" along with an impact in manufacturing, fabrics, and design.¹⁰⁹ The silhouette during the war became wider with skirts growing shorter. The waistline of dresses sat at the natural waistline or slightly above it with full skirts. In 1916, skirts were six inches off the ground and in 1917 skirts were eight inches or more off the ground. Tailored suits were popular and styled with distinctive military influence.¹¹⁰

Influenced by the War, Jumpers and knitted cardigans became popular along with pullovers. The silhouette of evening wear was close to the style of day dresses. Skirts were full with many layers of ruffles with beading and embroidery. Women entered the war effort by working in factories while the men fought in Europe. Women wore womanalls which were coveralls with gathered pant legs. Women also wore uniforms with above the ankle length skirts with "no-nonsense" jackets when serving in the army motor corps.¹¹¹

Fashions for Women: 1918-1924

The years immediately following World War I were "really a transitional period from the wartime styles to the styles of the 1920s."¹¹² Dresses had narrow hems with wide waistlines which produced a barrel shape silhouette. In 1919, skirts were narrower and hemlines were

¹⁰⁸ Ewing.

¹⁰⁹ Mendes and de la Haye, 48.

¹¹⁰ Mendes and de la Haye; Tortora and Eubank, 370.

¹¹¹ Farrell-Beck and Parsons, 45.

¹¹² Tortora and Eubank, 371.

ankle length. Women wore tailored suits with matching skirts and jackets and flattened silhouettes with the bosoms deemphasized. Post war designers included Jean Patou, Chanel, Edward Molyneux, Vionnet, and Lanvin.¹¹³

The silhouette of the early 1920s became very different from the silhouette of the 1910s. The silhouette of the 1920s was tubular and flat and was viewed as “boyish” as opposed to the desirable curves of the 1910s. The 1920s fashions included raised skirt lengths and a lowering of the waistline. At the beginning of the 1920s, skirts were still ankle length, but as the middle of the decade approached, skirts were fourteen to sixteen inches off of the ground.¹¹⁴

Women usually wore one piece, sleeveless dresses with a “V”, round, cowl, or bateau neckline. Skirts were cut on the bias and often had scalloped or handkerchief style hems. Evening wear was cut in the same length as day time dress, but was usually heavily beaded. Fashionable fabrics for evening dresses were velvets, satins, and chiffons. In 1919, Jeanne Lanvin introduced a bouffant skirt, reminiscent of the crinoline period known as the robe de style. Women strayed away from the corset and were adopting the brassiere as a form of support.¹¹⁵ “Bandeau styles and full brassieres confined the breasts more or less forcefully between 1919 and late 1924, when the first signs of rebellion appeared in the form of contoured brassieres with separate cups.”¹¹⁶

¹¹³ Farrell-Beck and Parsons; Tortora and Eubank, 371.

¹¹⁴ Tortora and Eubank.

¹¹⁵ Tortora and Eubank.

¹¹⁶ Farrell-Beck and Parsons, 71.

CHAPTER THREE: RESEARCH METHODS

A two step process was used for data analysis. First, a “grounded theory” approach was used to find emerging themes from the data collected. Secondly, a content analysis was used.

Three publications were analyzed for content starting from January 1910 through December 1924. The fashion-industry trade journal *Women’s Wear* along with the women’s magazines *Good Housekeeping* and *Harper’s Bazar* were analyzed for rayon advertisements and articles that mentioned rayon. The term “artificial silk” was used to describe rayon until the year 1924 when the term “rayon” was adopted.¹¹⁷ The terms “artificial silk” and “rayon” were used as search terms when conducting the research.

Women’s Wear was founded on July 13, 1910 by Edmund Fairchild. Later, in 1927, the title changed to *Women’s Wear Daily*. *Women’s Wear* was a trade-press newspaper that provided industry-related news to apparel manufacturers and retailers.¹¹⁸ *Good Housekeeping* started in 1885 as a journal about the home. Promoted for the middle class, it sold for \$2.50 annually which was higher in price than the other leading women’s magazines.¹¹⁹ Its contents included topics on household tips, dressmaking and fashion, home decorating, cooking, columns for reader’s questions, poetry, fiction, and puzzles. Clark W. Bryan, the journal’s editor, encouraged women to write to *Good Housekeeping* with questions and contributions of fiction, poetry, and household advice. These contributions from readers “showed good business judgment, enticing subscribers with the promise that they too could participate in the creation of this magazine.”¹²⁰ By contributing, women could earn money and these contributions helped

¹¹⁷ Kadolph, 102.

¹¹⁸ http://en.wikipedia.org/wiki/Womens_Wear_Daily

¹¹⁹ Braithwaite, Brian. *Women’s Magazines: The First 300 Years*. London: Peter Owen Publishers, 1995, 23.

Zuckerman, Mary Ellen. *A History of Popular Women’s Magazines in the United States, 1792-1995*. Westport, CT: Greenwood Press, 1998, 11.

¹²⁰ Zuckerman, 11.

bridge the gap between women and magazines.¹²¹ By 1912, *Good Housekeeping* had a circulation of 300,000 copies.¹²²

Harper's Bazar, founded in 1867 by the Harper brothers, discussed culture, fashion, and high society. Published for the upper-middle and upper class, *Harper's Bazar* originally included home and family focused articles, but narrowed its focus to fashion around the turn of the twentieth century.¹²³ The Hearst Corporation purchased *Harper's* in 1911 for \$10,000; Hearst changed the format by making illustrations more prominent in the layout rather than text heavy.¹²⁴

The researcher explored each publication for advertisements that included rayon as a “featured product.” These advertisements were analyzed for the content including: what products were offered, the price of the products, terminology used to describe rayon, and description of products. Along with the advertisements, each publication was analyzed for additional articles or excerpts that addressed the topic of rayon and/or included topics such as advice about care, use, or design of products using rayon.

Grounded Theory

Glaser and Strauss's grounded theory approach was used to analyze the data. Grounded theory operates opposite of traditional theory; through grounded theory one discovers theory from data rather than starting with theory and compiling data to fit that theory. It is “the discovery of theory from data systematically obtained from social research” and is a “way of arriving at theory suited to its supposed uses.”¹²⁵ The theories that evolve should provide clear

¹²¹ Bryan would pay women for their contributions; Zuckerman, 11.

¹²² Zuckerman, 29.

¹²³ Zuckerman, 19.

¹²⁴ Braithwaite, 38.

¹²⁵ Glaser, Barney G and Anselm L. Strauss. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago: Aldine Publishing Company, 1967, 2-3.

categories and hypotheses.¹²⁶ According to Glaser and Strauss, “generating a theory from data means that most hypotheses and concepts not only come from the data, but are systematically worked out in relation to the data during the course of the research.”¹²⁷

A comparative analysis is a general method used to generate theory and can be used for studies of any size.¹²⁸ Substantive and formal theories are generated from comparative analysis and are both grounded in data. Substantive and formal theories control the data collection process. Substantive theory is developed for a substantive or empirical area of sociological inquiry and formal theory is formed for a formal or conceptual area.¹²⁹ When applying grounded theory, one should form substantive theory first then formal theory from that. By doing this, substantive theory “gives an initial direction in developing relevant categories and properties and in choosing possible modes of integration.”¹³⁰

In the theoretical sampling stage, the researcher “collects, codes, and analyzes [the] data and decides what data to collect next and where to find them, in order to develop [the] theory as it emerges.”¹³¹ Decisions of data collection are based on a general perspective, subject, or problem area and are not based on preconceived theoretical framework.¹³²

Through data collection, conceptual categories emerge and hypotheses generated. Hypotheses are generated through the relation of the conceptual categories. A concept may be “generated from one fact, which then becomes merely one of a universe of many possible diverse indicators for, and data on, the concept.”¹³³ Generalizing theory from the data requires that data

¹²⁶ Glaser and Strauss, 3.

¹²⁷ Glaser and Strauss, 6.

¹²⁸ Glaser and Strauss, 21.

¹²⁹ Glaser and Strauss, 33.

¹³⁰ Glaser and Strauss, 79.

¹³¹ Glaser and Strauss, 45.

¹³² Glaser and Strauss, 45.

¹³³ Glaser and Strauss, 23.

collection, coding, and analysis is done simultaneously.¹³⁴ When choosing data for collection, one chooses data that “will help generate, to the fullest extent, as many properties of the categories as possible and that will help relate categories to each other and to their properties.”¹³⁵ In this case, *Women’s Wear*, *Good Housekeeping*, and *Harper’s Bazar* were used to help generate categories.

Content Analysis

A content analysis was employed with the data collected during this study. According to Jo Paoletti, a content analysis is a “technique developed in the social sciences for converting verbal and nonverbal communications into quantitative data.”¹³⁶ Content analysis is a relatively new research method for costume historians, though it has been employed for longer periods of time in other fields. Content analyses usually use data that are collected from newspapers, magazines, or other print materials that can provide enough information to yield an in-depth study. Content analyses have been used by experienced researchers like Laurel Wilson, Sharron Lennon, and Jennifer Paff Ogle along with novice researchers new to the textiles and clothing field.¹³⁷

Content analyses are useful when the sources are numerous, when the researcher wants to study the implicit meaning of communication, and when the documentary evidence is a principal source. The following steps that are common to all content analyses was taken from Jo Paoletti’s article, *Content analysis: Its Application to the Study of the History of Costume*:

- 1) articulation of precisely-stated objectives or hypotheses, 2) creation of an instrument or questionnaire designed to measure relevant variables or sort

¹³⁴ Glaser and Strauss, 43.

¹³⁵ Glaser and Strauss, 49.

¹³⁶ Paoletti, Jo B. “Content Analysis: Its Application to the Study of the History of Costume.” *Clothing and Textiles Research Journal* 1, (1982): 14-17, 14.

¹³⁷ Laurel Wilson used content analysis when studying cowboys, Sharron Lennon when discussing diet advertisements, and Jennifer Paff Ogle when researching feminist perspectives on dress and the body.

them into predetermined categories, 3) unbiased sampling of sources and communication units, 4) systematic recording or measuring of variable using the instrument, and finally 5) analysis of the data using appropriate statistical procedures.

A content analysis is useful because it “provides a systematic, disciplined methodology in situations where objectivity might be difficult to maintain due to the number or the nature of sources.”¹³⁸ Before conducting a content analysis, important decisions need to be made to ensure that the content analysis will yield the appropriate data. These decisions include choosing appropriate sources, choosing the proper unit of analysis, identifying and adapting a research design, provide instrument categories, and finally, choose a level of quantification.¹³⁹ Each decision will be discussed in detail below.

The first important decision that needs to be made when conducting a content analysis is choosing appropriate sources. The sources need to be able to “provide the necessary information.”¹⁴⁰ One should be able to access circulation and readership information for each source. This information will help in providing the study with generalizing the data collected to the readership in question.

The second important decision that needs to be made when conducting a content analysis is choosing the proper unit of analysis. Unit of analysis is the “portion of the source material selected for scrutiny” and can be found in verbal or nonverbal data.¹⁴¹ Examples of verbal clues would be data such as words, sentences, and paragraphs. Nonverbal clues include pictures, photographs, or cartoons. It is to a researcher’s advantage to use both verbal and nonverbal

¹³⁸ Paoletti, 14.

¹³⁹ Paoletti, 14-17.

¹⁴⁰ Paoletti, 15.

¹⁴¹ Paoletti, 15.

data.¹⁴² This particular research study used verbal and nonverbal data because articles (verbal) along with advertisements (both verbal and nonverbal) were analyzed for content.

The third important decision that needs to be made when conducting a content analysis is identifying and adapting a research design. Whether the information gathered is implicit or explicit, the instrument used should be developed and tested carefully. “A preliminary test by readers other than the researcher is essential for detecting bias and ambiguity in the instrument.”¹⁴³

The fourth important decision that needs to be made when conducting a content analysis is providing instrument categories. The research instrument should be developed without any prior knowledge of the data though a preliminary study can be conducted first to “determine the precise nature of the content available.”¹⁴⁴ A preexisting instrument should be used by the novice researcher who is not an expert in developing an instrument.¹⁴⁵

The fifth and final important decision that needs to be made when conducting a content analysis is to choose a level of quantification. A researcher can use simple descriptive data or statistically analyzable data to interpret the data collected. Content analysis is almost always categorical so using contingency analysis is the most appropriate test.¹⁴⁶

¹⁴² Paoletti, 16.

¹⁴³ Paoletti, 16.

¹⁴⁴ Paoletti, 16.

¹⁴⁵ Paoletti, 16.

¹⁴⁶ Paoletti, 16.

