

The Forgotten Fountain Pen:
The historical significance of the fountain pen in twentieth-century American society

by

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Abstract

This thesis addresses the adoption, popularity, decline, and revival of the fountain pen in American culture and society over the twentieth century. It examines how the World Wars and Great Depression interacted to influence fountain pen design and production; how the ballpoint and characteristics of convenience and disposability threatened the fountain pen's continued survival; how the act of writing changed with new writing implements, like ballpoints, typewriters, and computers; and how the "analog revolution" of the late 1980s helped revitalize fountain pen collecting, use, and manufacturing. It concludes that the fountain pen operated variously over the twentieth century as a writing tool, a status icon, and a collectible, adapting to new contexts and competing with newer writing instruments. The fountain pen's continued manufacture in the twenty first century illustrates that its appeal and writing properties are uniquely valued despite its more efficient competitors.

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Introduction

Nearly every word of this thesis was first drafted in fountain pen ink. Some ideas were frantically scribbled in notebooks, while others were annotated in book margins, and others still were the product of graphic mind mapping exercise. Before a single word followed my word processor's cursor, it first found life through wet ink and dead trees. I draft by hand for two reasons. First, it forces a drafting experience since each phrase must be composed and reconsidered before manifesting in the word processor. Secondly, drafting by hand frees me of distractions like the backspace key, which enables neurotic rephrasing efforts instead of facilitating flowing thoughts. The limitations of the pen are freeing in this way. On paper, misspelled words and poor syntax do not trigger red squiggly underscores, nor do emails or software updates pop up to derail writing progress. All this to say that the fountain pen is still a valuable tool in 2017, not merely for me, but also for hundreds of thousands of other users across the globe. The fountain pen's history is an exciting and significant one, spanning the entire twentieth century in its telling. The goal of this thesis is to narrate that story in tripartite fashion and illustrate how society, war, economics, class and wealth, and the evolving act of writing itself manifest in the fountain pen's fluctuating popularity. The fountain pen, as an American invention, tells its own unique version of American history as it pertains to writing, culture, and utility in the twentieth century. Additionally, the fountain pen's continued use—despite more efficient writing mediums—also reveals that it has an allure that transcends utility and time.

CHAPTER 1: Development and Legacy

The development of the fountain pen represented a writing revolution every bit as significant as that of smart phones moving the Internet from the desktop to the shirt pocket. The permanency of ink and nib were suddenly mobile and presented a more sustainable instrument compared to a constantly dwindling pencil. As with other wartime technologies like airplanes or penicillin, the fountain pen underwent change it likely would not have in a non-wartime consumer market.

This chapter is interested in how the exigencies of the World Wars specifically (and tangentially those of the intervening Great Depression) collectively redefined fountain pen design and legacy in American society. The following discussion will be divided into three chronological eras: 1912-1928 (World War I emphasis); 1929-1939 (Depression emphasis); 1940-1949 (World War II emphasis). These years include what pen collectors designate as the “Golden Age” (1918-1945) of fountain pen design and production, and conclude just before the fountain pen faced serious competition and commercial hibernation via the ballpoint by 1949. These three decades were chosen specifically because they represent the rise and fall of the fountain pen as the preeminent personal writing utensil. Though the focus here is on the interactions between the US military and the fountain pen business, I must include the significance of the Great Depression in debasing fountain pen quality, as this directly influenced pen production during the WWII period. Additionally, I will bring to bear germane fountain pen paraphernalia from this era, such as ink tablets for WWI trench pens and ink specially designed for WWII V-mail, to illustrate the relationship between military needs and fountain pen design.

At the turn of the twentieth century, fountain pens were on the cutting edge of writing instrument technologies. For thousands of years, the literate had been bound to a writing table and inkwell, and limited to a handful of lines before their dipped reed, quill, or nib ran dry. No longer was that the case. Authors and pen collectors João Pavão Martins, Luiz Leite, and António Gagean explain the transition from the dip pen to the fountain by contending three

elements were essential in the development of the modern fountain pen.¹ To make the fountain pen viable and lasting, one needed free-flowing, water-based ink; iridium tipped gold nibs; and “hard” (vulcanized) rubber. Notwithstanding these three essential criteria, however, early fountain pens still faced the problem all reservoir based writing instruments had suffered from the earliest prototypes: proper and consistent ink flow. Rudimentary fountain pens would invariably run dry or suffer unpredictable ink surges, the inconvenience of the former and the mess of the latter jointly serving to convince many late nineteenth-century writers to continue using dip pens decades into the twentieth century.

The solution to these flow issues was the fissured feed, first devised by insurance salesman Lewis E. Waterman in 1884. Legend holds that in 1883, Waterman lost the sale of a policy because his fountain pen flooded on the insurance contract, instantly ruining it. In the interval required for Waterman to rewrite the contract, he allegedly lost the customer to another salesman. Furious, Waterman went home and experimented with the ebonite feed in his misbehaving fountain pen until it no longer misbehaved, ultimately achieving what would become the benchmark for all subsequent feeds with consistent flow. Instead of a singular ink channel, Waterman cut smaller ink channels inside a single larger one, the result resembling an upside down “v.” *Figure 3. Waterman's Original 1884 Feed Patent*, demonstrates the concept; the circular object on the right indicates the two inflow channels (labeled “e”) as being below the larger air-exchange channel (labeled “d”). Waterman’s design revolutionized all subsequent pens, and in a mere handful of years transformed his backroom operation into one of the largest fountain pen dynasties in the world—one that still operates from its French headquarters, and continues to produce quality pens today. Following Waterman’s achievement, other manufacturers adopted systems just shy of patent infringement, especially since the L.E. Waterman Company believed in frequent and exhaustive patent litigation.

¹ João Pavão Martins, Luiz Leite, and António Gagean, *The Chronicle of the Fountain Pen: Stories Within a Story* (Atglen, Pa: Schiffer Pub, 2007), 6.

By the 1910s, despite the fact there were about fifty fountain pen companies in the United States, four had risen to dominate the rest; modern pen aficionados have labeled them “The Big Four,” and their distinction is due to their commercial success and design innovations. The L.E. Waterman Company contributed the fissured feed. The Parker Pen Company introduced the “Lucky Feed” which was curved on the distal, interior end, making contact with the barrel’s interior wall, and enabling capillary action to empty the feed when the pen was placed in an upright position, e.g. in the writer’s pocket. In traditional feeds, not all of the ink would drain from a feed when the pen was placed in the upright position; the writer’s body heat would then expand any air in the ink chamber, thus forcing the residual ink in the feed up, out, and onto the pen’s grip section, resulting in ink covered fingers when the pen was next uncapped. The Lucky Feed system resolved this problem, and gained tremendous popularity as a result.

The Conklin Pen Company produced the first “self-filling” pen in 1897; it used a rubber sac to store ink, which was filled by depressing an exposed half-moon shaped protuberance on the barrel. When released, the sac re-inflated and created a vacuum capable of drawing ink into the reservoir. This advancement eliminated the potential messiness associated with traditional eyedroppers, which entailed disassembly or adjustment of the nib and feed to permit one to fill the empty barrel with a bulb syringe.²

Finally, the Sheaffer Pen Company earned its position in the Big Four by improving on the self-filling concept in 1908; Walter Sheaffer designed what would become the most common self-filling mechanism—the lever-filler. Unlike Conklin’s protruding crescent hump, the lever in Sheaffer’s design filler laid flush with the barrel. Additionally, by the time Sheaffer introduced the lever-filler, the Conklin crescent had begun to appear dated in terms of aesthetics. By the nineteen-tens Sheaffer’s design had all the conveniences of the crescent filler with a more modern appearance.³

² Martins, Leite, and Gagean, *The Chronicle of the Fountain Pen*.

³ Ultimately, in 1924, Conklin’s unwillingness to aggressively expand beyond its initial success with the crescent-filler cost the company their place among the Big Four as the Wahl (soon to be Wahl-Eversharp) company assumed the mantle of fountain pen titan

WWI Era (1912-1928)

By the time of the First World War, and continuing into the 1920s, the Big Four dominated the fountain pen market. Their continued reign was because their initial successes enabled them to purchase patents, litigate patent infringements, and continue innovating. Their fountain pens of this era were characterized by high quality and commensurately high prices. Cheaper pens of lesser quality were produced by companies that lacked the financial backing to purchase new patents related to pen production. Though these lower quality pens captured enough of the market to survive, they still were not as cheap as steel nibs for a dip pen, nor as attractive as better made fountain pens. Thus, the budget conscious tended to continue using dip pens while the well-endowed bought expensive pens. To this end, order catalogs brimmed with premier pen options, and hard rubber was the material of choice until 1924, when plastics became the more viable and durable option.⁴ Often, hard rubber pens were covered in plain or patterned rolled gold or delicate silver filigree with jewel encrusted caps, complete with iridium tipped gold nibs. Though the fountain pen has always been a status symbol, 1890-1924 was the height of bejeweled extravagance, sometimes to the point of reduced ergonomic utility.⁵ Despite the progress of fountain pen reliability and increased popularity, dip pens were still far cheaper and the choice tool for most businesses and institutions, including the U.S. military. Fountain pens, even the most basic black hard rubber models, were substantially more expensive than a dozen steel nibs and an inkwell. Thus, unlike modern writing utensils, the convenience of a self-contained, mobile pen was a luxury, meaning fountain pens were the accoutrements of businessmen, lawyers, privileged students, and journalists.

WWI significantly influenced the legacy of the fountain pen by indirectly encouraging new pen features, writing reliability, and practicality. Most significantly, however, the war rapidly created a market for fountain pens. The Parker Pen Company's advertising department, writing in retrospect, claimed:

⁴ Richard Binder, *The RichardsPens Guide to Fountain Pens: Glossopedia*, 2nd ed., vol. 1 (Amazon Kindle, 2015), sec. 2398 (Kindle location).

⁵ Martins, Leite, and Gagean, *The Chronicle of the Fountain Pen*, 81.

Then the war broke devastating many industries, given sudden impetus to others. Luck favored fountain pens. From training camps, trenches, shipboard, and hospitals, came a sweeping demand. These millions of new pen users were added to the old, and these soldiers, sailors, and nurses continued to be users when they resumed civilian life.⁶

Some would contend that WWI had little to no influence on fountain pen productions or design since the U.S. only entered the war in 1916. This simply is not true. Certainly, the U.S. military only became involved for the war's final stages, but as Parker's advertising department revealed in their expose, the fountain pen industry quickly evolved to capitalize on military writing needs.

First, however, a common misconception must be expelled—there exists no evidence that the U.S. military had major contracts at any time for fountain pens as items to be distributed as equipment. Fountain pens were considered personal luxuries, not standard equipment. The military establishment was not going to requisition fountain pens when virtually all of their bureaucratic writing needs could be met with reliable and economic steel dip pens and typewriters. Moreover, many troops found the mobility and ultra-low maintenance needs of pencils preferable to fountain pens, which required occasional flushing and fairly clean water to operate successfully. Notwithstanding these exceptions, fountain pens outperformed pencils in writing comfort and lasting permanence, and surpassed the dip pen in portability, making fountain pens tremendously popular for troops who could afford them. Moreover, though the military did not purchase pens to distribute as gear, it did acquire pens to sell in post exchanges, where troops who wanted them could purchase fountain pens conveniently if they so desired.

Aside from the absence of WWI military contracts for fountain pens, researchers ought to also consider the massive, armed forces-oriented advertising campaigns as evidence that the military did not buy fountain pens in bulk; that is, fountain pen producers would not spend

⁶ Parker Pen Company, *Applied Advertising and Marketing for College and University Study a Noteworthy Example of Modern Methods* ... (Janesville, Wis.: Parker Pen Co., 1923), 3, <http://catalog.hathitrust.org/Record/100453768>.

thousands of dollars' worth of advertising targeting a consumer segment that already possessed a fountain pen. Yet, surviving advertisements illustrate that these pen producers did spend fortunes advertising to both military members and their families. These advertisements often evoked notions of patriotism, soldier-selflessness, familial connection via writing, and pen quality so great it could survive a warzone.

For instance, Sheaffer produced a 1917 ad titled "Sheaffer's Self-Filling Pen;" below the title was an image of a young military man seated at a desk, writing what appeared to be letters home. Directly beneath the soldier were the words, "For Uncle Sam's Fighting Boys."⁷ In this advertisement, Sheaffer capitalized on the patriotism involved in buying a fountain pen for one's son or husband, reminding audiences that a son or father equipped with a fountain pen could always write home. The advertisement was misleading in that the writer was neatly dressed and seated at a tidy desk, which reflected little of the far more common experience of composing a letter in a flooded trench; still, the advertisement displays how fountain pen producers related their product directly to the war effort and demonstrated how important fountain pens were to young men thousands of miles from home.

Other patriotic sentiments include those expressed in the 1919 Parker advertisement in the *Army-Navy-Air Force Register and Defense Times*, which included Parker's guarantee that, "Should an accident occur to any Parker Pen, no matter when purchased, if the pen is owned by any man wearing the uniform of a U.S. soldier, sailor, or marine, it will be repaired by us during the period of the war free of charge."⁸

Perhaps even more revealing than this offer of free maintenance, however, were the contents of a July 1919 Parkergram issue conveying the official sentiments of the Parker Pen Company toward WWI and returning veterans.⁹ One of the snippets entitled "Give the Boys

⁷ *Sheaffer's Army and Navy Special, Students Pen (1917)*, accessed September 6, 2015, <http://file.vintageadbrowser.com/b6mrg0kxp6ko2.jpg>.

⁸ *Army-Navy-Air Force Register and Defense Times*, vol. 65 (Washington, D.C., 1919), 389, <http://babel.hathitrust.org/cgi/pt?id=coo.31924069767105;view=1up;seq=395>.

⁹ "Parkergrams and Shoptalkers - Parker - The Fountain Pen Network," accessed December 13, 2015, <http://www.fountainpennetwork.com/forum/topic/34955-parkergrams-and-shoptalkers/>. The Parker Pen Company

Their Jobs” contained the company’s invocation that Parker product distributors and retailers rehire returning veterans to work in their stores. The passage was brief, but indicative of the company’s position.

You were mighty proud of your boys when the war was on and things going a bit uncertain, to have them enlist and get into the khaki. You felt there was nothing too good for them, and there was not.

Now that they are back, why not feel the same way? Suppose they have changed a little and are a trifle uneasy. You must remember they have gone through things that would tend to make them get a new view and slant of life. They are bigger, broader and better men in ninety-five cases out of one hundred than they were. Be patient, they are getting their bearings and as soon as they get them, they will be more valuable men than ever before

The old order of things will never again exist. Change to the new conditions, and above all be good and show your gratitude to ‘the boys.’”¹⁰

This tiny snippet conveyed devout notions of pride and patriotism, and coupled with another adjacent newsletter article titled “Rusty Pressure Bars,” showed that not only was Parker advocating for the benefit of returning troops, but also that the company had suffered specific quality control issues as a direct consequence of experienced workmen being drafted. It guaranteed replacement of defective parts like rusty pressure bars, and announced with mixed joy and reverence that skilled workers were returning from the war, “excepting those represented by two gold stars and two or three who are convalescing in hospitals.”¹¹ This compassionate, pro-soldier spirit expressed Parker’s desire to support US military members however possible, whether with trench pens and ink tablets, or else by urging employers to return the men to their former occupations. This spirit would continue to influence Parker advertising campaigns well

had two newsletters—Parkergrams, which were meant for retail distributors of Parker products, and Shoptalkers, which were meant for internal circulation.

¹⁰ Parker Pen Company, *Parkergram* (Janesville, Wisconsin: The Parker Pen Company, 1919), 2.

¹¹ *Ibid.*

into WWII; whether those patriotic references continued to possess such seeming genuineness or whether they were more so advertising tools is not entirely clear. This is not to say that Parker's WWI advertisements did not capitalize on military involvements in promoting their products. Yet, it is worth noting that the Parkergram series' purpose was circulating internal company news and policies, meaning these articles were not aimed at a consumer audience as they might be for advertising appeal, but only Parker distributors.