CHAPTER FOUR: RESULTS AND DISCUSSIONS

After collecting data from *Women's Wear*, *Good Housekeeping*, and *Harper's Bazar*, the information was analyzed for content. Only two and a half years of *Women's Wear* were able to be collected and analyzed; these years were the last half of 1910 and through 1912.¹⁴⁷ All years and each month of *Good Housekeeping* and *Harper's Bazar* were examined and analyzed. The content in *Women's Wear* was business focused and discussed industries that developed in the United States for rayon production along with discussions on manufacturing processes, trade embargoes, and competition. Both *Good Housekeeping* and *Harper's Bazar* included fashion related content and featured articles that mentioned production processes, but mostly contained advertisements of hosiery, clothing, and home furnishing products.

Researching for rayon products proved to be difficult because of the confusion of the term artificial silk and “real” silk. Companies used terminology such as artificial silk, art silk, and fiber (fibre) silk when talking about rayon. Not only was different terminology used for rayon, but there was an abundant amount of terminology used when discussing “real” silk. Products that featured real silk used terms such as silk, pure silk, all silk, tub silk, radium silk, and others. During this time period, consumers must have been confused about what products they were purchasing, especially since rayon was the first new fiber to be introduced in centuries and the first fiber produced in a manufacturing facility. Although included in definitions for artificial silk and rayon from earlier decades, the term “wood silk” was not found in any of the primary sources examined for this research.

Prior to the 1950s, textile products did not have to have labels denoting fiber content. Manufacturers could mislabel products or use substitute materials without penalty. In 1958,

¹⁴⁷ Only the first two and a half years of *Women's Wear* were able to be analyzed because of time constraints and a library miscommunication.

Congress passed legislations that required manufacturers to label products with correct and accurate fiber identification called the Textile Fiber Products Identification Act (TFPIA). Now, products are required to have percentage of fiber type listed in order of predominance, name of manufacturer or company RN number, trademark name of fiber if available, and country of origin permanently affixed in garments.¹⁴⁸

Content Analysis

In the next section, I will discuss the names manufacturers used to describe rayon and the types of products available and promoted to the public through advertisements, articles, and fashion editorials.

Table 1 is a compilation of all mentions of artificial silk from January 1910 to December 1924. Included in the chart is any mention of art silk, artificial silk, fiber (fibre) silk, and rayon. This chart includes products from Heatherbloom petticoats, Orinoka drapery fabrics, Kapock fabrics, two articles from *Good Housekeeping* that mentioned artificial silk, and *Women's Wear* articles counted once each. Overall, 225 listings for artificial silk and related terms were found for the time period of interest in the three primary sources.

TABLE 1. MENTIONS OF ARTIFICIAL SILK AND RELATED TERMS IN PRIMARY SOURCES, 1910-1924

Year	<i>Women's Wear</i>	<i>Harper's Bazar</i>	<i>Good Housekeeping</i>	<i>Total</i>
1910	3	0	0	3
1911	14	0	1	15
1912	40	0	1	41
1913	N/A	0	0	0
1914	N/A	0	0	0

¹⁴⁸ Kadolph.

TABLE 1. (continued)

1915	N/A	6	0	6
1916	N/A	13	6	19
1917	N/A	7	16	23
1918	N/A	3	15	18
1919	N/A	5	11	16
1920	N/A	5	10	15
1921	N/A	5	9	14
1922	N/A	15	9	24
1923	N/A	0	17	17
1924	N/A	0	14	14
Total	57	59	109	225

Mentions in *Good Housekeeping* were almost doubled those for *Harper's Bazar*. One reason for this drastic difference in numbers could be that during this time, rayon was advertised as a cheap alternative to silk. Women who would purchase or need to purchase lower priced garments would be more likely to read *Good Housekeeping* which was promoted to middle class as opposed to *Harper's Bazar* which was promoted to the upper middle to upper class. Mentions of rayon were not routine until 1916 which is consistent with previous secondary literature.¹⁴⁹ The year 1922 had the most mentions of rayon except for 1912 which included data from *Women's Wear*.

Table 2 is a compilation of the terminology that manufacturers used when describing rayon.¹⁵⁰ This table includes data found in *Good Housekeeping* and *Harper's Bazar*. Companies

¹⁴⁹ Field, Markham.

¹⁵⁰ See Appendix B on page 86 for a listing of all mentions of rayon found in *Good Housekeeping* and *Harper's Bazar* and includes information on terminology used, where used, what type of form, what type of product, company, and date and year.

such as Heatherbloom Petticoats, Kapock Fabrics, and Orinoka Draperies were not included in the total since they did not specifically state that their products were made of rayon.

**TABLE 2. COMPILATION OF TERMINOLOGY USED TO DESCRIBE RAYON
IN *GOOD HOUSEKEEPING* AND *HARPER'S BAZAR*, 1910-1924**

Terminology	Totals
Art Silk	11
Artificial Silk	12
Fiber (Fibre)	7
Fiber (fibre) silk	21
Rayon Silk	1
Rayonner	2
Scientific Silk	5
Silk twisted with Fiber (Fibre)	12
Total	71
Heatherbloom Taffeta Petticoats* ¹⁵¹	18
Kapock Sunfast Fabrics*	61
Orinoka Draperies*	13
Total	163

The terminology to describe products manufactured of rayon was quite confusing during this time period. The term artificial silk was used most frequently which was consistent with previous literature. Fiber (fibre) silk/fiber (fibre) was the most confusing terminology because these words did not describe the fiber content whatsoever.

There was little consistency in terminology used by companies in advertisements. The term art silk was used only in *Good Housekeeping* in 1917, 1918, 1922, and 1924 in both fashion

¹⁵¹ *These products did not specifically use the terms listed above, but suggest that they are artificial silk due to descriptive terms implying low cost, high luster, or other characteristic more related to rayon than true silk.

editorials and advertisements. The term artificial silk was used in both *Good Housekeeping* in 1917, 1923, and 1924 and *Harper's Bazar* in 1922 in both advertisements and fashion editorials. The term fiber (fibre) was used in both *Good Housekeeping* (1921 and 1923) and *Harper's Bazar* (1917 and 1921). Fiber (fibre) silk was used in *Good Housekeeping* in 1922, 1923, and 1924; *Harper's Bazar* in 1915, 1916, 1917, and 1922. Rayon silk was mentioned in *Good Housekeeping* in 1922, two years before the name rayon was adopted in 1924. Rayonner was mentioned in *Good Housekeeping* in a fashion editorial in 1920. The term scientific silk was used in advertisements for Hose of Luxite in 1916 only in *Harper's Bazar*. The term silk twisted with fibre was used only in *Good Housekeeping* in advertisements for Burson Fashioned Hose in 1918 and 1919. Some terminology such as “scientific silk” and “silk twisted with fibre” only appeared in specific company advertisements and was assumed to be company terminology only and not used across product categories or by consumers.

Table 3 summarized the different products made of artificial silk, regardless of the term used (fiber silk, rayon, etc). Table 3 only counts products in *Good Housekeeping* and *Harper's Bazar* since mentions of rayon occurred only in articles in *Women's Wear*. Heatherbloom Petticoats, Kapock Fabrics, and Orinoka Draperies were not included in the total since they did not specifically state that their products were made of rayon.

TABLE 3. SUMMARY OF PRODUCTS MADE OF RAYON IN GOOD HOUSEKEEPING AND HARPER'S BAZAR, 1910-1924

Products	Totals
Draperies/Curtains	2
Bed Spread	4
Sweater	13
Socks	1
Hosiery	36

TABLE 3. (continued)

Embroidery (trim)	3
Hat	1
Scarf	2
Dress	3
Blouse	2
Women's Suit	3
Book	1
Total	71
Heatherbloom Taffeta Petticoats* ¹⁵²	18
Kapock Sunfast Fabrics*	61
Orinoka Draperies*	13

All product categories include a variety of companies that manufactured rayon products. No single company produced rayon products which meant that rayon was slowly moving into the market from a variety of sources. No one company was a sole manufacturer and had a monopoly. The highest total for rayon products is hosiery (31 products) which is not surprising since previous literature stated that rayon was used primarily for hosiery. Second highest was sweaters which was unanticipated because of lack of secondary literature discussing sweater manufacture. The rest of rayon products were widespread across a variety of product categories such as blouses, dresses, and curtains.

Fashion Section

This particular section will discuss the garments that were made of rayon and featured in fashion editorials rather than in advertisements. Products featured included sweaters,

¹⁵² *These products did not specifically use the terms listed above, but suggest that they are artificial silk due to descriptive terms implying low cost, high luster, or other characteristic more related to rayon than true silk.

embroidery and trim on dresses, a hat, scarves, dresses, blouses, and women's suits. Both *Good Housekeeping* and *Harper's Bazar* introduced new fashions for the upcoming season in fashion editorial sections. Similar to the findings of Jacqueline Field's article *Dyes, Chemistry, and Clothing: The Influence of World War I on Fabrics, Fashions and Silk* published in *Dress*, garments of artificial silk or fiber silk were not showcased until the early 1920s. In fact, the first mention of artificial silk was not until the October 1920 issue of *Good Housekeeping*. This particular fashion editorial highlighted a fabric by the name of "rayonner" (Figure 1).¹⁵³ This was the only mention of "rayonner" that the author found throughout all of the data collected. The author speculates that this fabric was made of rayon or blended with a natural fiber. It was speculated that rayonner was rayon because of the similarity of names and no other fiber type was listed. In many other descriptions of garments, both magazines usually provided fiber type whether it was cotton, silk, linen, or wool. The only factor that makes the author question if the item was rayon was the price. Both garments featured on the page were suits with very similar styling and silhouette. The only differences were in line details, belts, and the presence or absence of pockets. One of the suits included a snug collar of rayonner, and not "cheap fur," which raised the price to \$97.50 while the other suit sold for \$49.¹⁵⁴ Compared to other garments during this time period, these prices do seem to be expensive for a relatively inexpensive fiber.

1922 Fashions

Four fashion editorials were found in *Good Housekeeping* during the year 1922; not including advertisements. In the March issue, a sweater, belt, and dress trimmings of fiber silk were presented as one of the season's latest fashions. The sweater was a mixture of mohair and

¹⁵³ According to the *Rayon and Staple Fiber Handbook* by Herbert R. Mauersberger, rayonne (minus the "r") is the French name for rayon, 796.

¹⁵⁴ October 1920, *Good Housekeeping*, 41.

fiber silk. It included long sleeves, a wrap-around belt, and came in a variety of colors. It sold for \$12.75. The second garment was not entirely of rayon, but had a belt and dress trimmings of “artificial silk”. The fiber content of the dress was alpaca mesh and sold for \$35. The belt wrapped around the waist and tied on the side with long ties. The black “artificial silk” dress trimmings were wrapped around the short sleeves and skirt near the hips in concentric circles.

Surprisingly, a “rayon silk” blouse was found in the May issue of *Good Housekeeping*. This blouse had a V neck, a Lanvin lattice collar, long sleeves, and hand embroidered Chinese monograms and sold for \$12.75 (Figure 2).¹⁵⁵ In June 1922, *Good Housekeeping* again showcased a sweater made of “fiber silk”. This tuxedo style sweater by “Schmidt Knit” had a windowpane design and braided sash and sold for \$10.50 (Figure 3).¹⁵⁶

1923 Fashions

Nine fashion editorials were found in *Good Housekeeping* during the year 1923; not including advertisements. The February issue illustrated a sweater mixed of wool and “fiber silk,” had what appeared to be a sailor collar, a two tone color scheme, and sold for \$6.75 (Figure 4). In the April issue, a “blouse sweater” featuring a scoop neck with long sleeves and contrasting trimming of “fiber silk” sold for \$11.75 (Figure 5). On the opposite page of the same issue of *Good Housekeeping*, another sweater combined mohair and “fiber silk” and sold for \$8.90. The sweater was described as “sportsmanlike” with a windowpane checkered front, long sleeves, and a button front (Figure 6).¹⁵⁷

A sports suit dress in the July issue featured a mixture of “fiber silk” and wool. It included long sleeves, a pointed peter pan collar, calf length skirt, and sold for \$44.00 (Figure 7).

¹⁵⁵ The researcher found this surprising because the name rayon was not adopted until 1924; May 1922, *Good Housekeeping*, 58.

¹⁵⁶ June 1922, *Good Housekeeping*, 56.

¹⁵⁷ April 1923, *Good Housekeeping*, 60, 61.

In the same issue of *Good Housekeeping*, a “fiber silk” scarf was also advertised. It was 72 inches long with colored stripes and sold for \$3.95 (Figure 8). On the same page as the scarf, *Good Housekeeping* featured an “overblouse” of “fiber” to be worn in place of a sweater. This overblouse featured long sleeves, a scoop neck, and also sold for \$3.95 (Figure 8).¹⁵⁸

In the August issue, a dress made entirely of “fiber silk” had short cuffed sleeves, a sash at the waist, calf-length skirt, blousy top, and sold for \$14.50. Similar styles in pure silk sold from \$25.00 to \$35.00.¹⁵⁹ The October issue featured two garments that utilized “artificial silk” for embroidery. The first garment was a “semi-made frock of Canton crepe with pattern and design stamped on material and artificial silk for embroidering.” The second garment was a frock of Poiret twill semi-made with “artificial silk” for embroidery. The rayon dresses were less expensive than similar silk garments of the time; the first sold for \$12.50 and the latter sold for \$10 (Figure 9).¹⁶⁰

“Artificial silk” or “fiber silk” did not appear in the fashion section of either *Good Housekeeping* or *Harper’s Bazar* for the remainder of 1923. Two fabrics did appear though, that the researcher speculated to be rayon. The first, appearing in November’s *Good Housekeeping*, was a soft-pile fabric called lustrosa. It was speculated to be rayon because the beginning of the word “lustrosa” is similar to luster which is one of rayon’s characteristics and because the information does not specify fiber content like many other product descriptions usually include.¹⁶¹ The other, lingette, was advertised as a “new silky material.” Again, no other fiber information was provided and the information described it as “silky,” but not called silk.¹⁶²

¹⁵⁸ July 1923, *Good Housekeeping*, 58, 62.

¹⁵⁹ August 1923, *Good Housekeeping*, 60.

¹⁶⁰ October 1923, *Good Housekeeping*, 58.

¹⁶¹ November 1923, *Good Housekeeping*, 48.

¹⁶² December 1923, *Good Housekeeping*, 53.

1924 Fashions

Three fashion editorials were found in *Good Housekeeping* during the year 1924; not including advertisements. The February issue of *Good Housekeeping* featured a knitted sports dress in a two-toned mixture of wool and “fibre silk.” The dress featured a gingham-like pattern on the bottom of the skirt and on the top of the shoulders. This dress had short sleeves, belted waist, calf length skirt, and sold for \$49.50.¹⁶³ The July issue of *Good Housekeeping* included two garments of “artificial silk”; one sweater and one scarf. The sweater was a two-toned checked pattern with wide collar, long sleeves, and sold for \$9.50. It could be worn as illustrated in the issue, as a Tuxedo sweater or with the collar buttoned all the way up to the neck. The scarf was striped with fringe ends and came in a variety of colors. It sold for \$3.95 (Figure 10).¹⁶⁴

Advertisements

The majority of data found in *Good Housekeeping* and *Harper’s Bazar* were advertisements. The businesses that advertised rayon included a couple of core companies such as Kapock Drapery Fabrics, Burson Fashioned Hose, and Heatherbloom Petticoats. Data found in *Women’s Wear* was not included in this section because no advertisements were found.

Clothing

Clothing (other than accessories such as hosiery) that were 100% or contained rayon were scarce throughout *Good Housekeeping* and *Harper’s Bazar* during this time period.¹⁶⁵ James McCutcheon & Co. sold sweaters and hats in July 1922 and advertised their products as “fibre silk” rather than rayon. Their “Tuxedo Sweater” featured smooth front panels, pockets, and a tasseled belt in a “fibre silk” crinkle weave.

¹⁶³ February 1924, *Good Housekeeping*, 56.

¹⁶⁴ July 1924, *Good Housekeeping*, 64.

¹⁶⁵ No advertisements were found in *Women’s Wear Daily*.

Hosiery

Consistent with previous literature, hosiery was the primary product category made of rayon. Companies used different terminology such as art silk, artificial silk, fiber (fibre), fiber (fibre) silk, scientific silk, and silk twisted with fibre. Companies that had hosiery made of rayon during this time period were Arrowhead Hosiery, Burson Fashioned Hose, Corticelli Silk Hosiery, Holeproof Hosiery, Hose of Luxite, Onyx Hosiery, and True Shape Hosiery.

Out of the numerous advertisements feature in *Good Housekeeping* (no advertisements of Arrowhead Hosiery were found in *Harper's Bazar*) only two advertisements featured “artificial silk” (Figure 11). An August 1923 *Good Housekeeping* advertisement featured hosiery in a “pure silk and artificial silk” mix.¹⁶⁶ A December 1923 *Good Housekeeping* advertisement featured “Minnehaha” stocking of pure silk plated over “fibre”. One of Arrowhead Hosiery’s unique characteristics was its ability to cling to a woman’s ankle to create a more feminine leg silhouette.¹⁶⁷

The Burson Knitting Company advertised fashioned hose of “art silk” as early as 1917 in *Good Housekeeping* along with hose made from cotton, lisle, and mercerized. Starting in the October 1918 issue of *Good Housekeeping*, Burson’s stopped advertising hose made of “art silk” and changed the term to “silk twisted with fibre.” This term was used for rayon stockings until the October 1920 issue of *Good Housekeeping* when Burson’s did not specify any fiber content until the May 1921 issue of *Good Housekeeping* when stockings were only offered in cotton, lisle, mercerized, and silk. Burson’s stopped advertising in *Good Housekeeping* and *Harper's Bazar* in December 1921. The September 1920 issue of *Good Housekeeping* was the last advertisement that had either “art silk” or “silk twisted with fibre.”

¹⁶⁶ Arrowhead Hosiery, August 1923, *Good Housekeeping*, 90.

¹⁶⁷ Arrowhead Hosiery. December 1923. *Good Housekeeping*, 187

Burson Knitting Company ran nine advertisements that mentioned “art silk” from March 1917 to July 1918 (Figure 12). The advertisements that mentioned “silk twisted with fibre” were found from October 1918 to September 1920. All advertisements appeared in *Good Housekeeping*. Burson hosiery had no seams and knit-in foot shape. These characteristics supposedly produced a slim appearing ankle and widened calf, made them comfortable, and snug fitting. These hose were also dependable because of reinforced areas and economical because they were inexpensive, a characteristic of rayon.¹⁶⁸

Out of several advertisements found in *Harper’s Bazar* from Corticelli Silk Hosiery, only one mentioned “artificial silk.” The specific advertisement, in the July 1922 issue of *Harper’s Bazar*, featured Corticelli silk hosiery and briefly mentioned that their mills in Florence, Massachusetts also manufactured dress silks, spool and crochet silks, yarns, and Sunglo Artificial Silk (Figure 13). It is unclear whether the particular product is hosiery or fabric by the yard.¹⁶⁹ Other advertisements by this company never mentioned “artificial silk” again although other advertisements mentioned all the other products that their mills produced.

The Holeproof Hosiery Company advertised “artificial silk” stockings in two advertisements in *Good Housekeeping* in the 1917 October and December issues (Figure 14). These advertisements, which appeared during the single year of the United States involvement in World War I, stressed the importance of patriotism and thriftiness. After 1917, advertisements did not mention “artificial silk”, but offered products in silk or pure silk, lusterized lisle, and silk faced. Silk faced could possibly be rayon faced with silk, but not enough information was provided to determine whether this assumption was accurate. Holeproof Hosiery produced inexpensive women’s hosiery with prices beginning at \$0.40. The company also guaranteed that

¹⁶⁸ Burson Fashioned Hose, March 1917, *Good Housekeeping*, 125. Burson Fashioned Hose, September 1917, *Good Housekeeping*, 86. Burson Fashioned Hose, December 1917, *Good Housekeeping*, 84.

¹⁶⁹ Corticelli Silk Hosiery, July 1922. *Harper’s Bazar*, 81.

their stockings “were quality.”¹⁷⁰ The Hose of Luxite company sold hosiery made of “Gold-Ray, the new scientific silk,” pure Japanese silk, lusterized lisle and cotton without added metallic salts used for weighting (Figure 15).¹⁷¹

“Onyx” Hosiery advertised light weight sport hose in “fibre” along with other fiber contents such as lisle, silk, wool, and mixed fabrics. The same advertisement was featured in June 1921 in both *Good Housekeeping* and *Harper’s Bazar* (Figure 16). After these two advertisements, there were no other mentions of “artificial silk” or “silk fiber.” These socks were for summer wear and came in sport color combinations.¹⁷²

True Shape Hosiery sold hosiery of rayon, but called it “fibre silk.” These stockings sold for 85 cents whereas the pure silk stockings sold for \$1.15 to \$1.75. A total of three advertisements were found; all featured in *Good Housekeeping* during 1918 (October, November, and December) (Figure 17). True Shape Hosiery advertisements stressed that their hosiery products were inexpensive and had proper fit, styling details of the time, and a patented cross-stitch feature that would prevent runs in stockings. During war time, True Shape Hosiery predicted that Christmas gifts from loved ones would be essentials and stressed their hosiery would provide consumers with quality products.¹⁷³

Petticoats

Advertised in both *Harper’s Bazar* and *Good Housekeeping*, Heatherbloom Taffeta Petticoats never stated that their petticoats were rayon, but stated that their petticoats “look and

¹⁷⁰ Holeproof Hosiery, October 1917, *Good Housekeeping*, 135. Holeproof Hosiery, December 1917, *Good Housekeeping*, 118.

¹⁷¹ Hose of Luxite, March 1916, *Harper’s Bazar*, 125. Hose of Luxite, April 1916, *Harper’s Bazar*, 143. Hose of Luxite, September 1916, *Harper’s Bazar*, 107. Hose of Luxite, November 1916, *Harper’s Bazar*, 97. Hose of Luxite, December 1916, *Harper’s Bazar*, 124.

¹⁷² “Onyx” Hosiery, June 1921, *Harper’s Bazar*, 2. “Onyx” Hosiery, June 1921, *Good Housekeeping*, 130.

¹⁷³ True Shape Hosiery, October 1918, *Good Housekeeping*, 83. True Shape Hosiery, November 1918, *Good Housekeeping*, 82. True Shape Hosiery, December 1918, *Good Housekeeping*, 88.

feel like silk” and had “3 times the wear of silk at 1/3 the cost.”¹⁷⁴ Durability and economy were stressed throughout the Heatherbloom advertisements. These advertisements highlighted their products, “lustrous beauty and shimmery silken tone effects.”¹⁷⁵ The Heatherbloom Taffeta Petticoats company stated that their product had “all of silk’s virtues—none of its faults.”¹⁷⁶ Women could also purchase Heatherbloom Taffeta by the yard as lining material for \$0.35 a yard.

Heatherbloom utilized celebrities to endorse their products; these celebrities included Lady Duff Gordon, Ethel Barrymore, and Carrie Reynolds. One particularly interesting advertisement in the December 1915 issue of *Harper’s Bazar* featured Ethel Barrymore (Figure 18). During the 1910s, the play called “Our Mrs. McChesney” written by Edna Ferber and starring Barrymore credited Heatherbloom Petticoats (and presumably a rayon product) as making the play possible.¹⁷⁷

In several of their advertisements, fashion designer Lucile (Lady Duff Gordon) endorsed their petticoats and was quoted to say that “[she] find[s] the Heatherbloom Taffeta a most desirable fabric for petticoats. Its beauty and adaptability are a high compliment to the skill of American weavers.” But throughout all the research conducted, no articles or advertisements featured Lucile products and Heatherbloom products.¹⁷⁸

Socks

Randolph Cuties Sox for Tots only advertised “art silk” socks once throughout the advertisements found in *Good Housekeeping* from 1922 and 1924 (Figure 19). No advertisements for Randolph Cuties Sox for Tots were found in *Harper’s Bazar* during this time.

¹⁷⁴ Heatherbloom Taffeta Petticoats, September 1916, *Good Housekeeping*, 104.

¹⁷⁵ Heatherbloom Taffeta Petticoats, August 1915, *Harper’s Bazar*, 57.

¹⁷⁶ Heatherbloom Taffeta Petticoats, October 1916, *Good Housekeeping*, 104.

¹⁷⁷ Heatherbloom Taffeta Petticoats, December 1915, *Harper’s Bazar*, 147.

¹⁷⁸ Heatherbloom Taffeta Petticoats, August 1915, *Harper’s Bazar*, 57. Heatherbloom Taffeta Petticoats, September 1915, *Harper’s Bazar*, 91.