Aside from the moral support that soldiers received from Parker, fountain pen producers also began producing pens with features aimed at armed forces members. The most recognizable of these during the WWI period was the Trench Pen, which was first produced by the Bicks Pen Company, but marketed more successfully by both Mabie Todd & Co. and especially Parker starting in 1916.¹² The concept was simple and ingenious; the pen could be filled with ordinary ink via an eyedropper, but had the bonus and defining attribute of a small compartment in the distal end of the barrel, secured by a screw cap mechanism, that provided for "ink tablet" storage. Ink tablets were compressed powder pills that could be dropped into the pen's barrel along with some water from a soldier's canteen to produce a writing fluid. Though the pens themselves are rare finds today, possibly signifying they were not popular or else did not survive combat, the concept of an efficient, self-contained mobile composition instrument, unburdened from inkwell or pencil sharpener, was successful enough that niche tablet-based pens survived well into the 1930s, even innovating new forms like Russell Kingman's Camel Pen (1935); unlike smaller trench pen tablets, "Camel's pellet dissolved slowly, over the span of dozens of fillings[...] The concept was good: a modern pen that could free the user from the shackles of an ink bottle for a year or more. But [the Camel pen] was not satisfactory"¹³

¹² "Fountain Pen History: Trench Pens, and Pompeian Orange," *Fountain Pen History*, February 25, 2015, <http://fountainpenhistory.blogspot.com/2015/02/trench-pens-and-pompeian-orange.html>; Richard Binder, "RichardsPens.com • Richard's Collection, Vintage American Pens, Page 7," accessed September 8, 2015, http://www.richardspens.com/?page=coll/col_07.htm. From here forward, this study has a distinct Parker flavor; this is due to the bulk of digitized primary sources pertaining to Parker's operations, which outstrip all other American companies in both quantity and detail

¹³ "RichardsPens.com • The Camel Pen," accessed December 12, 2015, http://www.richardspens.com/?page=coll/col_07.htm; Hartwell Ralf L and Kingman Russell B, Soluble Ink

Still, the wartime innovation of ink tablets survived outside of the trench pen since they could be used in any eye dropper pen design. Parker continued to make their ink tablets well into 1920; the product was so popular with travelers, students, and those in cold environments (whose bottled liquid ink could freeze) that Parker chose to retail them very cheaply, at a price only marginally exceeding production expenses. Parker regarded the cheap tablets as low cost advertising.¹⁴

Another military innovation came in the form of Parker's washer clip (U.S. Patent 1,197,224), which enabled pens to be carried lower in the pocket, and thus, more easily conform to military dress code. Though not developed specifically for this purpose, the Parker washer clip was the precedent for latter military clip styles, the most widely recognized being Sheaffer's military clip, which ultimately wrapped over the pen cap from the opposite side, thus allowing the deepest possible pocket-seating of any other clip type.¹⁵

Many of these WWI fountain pen designs survived and adapted into permanent pen characteristics, while others outlived their utility. To briefly review and illustrate, the earliest practical fountain pens were eyedropper fillers. Conklin produced the first self-filler, paving the way for the rise of lever fillers (1912) and button fillers (1914).¹⁶ Sleeker options compared to the crescent filler, they proved to be popular options. Parker's safety-filler button fillers instantly converted to eyedroppers if their sacs failed, which made them valued among soldiers who could not always easily visit a repair counter. Finally, in 1924, Sheaffer introduced the last great development of this first era – celluloid plastics, effectively ending the reign of hard rubber as the principle construction material. Compared to hard rubber, celluloid is more durable, lighter, and available in much wider color variety.¹⁷ This era's achievement of replacing leaky proto-

Fountain Pen, US2024228 A, filed December 18, 1934, and issued December 17, 1935, <http://www.google.com/patents/US2024228>.

¹⁴ *Parkergram* (Janesville, Wisconsin: The Parker Pen Company, 1920), 21; "Fountain Pen History: The Ink Tablet Pens," *Fountain Pen History*, February 27, 2015, <http://fountainpenhistory.blogspot.com/2015/02/the-ink-tablet-pens.html>.

¹⁵ "RichardsPens.com • Design Features: Military Clips," accessed December 13, 2015, <http://www.richardspens.com/?page=ref/glossary/F.htm>.

¹⁶ Martins, Leite, and Gagean, *The Chronicle of the Fountain Pen*, 56–57.

¹⁷ *Ibid.*, 102.

fountain pens with reliable pen designs was made possible by better feeds, iridium-tipped nibs, water-based ink, and quality construction materials. With major performance issues rectified, the fountain pen designs of the following decade focused on new aesthetics, novel filling methods, and survival in a depressed economy.

Great Depression Era (1929-1939)

Predictably, the stock market crash of 1929 did not bode well for fountain pen producers. Though the interwar decade of 1929-1939 did not witness as many fountain pen developments as the WWI or WWII eras, its effects on pen manufacturing were of lasting importance. Most immediately, the Great Depression devastated many smaller fountain pen producers and forced the survivors to choose one of two predominant operating strategies—mass produced economy pens or pricier high quality pens. Though the rise of cheaper third tier pens¹⁸ was a natural outcome of hard economic circumstances, popular first-tier fountain pens continued to sell surprisingly well during the depression. This was because first-rate pens were warranted, and would resultantly pay dividends for decades to come, while the lifespan of many third-tier pens was significantly shorter. The Big Four all opted to embrace lower sales of high quality pens rather than higher sales of cheaper pens—though these producers also developed economy lines because of the Depression. These lines were not as highly advertised, nor did their sales match those of the companies' flagship models. In the case of Sheaffers' economy line, for instance, the company decided not to print its customary full name on the barrel, but chose instead the acronym "WASP" (**W**alter **A.** **S**heaffer **P**en **C**ompany) in what appears to be an effort to distance their economy line from the distinction of being called a "Sheaffer" pen.¹⁹ Thus, the Big Four relied most strongly on their longstanding reputation for quality and dedicated the bulk of their research and advertising funds on their flagship lines. On the other end of the spectrum, companies like Wearever and Esterbrook produced attractive utilitarian pens of lower, though

¹⁸ As opposed to high quality first tier pens, or middling quality second tier pens.

¹⁹ Richard Binder, "RichardsPens.com • The WASP Clipper," accessed January 21, 2016, http://www.richardspens.com/?page=ref/profiles/wasp_clipper.htm.

sometimes shoddy quality. The worst products of these economy pens performed poorly, broke easily, and were unattractive, all of which would ultimately aid the rise of the ballpoint in later decades.

The 1930s also meant the end of the supremacy of eyedropper and sac-based filling systems; a new generation of writers needed fountain pens, many of whom considered the eyedropper too messy and sac-based pens dated and hassling. They wanted modern pens that were fast, fashionable, and efficient. Pen producers responded with three new defining features—streamlined bodies, non-sac filling systems, and ink views.

The most identifiable design change for the Depression era pens was the streamlining of pen bodies. Instead of their flat-topped, cylinder-like predecessors, pens began to appear more aerodynamic, with smooth, curved ends. This characteristic was born of the increasing public fascination with aerodynamic designs, visible most clearly in airplanes, like those used for the first time during WWI. Once more, this relationship is tangential, but without military investment, airplanes would not have developed as swiftly nor have garnered such immense public attention. The Sheaffer Balance of 1929 was the first streamlined pen design to capture mass public attention. This popularity stemmed both from the pen's balanced handing and from its unique aesthetic, making it a status symbol just like its gilt predecessors. This streamlining fed into the extant art deco pen styles, and culminated in some of the most beautiful pens ever produced, including the Parker Vacumatic, Waterman Patrician, and Wahl-Eversharp Doric. These pens were produced using the latest in modern plastics, including acrylic as well as celluloid.²⁰

In addition to streamlining, non-sac filling systems and ink viewing features became incredibly popular and sometimes appeared together. Users were tired of sac fillers whose latex bladders would gradually age and burst. Two of these new non-sac fillers were the Parker Vacumatic and the Waterman Patrician. Though these pens were technically sac-less, they each

²⁰ “RichardsPens.com • Design Features: Plastic and Resin: Two Names, One Thing,” accessed November 1, 2015, <http://www.richardspens.com/?page=ref/glossary/A.htm>; Binder, *The RichardsPens Guide to Fountain Pens: Glossopedia*, vol. 1, pt. 75.

still used a latex diaphragm, which attached internally to the distal end of the pen body. These diaphragms were extended and retracted to produce vacuums that drew ink directly into the transparent or semi-transparent barrels, where users could then view the ink level. Despite the continued presence of the latex diaphragm, consumers were thrilled with the useful ink view and the larger ink capacities of these new pens. Though, the idea of an ink view was at least as old as 1903, when L.E. Waterman had produced an eyedropper pen using bakelite (an semi-transparent synthetic plastic), the bakelite models were not popular because the material was more brittle and more expensive than similar hard black rubber pens.²¹ Therefore, innovation was necessary to make an ink view a more viable option. Using uncolored (i.e., transparent) celluloid, this option became more viable. Most modern piston fillers still feature ink views, testifying to their continuing popularity among users.

WWII Era (1939-1949)

As the smoke singed the sky above Pearl Harbor, it became clear that the United States was once more going to war. As war production proceeded to influence all other aspects of American life, fountain pens were no exception. Like many other industries, the U.S. government commandeered some fountain pen factories, including those of Sheaffer, Parker, and Wearever. Instead of Balances, Sheaffer's employees produced bomb sights. Similar conditions existed in the Wearever facilities, where they produced, among other things, components for military vehicles.²² Since fountain pens were not deemed necessary for the war effort, their production was curtailed significantly and their materials were limited, especially metals.²³ However, the 1940s witnessed improvements in thermoplastic molding and plastics manufacturing, which helped counter the limited availability of certain metals, for instance the

²¹ Martins, Leite, and Gagean, *The Chronicle of the Fountain Pen*, 31.

²² "RichardsPens.com • Design Features: World War II and Its Effects on Pen Design," accessed October 26, 2015, http://www.richardspens.com/?page=ref/design/wwii_design.htm.

²³ Ibid.

aluminum that comprised the filling mechanism in Parker's Vacumatic was replaced with a more precision-made plastic.²⁴

Notwithstanding these obstacles, the fountain pen industry rushed to meet the needs and opportunities the war produced. One of the greatest fountain pen innovations appeared early in 1941. The "Parker 51" would change fountain pen industry and image irrevocably. The Parker 51's namesake is not entirely clear. Some 1941 advertisements claimed the pen was a decade ahead of its time; others say the model was so named because the Parker Company was celebrating its 51st anniversary. A commercially expedient explanation claimed Parker chose the number "51" because it would easily translate into any language (unlike, for instance, the "Vacumatic") and, thus, more readily appeal to international markets.

Regardless of the name's origin, the pen was revolutionary.²⁵ Made possible by those new thermoplastics technologies, the 51 had a small, hooded, gold nib. The reduction of gold needed to produce this miniature nib allowed Parker to save money while maintaining the quality, corrosion resistance, and springy writing performance of a gold nib. Beneath the pen's shell and behind the hooded nib, was a new type of feed that Parker called a "collector." Compared to traditional feeds based on the fissured Waterman design, this monstrous conical collector surrounded the small nib inside the pen body, allowing the pen to more store and distribute ink more efficiently to avoid skipping regardless of writing speed. That is, a writer could not out-write the immediate ink supply of the collector before running the pen completely dry. This reliability and the smooth, consistent writing performance earned the 51 immediate popularity.

The 51 resolved two of the remaining problems with fountain pens. One was ink drying time. Fountain pen ink traditionally dried via evaporation once applied to a page. This lent itself to smudges if writers were careless or hurried. With the 51s unveiling, Parker also released the identically named "51 ink" which used sodium hydroxide as a base. This ink dried with

²⁴ Ibid.

²⁵ Martins, Leite, and Gagean, *The Chronicle of the Fountain Pen*, 221.

unprecedented speed, but was also highly corrosive, so much so that it was quickly replaced with a reformulated “Superchrome” ink.²⁶ This ink, too, however, was highly corrosive, with a pH of 12!²⁷ For comparison, few modern inks pass 9.5 on the pH scale, making Superchrome about 200% more alkaline than modern “high” ph inks. Superchrome was marketed to only work in the Parker 51, as few if any other pens could long withstand its aggression.

Just as it had for WWI, Parker tailored its ads with patriotic phrases and imagery. The Parker 51 campaign was its most resounding success in evoking nationalism to market a fountain pen product. One of their most famous 51 advertisements displays a P51 Mustang, diving at a 45° downward left angle; beneath and parallel to the plane is an illustration of the Parker 51. The title declared, “These famous P-51’s have more than a name in common!”²⁸ Other advertisements of the same campaign drew additional comparisons between the two technologies, for instance, about their mutual large capacities for fuel or ink respectively, and that both used a new plastic called Plexiglas, which Parker called Lucite. Their mutual aerodynamic appearances meant superior performance and handling were wrapped in an attractive, but subtle exterior.²⁹ The language in Figure 1: Parker 51 and P51 Mustang Advertisement in particular displayed how Parker brilliantly used wartime materials rationing and fountain pen production limitations to their advantage—they praised the 51’s quality and performance, only to tell consumers they could not yet purchase one because of wartime production limits. This advertisement also showed how the Parker Pen Company was manufacturing “primers, fuzes, parts for aircraft engines (including the P-51 Mustang) and a long list of vital war equipment.”³⁰ This advertising campaign masterfully promoted Parker on

²⁶ “The Parker ‘51,’” *RichardsPens*, accessed December 3, 2015, <http://www.richardspens.com/?page=ref/profiles/51.htm>; “RichardsPens.com • Pen Glossopedia: F,” accessed December 13, 2015, <http://www.richardspens.com/?page=ref/glossary/F.htm>.

²⁷ “RichardsPens.com • Pen Glossopedia: F.”

²⁸ “Ministry of Plenty,” accessed December 1, 2015, <http://eliweisz.tumblr.com/post/128022450281/1944-parker-51-pen-ad-the-famous-p-51s-have-more>.

²⁹ Richard Binder, “War and the Fountain Pen,” accessed September 6, 2015, http://www.richardspens.com/?page=ref/history/war_and_fp.htm.

³⁰ Parker Pen Company, *These Famous P-51’s Have More than a Name in Common!*, 1944, http://www.richardspens.com/?page=ref/history/war_and_fp.htm.

multiple fronts. It placed blame for the lack of 51s on the war rather than the manufacturer while still shamelessly tempting consumers with the pen's new features. Moreover, the inclusion of the P-51 Mustang imagery and the lengthy list of war articles Parker produced highlighted Parker's patriotism and faithfulness to the war effort. The campaign was a tremendous success, as witnessed by high sales of Parker 51's after war rationing was lifted, and the fact that Parker 51's are some of the most highly sought after fountain pens by modern collectors.³¹

Some fountain pen collectors and authors discuss the material shortages caused by WWII in predominantly negative terms, focusing more on how the materiel rationing bolstered third-tier pen production with shoddier materials rather than on how those shortages also forced innovation³² A more holistic analysis reveals, however, that WWII's material shortages and technologies produced some positive results for the fountain pen, like the Parker 51; more durable thermoplastics like Lucite; and new quick-drying ink formulations like Superchrome, which would inspire less corrosive, quick drying inks for left-handed writers in subsequent decades.

The Parker 51 was probably the greatest innovation born of lack, but it was not the only fountain pen design to garner attention in the shadow of WWII. Second and third tier pens also continued to capture substantial sectors of the market. Once more, rationing included aluminum, certain plastics, and the high quality hard metals needed for lasting nib tipping. Though it was true that some of the worst fountain pen producers carried over the corner-cutting measures that third tier pens made popular during the Depression era, it was also equally true that some of these lower tier producers in the WWII era manufactured some impressive writing instruments—Esterbrook's J series or Wearever's Pacemaker, for instance. Capitalizing on its characteristic interchangeable nib unit system called "Renew-Point," Esterbrook made having multiple writing points simple, and consumers valued the ability to easily swap nibs for different writing needs—an extra fine for checkbook posting, an italic for personal correspondence, a firm medium for

³¹ "The Parker '51.'"

³² Jonathan Steinberg, *Fountain Pens: Their History and Art* (New York, NY: Universe, 2002), 109.

general writing, etc.³³ Yet, since steel was critical to the war effort, Esterbrook was forced to alloy their 8000 series Renew-Point nibs with a more precious metal (palladium); this significantly increased the value of these particular Esterbrooks.³⁴

Additionally, while second and third tier pens were not accompanied by the lifetime warranties issued with expensive Sheaffer and Parker flagship pens, the reasonable cost to replace a damaged Esterbrook nib was a great value and saved the pen owner the time and hassle of sending a damaged pen to the manufacturer for maintenance. Like Esterbrook, Wearever did produce limited high quality pens before ultimately becoming known for its \$1.00 Pennants; for example, its WWII era Pacemaker, which had a gold nib and was composed of quality plastics. However, the pen had a tale-tell sign of its war time construction—its blind cap is a virtual match for a US Army jeep tire valve cap, which, not coincidentally, was one item produced in requisitioned Wearever factories during the war (See *Figure 2: Wearever button filler cap*).³⁵

Aside from the pen innovations wrought by the war, related accouterments like ink also adapted. Though Parker's Superchrome and 51 inks were nightmarishly corrosive and fell out of use quickly, they did succeed in entrenching a desire for a faster drying ink. Moreover, Superchrome was not Parker's only ink innovation of the era. "Microfilm Black Quink" made its debut in the early 1940s with the claim it was ideal for the microfilming process. Microfilming was a key component in a new communication medium introduced by the US military called the "Victory Mail" or "V-mail" system.³⁶ Developed during WWII by the Kodak Company, V-mail drastically reduced bulk air mail space, "fitting the equivalent of 37 mail bags worth of letters into just one."³⁷ The microfilming process worked as follows: a soldier's spouse, parent, etc.

³³ "RichardsPens.com • Nibs: The Renew-Point, by Esterbrook," accessed December 12, 2015, http://www.richardspens.com/?page=ref/nibs/renew_point.htm.

³⁴ Ibid.

³⁵ "PenHero.com - PenGallery - Wearever Pacemaker," accessed November 16, 2015, <http://www.penhero.com/PenGallery/Wearever/WeareverPacemaker.htm>; Binder, "War and the Fountain Pen"; "RichardsPens.com • Design Features: World War II and Its Effects on Pen Design."

³⁶ *The National WWII Museum | New Orleans: Learn: For Students: Primary Sources: V-Mail*, accessed September 6, 2015, <http://www.nationalww2museum.org/learn/education/for-students/ww2-history/take-a-closer-look/v-mail.html?referrer=https://www.google.com/>; "Victory Mail - Online Exhibit," accessed December 1, 2015, <http://postalmuseum.si.edu/victorymail/>.

³⁷ *The National WWII Museum | New Orleans: Learn: For Students: Primary Sources: V-Mail*.

would buy purpose-made V-mail stationery that folded into its own envelope. The standardized size of this paper limited letters to a single page, but also allowed more uniform (i.e. faster) processing. After writing and sending the letter to his or her soldier, the letter was received by domestic US military elements who opened, censored (though this applied more to return letters from battle zones), and microfilmed it along with thousands of others. The rolls of microfilm were then loaded into airplanes and flown to Europe or the Pacific, where they were opened, enlarged, re-printed to their original dimensions, and distributed to troops.³⁸ V-mail offered a cheaper alternative to airmail while also being faster than ship-delivered correspondence. It was also valued by the military because it simplified censoring outgoing mail.³⁹ That the Parker Company created an ink specifically for the V-mail process illustrated their responsiveness to wartime needs, both from business and patriotic perspectives.

Despite material rationing, intensely corrosive inks, or commandeering of factories, the greatest challenge to face the fountain pen coming out of WWII was the prototype ballpoint pen. László Bíró, the credited inventor of the ballpoint, conceptualized the design in the early 1940s but did not receive a US patent until 1945.⁴⁰ This was the same year that the ballpoint first became commercially available in the United States. Observing the modern pervasiveness of the ballpoint, it is difficult to believe that it had an inauspicious start. The ballpoint leaked, among other faults, and generated distrust of the expensive new writing utensil. When Milton Reynolds brought the “Reynolds International” ballpoint to American consumers in late 1945, it was under-designed and retailed for \$12.50, or about \$166.00 in 2015 buying power.⁴¹ The backlash was rapid. Ironically, the disaster of Reynolds’s launch, while certainly damaging him personally, was possibly an even bigger blow to Eversharp, which had possessed ambitions to

³⁸ Ibid., fig. 3.

³⁹ *The National WWII Museum | New Orleans: Learn: For Students: Primary Sources: V-Mail.*

⁴⁰ Martins, Leite, and Gagean, *The Chronicle of the Fountain Pen*, 237; “RichardsPens.com • Richard’s Collection, Vintage American Ballpoint Pens & Pencils, Page 3,” accessed December 12, 2015, <http://www.richardspens.com/?page=xf/2010/03.htm>.

⁴¹ “CPI Inflation Calculator,” accessed December 2, 2015, <http://data.bls.gov/cgi-bin/cpicalc.pl?cost1=12.50&year1=1945&year2=2015>; Binder, “RichardsPens.com • Richard’s Collection, Vintage American Pens, Page 7.”

introduce the ballpoint to American consumers. After all, Eversharp had legally acquired Bíró's patent and had been working since 1943 to perfect the ballpoint and offer it alongside their fountain pens. Reynolds, who had stumbled onto Bíró's prototype ballpoints abroad, brought them back to the United States for some hasty reverse-engineering, only to dump them on the market before Eversharp. Stunned, Eversharp, unwilling to miss out on the excitement surrounding the product launch that ought to have been theirs, prematurely launched their ballpoint, called the "CA." When their model floundered beside Reynolds's due to mechanical malfunctions, the company suffered a mortal wound from which it would never recover.⁴² Though the ballpoint would ultimately dominate the market of personal writing utensils, its poor debut in 1945 actually drove many customers back to the familiar fountain pen.

Though modern ballpoints are inexpensive and functional, anyone who has composed more than 300 consecutive words with one will understand the twinge of carpal pain that results from vertically bearing down while horizontally dragging rightward to roll words into existence. Any decent fountain pen, however, will write under the pressure of its own weight, requiring only gentle guiding flicks of direction to create words on a page. Today, despite the pervasiveness of the ballpoint and personal computer, the legacy of the fountain pen in America is a positive one, so much so that the fountain pen is experiencing a market rebound. Though it is impossible to conceive fountain pens could ever again overtake the \$0.25 Bic, there is, nonetheless, fast-growing interest in fountain pen culture, which computer-engineer-turned-pen-restorer Richard Binder attributes to the de-personalization of the digital age. "More and more," he says, "people seem to be turning away from the isolation—the computerization—of the Internet, and computers, and phones."⁴³

Today major fountain pen companies are well and thriving in Germany, France, India, Japan, China, and the United States. Despite the advent of computers and the Internet,

⁴² Martins, Leite, and Gagean, *The Chronicle of the Fountain Pen*, 237; Binder, "RichardsPens.com • Richard's Collection, Vintage American Pens, Page 7."

⁴³ National Geographic, *Fountain Pens Are Actually Fascinating*, 2015, <https://www.youtube.com/watch?v=nDra9j9POkU>.

handwriting is still an important communication medium. Script is intensely personal in ways keyboards and voice-to-text technologies cannot mimic. In observing the development of the fountain pen over the twentieth century, specifically how it evolved to survive and serve through two World Wars, the Great Depression, and now ballpoints, it becomes clear that fountain pens are characterized by their flexibility to adapt to changing circumstance, even under tremendous pressure and competition. The simple principles guiding how every fountain pen functions—water-based ink flowing via capillary action and maintained flow through a simple air-ink exchange rate—is as unpretentious and reliable a writing mechanism imaginable; this, combined with unparalleled operational ergonomics, quality construction, and ink versatility, has earned the device a lasting place in the pockets and hearts of writers the world over.

CHAPTER 2: Decline: How the Ballpoint Became America's Pen

When the Parker Pen Company launched their famous “51” model fountain pen in 1941, many considered the design the long-awaited solution to the lingering complaints associated with fountain pens. With a large ink capacity, rapidly drying ink, incredibly reliable flow owing to a new feed system, and an overall sleek appearance, the 51’s appeal upstaged the competition, inspired knock offs, and was a Parker best seller for several decades.⁴⁴ Yet, in the same year the pen launched, the United States entered WWII, which meant material rationing. As a result, the Parker Pen Company could not produce the 51 for widespread public consumption despite a promising launch; nonetheless, their advertising campaign for the 51 was highly visible during the war, and public enthusiasm remained stoked by a limited production of 51s. Though it was years before most customers could actually buy the pen, the promise of the Parker 51 captivated audiences, and post-war sales were extremely lucrative. Soon, the 51 became a widely recognizable American icon, which only helped to bolster its already great popularity both at home and on international markets.⁴⁵ Testifying to the 51s lasting popularity and quality, the modern fountain pen community still considers the 51 one of the most reliable fountain pens ever produced, with many 51s in 2016 still operating with all-original parts.⁴⁶

Yet in the final months of 1945, as the war ended and Parker 51 sales exploded, a new, upstart pen called a “ballpoint” debuted in America. Onlookers gazed on in astonishment, and retailers rapidly sold out of their limited supplies of the roller-based oddity. Nonetheless, without the longstanding history of quality represented by the “Big Four” fountain pen producers,⁴⁷ and with 51 sales climbing, many considered the “ballpoint” primarily as a novelty, especially when

⁴⁴ Michael Fultz, Daniel Zazove, and Geoffrey Parker, “The Development of the Parker 51,” *The PENnant* XVI, no. 1 (Spring 2002): 10–13.

⁴⁵ The Parker Pen company had been commandeered during WWII, where they produced P-51 Mustang elements; their advertising campaign for the 51 drew on parallels with the famous fighter plane and the company’s patriotic service. Additionally, General Dwight Eisenhower used a 51 to signed the German surrender and was famously photographed holding the 51 and another pen in a “V” for victory shape after the surrender.

⁴⁶ David Nishimura, “Parker 51,” *Vintage Pens and Writing Equipment*, 51, accessed November 1, 2016, http://www.vintagepens.com/Parker_51.shtml; “The Parker ‘51,’” 51.

⁴⁷ The “Big Four” refers to the Parker, Sheaffer, Waterman, & Wahl-Eversharp companies, which held the lion’s share of the pen markets in the United States when the ballpoint appeared.

early ballpoints had widespread leaking issues.⁴⁸ Compared to the proven design of fountain pens like the 51, ballpoints looked like a short-lived fad. Yet, by the dawn of the 1950s, the ballpoint was sidelining fountain pens in sales, and by the 1960s, it had secured itself the title of the most common handwriting tool for most Americans. Why and how did nascent ballpoint pens replace fountain pens—at the height of their technological development—as American’s standard handwriting instrument? In examining the victory of ballpoints over fountain pens, it becomes clear that this transition was not only a reflection of personal preferences, but also of larger consumption trends and changing writing needs within American society.

In a 1951 column of *The New Yorker* called “Where Are They Now?” Thomas Whiteside related the tale of Milton Reynolds—the man who introduced America to the ballpoint pen. Though Milton Reynolds had no affiliation with any pen manufacturer, he did understand the value of novelty and the power of advertising. Investing in niche businesses and withdrawing before incurring long term obligations (with accordingly boom and bust results) was how Reynolds made his living. So, when he stumbled across some of László Bíró’s⁴⁹ prototype ballpoints in South America, he purchased a few. He then sought to circumnavigate copyright infringement on the Eversharp Pen Company (which owned the North American patents for Bíró’s design) by reverse engineering his own ballpoint with a slightly different ink flow mechanism. The questionable maneuver satisfied the Patent Office; more importantly, the move allowed Reynolds to produce and market his pens before any of his competitors, including a furious Eversharp. Reynolds’s ballpoints, expensive and imperfect as they were, quickly changed how Americans thought about writing and pens. Though the “Where Are They Now?” column was inquiring about Reynolds’s ultimate fate, this 1951 article could as easily have been asking the whereabouts of the millions of fountain pens no longer being used thanks to Reynolds. The following will provide some historic background, first on the fountain pen and then the ballpoint,

⁴⁸ Elbridge W. Stein et al., “Ball-Point Pens: Use for Signing Legal Documents Considered,” *American Bar Association Journal* 34, no. 5 (1948): 373.

⁴⁹ László Bíró is widely regarded as the inventor of the ballpoint pen. There were earlier patents for ball-and-socket ink application devices, but Bíró was the first to produce his patented design.

before moving on to discuss how these pens interacted in an age of increasing consumerism, new compositional devices, and changing attitudes about desirability, revealing the several elements leading to the fountain pen's demise and the rise of the ballpoint as America's standard pen of choice.

Strengths and weaknesses of the fountain pen

The fountain pen replaced the centuries old dip pen, which had taken various forms over its lifetime including reed, feather quill, and steel nibs. The fountain pen was readily embraced by middle and upper class Americans, as it was more portable than the dip pen, more lasting than pencils, and more robustly made than both. The fountain pen was still the most popular personal writing instrument even following the widespread adoption of the typewriter—once more owing to its portability and (relative to a typewriter) its price. Since thirty-pound typewriters could not fit into a coat pocket, the fountain pen survived despite and beyond this competitor.⁵⁰ To this end, portability, quality construction, and permanent ink⁵¹ were the central selling features of the fountain pen for the first half of the twentieth century. Fountain pens unchained journalists, entrepreneurs, travelers, students, and soldiers from the desk, and made high quality writing experiences possible anywhere. Even many third tier⁵² economy fountain pens, because of the lubricating and capillary effects of water-based fountain pen ink, produced relatively effortless writing. The “fountain” element of early fountain pens was its internal ink storage, which could produce tens of pages’ worth of handwriting, depending on variety of factors, before requiring a refill; by comparison, dip pens commonly lasted a couple of lines, or at most a single page, before needing to be dipped again.

⁵⁰ Though the use of the typewriter and its inheritors did ultimately influence handwriting's role in society and business, as will be explained further on.

⁵¹ “Permanent” fountain pen ink was not waterproof, but neither was early ballpoint ink. The descriptor “permanent” in these early fountain pen inks instead refers to their non-fading quality. Since the 2000s, however, Nathan Tardiff's *Noodlers* brand inks are genuinely permanent fountain pen inks.

⁵² Third tier: “Term applied to a pen of relatively poor quality, made with thin celluloid or other body material, with thinly plated furniture and almost always having an untipped steel nib. Also applied to a manufacturer of such pens.” Binder, *The RichardsPens Guide to Fountain Pens: Glossopedia*.

Fountain pens, as an American invention, reveal much about late nineteenth and twentieth-century ideas surrounding the ideal writing experience. Dip pens had performed adequately as writing tools for centuries, and steel dip pen nibs were inexpensive by the time L.E. Waterman introduced his pricey “Ideal” fountain pen in the late 1880s. Why, then, would consumers have opted for a more expensive writing utensil that was essentially a dip pen with an internal ink reservoir? That people did in fact make that choice illustrated, first, that those in the American, European, and later Asian markets all wanted a portable, fashionable, smooth writing experience. Yet, the desire for novelty is often checked by reticence to stray far from the trusted. As Henry Petroski illustrates in his *Evolution of Everyday Things*, innovation and familiarity must maintain a balance; too much divergence from the functioning familiar can inhibit consumption.⁵³ Thus, unlike its contemporary competitor in the stylographic pen,⁵⁴ which appeared and functioned quite differently from the dip pen, the fountain pen borrowed heavily on the dip pen in form and function, but with several major improvements. The fountain pen retained the metal nib—the roughly triangular “point” of the pen, often made of gold or stainless steel; it functions to transfer ink from the pen to the page through a longitudinal slit, using the simple principles of gravity and capillary action. The continued use of gold as a nib material owes to the corrosive nature of earlier European iron gall inks (against which gold is more immune than steel) as well as the aesthetic appeal of gold. Moreover, fountain pen nibs varied in their styles and function; for instance, soft flexible nibs permitted the line variation necessary for Spencerian penmanship, while hard manifold nibs permitted the pressure needed to produce carbon copies. The fountain pen also retained the dip pen’s smooth writing movement via liquid ink. Overall, there is a strong reflection of the dip pen in the fountain pen—far less than the fountain pen will share with its successor in the ballpoint.

⁵³ Henry Petroski, *The Evolution of Useful Things: How Everyday Artifacts: How Everyday Artifacts - from Forks and Pins to Paper Clips and Zippers - Came to Be as They Are*, Reprint edition (New York: Vintage, 1994), 170.

⁵⁴ Stylographic pens were subsequently favored for drafting and technical drawing, but not for general writing. See “Design Features: Stylographic Pens,” *RichardsPens.com*, accessed September 20, 2016, <http://www.richardspens.com/?page=ref/design/stylos.htm>.

Yet, for all their similarities, the fountain pen differed from the dip pen in some key ways, one of which was that the fountain pen's ink reservoir enabled much longer writing sessions. Ink reservoirs were refilled by the pen user from a bottle of ink; the mechanisms facilitating that filling process ranged from simply using an eyedropper to fill the hollow body of the pen with ink to (eventually) the complex Sheaffer "Snorkel" filling mechanism, which used a retracting filling tube and vacuum elements to fill the pen's reservoir. The most popular filling mechanisms fell in between these two designs in terms of complexity and were easily repaired by the owner or pen distributor in the event of malfunction or normal wear. Also—unlike pencils, dip pens, ballpoints, and some typewriters—a top quality fountain pen was designed to last decades, and some even came with "lifetime" warranties. Fountain pens represented lightweight durability and quickly adopted new technologies to ensure high quality, lasting products. The heartiness of fountain pens was a major selling point, possibly best personified in Parker's 1926 advertisement series wherein the company dropped new celluloid-plastic "Duofold" models from twenty-five story buildings, airplanes, and even the top of the Grand Canyon to prove how robust their designs and materials were.⁵⁵ These lifetime warranties came to be expected for top tier pens. Unfortunately, this tradition would lead the Eversharp company into bankruptcy when—in competing with Milton Reynolds's ballpoints—they extended their warranties to their nascent ballpoint lines as well as their traditional fountain pens. When the ballpoints were a commercial and mechanical failure, the resulting warranty coverage and reputation costs for Eversharp were damning.⁵⁶ While this chapter considers how the ballpoint pen *indirectly* led to the commercial decline of the fountain pen, when considering Eversharp, readers see that the world famous fountain pen producer was directly undermined by its interaction with the ballpoint pen.

Besides lasting quality, fountain pens were designed to be personal writing instruments. Early ballpoint pens varied only in the diameter of the ball bearing (line width) and between a

⁵⁵ "PenHero.com - PenGallery - Parker Duofold Flat-Top Pens 1921-1929," accessed September 21, 2016, <http://www.penhero.com/PenGallery/Parker/ParkerDuofoldFlatTop.htm>.

⁵⁶ Thomas Whiteside, "The Amphibious Pen," *The New Yorker*, February 17, 1951, sec. Where Are They Now?

handful ink color choices. The ballpoint's lack of personality in these regards was a weakness commonly noted by contemporaries, some even citing it as a forgery concern. One late 1940s Waterman spokesperson was recorded as saying, "Take a look at the Constitution of the United States. You can't get that variety of signatures with a ball," while the Parker Pen Company considered the ballpoint "the only pen that will make eight carbons and no original."⁵⁷ Aside from insinuating a lack of personality, the Parker quote was also asserting that ballpoint pen ink in the late 1940s was so unreliable that only the rolling ball would work, thus producing carbon copies without ever applying ink to the original page. Tellingly, both Waterman and Parker eventually produced ballpoint lines, and Parker's "Jotter" ballpoint became one of the company's most popular products. This gradual transition in sentiment by major pen manufacturers illustrated how pervasive the ballpoint became; even the titans of the fountain pen industry were forced to adapt. Though they had all produced mechanical pencils alongside their fountain pens for years, the idea of producing ballpoints was anathema to some traditionalists within the industry.⁵⁸

Unlike the alleged lack of personality found in ballpoints, fountain pens were designed to fit specific handwriting styles and particular writing tasks. Aside from standard line widths (extra fine, fine, medium, broad), fountain pen nibs might also be flexible (which mimicked traditional dip pen strokes), manifold (non-flexible for producing carbon copies), or italic (includes "stub," "crisp" and "cursive" italic point grinds). Fountain pen nibs might also have a double slit, forming a "music" nib; music nibs were valued for their extra flow and forgiving writing angles, both of which were useful when composing music on non-ideal writing surfaces. There were also variations that combined some of these characteristics, like flex italic nibs and even adjustable nibs (e.g. Wahl-Eversharp's adjustable "Personal Point"), which could adjust from a hard manifold to a soft flex nib by using an adjustable slider. Unlike most dip pen nibs, fountain pen

⁵⁷ Ibid., 50.