Randolph's advertised fiber content as "three qualities—Cotton, Mercerized and Art Silk—all moderately priced."¹⁷⁹

Home Furnishing Products

Fabric by the Yard

Though Kapock Sunfast Fabric never specifically stated that it was rayon, the advertisement alluded to the fact. The researcher believes that this particular product was rayon because it stated that it was "not a worm silk," but "an industrial achievement" (Figure 20). It cost less per yard than "ordinary fadable silks" and were silky and soft in texture.¹⁸⁰ Kapock Fabrics came in a variety of colors and patterns, were easily washable, and supposedly colorfast to sun and water. The company that manufactured Kapock Fabrics suggested draperies and curtains as the perfect use for their products because of these characteristics.¹⁸¹ Kapock advertised numerous times in both *Good Housekeeping* and *Harper's Bazar* and had the majority of advertisements for any company with 61 ads.

Curtains

The Scranton Lace Company sold "Lustre-Lace Curtains" in "artificial silk." They advertised curtains in two advertisements in *Good Housekeeping* in 1924 (Figure 21). Lustre-Lace Curtains were woven, transparent, and colorfast to both laundering and sunlight.¹⁸²

Orinoka Guaranteed Sunfast Draperies and Upholsteries never specifically advertised that their drapery and upholstery fabrics were rayon, but alluded to the fact by stating that their fabrics have the look of silk, but at inexpensive prices (Figure 22). Advertisements with these statements were found in both *Harper's Bazar* and *Good Housekeeping* from as early as 1915 to

¹⁷⁹ Randolph Cuties Sox for Tots, May 1922, *Good Housekeeping*, 151.

¹⁸⁰ Kapock Sun-Fast Fabrics, October 1916. *Good Housekeeping*, 186.

¹⁸¹ Kapock Sun-Fast Fabrics, October 1916. *Good Housekeeping*, 186. Kapock Sun-Fast Fabrics, November 1916. *Good Housekeeping*, 94.

¹⁸²¹⁸² Scranton Lace Company, February 1924, *Good Housekeeping*, 204. Scranton Lace Company, May 1924, *Good Housekeeping*, 209.

March 1924. Orinoka curtains were colorfast to sunlight and laundering and came in an array of colors, weaves, and textures.¹⁸³

Bed Spreads

Stevens Spreads offered lustrous bed spreads in white satin, “art silk,” and crinkle cotton though they did not start advertising “art silk” until March of 1924 in *Good Housekeeping* and then changed “art silk” to “artificial silk” in the May 1924 issue of the magazine (Figure 23).

Stevens Spreads offered matching draperies to their crinkle bed spreads at economic prices.¹⁸⁴

Book

Some advertisements for Belding Bros. & Co. publicized “pure” silk fabrics and stressed the importance of purchasing real silk opposed to “adulterated silks.” Other advertisements from this company promoted “Syltex—a fast dye artificial silk—[that] is especially adapted to dress embroidery.”¹⁸⁵ Out of the numerous advertisements that the Belding Bros. Company ran in *Harper’s Bazar* and *Good Housekeeping*, only one advertisement displayed the Syltex “artificial silk.”

The advertisement in which Syltex appeared did not feature bolts of pure silk to purchase, but their “Belding’s Book of Silk Embroidery, Knitting and Crochet.” This book, which sold for 15 cents in 1922, inspired women with unusual design patterns to create accessories such as hats, bags, and scarves along with sweaters and cross stitch patterns. Along with Syltex, Belding’s advised women to use their new process embroidery silks and Belding’s crochet silks (Figure 24).¹⁸⁶

¹⁸³ Orinoka Mills, September 1915, *Harper’s Bazar*, 85. Orinoka Mills, May 1917, *Harper’s Bazar*, 121. Orinoka Mills, March 1924, *Good Housekeeping*, 224.

¹⁸⁴ Stevens Spreads, March 1924, *Good Housekeeping*, 193. Stevens Spreads, May 1924, *Good Housekeeping*, 204. Stevens Spreads, September 1924, *Good Housekeeping*, 149. Stevens Spreads, November 1924, *Good Housekeeping*, 232.

¹⁸⁵ Belding Bros. & Co., March 1922, *Harper’s Bazar*, 98.

¹⁸⁶ Belding Bros. & Co., March 1922, *Harper’s Bazar*, 98.

DISCUSSION

The data found from *Women's Wear* was included in the discussion section because no advertisements were found that could be included in the content analysis section except for terminology. *Women's Wear* currently is, and was during the 1910s, directed towards fashion retailers.

All sources during this time period gave a variety of stated advantages and disadvantages of using rayon in products. Two major advantages of rayon over natural silk were cost and luster. Rayon was cheaper than silk and much more lustrous. Other stated advantages of rayon during this time period described it as a “very good material,” it wore well as dress trimmings and passementerie, its ability to cover, and that it was difficult to tell that the material in question was rayon.¹⁸⁷

Stated disadvantages of rayon during this period included written consumers' perceptions of rayon: its susceptibility to heat and moisture, its weakness when wet, and its overall weakness compared to silk (only one-eighth as strong as silk). One major disadvantage of rayon during this time was that no care information was provided and many women would try to iron it as they would iron cotton. The moisture and hot iron needed to press cotton would immediately ruin the garment with no means of repair. Rayon fibers were manufactured coarser than silk fibers during this time, which could have been a disadvantage or an advantage depending on the need of the product. Coarser fabrics have less drape and stiffer hand, but have good abrasion resistance and wrinkle less. Other disadvantages included poor elasticity, poor dye affinity, poor abrasion resistance, and the lack of the necessary qualities to produce a twistable yarn thus

¹⁸⁷ Rath, Lois M. “Artificial Silk.” *The Journal of Home Economics* 14, no. 9 (1922): 425-429. Interestingly, this research was conducted at Iowa State College and was part of a “cooperative project done under the direction” of a professor of home economics and a professor of chemistry. Bjorklund, 377. “The Association Meeting at the Wednesday Club of St. Louis.” *The Journal of Home Economics* 3, no. 2 (1911): 179-186, 185. Passementerie is the art of making intricate trimmings for furnishings or clothing out of beads, embroidery, colored cord, braids, or embroidery; <http://en.wikipedia.org/wiki/Passementerie>.

limiting rayon to knit goods, embroidery, and coarser weaves. Yet another disadvantage was that rayon yarns had slubs and knots and produced a lot of waste.¹⁸⁸

Rayon was presented as inferior to silk because of the industries' portrayal of rayon, cost of products made of rayon, confusion among terminology, and lack of information provided about rayon to the consumer. The fashion industry along with the silk industry painted rayon in a negative light at the beginning of the twentieth century. The terms "real" or "pure" silk were used repeatedly to differentiate between silk and rayon. This led consumers to think that silk was the right or real choice and rayon was the wrong choice. Publications during this period sometimes implied that the purpose of rayon was to replace silk. Though rayon had similar characteristics to silk, it was not supposed to replace silk entirely but provide consumers with a substitute product or another fabric selection at a lower price. *Women's Wear* authors wrote phrases such as "the real thing and its understudy" and suggested that rayon "will require considerable application and perfection to eventually replace the genuine with the artificial product."¹⁸⁹

In an article about rayon written with the consumer in mind from *Good Housekeeping*, "artificial silk" is included as part of a larger article titled "The Selection of Silks." Not only did this article not mention the difference between "artificial silk" and silk, but implied that "artificial silk" was an imposter by claiming "how is [the customer] going to learn how to pick out the true from the false?"¹⁹⁰ Manufacturers did not think that rayon was or ever would be a threat to the silk industry; manufacturers had "little fear that artificial silk will become a serious competitor of the exquisite products made entirely from the regal fiber given us by the

¹⁸⁸ Dewey, L. H. "Pure Textiles." *The Journal of Home Economics* 6, no. 3 (1914): 222-228. Gibbs Baker, 253. Rath, 428. Matthews, J. Merritt. "Wonderful New Fabrics and Dyes." *Good Housekeeping*, Oct. 1912, 503-505. Bjorklund, 382. "A New Use For Artificial Silk." *Women's Wear*, 14 Aug. 1912, 4.

¹⁸⁹ "Silk and Artificial Silk." *Women's Wear*, 31 July 1912, 8. "Artificial Silk Imports Increasing." *Women's Wear*, 26 July 1912, 4.

¹⁹⁰ Waite, Charlotte. "The Selection of Silks." *Good Housekeeping*, May 1911, 607.

industrious silkworm.”¹⁹¹ And yet, at the same time, journal authors did nothing to help consumers learn about and understand the differences between real silk and rayon.

A research study conducted by *The Journal of Home Economics* in 1920 found numerous fabrics mislabeled about fiber content. Consumers were getting fabrics of different fiber contents than what they thought they were getting. Problems like this would cause consumers to be apprehensive about fiber content labels and be unsure just how rayon products would perform because of the mislabel. Another fabric labeled “artificial silk” turned out to be a mixture of cotton and silk along with a fabric labeled as “union silk and linen” was in fact “more than half cotton, with the remainder artificial silk.”¹⁹²

Several different authors from *The Journal of Home Economics* mentioned tests consumers could perform to differentiate between rayon and silk. Consumers could feel the difference; rayon had a stiffer and harsher hand. Home burning tests was another option for distinguishing; silk would burn easily with a smell like burning hair whereas burning rayon would burn rapidly, like cotton. If home chemists did not want to burn their rayon products, they could use Millon’s reagent, a solution of mercury in nitric acid, and apply to light colored fabrics. The solution would turn rayon red and not change the cellulose derivatives.¹⁹³

In October 1912, *Women’s Wear* reported “no definite standard has ever been laid down as to what genuine silk really is.”¹⁹⁴ Without regulation, as described above, fabrics were incorrectly labeled. If a consumer purchased an “artificial silk” fabric and that fabric performed poorly, then the consumer would be hesitant to purchase any more rayon fabric whether or not this fabric was actually rayon.

¹⁹¹ “Some of the Lines in Which Artificial Silk is Used.” *Women’s Wear*, 17 Jan. 1912, 7.

¹⁹² Hickmans, Evelyn M. “The Price and Value of Textiles.” *The Journal of Home Economics* 12, no. 8 (1920): 359-366, 360.

¹⁹³ Rath, 428. Bjorklund, 381.

¹⁹⁴ “Substitutes for Silk in England.” *Women’s Wear*, 21 Oct. 1912, 4.

Rayon was perceived as inferior to silk because of cost perceptions. The majority of rayon products were priced lower than silk garments. One striking difference between price of an “artificial silk” and a silk button up sweater was shown in a Bonwit Teller advertisement from *Harper’s Bazar* from February 1917 (Figure 25). The ad featured five sweaters of similar styling; two almost identical though of different fibers. Both sweaters had a sailor style collar, five front button closure, long sleeves with cuffs, two patch pockets on front hips, and long sash with tassels around the waist. One sweater, the “Vallemont,” was pure silk; came in green, Copenhagen blue, rose, corn, purple, or white, and cost the consumer \$22.50. The other sweater, the “Cedarleigh,” was “fibre silk,” came in more colors than the pure silk version (pink, rose, corn, turquoise, cherry, Copenhagen blue, white, peacock, purple, green, navy, and black), but only cost the consumer \$11.50; approximately half the price as the pure silk sweater.¹⁹⁵ Most consumers’ perceived lower cost as lower quality and would most likely perceive the rayon sweater as lower quality than the silk sweater.¹⁹⁶

Rayon was perceived as inferior to silk because of confusing terminology. Rayon was called many different names during this period that were bewildering to consumers. Art silk, artificial silk, fiber silk, manufactured silk, chemical silk, scientific silk, rayonner, wood silk, or even rayon silk were all used during this time period with the misnomer title of silk attached. With this variety of terms, consumers would not necessarily know what the actual fiber was.

Rayon was perceived as inferior to silk because of poor information provided about rayon to the consumer. The article from the May 1911 issue of *Good Housekeeping*, “The Selection of Silks,” did not differentiate between “artificial” silk and “real” silk. The article mentioned that “artificial silk” is made from cellulose, but continues to call artificial silk “silk.” It is likely that

¹⁹⁵ Bonwit Teller, February 1917, *Harper’s Bazar*, 7.

¹⁹⁶ Bjorklund.

housewives reading this article might assume that “artificial silk” was another type of silk rather than a different fiber altogether.¹⁹⁷

¹⁹⁷ Waite.

CHAPTER FIVE: CONCLUSIONS

Rayon was and continues to be an important fiber to the textile and fashion industry. Prior to rayon's invention, only natural fibers such as cotton, silk, flax, and wool were available for clothing and home furnishings. Rayon, invented in 1846, was manufactured in the United States beginning in 1911. Called artificial silk until 1924 when the name rayon was coined, rayon was a less expensive alternative to silk clothing and accessories.