⁵⁸ Pencils and pens are sold in sets because their purposes are complementary, yet distinct. A pencil's graphite mark is purposefully erasable while pen ink is intentionally permanent once on the page. For more on pencils, see Henry Petroski's *The Pencil*.

nibs were made using corrosion-resistant gold or stainless steel *and* tipped with hard metals that provided a long-lasting wear. If users did not desire a special nib, standard equipment was a gold nib with a fine or medium “round” grind that favored general composition and a variety of writing angles. As the sheer number of nib materials, tipping styles, aesthetics, and writing characteristics testify, buying a fountain pen was a personal experience. First-tier pens did not come in identical plastic cartons stacked on store shelves. Instead, they were prominently displayed in glass cases, much like jewelry. Prospective buyers would interact with the retailer—asking questions and testing different pen and nib combinations to arrive at a bespoke writing tool. Their personalized pen would then last many years and only grow more attuned to the user’s handwriting as the tipping slowly wore to match the writer’s grip and writing angle.

Yet, by 1945, evidence of the fountain pen’s shortcomings was all too familiar to many users. The pens would dry out if left uncapped too long; they were subject to heat and pressure changes, often resulting in stray ink drops on paper, hands, and clothing (especially egregious for those partaking in the burgeoning air travel industry). Fountain pens also had to be refilled relatively often, and forgetting to do so regularly meant consistently empty pens. Additionally, accidentally dropping an uncapped pen in a nib-down orientation irrevocably bent the tines, and those prone to heavy handwriting could easily “spring” or over-exert their nibs by pressing too hard, also ruining the pen, at least until they could get a replacement nib. Fountain pens with latex sac ink reservoirs had a one to five-year lifespans before requiring a new sac, and fountain pen ink was a doubled edged sword. Being water-based, the same easy flowing nature that made fountain pen ink so smooth also prevented it from drying rapidly on the page, resulting in smudged writing, inky hands, and ruined shirt sleeves. The problem was even worse for left-handed writers, whose dominant hand might contact recently written ink long before its average drying time of 15-30 seconds. Fountain pens were also expensive, serving as much as status symbols as writing utensils. Unless a casual writer genuinely needed the portability and convenience of a fountain pen, it was still far cheaper to use dip pens or pencils.

Strengths and weaknesses of the ballpoint

The origin story of the ballpoint rings similarly fateful to L.E. Waterman's and his "Waterman Ideal" fountain pen in that both pens were allegedly invented because their innovators were frustrated by their old writing instruments. Though possibly embellished, the first consistently reliable fountain pen feed was produced by insurance salesman L.E. Waterman in the 1880s, and was invented because prototype fountain pens dripped ink unpredictably when writing. Several decades later, in 1936, a Hungarian man named László Bíró had a similar breakthrough. Bíró's varying careers had significant writing demands. Bíró, however, was heavy-handed with his fountain pens, which meant he often damaged them. An inventive mind, he (depending on story variants) either saw a child's ball roll through a puddle while outside a café, or else saw a ball bearing roll through some ink on his desk; regardless, either sight would have accorded him the observation of a residual trail behind the rolling spherical object. Though Bíró was certainly not the first person to consider the writing potential of a ball-tipped pen, he was the first to bring to bear enough funding and specialization to move the idea significantly beyond the patent stage (*Figure 4: Image from Bíró Patent US2390636 A*).⁵⁹ Soon, Bíró's designs found markets all over the globe.

By late 1946, the Parker Pen Company had received a plethora of inquiries from their retailers about what Parker intended to do about the new ballpoints, which had been on the market for nearly one year. In their employee newsletter *Shoptalk*, Parker issued an official corporate response titled "Ball Point Pens- Our Slant." K.P. issued a surprising stance on behalf of the company. "Anybody rash enough to stand up and say that 'ball pens are no good and never will be,'" he declared, "is being overly rash."⁶⁰ He professed that Parker was not only aware of the ballpoint's pervasiveness, but also had numerous employees testing those commercially available while simultaneously producing "hundreds of models" of its own. Yet, none of those

⁵⁹ György Moldova, *Ballpoint: A Tale of Genius and Grit, Perilous Times, and the Invention That Changed the Way We Write* (North Adams, Mass: New Europe Books, 2012), 19–21; Jozsef Biro Laszlo, Writing Instrument, US2390636 A, filed June 17, 1943, and issued December 11, 1945, <http://www.google.com/patents/US2390636>.

⁶⁰ K.P., "Ball Point Pens - Our Slant," *Parker Pen Shoptalker* 1, no. 11 (November 1946): 3.

prototypes had outperformed the ballpoints already on the market, and even if they had, none of the designs were congruent with Parker's quality standards. Thus, unlike Reynolds and Eversharp, Parker invested significant sums into long-term research on their ballpoint models before bringing them to market—culminating in the 1954 introduction of the “Jotter.”⁶¹ Though the Jotter was a relative latecomer to the ballpoint game, it proved tremendously successful because it bypassed all the mechanical failures (and reputational damage) incurred by earlier models.

As indicated by Bíró's original patent, early ballpoints functioned by means of a small ball bearing operating inside a conical metal housing, which was smaller in diameter before the sphere (opening onto the paper) and pinched behind; this effectively pinned the sphere in place, though not so tightly as to prevent omni-directional rotation.⁶² Connected and rearward of this apparatus was a thin tube filled with viscous ink. Though there are variations on the ballpoint design, the basic physical principles are essentially the same; like a fountain pen, the ink in a ballpoint also used capillary action, though not at the point of contact with the paper, but instead in how the ink flows down the tube and onto the applicator ball bearing. The flow of ballpoint ink was also substantially slower than in a fountain pen. This was because ballpoint ink was quite viscous; it had to adhere to the ball-bearing, lubricate the balls omni-directional movement, but also peel off onto the paper and dry instantly. Too thick and the ink clogged in the pen; too thin and it leaked past the ball-bearing and into unsuspecting shirt pockets. This unreliable ink flow was the primary plight of the first commercially available ballpoint pens.

Yet, for all its faults, the ballpoint pen successfully addressed some common criticisms of the fountain pen, including having a much longer lasting ink reservoir and (ultimately) being significantly cheaper. In doing so, the ballpoint simultaneously represented a new way of thinking about writing; it was an unprecedented writing tool with unprecedented possibilities for both producers and consumers. First, ballpoints would come to symbolize a new kind of

⁶¹ Binder, “RichardsPens.com • Richard's Collection, Vintage American Pens, Page 7,” pt. “Jot It Down.”

⁶² Ordway Hilton, “Characteristics of the Ballpoint Pen and Its Influence on Handwriting Identification,” *The Journal of Criminal Law, Criminology, and Police Science* 47, no. 5 (1957): 607, doi:10.2307/1139043.

disposable writing instrument. Though the ballpoint was not the first disposable writing instrument (consider quills, steel nibs, and wooden pencils), they were the first self-contained, permanent ink pen intended for temporary use. However, this disposability characteristic was an evolution on the original ballpoint design. Earlier ballpoints were priced much more like high quality fountain pens, the earliest models being robust, machined aluminum. There was no intention to make early ballpoints disposable, and even Reynolds's pens were designed to be returned to the factory for refilling once empty (though they were more readily returned for their proclivity to stain shirt pockets, sometimes along with the stained clothing).⁶³ Only later did ballpoints take the form of disposable plastics as part of a larger shift toward ephemeral convenience—a shift the fountain pen fundamentally could not follow.

Additionally, the relationships between ballpoints, typewriters, and traditional cursive handwriting encouraged the ballpoint's success. As the typewriter occupied an ever-increasing role in schools, businesses, and government, cursive handwriting became less useful.

So what role does the decline of cursive play in the decline of the fountain pen? Cursive was the most common script before the ballpoint pen *because* nibbed pens favored connected lines. Fountain and dip pens made marks with light contact with the writing surface because the ink transfer mechanism works using capillary action and. Additionally, the faint feedback of a stationary (i.e. non-rotating) writing point combined with the wetter ink of a fountain pen encouraged more careful character formation. That is, fountain pens felt “wetter,” than standard ballpoints; like butter in a hot skillet or oil in a door hinge, the ink lubricates the movement of the pen point. As a result, fountain pens emphasize steady, consistent handwriting—too slow and the ink will “bleed” through the page under a stilled nib; too fast or at non-traditional writing angles and the pen will skip, snag, or splatter. Using a fountain or dip pen to produce non-connected manuscript letters compromises this lubricating effect. As a result, this can alternatively make fountain pens feel scratchier because of excessive lifting and repositioning for

⁶³ Whiteside, “The Amphibious Pen,” 48.

each letter, or can cause extra ink to pool for specific characters because it cannot flow evenly across two or three connected characters.

Thus, for non-cursive writers, ballpoints enable speedier handwriting compared to fountain pens, especially for those with non-traditional writing grips; however, anyone who has observed a busy doctor's prescription or waiter's handwritten receipt knows that speedier handwriting does not always equate with more efficient communication or legibility. Though ballpoints were regularly praised for being omni-directional, fountain pens with a regular "round" or "ball" nib tip shapes function similarly, but must be wielded more carefully to achieve any non-traditional stroke (i.e. any stroke not commonly found in cursive writing—for instance, a rapid up-and-left line at 135 degrees). Thus, the omni-directional capacity of ballpoints is praised not because fountain pens could not make the same strokes, but because ballpoints could make them much easier and faster.

Aside from omni-directional strokes, the ballpoint's deployment from pocket to paper became easier as well. The ballpoint's self-contained roller-and-ink unit found fresh application in retractable or "clicking" pen forms. The height of convenience, a retractable ballpoint could be brought to bear on the writing surface with a one hand in a singular fluid motion; compared to the two-handed un-capping and posting ritual for fountain pens, the retractable ballpoint was faster, and there was no fear of losing the cap.

Additionally, the ballpoint's cheaper production price and body materials made it a prime medium for advertising. Though the fountain pen had operated as a form of advertisement for pen makers through its attention-grabbing portability and identifiable clips, the promotion was relatively subtle. Conversely, the ballpoint advertised directly, and for businesses besides the pen manufacturer. That is, aside from a ballpoint being recognized as a Papermate product, for instance, it also could advertise other business entities whose names and contact information could be directly printed on the disposable ballpoint. To this day, virtually any bank, automotive repair shop, or medical office has a ready supply of free ballpoint pens plastered with promotional materials. The feasibility of advertising on quality fountain pens had been virtually

nonexistent; they were too expensive. On increasingly cheap ballpoints, however—where writing performance was consistent and pens were less personal—the potential for pervasive and cheap advertising was an immediate success. Together, the capacities for effortless omni-directional writing, retractable pen designs, and versatile advertising reinforced the ballpoint’s primary appeals of ease, speed, and convenience.

Cultural Adaptation and “Throw Away Societies”

In his seminal 1960 work *The Waste Makers*, Vance Packard concluded that the American economy had grown over-reliant on consumption and production. Much had changed since Adam Smith’s *Wealth of Nations*, which proclaimed production as the bastion of a healthy economy. But that was the economic model for the early modern era. By the middle of the twentieth century, American production capacities had outstripped American consumption capabilities. As a result, producers resorted to marketing various unprecedented *types* of consumer goods, influencing food, automobiles, home appliances, and toys. Meeting with mixed reviews, *The Waste Makers*’s muckraking nature raised eyebrows about the average consumer’s gullibility. “But all these forms of wastefulness in American life,” Packard said, “seem to stem in large part from the fantastic productivity of the nation’s mechanized, often automated offices, factories, and farms. That productivity is the central fact. And its impact is seen most conspicuously in the efforts of the United States business to cope with it by promoting ever-higher levels of private consumption and a philosophy of waste.⁶⁴” This extract shows that Packard did not readily blame consumers so much as producers, and gave great credit to the psychological influences of marketeering. Packard’s journalistic, as opposed to academic, approach threw into question the validity of some of his anecdotal evidence. Regardless, the text stands as a pivotal and ambitious attempt at understanding the United States economic condition at the middle of the twentieth century.

⁶⁴ Vance Packard, *The Waste Makers* (New York: David McKay Company, INC., 1960), 8.

Essentially, Packard's core idea manifested that, up until the end of WWII, industrial engineers enjoyed the traditional inventor's task of producing the lightest, strongest, longest-lasting, highest-quality products possible; these products, in turn, would form the first-rank products available to consumers. Of course, there have long been second and third ranking products as well. However, post-WWII manufactures faced some new challenges within this old model. Nuanced as these issues were, Packard reduced them to the convincing conclusion that producers could not continue producing high quality goods on the massive scale made available by wartime production. That is, producing too many high-quality goods (which accordingly had lower maintenance rates and longer usable lifespans) would put producers out of business since there would not be enough repeat customers. Instead, American industry resorted to reducing the quality of products, whether literally (e.g. using cheaper parts) or simply within consumers' minds (enabling unprecedented rates of fashion and stylistic turnover). A central concept relating to this movement was "obsolescence," which Packard broke into three possible categories, all of which can readily be applied to the convergence of the fountain and ballpoint pen. Though continued research into the phenomenon of obsolescence has since recast it into more nuanced categories, Packard's insights are useful as evidence of how mid-twentieth contemporaries considered the consumer society they inhabited.⁶⁵

The first, obsolescence of function, occurred when a new product performed a task "better" than the old. This was the natural narrative of progress and seemed the least contrived. Few would argue that the locomotive was a frivolous or unwarranted replacement of the wagon or canal; rather, it seemed to have been a substantial enough improvement to be considered a worthwhile investment of time, money, and infrastructure change. This was the least manipulative version of obsolescence, as most consumers could readily judge genuine improvement. The remaining two types of obsolescence appeared potentially more insidious. They were obsolescence of quality and obsolescence of desire. The former dealt with

⁶⁵See: Rob Lawlor, "Delaying Obsolescence," *Science and Engineering Ethics* 21, no. 2 (May 3, 2014): 405–6, doi:10.1007/s11948-014-9548-6.

intentionally reducing or limiting product lifespan. This was done in order to assure that the producer had enough return business to continue reinvesting in the company. Resultingly, washing machines, carpets, cars, radios, clothes, and much more had their average lifespans artificially reduced by half or more. The greatest obstacle to this approach was convincing the average consumer that she was still being treated fairly; even better was convincing her that not buying into this new system was un-American and unpatriotic. Brooks Stevens, a noted mid-century industrial engineer, went on record saying,

Our whole economy is based on planned obsolescence, and everyone who can read without moving his lips should know it by now. We make good products, we induce people to buy them, and then next year we deliberately introduce something that will make those products old fashioned, out of date, obsolete...It isn't organized waste. It's a sound contribution to the American economy.⁶⁶

Though Stevens did not claim to speak for the work ethic or conscious of every industrial engineer, Packard illustrated how his sentiments are echoed time and again by marketing staff at large corporations in the 1950s and 1960s. However sensational it sounded, Packard portrayed Americans' relationship to the economy as a consume or be consumed situation. While it was certainly undesirable to continue investing in what were markedly lower quality goods, it was even more undesirable to imagine what destruction could result from returning to older, lower consumption levels—economic decline, unemployment, or scientific stagnation were all recognized fears. None of that would do, especially with the Soviet threat ever-looming. Packard asserted that fears of the Soviet Union and anxieties about American decline reaffirmed the relationship between patriotism and consumption. To stop producing and consuming even marginally could spell catastrophe. Though Packard occasionally took dramatic license in his arguments, his overall case against blind consumption echoed the thoughts of many fellow Americans.

⁶⁶ Packard, *The Waste Makers*, 54.

Regardless, the new consumer world which Packard described does much to explain Americans' transition away from fountain pens in favor of ballpoints. Packard railed against the perceived need to limit the lifespan of products in order to ensure future purchases. Let us examine the fountain pen in terms of Packard's three types of obsolescence—obsolescence of function, obsolescence of quality, and obsolescence of desirability. The following will focus on the first two forms, as the obsolescence of desirability for the ballpoint compared to the fountain pen centers primarily on its novelty, ease, and convenience, but also included the ballpoint advertising and gimmick potential.⁶⁷

In terms of obsolescence of function, the question is simple: did the ballpoint perform the action of writing better than the fountain pen? Predictably, there is no clear answer. Since clay gave way to papyrus, thence to parchment, and then to paper, it seems safe to claim that the clay and lead stylus are no longer prime compositional tools for the modern writer, or that they have lost functional currency. One must ask whether the fountain pen has lost similar functional currency compared to the ballpoint.

Modern paper production technologies help explain one reason fountain pens experienced decline. By the mid-twentieth century, new paper technologies had enabled more efficient production of acid-free paper, but had also reduced the average grams/square meter (gsm) density of many paper products (See:

List of Figures 5-10). The result was more absorbent paper—the sort found in most cloth and spiral bound notebooks and standard copy paper available in general and office supply stores. This more absorbent paper permitted deeper and more sprawling penetration of fountain pen ink, phenomena commonly called “feathering” if ink tendrils leached outside character strokes, and “ghosting” if the writing could be faintly viewed from the back of the page.⁶⁸

⁶⁷ Ballpoints were easily transformed into advertising agents, a trend still common every time we pick up a free ballpoint pen from the bank or on vacation.

⁶⁸ Feathering results when ink spreads parallel to the page using capillary action and makes strokes appear frayed. Ghosting occurs when ink over-penetrates paper and “ghosts” through on the back side of the page.

“Bleeding” was egregious ghosting, wherein ink seeped through the whole page onto the other side. Feathering, ghosting, and bleeding do not affect legibility, but can make the written page look messier. Conversely, the drier nature of the paste-based ink used in ballpoints produced standard lines across most paper types—even absorbent newsprint and napkins—because the ink stayed on top of the page. Sprawling or feathered writing were not the only issues produced by the cheaper paper. More absorbent paper also increased ink consumption for the capillary-action-based fountain pens; this meant fountain pens had to be refilled more frequently. Thus, if lasting ink capacity and crystal clear strokes on standard copy paper are meaningful criteria in determining the fountain pen’s functional obsolescence, then the ballpoint is the clear winner.

Permanence is another significant criterion in determining the fountain pen’s functional obsolescence. Water-based fountain pen ink evaporated once on the page, leaving behind the ink dye to produce the writing. However, should this dried dye contact water again, it would re-dissolve, ruining the writing. This could be a security issue with items like checks or legal documents. Though the modern ballpoint is fairly permanent, the early ballpoint was more susceptible than a fountain pen concerning forgery. In a May 1948 issue of the *American Bar Association Journal*, professional document examiners discussed the new security issues produced by the ballpoint pen (which had been on the market for about two and a half years) compared with nibbed pens. They contended that, “regardless of its [the ballpoint’s] ability to compete with the traditional writing instruments, there are facts in connection with its use which seem to us to make it unwise to sign important legal documents with a ball-point pen.”⁶⁹ They cited the consistent line width and lack of shading produced with ballpoints as features enabling easier signature forging. Though the authors claimed to be neutral in their dip/fountain pen vs ballpoint examination, they indulged in some quality claims of their own, as for instance when they concluded a section detailing how some ballpoint inks could be lifted and transferred directly from one document to another using a damp thumb; “While the ball-point pen may not

⁶⁹ Stein et al., “Ball-Point Pens,” 373.

need refilling for several months or longer,” the authors contended, “this cannot counter-balance the disadvantages of using such a pen for writing signatures on important papers [. . .] If a pen is to protect a writer’s signature from forgery, it must do more than be ready to write at any moment.”⁷⁰ If the purpose of a pen was permanence of ink, the fountain pen had the initial advantage compared to ballpoints. Yet, one year after the American Bar Association published this article, the nascent Papermate Company made major improvements in ballpoint ink, greatly increasing its permanence once on the page and drastically increasing its competitiveness with the fountain pen in the category of lasting ink and signature security. Once again, the ballpoint pulled ahead of the fountain pen in the functional obsolescence category. As far as functional obsolescence from the utilitarian standpoints of clean script, long-lasting ink, and permanence on the page, the ballpoint had swept the board.

In terms of Packard’s second type of obsolescence—obsolescence of quality—the high-quality celluloid fountain pens and precision machined ballpoint body materials were fairly well matched at in 1945, with neither utensil intended to be used temporarily and tossed. Yet, the robust aluminum bodies of early ballpoints could not make up for their poor writing capabilities, which soured their reputation with consumers. As a result, ballpoint prices dropped drastically, as is evident in the divergence between Reynolds’s \$12.50 “International” pens in 1945 to his 1947 \$0.39 “Flyer” model. As retailers sought to sell a tainted, but still curiosity-invoking product, the market simply became inundated with poor quality pens.⁷¹ Despite the negative associations surrounding the ballpoint, which was in its death throes by the end of 1948, optimistic pen producers worked tirelessly to solve the ink conundrum; they believed that a singular breakthrough in ink quality would overshadow the ballpoint’s problematic history. One chemist, Fran Seech, succeeded in 1949, when he produced a glycol-based ballpoint ink that performed consistently, did not leak, and did not fade.⁷² After Fran Seech’s discovery, the

⁷⁰ Ibid., 375.

⁷¹ Henry Gostony and Stuart L. Schneider, *The Incredible Ball Point Pen: A Comprehensive History & Price Guide*, A Schiffer Book for Collectors (Atglen, PA: Schiffer Pub, 1998), 17–19.

⁷² Maygene Daniels, “The Ingenious Pen: American Writing Implements from the Eighteenth Century to the Twentieth,” *The American Archivist* 43, no. 3 (July 1, 1980): 318, doi:10.17723/aarc.43.3.2052654603041853.

ballpoint market enjoyed a resurgence of popularity. Yet well performing ballpoints maintained a lower price point than their fountain pen counterparts. What once was a sign of a tainted product now signified an efficient, utilitarian, writing tool. The price reduction came as the result of the realization that the ballpoint writing mechanism (ball, housing, ink cartridge) could be separated from the pen body and made into a distinct unit.

This is where Packard's theories about "waste societies" become increasingly significant in regard to ballpoints. Because the actual writing unit could be manufactured separately from the pen's body, it could be designed as a stand-alone refill, which could simply be swapped out once empty. In order to make the viscous ink of the ballpoint as airtight as possible (prolonging its shelf life), restricting air access to the ink was essential. To do so meant adopting tighter manufacturing tolerances and sealing the ink tube/reservoir on the opposite end of the writing unit. Once in this relatively airtight configuration, it was increasingly difficult to refill a ballpoint cartridge. Thus, the disposable refill was born, whose shelf-life and long lasting ink were considered worth the expense and waste of making the writing unit a single-use element. The disposable cartridge also made the idea of an entirely disposable pen palatable, and soon disposable ballpoints like BIC's iconic "Crystal" model became common, selling for pennies. Their convenience helped justify their cheaper material composition as well. Increasingly, consumers embraced the idea that their personal writing utensil did not need to be personal at all; in fact, it could come in a pack of a dozen identical pens.

By the early 1950s, it became apparent that the improvements in ink composition and tighter manufacturing tolerances had saved the ballpoint. Ballpoint prices began to rise again, but were still well below the standard prices for flagship fountain pens. As a result, "Big Four" first tier pens and select second tier pen sales slowed. Since the ballpoint's major flaws and performance issues had been solved, its cheaper price made it an increasingly tempting option compared to pricier top tier fountain pens. Still, Parker balked at the prospect of producing a ballpoint pen, adhering to what CEO Kenneth Parker had declared in 1946: the Parker Pen Company "didn't have a ball point in its stable of products because it didn't want one [but] if and

when we bring out a ball pen it won't resemble anything now on the market.”⁷³ But when ballpoint sales surpassed fountain pen sales in 1953, the Big Four took notice. Though some of them had already produced some ballpoint models, they were not the companies' focus. That changed. Since 1950, annual fountain pen sales had decreased gradually, and by 1954, they were an average of five million dollars less/year than in 1950, which equated to an overall 12.5% decrease for fountain pen makers.⁷⁴

Though the early 1950s witnessed the resounding success of the ballpoint, Packard would declare the same years as a time of adverse socio-cultural change, wherein the average consumer was at a loss to deal with the wasteful greed of industry leaders across the board—from food producers with new pre-cooked dinners, pressurized canned cheese, and increased plastic packaging; to car manufacturers who tailored marketing campaigns for their cars, less around quality or classic designs, as on colorful stylistic options and superficial alterations. Packard's readers were encouraged to see the American consumer as a hostage to these changes rather than active participant, but the reality was that these increasingly disposable, prepackaged, superficial products became popular.

Perhaps Packard's denouncement of throwaway societies was a bit harsh or idealistic. After all, it is self-evident that any product has a finite functional lifespan, even those of the highest quality. To this end, other waste studies scholars, like Kevin Lynch in *Wasting Away*, propose that the reality of consumption and waste are more complex than Packard's didacticism acknowledged. Lynch's text, more than Packard's, is specifically focused on urban decline, artificial and natural structures, and cultural attitudes about waste, rot, and decline. Unlike Packard's primarily negative understanding of planned obsolescence, Lynch considers the influences of the practice outside of the “corporate greed” paradigm pervading Packard's theories. For Lynch, the key to changing or understanding perceptions of planned obsolescence (and waste in general) was to understand and accept waste as a natural process. In the modern

⁷³ Gostony and Schneider, *The Incredible Ball Point Pen*, 36.

⁷⁴ *Ibid.*

world (at least in highly industrialized countries), waste, trash, and decay are viewed as undesirable byproducts, and physical decline is innately associated with failure. Yet, if decline is a *natural* process, its association with *failure* appears illogical. Decline, Lynch would say, is the nature of everything, including the entropy of the Universe itself; hitching negative notions like “failure” to this universal state of decline is incongruent with our natural states of living and dying. Moreover, it is foolish to declare that all human endeavors must be undertaken with the intention of permanence. Not all food should be shelf-stable indefinitely, nor should toothbrushes have steel handles. The nature of these items is such that the goods must be ephemeral to be optimal or effective. It would be a waste of energy, steel, and money to produce a metal-handled toothbrush whose life expectancy is only three months. Moreover, Lynch suggests that people should celebrate demise as much as beginnings—that groundbreakings and demolitions should be valued equally, as both endeavors personify the natural order of existence more than the social constructs of progress or failure.

Yet, Lynch does not claim that all waste is good, nor does he devalue recycling. He does urge consumers to reevaluate their associations with trash and waste in order to dissociate them from undue negative associations. Production, consumption, waste, and reuse should all be considered in a more holistic fashion, one where initial product manufactures are informed by ultimate product deaths. While Lynch’s and Packard’s theories on the morality of waste differ, they are not mutually exclusive. While Packard’s interpretation of planned obsolescence depicts the practice as economically and environmentally irresponsible, Lynch highlights how planned obsolescence can be used to guard against those same elements.

For example, the intentional reduction in operational lifespan of consumer goods may be used to maximize value for both producers and consumers. Customers may not want an object to last indefinitely, nor wish to pay higher prices for higher quality. Therefore, it becomes essential to understand *why* a product is being purchased; if it is not being purchased for lasting quality, but rather for style, price, or convenience reasons, then designing the product around being robust rather than designing it around these features is a wasteful endeavor.

To bring this theory to bear on writing utensils, pen makers had to face the reality that many consumers did not want something like a pen to last for decades of use, especially when, in the case of the fountain pen, that meant decades of routine maintenance, monthly cleaning, and weekly or daily ink refills. Despite the lasting value, many such customers were less willing to invest in a fountain pen when a ballpoint was so much easier. Recognizing this trend in the writing instrument market, pen producers like Esterbrook and Wearever answered the decades of the 1940s and 1950s with new, “third tier” fountain pens; these pens offered much of the functionality of their top tier predecessors without the quality of materials. These cheaper pens were not necessarily ill performing, and some even offered profitable innovations, for instance Esterbrook’s “Review Points,” which enabled writers to simply twist off one writing nib unit for another of a different boldness or line styling, and which ranged in their specific purposes from bookkeeping, accounting, student notetaking, social correspondence, shorthand, and shaded writing.⁷⁵ This feature illustrates that fountain pen producers were not deaf to consumer demands for lower prices and greater variety. This movement toward cheaper plastics – made possible by innovations in thermoplastic injection molding and by exchanging quality for variety focused on “stylish” and economy options—tendencies Packard describes at length as occurring across virtually all major industries after WWII. On his website famed pen restorer Richard Binder notes that the *Duracrome* line of Esterbrook’s Renew Points (the cheapest line of the interchangeable nib units) had some nibs that were simply imprinted “FINE,” “MEDIUM,” and, “BROAD.” This is significant because most of the Review Point nibs (in imitation of higher quality nibs) were imprinted with a number that corresponded with their intended purpose, (e.g. “1551” meant “firm medium”). “These numberless nibs,” Binder suspects, “may reflect an effort to cut costs; or they may be an indication of the public’s declining interest in nib variety due to the rise of the ballpoint pen.”⁷⁶

⁷⁵ Richard Binder, “Esterbrook Nib Chart: The Renew-Point,” *RichardsPens.com*, accessed October 1, 2016, http://www.richardspens.com/?page=ref/nibs/renew_point.htm.

⁷⁶ *Ibid.*

If cheapness of manufacture and disposability were key elements of the ballpoint's triumph over the fountain pen, they also illustrate ballpoint's greatest flaws, as defined by both Packard and Lynch's interpretations of planned obsolescence. According to the former, the disposable ballpoint is symbolic of an age of economic opportunism over product quality and performance; according to the latter, the unrecyclable composition of ballpoints (mixed plastic, metals, and viscous residual ink) indicate a lack of forethought in holistically considering the whole lifespan and use of the product.

In summary, the reasons the ballpoint pen assumed rapid dominance over the fountain pen between 1940 and 1960 as America's best-selling personal writing utensil are numerous. It would be a mistake, however, to ascribe the ballpoint's rise to victory as resulting wholly from its inherent superiority to an inferior predecessor. By approaching the era bookended by 1940 and 1960 with a more inclusive interpretation, it becomes clear that the decline of cursive handwriting, the increased use of typewriters within major institutions (like government, business, and schools), and the rise of Packard's "Waste Society" in America, all contributed to a new socio-cultural environment when contributed to the rise of the ballpoint and decline of the fountain pen.

But what about the future of handwriting (which inherently determines the future of all pens)? Fortunately, handwriting is still a deeply informative element of the human learning and communicative experience. Even if the pen disappears in the next decade (as at least one tech giant has predicted)⁷⁷ as the world becomes increasingly electronic and paper consumption more environmentally questionable, handwriting will survive. Consider the incredible sensitivity, preciseness, and accuracy of increasingly sophisticated digital stylus devices. Moreover, the tablet—as a computing device situated between a smart phone and laptop in both size and computing power—is a potential substitute for many paper applications, i.e. a notebook. This stylus/tablet combination could be a model for future handwriting tools. Regardless, the stylus is

⁷⁷ Chris Matyszczyk, "Microsoft's Ceo Expects Pen to Be Extinct in a Decade," *CNET*, February 5, 2015, <https://www.cnet.com/news/microsofts-ceo-expects-pen-to-be-extinct-in-a-decade/>.

an acute reminder that no matter how enthusiastically society embraces the potential of digital communication mediums, it is unable to forgo the humanity of handwriting—of flexed lines and flourishes, of scribbles and marginalia. Indeed, in a world where email has all the personality of a utilities bill, handwriting provides an outlet for self-expression.

CHAPTER 3: Revival and Enthusiasm

Why, after the rise of the ballpoint to commercial preponderance, did anyone care about the fountain pen? By the 1980s, as computers become familiar features in American government and commercial institutions, even the ballpoint's compositional utility looked dated. If anything, the 1980s should have been the very moment the fountain pen faded into oblivion as newer, faster, easier writing and record-keeping technologies improved daily. Far from disappearing, however, the fountain pen experienced a revival as the decade closed, and that revival has not slowed. On 12 February 2017, the news outlet CBC-Radio Canada published an article titled, "Retro Fountain Pens Push for Placement in Digital World: From Obsolescence to Opulence, the Fountain Pen Has Rewritten its Image in a Digital World." In it, author Colin Butler asked how and why the fountain pen continues to survive in a world of instant digital communication. Butler interviewed Mrs. Mano Duggal, co-owner of a successful brick and mortar fountain pen shop in Ontario, Canada, about her business operations. She explained that her customers were primarily between 19 and 35 years old, and included students, young professionals, doctors, judges, and laborers—all united by a common desire: writing pleasure.⁷⁸ Articles like Butler's appear not infrequently in publications like *The New York Times*, *Business Weekly*, and scores of local newspapers as journalists are amazed to find operational stationary and fountain pen stores surviving and thriving. To best understand the fountain pen's twenty-first century rebirth requires first contextualizing its place within the larger revival other analog technologies that took place in the 1980s and 1990s.

During the last few decades of twentieth century, fresh interest sparked the collectability and use of select analog technologies, including fountain pens, vinyl records, film cameras, board games; paper books, journals, and magazines; and black powder and bow hunting. Technologies that Baby Boomers and some Generation X'ers might have considered antiquated became exciting hobbies for their children and grandchildren. Owing to the latter's lack of

⁷⁸ Colin Butler, "Retro Fountain Pens Push for Placement in Digital World: From Obsolescence to Opulence, the Fountain Pen Has Rewritten Its Image in a Digital World," *CBCNews*, February 12, 2017, <http://www.cbc.ca/news/canada/kitchener-waterloo/waterloo-kitchener-cambridge-fountain-pens-sales-1.3975738>.

exposure, these old technologies were theoretically “new” technologies, possessing similar novelty to the new computer-oriented gadgets also vying for their attention.