This paper focused on the time period of 1910-1924. The start date 1910 was selected because rayon production in the United States started in 1911. The year 1924 was chosen as a stop date for this project because acetate was invented in 1924 making rayon no longer the only manufactured fiber. This topic was important to study because little to no research had been done to address how rayon was introduced to consumers and to assess its impact on the fashion world. Seven research questions guided the research. These questions were:

1. What was the early history of rayon production and introduction to the public?
2. What names did manufacturers use when selling rayon?
3. What type of products featured rayon?
4. How were the above products promoted to the public?
5. What were the stated advantages of rayon during this time period?
6. What were the stated disadvantages of rayon during this time period?
7. Why was rayon perceived as inferior to silk?

This study utilized a grounded theory and content analysis to analyze data collected from the retailers' newspaper *Women's Wear*, the woman's fashion magazine *Harper's Bazar*, and the woman's home magazine *Good Housekeeping*.

Manufacturers and the industry used a variety of names to describe rayon which confused the consumer. The terms artificial silk, art silk, fiber (fibre) silk, fiber (fibre), chemical silk, manufactured silk, scientific silk, rayonner, and rayon silk were all used to describe one type of fabric. Products made of rayon were varied and included clothing, accessories, and home furnishing *products*. The majority of products made of rayon were hosiery; which was no surprise because of previous literature. Other products included sweaters, draperies and curtains, embroidery and trim, bed spreads, dresses, scarves, blouses, women's suits, hats, and socks. These products were promoted to the consumer through advertisements and articles featured in *Harper's Bazar* and *Good Housekeeping* along with mentioned in articles in *Women's Wear*.

During the time period of 1910-1924, many advantages and disadvantages were apparent. The major advantage of rayon was its luster; the second major advantage was cost. Rayon was lower in cost than silk. Other advantages of rayon included its ability to cover and it wore well as dress trimmings and embroidery. In spite of these advantages, there were many disadvantages. Rayon was susceptible to heat and moisture, only one-eighth as strong as silk, and weaker when wet. Women who purchased rayon did not know how to properly care for the fiber. This lack of knowledge resulted in ruined fabrics because the hot irons normally used for cotton would singe and burn rayon beyond repair. Rayon fibers were coarser than silk which produced a coarser weave, had poor elasticity, poor abrasion resistance, poor dye affinity, and lacked the necessary qualities to produce a twistable yarn. This last disadvantage caused knots and slubs in the yarns and produced a lot of waste yarn and fabric.

Rayon was seen as inferior to silk for four main reasons. First, the industry's portrayal of rayon products was negative. Because of rayon, manufacturers and industry professionals started dubbing rayon as artificial silk and silk as "real" or "true" silk. These terms made consumers

think that silk was the optimal choice, but that they might have to settle for artificial silk, the imposter. Cost perceptions was the second major reason rayon was seen as inferior. The majority of rayon products were priced cheaper than silk products. For many consumers, inexpensive products equaled lower quality. Third was confusion about the terminology used. A variety of terms were used to describe rayon: artificial silk, art silk, fiber (fibre) silk, fiber (fibre), chemical silk, manufactured silk, scientific silk, rayonner, wood silk, and rayon silk. With this list of terms, consumers would not necessarily know what specific product they purchased or the correct fiber content. The fourth, and final reason, was poor information provided about rayon to the consumer. Articles written about silks included information about rayon, but did not differentiate between the two fibers.

Limitations

One limitation of this study was using only two sources for data analysis since *Women's Wear* was only available for two and a half years. This only gave a partial business view of artificial silk and two magazine points of view; one magazine catered to the middle class and one catered to the upper middle to upper class. Another limitation was that this study only looked at literature promoted to middle and upper-middle class white women.

Future Research

This study can be expanded in many directions. More sources should be explored to achieve a more rounded view of rayon during this period. Archives of companies that were instrumental to the creation of rayon were not examined. These papers would provide a company's perspective on the creation and promotion of the fiber. A chemists' perspective would enhance the science aspect and explore a different angle along with patent research. Patents were found using Google Patents, but were not utilized. Another important study would

be the discussion of rayon from a retailer's perspective, particularly given the National Retail Dry Good Association's impact on naming rayon. The name change from artificial silk to rayon needs to be further studied; only a small number of articles from *The New York Times* were analyzed. If possible, interviewing people who lived during this time period to study whether or not they remember the time before manufactured and synthetic fibers would prove to be an interesting angle. Interviewing people would also apply to fibers like acetate and nylon.

Since women's wear was only analyzed, looking at men's and children's wear would also provide a more rounded view of rayon during this period along with reviewing store inventories, and technical or industrial products to give a business point to rayon.

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APPENDIX A: FIGURES



Figure 1. Fashion editorial of women's suits made from "rayonner." *Good Housekeeping*, October 1920.



These models will be purchased by Good Housekeeping Shopping Service on receipt of check or money-order. Please give headsise for hats, which can not be exchanged or credited

A black Canton crêpe frock, with cascade panels falling below the hem-line has an underblouse of black and yellow crêpe with the new full sleeve closely banded at the wrist. Sizes 34 to 40, \$58

A new version of the draped, beltless frock sponsored by Worth is of navy Kasha cloth, and is coolly accented by deep cuffs and a graduated side frill of embroidered batiste. Sizes 34 to 38, \$68

Center: Ajuponblouse worn over a slip, becomes a sports frock when of fine-knitted wool with contrasting stitching. Navy or henna with gray, Copenhagen with navy, or beige with brown. \$29

IN THE NEW YORK SHOPS

Spring frocks that meet a chilly evening without dismay,
and smart accessories for the tailored toilette



Rayon silk blouse, white, orchid, Alice blue, or beige with Lanvin lattice collar and hand-embroidered Chinese monogram, \$15. Tokio straw hat in colors, with gray tweed facing, \$12.75

THE shops are showing many delightful, new designs in frocks, suits and accessories. The dress at the right-hand top of the page is of the type indispensable to the wardrobe of the woman whose business or pleasure takes her to town during the summer. The straight, beltless lines derived from a Worth inspiration are particularly becoming to a slender woman, but are not recommended in sizes over 38.

Blouses have entered a new era of being "softly tailored" instead of "strictly tailored"—that is, they retain their simple tailored lines with little unusual touches such as the Lanvin lattice on the blouse on the left, and edge the plain little collar of a dimity shirt with real Irish lace.

All blouses shown come in sizes 34 to 44. Tweed has held the stage all spring and has now invaded the millinery field. Many well-dressed women formerly had hats of tweed made by their tailors to match their suits, but they can now be bought ready to wear for very moderate prices.



Tweed sports hat in orchid, sand, Alice blue, or rose, \$5.25. Entirely hand-made, with real lace edging the Peter Pan collar, this shirt of white, checked dimity is excellent value at \$5

Figure 2. Fashion editorial of rayon silk blouse. This was the first and only mention of rayon. *Good Housekeeping*, May 1922.

PARIS first taught us how charming knitted sport clothes could be, so that now they are not merely a vogue, but an established fashion. They may be wool, silk, or cotton; but there is something in their soft, subtle lines that is particularly pleasing to the American woman.

Each season sweaters find new ways to be interesting, and this is achieved by unusual weaves or smart color combinations. For summer wear, very light weaves are largely featured. Both the tuxedo and the slip-over models sketched here depend solely on the block stitch design for their embellishment. The knitted silk dress—or rather the scarfed sweater with the matching skirt, for they can be bought separately—favors a combination of color, while the bathing suits are woven in solid color with embroidered designs or contrasting bindings.

Of pure Organsine thread silk, in a wide variety of color combinations, a three-piece costume consisting of sweater with separate skirt and scarf costs about \$70, or each may be bought separately



GOPHER

SCHMIDT KNIT

Both the wool slip-over "Gopher" sweater and the "Schmidt Knit" tuxedo of fiber silk with a braided sash are woven in a smart block stitch design. The latter can be bought for about \$10.50 and the former, with long or short sleeves, for about \$2.65

A pure worsted Sacony Knit bathing suit, with Knickers attached and an unbreakable, invisible waist-line, is piped and trimmed with contrasting braid, and has a tiny pocket with a button flap. It may be bought for about \$14.00

NEVER have shoes and stockings shown such a delightful diversity of styles, and the most encouraging feature is the disappearance of the too high heel and too narrow toe. Flat heels and round toes, especially in the fashionable strap and oxford models, are extremely good form and are delightfully youthful. The shoes that carry well-known trademarks are designed under the supervision of an expert orthopedist to fit the foot correctly, while at the same time the fashion tendencies are carefully watched and new models constantly added.

Stockings, too, have become more insistent in color and design. Drop-stitch patterns and clocks are very much favored, as are very sheer silks for evening and ribbed designs for sport wear. Beige and gray tones predominate for day wear and are worn largely with black and tan strap or open shoes.

Embroidered polka-dots and contrasting-colored pipings emphasize the smart lines of this knitted bathing suit that buttons on the shoulders. Comes in black, brown, buff or navy, and costs about \$10.75

ASK YOUR DEALER FOR THESE MODELS UNDER THEIR TRADEMARK NAME. IF HE DOES NOT CARRY THEM, WRITE GOOD HOUSEKEEPING NATIONAL SHOPPING SERVICE FOR THE NAME OF A DEALER IN YOUR TOWN OR LOCALITY WHO DOES



PALMERKNIT



SACONY



NAVYKNIT

Figure 3. Tuxedo sweater made of fiber silk with sash picture on top right. *Good Housekeeping*, June 1922.



For the fortunate who will bask in the warm, southern sunshine, the voile above is indispensable. Comes in orchid, flesh, rose, white, and trimmed with narrow, white braiding, \$8.95

A knife-plaited, flannel skirt, in gray, tan, or white, \$11.75. The sweater of wool and fiber comes in combinations of navy and ocher, tan and orange, ocher and gray, \$6.75. Felt sports hat, \$12.50

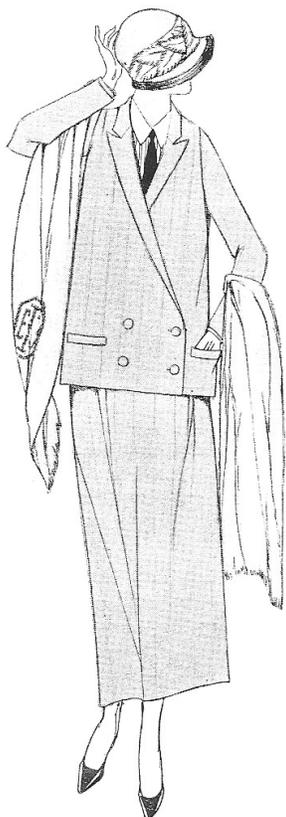
A frock of checked crêpe gingham is equally good for mornings on the beach or household tasks. The piqué collar and cuffs are bound with self material. Comes in brown, blue, or black, \$2.95

Printed crêpe de Chine is the last word for overblouses, and the plaited ruffle is a distinctly new feature. Variety of color combinations, \$15. Small felt hat in tan, navy, or brown at \$10.50

Nothing is so satisfactory as smart traveling equipment. A wardrobe trunk, medium size, with four small drawers and a large one for hats, a laundry bag and shoe pockets, \$32.50. A patent-leather hatbox is 18 in. by 18 in. and 12 in. deep, \$6. The fitted, leather suitcase contains 11 toilet articles which may be had in imitation tortoise shell, amber, or ivory—sizes 20 to 26 in., \$27.50

The models on this and the opposite page not only offer a wide range of selection, but combine moderate prices with the latest hints of spring fashion, and are as suitable for the stay-at-home as for the traveler, for whom the luggage is shown. We shall be very happy to buy them for you on receipt of money-order or check. Address Good Housekeeping Shopping Service, 119 West 40th Street, New York

Figure 4. Sweater made of wool and fiber pictured on top middle model. *Good Housekeeping*, February 1923.



Suit of mannish mixtures, gray or tan, with invisible stripe, 14 to 20, \$39.50. Felt hat, various colors, trimmed with felt leaves, \$12.75. Hand-embroidered cashmere scarf, \$4.95



IN THE NEW YORK SHOPS

To brave a sudden shower, or the most critical eyes, the young woman above is well-equipped. The umbrella, with carved, wooden handle, has the new, short stick. It is covered with satin-bordered silk and has amber tips and ferrule, \$5. The ear-rings are carnelian in color, with sterling silver drop, \$3.50. For the frock with a bateau neck-line is the hand-made organdy collar, \$1.75. The Canton crêpe bag, steel-beaded, silk-lined, and with cord drawstring, is \$2.75



Flannel shirt, box-plaited, white, tan, or gray, \$9.75. Blouse sweater of iceland yarn, with trimming of contrasting fiber silk, camel and brown, gray and navy, \$11.75. Leghorn hat, \$12.75

SINCE this is to be a season of color, we find a brilliant bit of embroidery, or pattern, introduced into most frocks or hats. Sports costumes, too, which follow the mode almost as much as other clothes, find many different ways to show this use of color. Perhaps the simplest way to add variety to a sports costume is to knot a vari-hued bandanna about the neck of the dress, and with it wear a hat which is also bandanna-trimmed, as shown on the opposite page. There are many other ways to use these exotic bandannas, and always they bring that vivid color to the costume which is so essential this season.

Frocks for afternoon wear, if not made of contrasting materials or patterned silks, find color, or contrast, in embroidered blouses or beaded bands. The two frocks on the opposite page show this contrast. Instead of the embroidered blouse to be worn with the plaited skirt, one of silk in a bright pattern would be equally good, and quite in the mode. The simple, twill



Straw hat trimmed with georgette, \$10. Net veil, \$2.50. Lace bertha, \$1.95

frock, shown on the next page, artfully adapts triangles of leather to its expression of the mode, and even the cashmere scarf, worn with the suit above, relieves its monotone with an embroidered monogram.

The unbelted coat is very new, although some are shown with a narrow string belt that usually appears just on one side for a fastening. In tailored suits, the straight, unbelted, short jacket is a new feature.

Another new note this season is the use of sweaters which give the effect of a blouse. A very good example of the sweater-blouse is shown above. The body of the sweater is made of mohair yarn, in a solid color; the bands of trimming and the tie sash are of fiber silk in a contrasting color. With a plaited, flannel skirt and trim hat, one is ready for the most active of days or to be merely an interested onlooker.

We will gladly purchase any of the articles shown on these two pages for you. Send check or money-order, stating article desired, size and color, to Good Housekeeping Shopping Service, New York City.

Figure 5. Sweater made of fiber silk pictured top right. *Good Housekeeping*, April 1923.



Figure 6. "Sportsmanlike" sweater picture top right of fiber and mohair. *Good Housekeeping*, April 1923.

IN THE
NEW YORK
SHOPS

Frocks and Hats for
Sports or for
Traveling



Equally smart for town or traveling is the satin Canton crêpe dress, plaited, trimmed with éru lace. Navy, black, gray, or cocoa, 34 to 44, \$50.50. Ermine-trimmed, milan hat, \$25

You may approach the waves with equanimity attired in this wool-jersey bathing-suit, navy or black, 34 to 44, \$16.50. Bathing cape of printed toweling, \$6.95. Silk bandanna, \$2.95

Very much in the mode is this smart fiber silk and wool, knitted sports suit. In buff, gray, or corn-color, 16 to 42, \$44. Leghorn hat, with two-toned, faille silk band, in various colors, \$8.75



PACKING the suitcase for a week-end trip is a thing not lightly to be considered, for a variety of clothes must be included in a small space to take care of varied activities. Of course, the traveling frock or suit must have the first thought, as to arrive at one's destination looking trim and smart is a condition devoutly to be desired. The Canton crêpe dress, above, will prove just the thing, for it is light and cool, and withal extremely smart. A top-coat should be included when a frock is worn for traveling, but if a suit is worn, the top-coat may usually be omitted.

Perhaps nowhere else is simplicity and appropriateness so essential as with sports clothes. For a week-end trip nothing is so suitable as a knitted blouse and skirt that may be used for golf, tennis, walking, or the mere observance of activities. A knitted suit can be folded so easily into a



Figure 7. Sports suit pictured on right of fiber silk. *Good Housekeeping*, July 1923.

THE NATIONAL SHOPPING SERVICE

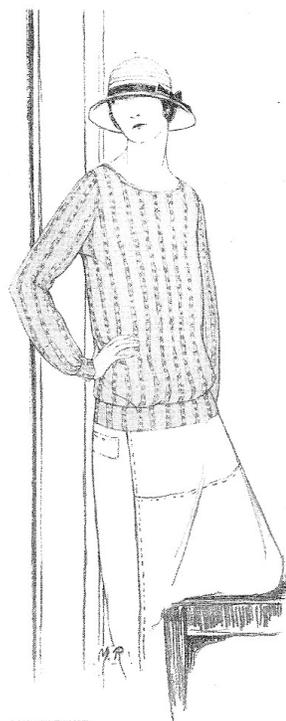
*Sports Clothes For The
Beach Or Links, Moun-
tains Or Country*

*With Playtime Clothes
For The Younger Mem-
bers Of The Family*



STANDWARE

YOU WILL FIND THESE MODELS, OR OTHERS MADE UNDER THE SAME TRADE-MARKS AND GUARANTIES, IN YOUR LOCAL SHOPS. JUST ASK FOR THEM BY THE TRADE-MARK NAMES



SCHMIDTKNIT

*Fiber silk scarf (center, above)
72 in. long, with colored stripes
at ends, in navy, brown, tan, gray,
or blue, approximately \$3.95*

*A very attractive, fancy-stitch,
fiber overblouse, to take the place
of a sweater (above), comes in vari-
ous colors for approximately \$3.95*

*Knitted, wool-jersey bathing-suit,
with embroidered dots and bands to
match dots, in various colors,
about \$11. Cape to match, \$15*



ANNETTE KELLERMAN TWO-IN-ONE



STANDWARE

*Light-weight mohair makes a very
comfortable sweater for golf. The
coat model above has colored stripes
around the bottom and is about \$7*

*Jersey bathing-suit, scalloped in
color with sash to match, navy with
jade, black with pearl, brown with
buff, or purple with black, about \$10*

*A waterproof, paper parasol, hand-
painted, makes an effective screen
from the sun while on the beach. In
various colors, approximately \$2.50*

62

Figure 8. Fiber silk scarf pictured top center. Fiber overblouse pictured on model on left side. *Good Housekeeping*, July 1923.



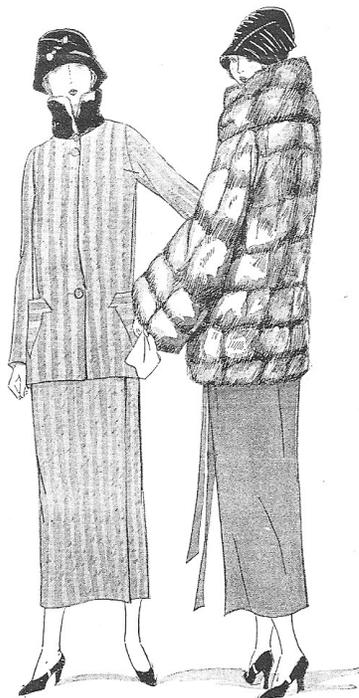
THE semi-made dress has been such a success that the manufacturers have gone even farther with its development. The frocks at right show two new models. Each dress is sent to the purchaser in a package with the design stamped on the material and silk with which to embroider it included. All that is necessary is to cut the dress as outlined on the material, stitch the seams, and embroider it, following directions and color chart. To order these frocks, or any other models shown on these two pages, send check or money-order to Good Housekeeping Shopping Service



Afternoon frock of navy, brown, or black Canton crêpe, smartly plaited and trimmed with steel beads, open sleeves fastened by band at wrist, sizes 14 to 44, \$39.50

Made of charmeen, a new, twill-like material, in navy, brown, or black, and trimmed with braid, the frock above, in sizes 14 to 44, is an excellent value at \$24.50

Suit of striped, imported homespun, in plaid mixtures of tan and taupe, black and tan, or dark brown and . . . , with snug beaver collar, sizes 14 to 20 years, \$59.50



Semi-made frock of Canton crêpe (left above) with pattern and design stamped on material and artificial silk for embroidering, sizes 16, 18, navy, brown, or black, \$12.50

Poiret twill semi-made frock (right above) sizes 16 and 18, navy or seal brown, with artificial silk for embroidering, \$12. Same model in wool jersey, with wool thread, \$10

Ideal for sports wear is this three-quarter length muskrat coat, made of selected skins in box-coat effect. It is silk lined, and comes in sizes 14 to 20 years for \$135

Figure 9. Artificial silk for embroidery treatments pictured on both garments top right. *Good Housekeeping*, October 1923.

THE NATIONAL FASHION SERVICE

Ready-Made Clothes That You May

Buy In Your Local Shops

Is This Service of Benefit to You?

No service can be a help to you if you do not use it! Have you learned how to use this National Fashion Service? Do you look to it for guidance in buying your clothes? Has it saved you time and money in finding the best merchandise at the best prices in your own shops? If it has, tell us about it, in a letter addressed to the Editor National Fashion Service, Good Housekeeping, 119 W. 40th St., New York City



WEARTEX SCARF
SCHMIDT KNIT SWEATER

Fiber silk sweater with two-toned collar, cuffs, and front that may be worn as illustrated, with collar buttoned all the way, or as a Tuxedo sweater. In sizes 34 to 44, about \$9.50

Striped scarf of fiber silk with fringed ends, 72 in. long, about \$3.95. Comes in black and red, tan and blue, silver and blue, tan and green, navy and tan, or black and white

Hand-made dress of fine voile, hand-drawn and embroidered, with two flounces, in blue, green, gray, maize, orchid, peach, bisque or coral, sizes 16 to 18 and 38 to 44, about \$20



BLUEBIRD DRESSES



STANDARDWEAR
SWEATER

Tailored mohair sweater, braid trimmed, in sizes 34 to 44, about \$15. It comes in white and two shades of blue or green, black and white, rose and white, navy and white, or gray and white

Hand-made dress of fine handkerchief linen, bound in white, with hemstitched motifs and tucks, in brown, rose, tan, blue, orchid, or maize, sizes 16 to 18, 38 to 44, about \$20

The models on these two pages were selected to give you an idea of the merchandise manufactured under these trade-marks. Ask your own shops for other models under the same names

Figure 10. Fiber silk sweater and striped scarf pictured top left. *Good Housekeeping*, July 1924.



Arrowhead Hosiery is making it possible for every woman to have trim, neat ankles.

And we have now perfected the exclusive feature, the "Cushionweave" in Arrowhead Hosiery.

"Cushionweave" is a beautiful, strong, wear-resisting silk stitch which displaces the mercerized portions in the double sole! For example: In style 3500 the sole, high-spliced heel and the back seam are in the fashionable "Cushionweave" stitch, giving an inimitable air of distinction. Style 7500 is made with the same weave, but is pure silk and artificial silk mixed. Arrowhead Hosiery for all the family.

Richmond Hosiery Mills
Established 1896
Chattanooga, Tennessee

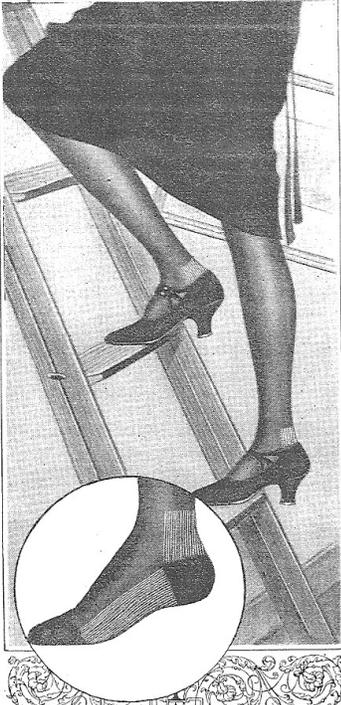


Figure 11. Arrowhead Hosiery advertisement. Artificial silk mixed hosiery is featured. *Good Housekeeping*, August 1923.



Every woman should know the difference between the hosiery that is Knit to Shape—

BURSON
FASHIONED HOSE

—and hosiery that is stretched to shape or tailored with seams.

The next time you buy stockings ask your dealer to show you a pair of "Burson." Pull one over your hand—test the firmness of the knitting; feel how smooth it is on the inside; see how the shape is really KNIT-IN without a seam anywhere; examine the back of the leg and see how rows of knitting gradually drop out to narrow the ankle; how the leg and foot are shaped to fit without binding or without wrinkles.

Such a test will convince you that these special features give real comfort along with a trim, snug fit—and that Burson Hose are a realization of what you have often wished for.

Made in Cotton, Lisle, Mercerized and Art Silk

*Sold in the leading retail stores.
Write for free illustrated booklet.*

Burson Knitting Company
710 Glen Street
Rockford Illinois

Figure 12. Burson Fashioned Hose advertisement. Women could purchase their hosiery in cotton, lisle, mercerized and art silk. *Good Housekeeping*, October 1917.