Journalist David Sax’s book *The Revenge of Analog* addresses this larger revival. In this text, Sax is interested in the enduring fascination Americans have for certain older technologies. He attributes the overall interest to a variety of influences, and writes in an investigative journaling style that channels Vance Packard from several decades earlier. In the text, one of Sax’s themes is the power of limitation. Within that discussion, Sax presses his readers to consider whether “more” is genuinely always better. For instance, when many picture a notebook and pen alongside a digital word processor, they consider the latter the superior product because it can “do” more. However, Sax argues, the power of limitation in analog technologies is that it forces a user to operate creatively within predetermined parameters. In this way, the users of analog technology operate akin to an artist limiting herself with her medium or color options; she does so with the express purpose of crafting something unique within the confines of the limitation. Likewise, users of analog technologies appreciate that they are not the simplest, cheapest, or fastest mechanisms (typing is faster than handwriting, digital photography is easier than film, and finding an album in iTunes is simpler than finding it in a record store.) Analog enthusiasts are not operating under a nostalgic Luddite delusion that these older technologies are more efficient; instead, the operational rituals and challenges associated with analog technologies represent a powerful, nearly aesthetic draw for their operators, one that produces feelings of appreciation for both the technology and the process.

Another reason analog technologies are attractive is that they represent a life-style choice. Engaging with these technologies helps one cultivate a certain image both intrinsically for oneself and extrinsically for others. If this reasoning seems anachronistic or reaching, consider this: most people consider home-cooked food more authentic, wholesome, or comforting than takeout, because if one cooks something personally, he witnesses every preparatory step, and every fresh ingredient, and ultimately is investing more than simply money in the acquisition of dinner. Meanwhile, restaurants are “black boxes,” where a customer places an order, pays

money, and food appears a few moments later. There may be little difference nutritionally between a home cooked and restaurant meals, but there is a clear difference in how most people regard the two in terms of personal investment or enjoyment. Similarly, analog enthusiasts' appreciation for limitation demonstrates that the ritualistic experience of using analog technology is just as important or enjoyable as the product of the technology. Consider how digital photography, social media sites, or MP3 files have replaced the ritual of using a darkroom, conducting paper correspondence, and playing physical sound media; these tasks are now operated and carried out using "black box" mechanisms of digital technology that elevate ease of use while decreasing users' familiarity with the technology.

We can think of the influence of Packard's planned obsolescence here, combined with what I will term "planned obscurification," which intentionally isolates consumers from the knowledge of how their technologies function, and, accordingly, from how to repair or optimize their technologies. Some people would say this is the price of living in the digital age. These analog enthusiasts, however, prefer to understand and manipulate their technologies, and doing so is part of the fulfilment of the hobby. As far as pen enthusiasts are concerned, they cannot easily reload ballpoint cartridges because they are machined to tight tolerances and use propriety inks; yet, they can easily disassemble a fountain pen, swap out and customize parts, and use any color ink, and that pen will function so long as the user understands the simple principles of capillary action and atmospheric pressure. Among film photography enthusiasts, it is useful to think of developing film photographs as part chemistry, part art; conversely, producing a digital photograph is a series of mouse clicks. At the end of the day, analog enthusiasts appreciate the ability to invest a part of themselves into their hobby through ritual and despite limitations. It produces pride in having fringe knowledge sets to operate, manipulate, and enjoy "obsolete" technologies.

Leaving Sax's explanations of analog enthusiasts' motivation, historian Rachel Maines's book *Hedonizing Technology* provides insight into the origins of those motivations in her observations on collecting. Her research is particularly enlightening for fountain pens. One

significant influence in the revival of using, repairing, and collecting fountain pens is what Maines describes as the transformation of an activity from “work” to “work-like leisure.” One of her prime examples is the act of needlework—once a domestic and economic necessity, it is now primarily an artistic pastime. As *Hedonizing Technology* illustrates, the move from work to work-like leisure often warrants an exchange of tools, from wholly utilitarian to tools of higher quality or increased comfort. Thus, one way to explain the resurgence of fountain pens is to understand handwriting as a leisure instead of work activity. Note, that this explanation only pertains to handwriting specifically, not other forms of literary composition.

In the twenty-first century, handwriting, and especially cursive, is a luxury. Though appreciated, good penmanship has virtually no professional use and, overall, is unnecessary outside of signatures. Everything from shopping lists to crossword puzzles can be completed on digital devices, and even signatures are not the sacred realm of pen and paper since they are increasingly completed with an index finger on a touchscreen. Like modern needlework, handwriting is no longer a requirement, but a leisurely prerogative. In this transition from requisite skill to leisurely act, Maines contends that a user may wish to adjust or optimize the tools needed to engage in the activity. In Maines’s examples of needle work, people who enjoy knitting might choose wooden knitting needles instead of longer lasting steel or plastic ones simply because wood feels more comfortable in the hand. Moreover, knitters are at liberty to choose a more expensive, less utilitarian option because modern knitting is a leisurely act rather than an economic necessity, the latter of which would demand greater efficiency in tool choice. Handwriting follows similar patterns, transitioning over the course of the twentieth century from the primary form of personal written communication to a singular compositional option among typewriters, word processors, and voice-to-text transcription programs. When most of our professional communications are performed through a computer, the option to embrace handwriting using with a finely crafted fountain pen is a luxury—one that differentiates the writing performed primarily as work and the writing done primarily as pleasure.

To elaborate on utilitarian versus luxury, let us be a bit dramatic. In an apocalyptic wasteland, most people (even fountain pen lovers) would choose a ballpoint as their primary writing tool. The ballpoint does not require electricity, it can withstand rapid temperature and environmental changes, and no amount of dust could clog its ink application mechanism. The light, self-contained ink cartridge refills for ballpoints would be much easier to transport than liquid ink bottles, and they would last much longer relative to their weight. This example is a melodramatic definition of “utilitarian,” but simply put, in such demanding circumstances, the fountain pen would require more attention than a ballpoint, and is accordingly less utilitarian.

Unfortunately, for all the improvements in convenience and permanence the ballpoint introduced, it also enabled bad writing habits more focused on downward pressure than the fluid movement of earlier capillary-action based utensils, like quills and dip and fountain pens. Thus, painful or illegible ballpoint-based penmanship undermines peoples’ willingness to use handwriting, especially when computers produce perfectly formed characters for any user at any skill level. That is, the personal computer is the new compositional tool—the great equalizer, where the personality of script is exchanged for the standardized reliability of fonts. Moreover, the computer’s connection via the Internet makes any composition it produces readily available to the world—admittedly a feat no pen could ever match.

After the ballpoint made common “heavier,” pressure-reliant handwriting, the next step in Maines’s work-to-leisure transition of handwriting was the decline of cursive. To maximize a fountain pen’s utility, one needs cursive handwriting *and* a traditional handwriting form (tripod grip, minimal writing pressure, and a holistic movement technique that uses the entire arm and not just the phalanges of the hand to produce character strokes and lateral movement).⁷⁹ In an unofficial experiment, I recently monitored a room of twenty-two students taking essay exams, observing their writing postures, grips, and techniques. Nearly to a person, these students struggled to write more than three quarters of a single handwritten page without needing to

⁷⁹ See Chapter Two for more detail on cursive and nibbed pens

pause, lay aside their ballpoints/gel pens/pencils, and massage their seizing hands. These students knew the material, but the vertically oriented and pressure-reliant writing they exhibited produced visible strain as they wrote swiftly and under stress. Unfortunately, their unorthodox writing techniques are no fault of their own; these students used excessive pressure not only because they were never taught about alternative writing techniques, but also because most modern student writing takes place behind a keyboard. Traditional pen grips and writing techniques permit consistent writing using a lighter touch; however, these techniques work best in conjunction with capillary action based pens. As dip and fountain pens fell into disuse and handwriting became less important in education and professional development, accordingly these traditional writing techniques are rarely taught or used anymore.

Fountain Pens as a Status Icons

Enjoying and investing in handwriting as a luxury experience explains part of the fountain pen's revival in the late twentieth century, but when the fountain pen became popular in the 1920s and 1930s, everyone wrote in cursive and used traditional writing grips. Understanding the fountain pen's original appeal over a hundred years ago requires more than understanding its ergonomics. Though cursive handwriting may be luxury for modern pen users, it was still a requisite skill earlier in the century, and so closer to "work" than "work-like leisure" on Maines's spectrum. Moreover, when dip pens could produce cursive—especially the Spencerian writing still common in many businesses—with the same ergonomic ease, the fountain pen lacked any advantage in terms of writing comfort. Instead, the answer to the fountain pen's original popularity lay in: 1) its portability, and 2) its status appeal. We covered the first point in chapter one; the second point will be the focus here.

Some people lavish money on nice cars, fine whiskey, or first editions of famous literature. Though much of this is done for personal satisfaction, much of it is also done to impress others. For the same reasons, many appreciate the design, function, and appeal of the fountain pen compared to other perfectly adequate, more utilitarian writing tools.

To this end, fountain pens have always been status symbols, and rarely more so than when they first rose to prominence in the 1910s and 1920s. Understanding how the fountain pen served as a social status icon requires looking beyond the writing need it filled to understand *how* people *reacted* to the filling of that need. Favored by those who wrote extensively while on the move, fountain pens were also loved because owning one meant not only that one was well-written, but was also wealthy enough to afford a fountain pen when dip pen nibs and dip ink were substantially cheaper. Since the earliest fountain pens were marketed for their mobility, owning one also showed that a persona was a “mover-and-shaker” with little time or desire to bother with an inkwell and desk setup. If one owned a fountain pen, suddenly the train or taxicab (and later, the airplane) became one’s writing desk, and fountain pen users consequently became walking testimonials to those around them. The fountain pen’s personalized writing (nib point, ink choice, pen color, etc.) quickly brought it favor in the eyes of wealthier middling and elite consumers who appreciated and could afford distinctive craftsmanship. Some material culture scholars, like Neil McKendrick, posit that “emulation” is key for luxury products to become popular outside of elite circles. When applied to the fountain pen, it follows that wealthier consumers’ use of the fountain pen helped drive the market forward through emulation, when less wealthy consumers gradually redirected their more limited incomes onto goods they deemed as characteristic of their social superiors—the hope being that the icon (a fountain pen in this case) could serve as a visual indication that the user was included in a desirable group.⁸⁰

This held true even during the 1930s and 1940s – not in that the fountain pen would have been a rare sight, but that many people would have noticed what *kind* of fountain pen one was using. Identifying fountain pen models was easy even when given as little information as the exposed clip when a pen was tucked inside a shirt pocket. Both consumers and pen producers were aware of this fact and designed pens to maximize this conspicuous feature—the pen clip. For instance, Parker’s blue “diamond” on its golden, arrow shaped clips and Sheaffer’s matte

⁸⁰ Neil McKendrick and J.H. Plumb, *The Birth of a Consumer Society: The Commercialization of Eighteenth-Century England* (Bloomington: Indiana University Press, 1982), 11.

“White Dot” on its glistening gold clips distinguished both companies’ warrantied pens from their lower tier pens with a passing glance. The desirability of these recognizable features cannot be underestimated. For example, when Sheaffer launched its massively popular “Balance” pen in 1929, the streamlined pen had a torpedo-shape, with a rounded cap and body ends that easily distinguished it from the familiar flat top pens of the time. The Balance’s popularity spun off a cheaper line, sometimes called “Half-Balances” by collectors; essentially, these Half-Balances had the characteristic rounded cap, but a traditional flat-ended barrel. The models used the same nibs as the regular Balance, so their writing performance should not factor into any consideration of *why* the Half-Balance was produced. Instead, as Richard Binder ventures, Half-Balances, when capped and/or clipped in a shirt pocket, look exactly like regular Balances. That is, the Half-Balance could attract and garner the same status appeal as the full Balance for a cheaper price.⁸¹ Thus, it seems the success of the Half-Balance hinged significantly on people’s desire to appear a certain way—to be included among the ranks of other Balance users.

Earlier still, as Binder highlights, the iconic “Chinese red” of the Parker Duofold “led innumerable other manufacturers, most of them bottom feeders, to jump on the ‘red pen’ bandwagon. These companies produced their knockoffs mostly — but not entirely — in the late 1920s when the ready availability of celluloid made such a venture easy and cheap” instead of Parker’s original red hard rubber.⁸² Later, Parker pen caps from more expensive pens, like the Parker 51, were sometimes swapped onto cheaper versions, like the Parker 51 “Special” and the Parker 21. The resulting visual effect, when clipped in a shirt pocket, was that a considerably cheaper pen could easily be pass off as a more expensive one. To this day, the Parker 51 is mimicked by the Shanghi Hero Pen Company in their 100 and 616 models, including the iconic Parker “arrow” clip.⁸³

⁸¹ Richard Binder, “Profile: Sheaffer’s Balance,” *RichardsPens*, December 28, 2015, <http://www.richardspens.com/?page=ref/profiles/balance.htm>.

⁸² Richard Binder, “Profile: The Parker Duofold,” *RichardsPens*, December 28, 2012, <http://www.richardspens.com/?page=ref/profiles/duofold.htm>.

⁸³ “PenHero.com - PenGallery - Attack Of The Clones - Part 1,” accessed March 9, 2017, <http://www.penhero.com/PenGallery/Parker/Parker51ClonesPart1.htm>.

Today, fountain pens are still valued for their portability, technological innovations, and social distinction, very much as they were in their heyday. With thousands of doctors, lawyers, teachers, students, and business people using fountain pens as part of their jobs (that is, people who may or may not be collectors, but who are on-the-move professionals using pens as serious tools), the fountain pen's utility clearly remains a major selling point. As discussed earlier, the fountain pen still maintains its novelty as a "new" technology if a person has never encountered one, and for these people, the fountain pen retains its technological novelty. So, too, does the fountain pen remain a status icon, possessing many of the same connotations in 2017 as it did in 1915. Today, the fountain pen is readily distinguishable from other writing instruments, just as it would have been decades ago. Given these criteria, fountain pen users generally anticipate that others, especially fellow fountain pen users, will notice when they are using a fountain pen.

Fountain Pen Enthusiast Communities

In 1986, long after the fountain pen had succumbed to the commercial onslaught of the ballpoint, a Californian doctor named Robert Tefft orchestrated the formation of the Southern California Pen Collectors Club (SCPCC). According to Fred Krinke—fellow enthusiast, original club member, and owner of "The Fountain Pen Shop" pen store—Tefft was frustrated by the lack of networking among pen enthusiasts. He knew the problem was communicative, however, and not a lack of enthusiasts, since he encountered other pen collectors relatively frequently. Accordingly, Dr. Tefft sought out the support of these fellow collectors, including Krinke, and enjoyed success when 35 participants gathered for the first meeting in Dr. Tefft's living room.⁸⁴ Krinke indicated that attendees included Peter Amis (later a co-owner of the Pen Sac Co.) and Paul Hoban (who reproduced pen parts), plus Krinke himself as the owner of a prominent fountain pen store. Other members illustrated the diverse occupational backgrounds of early

⁸⁴ Fred Krinke, Southern California Pen Collectors Club History, n.d., accessed February 11, 2017.

fountain pen enthusiasts, including folks from the movie industry, engineering fields, and antique dealing professions.⁸⁵

The purpose of the club was communication and camaraderie— putting collectors in touch with one another while also organizing, preserving, and making available printed fountain pen resources, like vintage advertisements, catalogs, and repair literature. Despite the promising turnout for the first meeting, the membership roster in November of 1986 was only thirteen members, most from Southern California, with a few from Northern California. Yet, the club witnessed spectacular growth over the following few years, totaling 60 by the end of 1988, and 78 the following year. This accretion continued, with the club numbering 260 members by April of 1990. As the organization grew, so too did its ambitions, and soon the club was responsible for planning the first ever Western United States Pen Show in 1988 (which later became the larger L.A. Pen Show).⁸⁶ With the onset of the 1990s came new leadership.⁸⁷ As increasing numbers of non-Californians joined the club—recruited by word of mouth, the pen show, and the trading newsletter the organization produced, now called the *PENnant*—the SCPCC decided it was time for a moniker change in late 1991. After a survey though the *PENnant*, a majority vote decided the the SCPCC would become the Pen Collectors of America (PCA), which is still the premiere national pen club in the United States today.

Today, the *PENnant* is a premiere source of fountain pen scholarship. Articles have included pen repair basics; small centrifuge design instructions (used to remove trace amounts of water and ink from pens); discussions of specific hard-metal alloys used for nib tipping material; and much more. This organization also possesses the largest digital archive of fountain pen related research materials, many of which were ephemeral and long forgotten until the organization made it part of its mission to preserve and make available these resources, including

⁸⁵ Ibid.

⁸⁶ Frank Shyong, “Pen Collectors Going Strong Even as Handwriting Dwindles,” *Los Angeles Times*, February 15, 2013, <http://articles.latimes.com/2013/feb/15/business/la-fi-pen-show-20130216>.

⁸⁷ In 1991, Anthony (Tony) Davis became the SCPCC president. The other officers were Harvey Raider as Vice President, Steve Miller as Secretary, and Paul Hoban as the treasurer; Source: Krinke, Fred. Southern California Pen Collectors Club History, n.d. Accessed February 11, 2017.

various pen manufacturer catalogs dating to the late nineteenth century – all scanned, described, and arranged in a searchable platform, and free to access by anyone.

At the same time Dr. Tefft was organizing the SCPCC, thousands of miles away in Chicago, one of America's largest pen shows was taking shape, and attracting notice.⁸⁸ Starting in 1980 in the living room of lawyer and pen collector Don Lavin, the "Chicago Pen Swap" rapidly outgrew his personal residence. It then moved, not to a convention center or in a hotel like modern shows, but to a local horse racing track. By 1986, the show's attendance regularly topped 100 attendees, from all over the United States and Canada. Unlike some enthusiast conventions that grow out of internal trade shows, pen conventions like this one grew out of similar motivations as the SCPCC: the need for better communication and trade networks among similar-minded collectors.

In a 1986 interview at the eighth annual Chicago Pen Swap, fountain pen aficionado and pen collecting author Glenn Bowen described the birth of fountain pen enthusiasm in the early 1980s. At the time of the article, there were an estimated 2,500 "serious pen collectors" in the United States.⁸⁹ These included many enthusiasts like Bowen, who had been collecting for decades already, acquiring pens abundantly and cheaply and now hoping to trade up their accumulated treasures for more specifically defined collections or rarer specimens. As a result, these earlier collectors founded clubs, pen shows, and newsletters; published collecting and repair texts; and hosted seminars by respected retailers for new products and expert restorers. As the hobby became more widespread, it attracted new enthusiasts who had not been part of the core of early collectors. Though welcome, these new enthusiasts would change the collecting landscape by providing greater competition, in turn causing pen prices to rise, and ultimately excluding some older collectors who were not willing to pay the higher prices.⁹⁰ These veteran

⁸⁸ "Pen shows" are pen conventions, generally held annually, where pen vendors, restoration specialists, nib grinder all retail the products and skills, including new and vintage pens, inks, paper, leather cases, etc. There are also usually auctions, seminars, and club or organizational recruitment.

⁸⁹ Jim Spencer, "The Pen Is Also Mighty To Collectors," *Chicago Tribune*, May 9, 1986, http://articles.chicagotribune.com/1986-05-09/features/8602020642_1_pen-collectors-collectible-fountain-pens-glenn-bowen.

⁹⁰ Krinke, Southern California Pen Collectors Club History.

pen collectors had difficulty adjusting to the more expensive market; for them, fountain pen collecting had been a cheap pastime since the 1960s—a time when most fountain pens could be purchased for a fraction of their original value. Bowen indicated as much in his interview: “Back then, you couldn't find pens in antique shows [...] because people were throwing them away. They thought they were junk. You could pick up old fountain pens for a quarter, 50 cents, a couple of dollars.”^{91,92}

Voices other than Bowen also noted the differences between old and new collectors. “[N]ewcomers to the hobby are very different from the typical pen collector of the seventies or early eighties,” said pen auctioneer Cliff Lawrence in the early 1990s. “Unlike the old-timers who couldn't or wouldn't spend much on vintage pens, they [newcomers] recognize the value of these old treasures and are willing to spend considerable sums of money to acquire them.”⁹³ Rising pen prices caused some friction, as fellow collectors realized the value of pens would only continue to rise since vintage pens were finite. Still, the overall atmosphere was supportive; older collectors welcomed neophytes and shared their collecting experiences and tips freely. Bowen even remarked in his interview that he wanted “to do a pocket guide that buyers and dealers can carry around for pricing and identification.”⁹⁴ Instead of permitting the divide of older accumulators and younger enthusiasts to spoil the pen community, Bower and others understood that the newcomers were key to the survival and expansion of the hobby.

Since that 1986 pen show, the fountain pen community has experienced tremendous growth. A quick Google search illustrates the depth and breadth of the hobby today, easily yielding thirteen primarily online retailers of fountain pens (along with inks, stationery, leather-bound journals, and wax seals). Additionally, the 1980s pen swaps have grown into 14 major annual pen conventions throughout the United States, with the Washington, D.C. Super Show

⁹¹ Spencer, “The Pen Is Also Mighty To Collectors.”

⁹² Already an established author with his foundational 1982 text *Collectible Fountain Pens*, Bowen would go on to work with the publication *Pen World* in the early 1990s, which is still a major publication in the hobby today.

⁹³ Martyn Burke, “The Perils of Pen Auctions,” *The PENnant*, *The Pen Collectors of America*, VI, no. 4 (October 1991): 1–2.

⁹⁴ Spencer, “The Pen Is Also Mighty To Collectors.”

being the largest in the world and attracting an international attendance. The Pen Collectors of America remains the premiere national club, with regional chapters; it is complemented by smaller state and local clubs (e.g. the “Alabama Fountain Pen Group” quartered in Birmingham with approximately 30-35 members). As in the original clubs, the in-person settings of shows and clubs embrace the hands-on nature of collecting fountain pens. Nevertheless, the online forums of “The Fountain Pen Network” (FPN) are the ultimate in communication, collaboration, and trading in the fountain pen community. With over 102,000 members from all over the world, the international reach of the fountain pen has been made possible by the Internet, as is also reflected in the bulk of fountain pens (outside of pen shows) being purchased online, and in fountain pen retail sales worldwide reaching \$1.046 billion in 2016.⁹⁵

Divisions within the Fountain Pen Community: Price and Purpose

The diversity of fountain pen enthusiasts is succinctly captured in the sentiments of 2012 Pen Collectors of America President Lisa Anderson: “Our hobby is filled with members of incredible talents, knowledge, and skills, and we are blessed by the sense of true community. No petty hoarding or secrecy of knowledge or resources among us.” The same spirit that characterized the SCPC in collecting, preserving, and distributing knowledge about fountain pens still pervades the hobby today. The Pen Collectors of America host a digital library where they have copied hundreds of vintage pen catalogs, the earliest dating from the late decades of the nineteenth century. Following a brief publishing embargo for non-paying club members, the PCA’s back issues of *The PENnent* are made freely available in the digital library as well. Echoing the educating spirit of Gregg Brown decades earlier, computer engineer turned fountain pen posterchild Richard Binder currently hosts thousands of web pages on his site, all of which draw on his expertise as a leading restorer. He illustrates various complex repair techniques, pen

⁹⁵ “Fountain Pen Sales Are Surging, Despite Flat Luxury Global Sales,” *Bloomberg.com*, February 2, 2017, <https://www.bloomberg.com/news/articles/2017-02-02/fountain-pen-sales-are-surging-despite-flat-luxury-global-sales>; Steven Brocklehurst, “Why Are Fountain Pen Sales Rising?,” *BBC News*, May 22, 2012, sec. Magazine, <http://www.bbc.com/news/magazine-18071830>.

histories, the social life and influence of pens, chemical properties of inks, and much more. Though Binder sells books about these same topics, he makes much of it freely available. Likewise, individual enthusiasts constantly develop and share new approaches to the hobby – for instance, creating digital programs tailed to categorizing personal pen collections for organizational and insurance purposes. There are thousands of product reviews and even podcasts to help new and veteran fountain pen users navigate the vast availability of writing instruments available. The hobby often segues into calligraphic, mechanical horology, leather goods, and straight shaving hobbies as well, and online forums are filled with cross-enthusiast chatter between these related interests.

Despite the cohesiveness of the fountain pen community, however, there are still divisive issues. To be clear, not all fountain pen users are collectors; some are Spartan users, owning only one or two pens, using the same number of inks, and maintaining a practical and conservative relationship to these tools. Others are accumulators, acquiring as many pens as possible with no real end goal apart from pure fascination. Then, there are the collectors, whose acquisitions must have a form and goal to count as a collection⁹⁶. Though a collector may have multiple fountain pen collections, a single collection must be limited to circumscribed criteria—e.g. products from a specific decade, successive versions on a single pen model, or variations on a single filling system—in order to satisfy the definition of a collection.

Aside from the differences between users, accumulators, and collectors, the fountain pen scene is still divided today, just as it was in the 1980s, by one’s willingness to spend money. This divide falls roughly at the \$250 price point on pens, though many within the hobby would argue for a substantially higher or lower number. This demarcation is complicated by differing values in vintage and modern pens (e.g. someone may never pay more than \$60 for a modern TWSBI pen while effortlessly spending \$600-\$900 on a pristine vintage Waterman). Overall, vintage pens are more expensive, yet some modern pens, like the Montblanc Meisterstück or hand

⁹⁶ “RichardsPens.com • Pen Shows II: Preparing for a Show,” accessed February 22, 2017, <http://www.richardspens.com/?page=xf/2005/10.htm>.

painted Namiki Maki-e pens can venture into the thousands and tens of thousands.

Notwithstanding, this \$250 price point represents the threshold of optimal fountain pen writing performance. For \$250, one can purchase a high quality, mass produced pen with a superb stainless steel or gold nib that will write as well as a \$10,000 pen and last decades. For any pen costing more than \$250 dollars, one is paying either for brand legacy, artisanship, and/or rarity. Still, many will argue their \$30 Lamy Safari is their finest pen, and I own a \$40 Noodler's Ahab that writes as well as my \$200+ pens. Though this price point difference is essentially a matter of preference (since, in terms of pure utility, a \$0.25 ballpoint is the clearest choice), many wealthier pen collectors disdain sub-\$100 pens, while many Spartan users consider Mont Blanc and Visconti pen owners frivolous and elitist. The fierce contention surrounding the "optimal" writing experience illustrates diverse ways in which members of the fountain pen community understand the hobby.

The arguments resulting from these contentions frequently play out on the FPN forums, where they are litigated if not shut down by moderators since most of the disputes are matters of personal preference. Still, pen pricing occasionally causes real strife in the fountain pen community, as, for instance, in the case of limited edition FPN pens. Every few years, the FPN contracts with certain pen manufacturers to produce an official FPN pen(s). Past variations on the pen included options to make the final product either as Spartan or deluxe as the user desired, with more expensive versions costing four or five times as much as their more standard versions. However, in 2015, the official FPN Commemorative pen was a whopping \$1,341 – far outside most member's budgets. Additionally, only five hundred commemorative pens were made, making the pen limited both in its exclusive price and limited volume. This caused no shortage of vitriol in the official forums, as well in Facebook and Reddit off-shoot threads. Most commenters were passionate about the exclusive nature of these "limited edition" pens that are marketed for the whole of the 102,000-person network, but which appear to appeal exclusively to wealthier members. Defenders contended the limited quantity and hefty price guaranteed lasting and rising value as a collectable. It is also important to note that there were many FPN members

in the middle – people who could not afford these pens, but who did not feel excluded simply because they could not own a single pen; after all, there are hundreds of pens most collectors cannot afford, but no one doubts they are members of the fountain pen community at large.

The detractors of the expensive commemorative FPN pen were as frustrated by forum censorship as they were by the pen's price. The usually amiable and uninhibited FPN discussion threads were heated and soon some comments were being censored. To some, the administrators' censorship smacked of elitism and biased approval of the price, while others considered the Spartan utilitarians' comments whiny and exasperating. Many interpreted the FPN moderators' censorship (freezing or deleting) of mostly contrary comments as a suppressive rather than peacekeeping measure—one which seemed to privilege elite voices over oppositional ones. The debate ultimately cooled, and the pen sold at the original \$1,341 price despite objections. The 2015 FPN Commemorative Pen episode reveals cost is one of the deepest rifts within the fountain pen community, as enthusiasts ask whether the fountain pen's primary worth lies in its role as a tool or as a collectible.

Fountain Pens and Ink for the Twenty-First Century

In the early 2000s, Massachusetts resident Nathan Tardiff shook the fountain pen community by marketing the first truly permanent fountain pen ink, or as he called it, “bulletproof” ink. Traditional fountain pen inks are water soluble – great for smooth flow, less so if one spills hot coffee on a recently written page. Tardiff proposed modern writers needed a new fountain pen ink to meet the demands of a new century. Noodler's bulletproof inks operate like traditional fountain pen inks except that their propriety formulas include cellulose reactive ingredients; instead of relying solely on evaporation to deposit ink dyes onto the page, these ingredients chemically bind dye solutions to paper fibers. The result, once on paper, is a permanency akin to a permanent marker, and far more permanent than ballpoint pen ink. On his website, Tardiff delineates the issues facing the fountain pen today and why he decided to make such unprecedented inks:

“When people who have purchased a tip dip or Sheaffer Admiral find themselves facing costly ink bottles — and then ask me how on earth such a pen can be more economical to use than a Bic, there is a problem. Ink should not be so high priced that affordable luxury pens lose the battle for economic viability over the long term. A gold nibbed, \$25 pen has, until recently, always been a better deal over several years than purchasing ball pens — it also maintains a resale value (often appreciating over the purchase price if well cared for) and avoids permanent deposits in landfills as is experienced with disposable ball pens.”⁹⁷

As a result, Tardiff’s inks (called “Noodler’s” ink in reference to the barehanded catfishing technique Tardiff likens to the economic struggle for fairness between retailer and consumer) are tremendously affordable even though their novelty is unparalleled by other ink manufacturers. He aimed for a fair price, permanence, and versatile utility (e.g. the ability to write on ultra-absorbent paper like newsprint or napkins as well as better quality paper.) To date, Tardiff has well over 100 Noodler’s inks with varying properties (permanent, forgery proof, archival safe/pH neutral, lubricated, color changing given time or tampering, freeze resistant, and even invisible/UV sensitive inks.) He also retails pens aimed at moderately advanced pen users who enjoy fiddling with and adjusting their pens for flow and smoothness. That Tardiff believes the fountain pen community *needs* or wants these features from their ink is a questionable claim within the community, for some within the fold refer to his formulations derisively as “boutique” inks of questionable long term effects.

Tardiff’s appearance marks another major divide in the fountain pen community. The eccentric libertarian’s personal politics manifest in his products in very literal ways. His ink bottles often boast poignant historical quotes combined with hand drawn artwork. In the past, Noodlers’ bottle themes have included celebrating the ideals of the American Revolution, remembering the bloodshed of the Civil War, highlighting instances of racial injustice,

⁹⁷ “Why Noodler’s? – Noodler’s Ink,” accessed February 24, 2017, <http://Noodler’sink.com/why-Noodler’s/>.

expressing disdain for the federal reserve, praising the Yankee valor of nineteenth-century New England whalers, and ridiculing both socialism and capitalistic greed in equal parts. His crusade for a modern, economically sustainable (for the consumer anyway) fountain pen ink has won him favor and respect even from those who do not agree with his politics. Despite being one of the most politically outspoken producers within the fountain pen economy, Noodler's ink is well beloved the world over, despite consistent stocking issues stemming from Tardiff's Lone Ranger production system (he designs, produces, bottles, and markets all of his inks personally). Yet, at the end of the day, it usually is not Tardiff's personal politics that incur the ire of his detractors, but instead the alleged performance issues of some of his products. What some hail as the solution to the fountain pen's longstanding permanence problem, others construe as corruption, both ideologically of the classical ink paradigm and literally of pen components. As far as the latter goes, the unique capabilities of Noodler's inks urged consumers to seek chemical analysis and unparalleled testing for fear the new ink could damage expensive vintage pens. The hand-made batches are unique by nature, complicating performance and comparison testing. It also means that a questionable batch of "Bulletproof Black" or "Massachusetts 54th" might disproportionately deter customers from the predominantly safe Noodler's lines.

Soon after Noodler's launch, there appeared to be a lot of failing latex sacs in lever and diaphragm pens, which many blamed on the new inks' unprecedented properties. This is the origin for many people's abhorrence for the ink, even though it was revealed later to be a defective batch of latex sacs. The divide only became more entrenched later when prominent pen restorers came out on different sides of the debate, particularly Richard Binder himself. To this end, Nathan Tardiff – a well-known pen man himself—vigorously defended his inks against any such accusations of their causing damage. Ultimately, FPN issued the "Big Ugly Red Rule," which was a permanent banner in ink forums outlining the essential arguments for both sides, linking to already inundated threads discussing the subject of Noodler's inks, and banning continued rehashing of the tenuous subject since neither side could offer more than anecdotal evidence. Still, the rift runs deep. Tardiff's dream of a twenty-first century ink for fountain pens

was ultimately hailed as both revolutionary and sacrilegious, finally boiling down to whether one views his or her pens as tools to be used or collectables to be preserved. The former tend to favor Noodler's, while the latter tend to err on the side of caution and away from Noodler's.

If Tardiff sought a modern fountain pen ink, then companies like TWSBI (Taiwan, 2009), Edison (USA, 2007), and Bexley (USA, 1993) are the pen producer equivalents, since all of these companies entered the pen business only after the late 1980s development of fountain pen enthusiasm. Their success is remarkable since none of these companies have the legacy of Mont Blanc, Pelikan, Parker, Waterman, Pilot, or any other classic pen producer. Their success in recent decades is a stark contrast to the downsizing of Parker and Waterman, who were forced to relocate to England and France respectively in the 1970s following slower business and their purchase by larger conglomerates. Additionally, these three modern pen companies represent both utilitarian and elite fountain pen tastes. The TWSBI Eco retails for about \$30 USD and is produced in a large-scale factory familiar with fountain pen components and specializing in plastic and metal working. Alternatively, Edison and Bexley offer high quality, handcrafted pens, and the Edison Pen Company permits every component of their pens to be customized by special order—an approach that has not been successfully executed since the heyday of the fountain pen much earlier in the century. Edison's current model is precisely the sort of ultra-personalized market approach that was replaced by standardized fountain pen components (like Sheaffer's "personal point" nib/feed units) which passed the burden of personalization onto the consumer rather than the distributor. If that were not enough, the Edison Pen Company has reinvented some of the most beloved classic filling systems, making them out of solid brass rather than "wartime" plastics, like the Parker Vacumatic filler which Edison renamed the "Menlo" filling system.