INTRODUCING
Corticelli
 SILK HOSIERY



THERE is no silk so smooth, so lustrous and so strong as Corticelli Silk. Its use for fine silk hosiery now affords you the opportunity to buy really dependable silk stockings.

Corticelli Silk Stockings are made exactly as a woman would design them—luxurious in appearance, perfectly fashioned and so evenly knit that there is never a hint of that

distressing "streaky" look. You will find Corticelli Silk Stockings at the discriminating shops, they are quality hosiery. Look for the little gold Kitten Head stamped on the toe.

Corticelli Silk Mills, Florence, Mass. Also makers of Corticelli Dress Silks—Spool Silk—Crochet Silks—Yarns—Sunglo Artificial Silk.

Figure 13. Corticelli Silk Hosiery sold hosiery using Sunglo Artificial Silk yarns. *Harper's Bazar*, July 1922.

**HOLEPROOF
HOSIERY**

© H. H. Co.

Why Not Have Your Share of the Saving that Holeproof Insures?

NOW, when every patriotic American is making war on waste and practicing thrift, Holeproof's low prices and famous wearing quality appeal to every pocketbook.

One pair of Holeproof will outwear two pairs of many kinds. In Pure Silk, Lisle, Artificial Silk, and Cotton.

Men's, 30c a pair and upward—Women's, 40c and upward—Children's, 35c and upward

Say "Genuine Holeproof Hosiery" when you order in the stores. We'll ship direct, charges paid, if your dealer can't supply you. Send your address for illustrated Holeproof Booklet and list of styles and prices.

HOLEPROOF HOSIERY COMPANY, Milwaukee, Wis.
Holeproof Hosiery Company of Canada, Limited, London, Canada
Holeproof Hosiery Company, 10 Church Alley, Liverpool, England

This trademark identifies the genuine

Figure 14. Holeproof Hosiery advertisement featuring hosiery in pure silk, lisle, artificial silk, and cotton. *Good Housekeeping*, October 1917.

*A Striking
New
Attainment
in
Hosiery
Making*

Hose of Luxite

Pure Dye

By using abundant silk in Hose of Luxite we attain full weight and lasting beauty. We never load the dye with metallic compounds to make the hose seem heavy and glossy. Hosiery like that—though you can't detect it—will soon drop stitches when worn, or disintegrate when washed. Have you not had such experience?

Your safeguard lies in demanding hose that bears the name LUXITE. All hose of Luxite—for Men, Women and Children—are pure dyed. Women's stockings full-fashioned or seamless as preferred.

Hose of LUXITE excels in elegance because of its close, fine stitches, rich shimmer and soft, firm body. It excels in fit because of its limb-form shapeliness. Repeated washings leave it snug and lustrous like new.

LUXITE TEXTILES, INCORPORATED, 520 Fowler Street, Milwaukee, Wis.
New York Chicago San Francisco Liverpool
Makers of High-Grade Hosiery Since 1875

*Women's Silk
Stockings 75c, \$1
and \$1.50; Men's Silk 50c*

Hose of Luxite at these prices is made of strong, pure Japanese silk, 12 strands to the thread, instead of the customary 6 or 8. Fine lisle top and high-spliced heel and toe of lusterized lisle, reinforced with extra two-ply thread instead of a single thread.

These are the chief reasons Hose of Luxite far outwears the average.

There are other grades at lower prices—in pure Japanese silk—in Gold-Ray, the new scientific silk, and in lusterized lisle and cotton.

If you want *ultra-style* and *extra* wear be sure to request HOSE OF LUXITE by name at your favorite store. We ship direct, postpaid, if your dealer fails to supply you. Write for descriptive booklet.

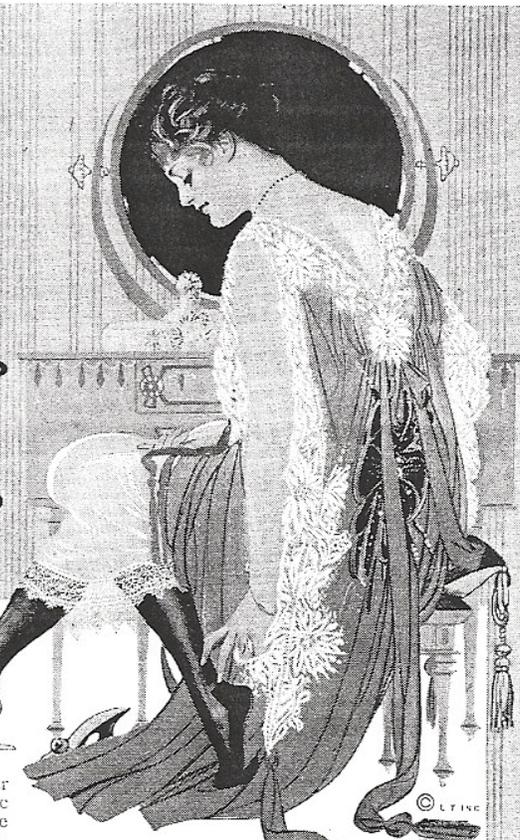
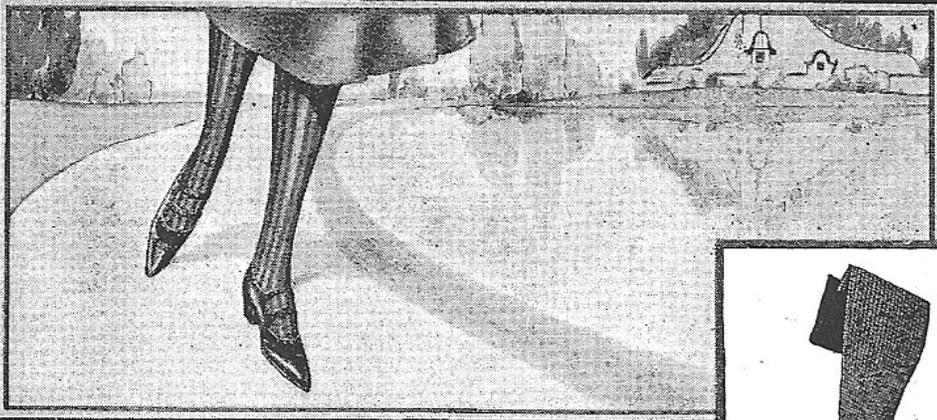


Figure 15. Hose of Luxite sold hosiery made of "Gold-Ray" labeled as the new scientific silk. *Harper's Bazar*, March 1916.



“Onyx”  **Hosiery**

for Sportswear

Light weight Sport Hose in
Silk, Lisle, Fibre, Wool and
Mixed Fabrics for Summer
Wear.

Ask for our “No. P 60”

Emery & Beers Company, Inc.
Sole owners and wholesale distributors
NEW YORK



Figure 16. Onyx Hosiery advertisement for light weight sport hose. *Good Housekeeping*, June 1921.

IS there anything more trying to a woman's patience than to be completely dressed—all ready for the shopping tour or appointment, and z-z-z-z—!—find a garter run in a perfectly brand new pair of stockings?

True Shape

HOSIERY

takes away this bug-a-boo. The patented cross-stitch feature absolutely prevents any "runners" below the garter top. And, as though this were not enough, True Shape Hosiery has a shimmering loveliness and trim effect that fairly bewitches.

The immeasurable satisfaction you'll get from True Shape more than compensates for the added effort of remembering the name and insisting on seeing it on every pair.

For women in silk lisle, 50c. up; fibre silk, 85c. up; pure silk, \$1.15 to \$1.75. Ask your dealer for the True Shape. If he hasn't it, write us and we will tell you of one who can supply you.

TRUE SHAPE HOSIERY CO.
Philadelphia

Wherever you are you'll be sure of hosiery satisfaction if you insist on this trade-mark on each pair.



© T. S. H. CO. 1918



Figure 17. True Shape Hosiery advertisement for "fibre silk" hose that sold for \$0.85 compared to pure silk hosiery with prices that started at \$1.15 to \$1.75. *Good Housekeeping*, November 1918.

Ethel
Barrymore
is
talking



Copyright, 1915, by Charles Frohman Inc.

**Ethel Barrymore
showing a
Heatherbloom Petticoat**

“It’s graceful, bouffant,
practical and serviceable,
and at the same time ele-
gant. Made in all the
fashionable shades.”

These lines are from Ethel
Barrymore’s great comedy suc-
cess “*Our Mrs. McChesney*”, by
Edna Ferber, now at the Lyceum
Theatre, New York.

The play is built around

HEATHERBLOOM
TRADE MARK

**The Petticoat that Made
the Play Possible**

The new wide skirts now, more
than ever, make Heatherbloom
Petticoats a necessity.

At all good stores
Write for free “Petticoat Panorama”
A. G. Hyde & Sons, 361 Broadway, N. Y.

Makers of **Hydegrade** WEAVES

Figure 18. Heatherbloom Petticoats did not specifically state rayon products, but used phrases like “1/3 the cost of silk” and “feels like silk.” *Harper’s Bazar*, December 1915.

RANDOLPH CUTIES

TRADE MARKS REG. U.S. PAT. OFF. & CANADA

SOX FOR TOTS

RANDOLPH Cuties give a well-dressed look to your girl or boy. Besides the dainty pinks and blues, there are gay greens and scarlets, gold and turquoise—a rainbow of colors tastefully blended in a wide variety of fancy tops.

There are three qualities—Cotton, Mercerized and Art Silk—all moderately priced.

Three-quarter length, mercerized, for larger boys and girls, and for the baby, soft, long hose.

Ask in your local shops for Randolph Cuties.

Trade Mark on Every Pair

RANDOLPH MILLS
Philadelphia
E. M. Townsend & Co., Selling Agents
New York City

*Exclusive patterns and colorings.
—no seams to injure the feet.
—extra weight and strength.*




Figure 19. Randolph Cuties sold socks for children in cotton, mercerized, and "art silk". *Good Housekeeping*, May 1922.



KAPOCK

—the touch
of exclusiveness

Fascinating window hangings instantly convey one's idea of *home*. Let these draperies be not only regal in their airy, soft appearance, but *economical*—yet exclusive in tone.

KAPOCK
DECORATIVE FABRICS
"NOT A WORM SILK"

are unique, and as beautiful as they are novel. See their many attractive shades and designs at your favorite store.

Request your dealer to write us for free
"KAPOCK SKETCH BOOK"
suggesting practical decorations for your home

Look for basting thread trade mark in selvage which identifies genuine "Kapock" Fabrica

A. THEO. ABBOTT & CO.
Dept. S. PHILADELPHIA

Figure 20. Kapock Sunfast Fabrics sold fabric by the yard. They never specifically state that their product was rayon, but stated that their fabric was "not a worm silk." *Harper's Bazar*, November 1918.



New curtains that bring an atmosphere of luxury and charm • *Scranton Lustre-Lace*

HOW often have you been in a room that might be charming, yet is somehow all wrong because of curtains that "don't belong"? They seem stiff, graceless, and out of harmony with the comfort of livable furniture, well-chosen rugs and unobtrusive walls.

The new Scranton Lustre-Lace Curtains bring their own atmosphere of gracious and luxurious fitness to any home. Woven from artificial silk in the loveliest of designs, they are delightfully transparent, and still marvelously decorative in every richly gleaming fold.

And this richness of texture lasts. Scranton Lustre-Lace Curtains will withstand both tubbing and hot sun without loss of color or sheen. Naturally, with these unusual qualities, Lustre-Lace has come into a tremendous vogue.

See the smart Lustre-Lace showing at any of the leading stores. You will be interested in other Scranton curtains and drapery fabrics too—particularly the Filet Nets and the new color-fast Lustre-Casement that comes in blue, rose and other shades to match the handsome Lustre-Bedspreads which are so much in demand.

SCRANTON



THE SCRANTON LACE CO.
Dept. 2-O, Scranton, Pa.
Please send me without cost booklets, "New Outlooks for Every Home" and "Scranton Bedspreads."

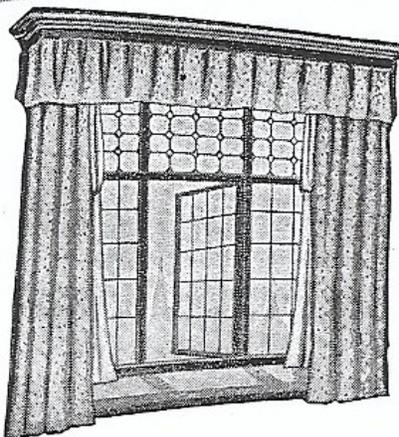
Name.....
Address.....
City.....

LUSTRE-LACE FILET NETS LACE CURTAINS BEDSPREADS



To help you plan, you may obtain two interesting booklets, "New Outlooks for Every Home" and "Scranton Bedspreads"—illustrating smart and authoritative treatments for every type of window and bed. Fill out and mail coupon for them to-day; and if you have an unusual curtain problem, write our Service Department about it.

Figure 21. Scranton Lustre-Lace sold curtains of artificial silk. *Good Housekeeping*, February 1924.



Fadeless

*fabrics can still be
had by insisting upon*

ORINOKA

Guaranteed

SUNFAST

DRAPERIES and UPHOLSTERIES

Wonderful weaves and
colors in many patterns
and grades — every one
absolutely color-fast.

Ask for them by name at
leading retailers and decorators.

Write for dealer's name and booklet

ORINOKA MILLS

146 Clarendon Building, New York

INSIST ON THIS GUARANTEE.

These goods are guaranteed abso-
lutely fadeless. If color changes
from exposure to the sunlight or
from washing, the merchant is
hereby authorized to replace them
with new goods or refund the pur-
chase price.

Figure 22. Orinoka sold curtains that looked like silk, but for inexpensive prices. *Harper's Bazar*, November 1916.



*Those treasured hours
in Mother's Room—*

GIVE THEM A BACKGROUND OF LOVELINESS

LET the room your children love best radiate cheerfulness and beauty. Give it the richness of charming fabric and color.

Nothing can give more of this richness and charm than the Stevens Glory Crinkle Spread. Its exquisite texture is alternately figured and crinkled, and it glows softly in delicate tones—blue, rose, orchid, or gold.

And to complete the harmony of the room, Stevens Glory Crinkle, in the same tone, can be obtained for draperies.

“There is a Stevens Spread for every bed”—WHITE SATIN, CROCHET, Artificial Silk and Cotton NOVELTIES, in a wide range of attractive colors and patterns. See them at your dealer's.

STEVENS MANUFACTURING CO., FALL RIVER, MASS.

CLARENCE WHITMAN & SON, Inc., *Selling Agents*, 354 FOURTH AVENUE, NEW YORK

*MAKE your little girl happy
with this Dolly's Bed Spread*

Soft texture, pretty design, choice of blue or pink. Sent on receipt of 25c

SPREADTIME STORIES, an illustrated story booklet for children, will be sent free. Write to

STEVENS MFG. CO., FALL RIVER, MASS.
Dept. G

*Stevens
Spreads*



204 May 1924 Good Housekeeping

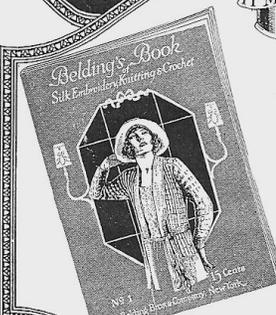
Figure 23. Stevens Spreads sold bed spreads in satin, crochet, artificial silk, and cotton. *Good Housekeeping*, May 1924.

Makers of Fine Silks
for Gowns, Linings, Lingerie

For Linings
Chosen for beauty
and certainty of
long wear



IT MATCHES



NEW and unusual designs for small gifts, scarves, sports hats, sweaters, bags, etc., including a full color page of cross-stitch designs—all in

Belding's Book of
Silk Embroidery, Knitting and Crochet

Use Belding's New Process Embroidery Silks—made of pure silk—for articles which must withstand long wear or frequent launderings and Belding's Crochet Silks to give the utmost durability to crocheted articles. Belding's Stytex—a fast dye artificial silk—is especially adapted to dress embroidery.

Belding's Book is Fifteen Cents, at your dealer's or from Belding Bros. & Co., 902 Broadway, N. Y.

Figure 24. Beldings Bros. & Co. advertisement. This advertisement is for a book that the company sold for artificial silk embroidery. *Harper's Bazar*, March 1922.

BONWIT TELLER & CO.

Paris 42 Rue de Paradis Philadelphia 13th and Chestnut Sts.

The Specialty Shop of Originations
FIFTH AVENUE AT 38TH STREET, NEW YORK

“Bontell” Sweaters in Springtime Mode

WOODMERE—Slip-over sweater of brushed Zephyr wool in rose, green, Copenhagen blue, corn, maroon or white—plain colors or with white collar and cuffs. 6.75

CLEBURNE—Slip-over sweater of wool jersey banded and belted in contrasting color jersey and designed in soutache braiding. In white combined with gray, crimson, mustard, rose, navy, Copenhagen blue or green. 30.00

LOIRE—Hand-knit Shetland wool slip-over sweater with collar and cuffs of white or gray angora. In coral, pink, gray, Copenhagen blue, Nile green, turquoise, black, white or orange. 25.00

VALLEMONT—Pure silk sweater in rose, green, Copenhagen blue, purple, corn or white. The collar may be worn either high or low. 22.50

CEDARLEIGH—Fibre silk sweater with half Russian back—in rose, pink, cherry, corn, turquoise, white, Copenhagen blue, green, peacock, navy, purple or black. 11.50

MAIL ORDERS PROMPTLY FILLED
TELEPHONE MURRAY HILL 7300

Fiftieth Anniversary Year
Harper's Bazar, February, 1917

Figure 25. Bonwit Teller advertisement which shows similar styling between sweaters “Vallemont” and “Cedarleigh;” note the “Vallemont” sweater is pure silk and sold for \$22.50 while the “Cedarleigh” sweater is fibre silk and sold for \$11.50. *Harper's Bazar*, 1917.

**APPENDIX B: CHART OF ALL ADVERTISEMENTS FROM *HARPER'S BAZAR* AND
*GOOD HOUSEKEEPING***

Terminology Used	Where Used	What Type of Form	What Type of Product	Company	Date and Year
Art Silk					
Art silk	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	March 1917
Art silk	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	September 1917
Art silk	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	October 1917
Art silk	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	November 1917
Art silk	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	December 1917
Art silk	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	January 1918
Art silk	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	April 1918
Art silk	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	May 1918
Art silk	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	July 1918
Art silk	<i>Good Housekeeping</i>	Advertisement	Socks	Randolph Cuties	May 1922
Art silk	<i>Good Housekeeping</i>	Advertisement	Bed spread	Stevens Spreads	March 1924

Artificial Silk					
Artificial silk	<i>Good Housekeeping</i>	Advertisement	Hosiery	Holeproof Hosiery	October 1917
Artificial silk	<i>Good Housekeeping</i>	Advertisement	Hosiery	Holeproof Hosiery	December 1917
Artificial silk	<i>Harper's Bazar</i>	Advertisement	Book	Belding's Silks	March 1922
Artificial silk (Sunglo)	<i>Harper's Bazar</i>	Advertisement	Hosiery	Corticelli	July 1922
Artificial silk (mixed)	<i>Good Housekeeping</i>	Advertisement	Hosiery	Arrowhead Hosiery	August 1923
Artificial silk	<i>Good Housekeeping</i>	Fashion Editorial	Embroidery on dress	N/A	October 1923
Artificial silk	<i>Good Housekeeping</i>	Fashion Editorial	Embroidery on dress	N/A	October 1923
Artificial silk	<i>Good Housekeeping</i>	Advertisement	Curtains	Scranton	February 1924
Artificial silk	<i>Good Housekeeping</i>	Advertisement	Bed spread	Stevens Spreads	May 1924
Artificial silk	<i>Good Housekeeping</i>	Advertisement	Curtains	Scranton	May 1924
Artificial silk	<i>Good Housekeeping</i>	Advertisement	Bed spread	Stevens Spreads	September 1924
Artificial silk	<i>Good Housekeeping</i>	Advertisement	Bed spread	Stevens Spreads	November 1924
Fiber (Fibre)					
Fibre (and mercerized cotton)	<i>Harper's Bazar</i>	Advertisement	Sweater	RH Macy & Co.	July 1917
Fibre	<i>Harper's Bazar</i>	Advertisement	Hosiery	Onyx Hosiery	June 1921
Fibre	<i>Good Housekeeping</i>	Advertisement	Hosiery	Onyx Hosiery	June 1921

Fiber (and wool)	<i>Good Housekeeping</i>	Fashion Editorial	Sweater	N/A	February 1923
Fiber (and mohair)	<i>Good Housekeeping</i>	Fashion Editorial	Sweater	N/A	April 1923
Fiber	<i>Good Housekeeping</i>	Fashion Editorial	Blouse	Schmidt Knit	July 1923
Fibre	<i>Good Housekeeping</i>	Advertisement	Hosiery	Arrowhead Hosiery	December 1923
Fiber (fibre) silk					
Fiber silk	<i>Harper's Bazar</i>	Advertisement	Sweater	Mandel Brothers	September 1915
Fibre silk	<i>Harper's Bazar</i>	Advertisement	Sweater	Bonwit Teller & Co	May 1916
Fibre silk	<i>Harper's Bazar</i>	Advertisement	Sweater	Franklin Simon & Co	June 1916
Fibre silk	<i>Harper's Bazar</i>	Advertisement	Sweater	Bonwit Teller & Co	February 1917
Fibre silk	<i>Harper's Bazar</i>	Advertisement	Sweater	RH Macy & Co.	July 1917
Fibre silk	<i>Harper's Bazar</i>	Advertisement	Hosiery	True Shape	October 1918
Fibre silk	<i>Harper's Bazar</i>	Advertisement	Hosiery	True Shape	November 1918
Fibre silk	<i>Harper's Bazar</i>	Advertisement	Hosiery	True Shape	December 1918
Fiber silk	<i>Good Housekeeping</i>	Fashion Editorial	Sweater	N/A	March 1922
Fiber silk	<i>Good Housekeeping</i>	Fashion Editorial	Trim on dress	N/A	March 1922
Fiber silk	<i>Good Housekeeping</i>	Fashion Editorial	Sweater	Schmidt Knit	June 1922
Fibre silk	<i>Harper's Bazar</i>	Advertisement	Sweater	James McCutcheon	July 1922

				& Co.	
Fibre silk (and wool)	<i>Harper's Bazar</i>	Advertisement	Sweater	James McCutcheon & Co.	July 1922
Fibre silk (and wool)	<i>Harper's Bazar</i>	Advertisement	Hat	James McCutcheon & Co.	July 1922
Fiber silk	<i>Good Housekeeping</i>	Fashion Editorial	Dress	N/A	April 1923
Fiber silk (and wool)	<i>Good Housekeeping</i>	Fashion Editorial	Suit	N/A	July 1923
Fiber silk	<i>Good Housekeeping</i>	Fashion Editorial	Scarf	Standware	July 1923
Fiber silk	<i>Good Housekeeping</i>	Fashion Editorial	Dress	N/A	August 1923
Fibre silk (and wool)	<i>Good Housekeeping</i>	Fashion Editorial	Dress	N/A	February 1924
Fiber silk	<i>Good Housekeeping</i>	Fashion Editorial	Sweater	Schmidt Knit	July 1924
Fiber silk	<i>Good Housekeeping</i>	Fashion Editorial	Scarf	Weartex	July 1924
Rayon Silk					
Rayon silk	<i>Good Housekeeping</i>	Fashion Editorial	Blouse	N/A	May 1922
Rayonner					
Rayonner	<i>Good Housekeeping</i>	Fashion Editorial	Suit	N/A	October 1920
Rayonner	<i>Good Housekeeping</i>	Fashion Editorial	Suit	N/A	October 1920
Scientific Silk					
Scientific silk	<i>Harper's Bazar</i>	Advertisement	Hosiery	Hose of Luxite	March 1916
Scientific silk	<i>Harper's</i>	Advertisement	Hosiery	Hose of	April 1916

	<i>Bazar</i>			Luxite	
Scientific silk	<i>Harper's Bazar</i>	Advertisement	Hosiery	Hose of Luxite	September 1916
Scientific silk	<i>Harper's Bazar</i>	Advertisement	Hosiery	Hose of Luxite	November 1916
Scientific silk	<i>Harper's Bazar</i>	Advertisement	Hosiery	Hose of Luxite	December 1916
Silk twisted with Fibre					
Silk twisted with Fibre	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	October 1918
Silk twisted with Fibre	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	November 1918
Silk twisted with Fibre	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	January 1919
Silk twisted with Fibre	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	March 1919
Silk twisted with Fibre	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	May 1919
Silk twisted with Fibre	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	September 1919
Silk twisted with Fibre	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	October 1919
Silk twisted with Fibre	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	November 1919
Silk twisted with Fibre	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	March 1920

Silk twisted with Fibre	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	April 1920
Silk twisted with Fibre	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	May 1920
Silk twisted with Fibre	<i>Good Housekeeping</i>	Advertisement	Hosiery	Burson Fashioned Hose	September 1920