As the newest fountain pen manufacturer, TWSBI offers the most telling perspective into expectations about the future of fountain pens. Specifically, it offers a new niche within the pen market – something above the student pens of the Pilot Metropolitan (\$15) and the Lamy Safari (\$35), but below the next price tier of \$100+. This is a highly desirable market, as it captures an

intermediate crowd of both journeyman fountain pen users and veterans looking for a durable and attractive pen without the worry of a massive price tag or fear of loss. TWSBI is among sparse competitors in this price range, and is certainly alone in being a piston-filling pen⁹⁸ (high ink-capacity filler mechanism requiring more complex machining) in this price range. In February of 2015, an Australian economist and fountain pen enthusiast named Dr. Jonathon Deans posted a brand analysis for TWSBI on his blog called “Pen Economics.” He illustrated the excitement of the market share TWSBI’s newest product called the “ECO” was poised to capture:

The conventional economic explanation for the company’s success is that it is disruptive: Twsbi’s products are innovative and aggressively priced. For anyone who needs a reliable pen with large ink capacity, it’s hard to beat the 580AL (\$60) or Vac (\$65). In the same price range are pens like the Faber-Castell Ambition (\$70), Lamy Studio (\$80), Monteverde Invincia (\$68), Parker Urban (\$65), and Sheaffer Sagaris (\$65). All of these are quite nice-looking, well-made pens, but they are cartridge/converter pens with limited ink capacity. To my knowledge, the only cheaper piston-filler pens are the notoriously unreliable Noodler’s pens. Indeed, the closest real competitor is almost double the price, the Pilot Custom 74 (\$90 Asia/\$160 US). Although the 74 comes with a gold nib, Pilot don’t offer swappable nibs or design their pens to be dissembled like Twsbi do. It’s easy to see why these pens caught on, and why everyone in the market was forced to pay attention to the Taiwanese upstart.⁹⁹

Though Deans goes on to highlight some of the cracking issues that frustrated TWSBI’s launch, the ultimate tone of his analysis was positive, eager to see how more established competitors would address the new market force.

⁹⁸ As Dr. Deans indicates somewhat unfairly in the following quote, Noodler’s produces less expensive piston fillers than TWSBI; however, Noodler’s piston fillers are aimed at moderately experienced users who enjoy tinkering with and personalizing their pens. TWSBI, he implies, offers a more predictable out-of-the-box writing experience.

⁹⁹ Jonathon Deans, “Brand Analysis: Twsbi,” *Pen Economics*, February 16, 2015, <http://www.peneconomics.com/blog/2015/2/16/brand-analysis-twsbi>.

The arrival of a new company specializing in this sub-\$100 price range and succeeding reveals much about the future of fountain pens, and a realized need to capitalize on the middle ground between utilitarianism and aesthetic appeal that so often divides the enthusiast communities when it comes to cost. Their pens are made with a “polycarbonate with a protective coating heat treated onto the pen. This allows for the plastic to have a hard shell, scratch resistant, and clear crystal look.”¹⁰⁰ These pens have a uniquely crystalline faceted design that makes them both attractive and useful in permitting viewing of remaining ink levels and the mechanics of internal mechanisms. The use of high quality stainless steel German nibs and some of these pens have filling mechanisms and bodies machined using aluminum in addition to the normal clear resin. Unlike older fountain pen producers, TWSBI has no legacy to depend upon, but does possess decades of experience in plastics and metal working. Their overall success in the market (despite serious quality control issues with cracking in earlier pen models), is due, first, to their middling utilitarian price point; second, to their unparalleled customer service (lifetime warranty for mechanically or structurally deficient pen components); and third, to their solidly made pens that are stripped of unnecessary frills and are fully user serviceable. Compare that final point to Mont Blanc’s customer service: though it is rarely needed, Mont Blanc’s customer service is not renowned for its speed, and the company’s pens are not designed for user repair or alteration. Instead, a damaged Mont Blanc must be returned to the factory for repair work, depriving the user of their \$600+ pen for a week or more. TWSBI will ship overnight a replacement pen cap for a \$65 TWSBI 580 pen.

Here to Stay: The Fountain Pen’s Staying Power

TWSBI and Noodler’s stand as exemplary cases in illustrating the survival of the fountain pen in the twenty-first century. Yet, their success would have been impossible without revivals in the popularity of analog technologies or the formation of fountain pen enthusiast

¹⁰⁰ “News | TWSBI,” accessed February 25, 2017, <https://www.twsbi.com/blogs/news>.

outlets in the 1980s. Those early collectors had to make vintage fountain pens popular once again before TWSBI, Noodler's, Bexley, or Edison could dream of producing modern fountain pens and inks. That the revival of fountain pens occurred in the final decades of the twentieth century—among people who have alternative writing options and lessened practical use for handwriting—is telling. Since the 1980s, innovations in design and assembly have surpassed much of the manufacturing technology used during the fountain pen's heyday.¹⁰¹ That these innovations are happening today instead of the 1930s testifies to the health and vigor of the fountain pen as a technology: it has evolved to fit a very different society than the one for which it was originally designed. Clearly, fountain pens do not exist as a bygone technology; collectors today are not only able to seek out vintage models for preservation, but collect brand new specimens fresh off production lines. Indeed, fountain pen production represents a robust manufacturing industry, producing a wide variety of products for various price ranges—from durable sub-\$5 Platinum Preppys, to middling workhorse models like the Pilot Custom 74, and all the way to uniquely hand painted artworks with like Namki's Maki-e pens. The record sales, numerous manufacturers, abundant enthusiast literature, and hundreds of thousands of fountain pen users prove that fountain pens are thriving. They are not gimmicks. They are not just nostalgic whimsies. They are serious tools for serious writers. As the prolific English novelist Graham Greene told the International Herald Tribune in 1977, "My two fingers on a typewriter have never connected with my brain. My hand on a pen does. A fountain pen, of course. Ball-point pens are only good for filling out forms on a plane."¹⁰²

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¹⁰¹ Excepting 14kt gold flex nibs, which requires technological expertise and great demand to make their production worthwhile. This has not yet occurred in the modern fountain pen market.

¹⁰² "Collections on Parade: Graham Greene and Evelyn Waugh," accessed March 25, 2017, <http://www.hrc.utexas.edu/ransomedition/2003/spring/parade.html>.

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List of Figures

THE SATURDAY EVENING POST April 29, 1944



**These famous P-51's have more
than a name in common!**

There's a world of kinkily in these two—the P-51 Mustang, one of the fastest fighters in existence, and the brilliant, streamlined Parker "51" fountain pen.

For, like a plane in flight, the Parker "51" responds smoothly, instantly to your touch. Its history is the history of flashing wings.

Your natural desire is to possess this finest of all writing instruments of man. Yes, you may have to wait for yours.

You see, production of all fountain pens has been curtailed by government order. Fortunately, Parker craftsmen are today creating

ing primers, bases, parts for almost engines (including that of the P-51 Mustang) and a long list of other vital war equipment.

All the Parker "51" pens we can produce are now national in demand. However, if a new pen is essential for your war task—or for other letters of encouragement to someone in service—place an order for a Parker "51".

The Parker "51" is the only pen of its kind—patented for basic U. S. Patents. It also can use the new Parker "11" ink—the world's finest flying ink! Dites as you write! You need no blotter. Of course, you can use any

regular ink with the Parker "51" if you so desire—but you won't "be dited."

Colors: Black, Blue-Celest, Dove Gray, Condor Brown, \$12.50 and \$15.00. Precise, \$4.99 and \$7.50. Famous Parker Vacuum pens, \$6.75. Precise, \$4.99.

DISCONTINUED BY THE MANUFACTURER: Parker's also featured in the past a new model continuously improving writing for the writer's fit, without any other than the change of pen nib, sections, and fittings, if you so are interested in changed and a changed model as the Parker 51 fountain, fountain, fountain.

Write your dollars right—BUY PARKER 51'S

Parker "51"

Writes day with wet ink!

Figure 1: Parker 51 and P51 Mustang Advertisement



Figure 2: Wearever button filler cap. Courtesy of Mr. Jim Mamoulides

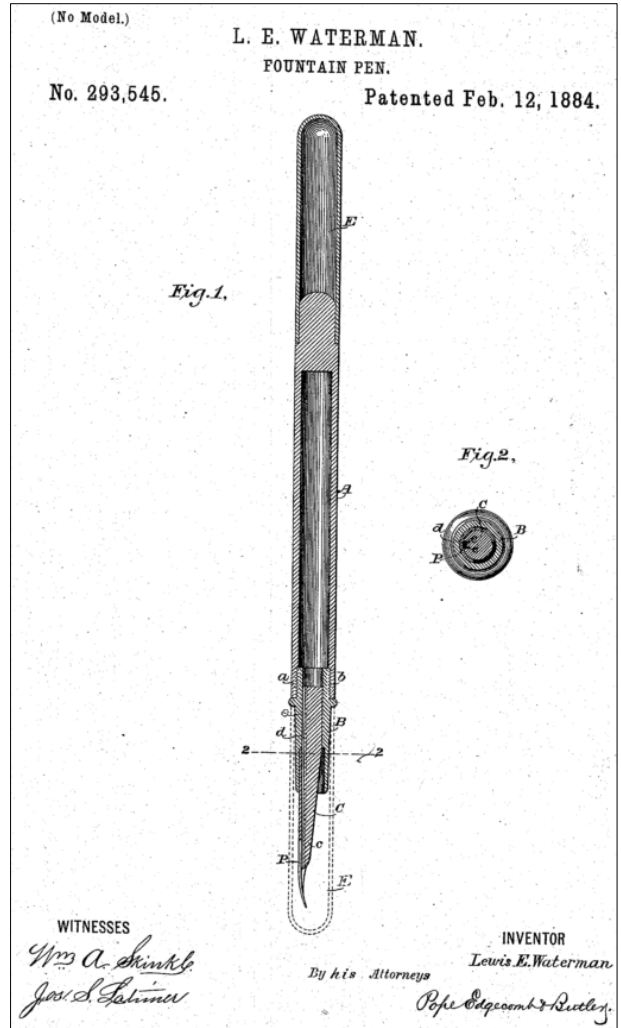


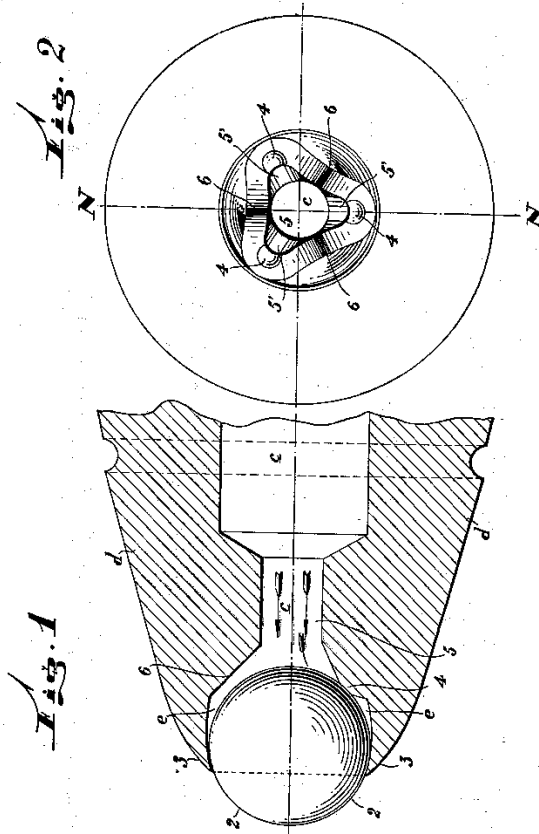
Figure 3. Waterman's Original 1884 Feed Patent.

Dec. 11, 1945.

L. J. BIRO
WRITING INSTRUMENT
Filed June 17, 1943

2,390,636

3 Sheets-Sheet 1



Inventor

L. J. Biro

By *Clasco Downing*
Attorney

Figure 4: Image from Bíró Patent US2390636 A

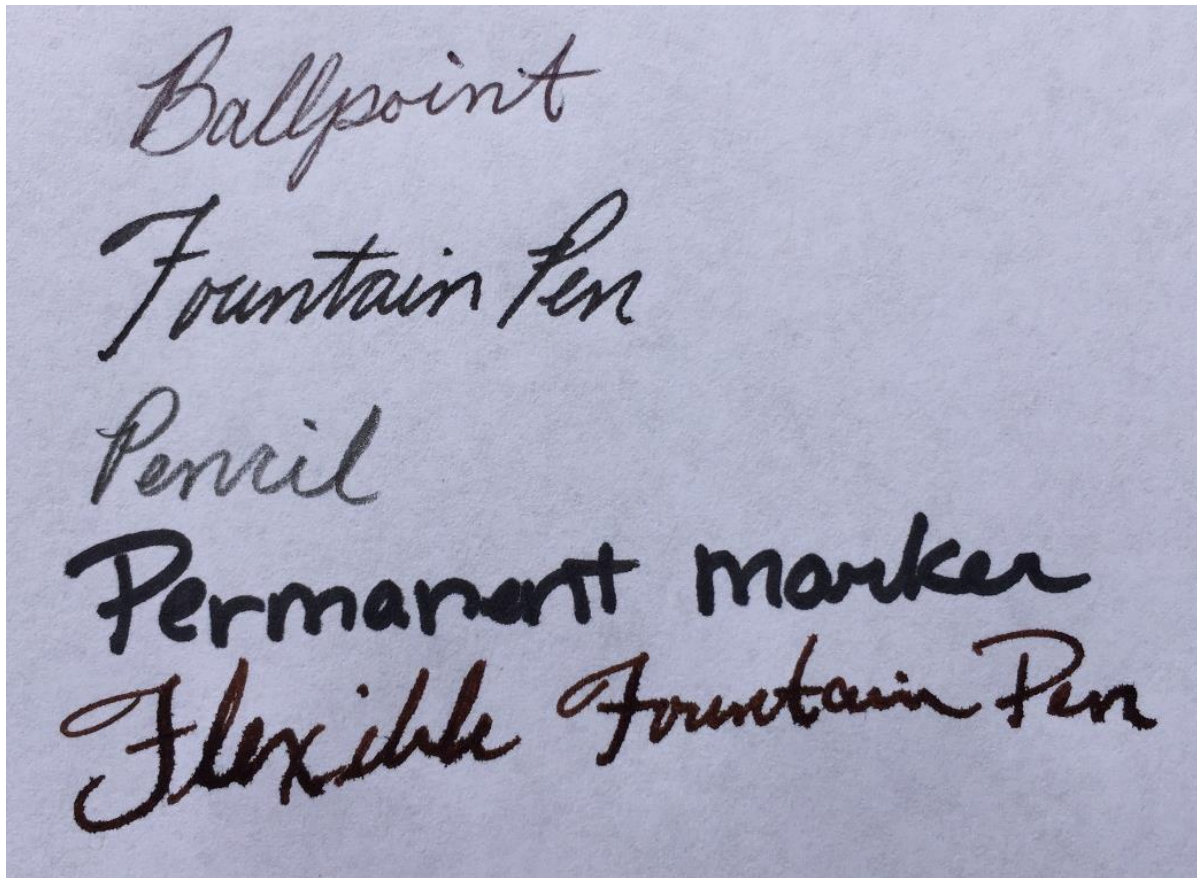


Figure 5: 20lb Copy Paper Writing Sample

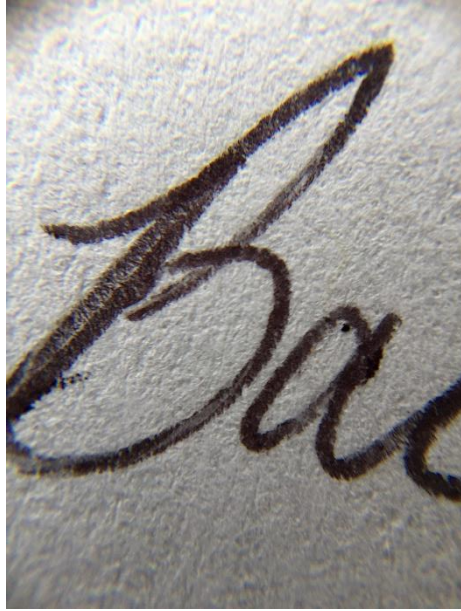


Figure 6: Ballpoint (Medium)



Figure 7: Fountain Pen (Fine)



Figure 8: Mechanical Graphite Pencil (.07mm)



Figure 9: Permanent Marker (Fine)

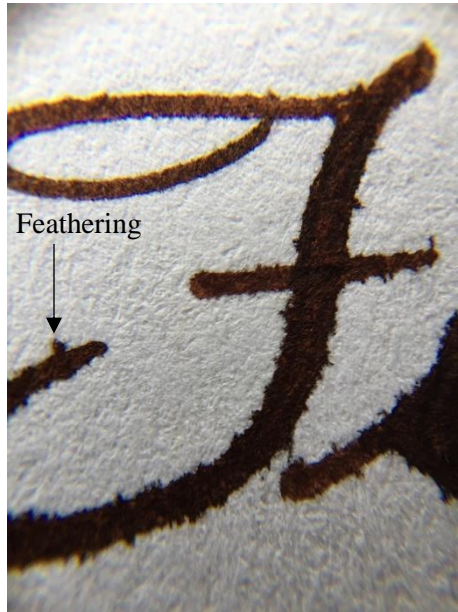


Figure 10: Fountain Pen (Fine, Flexible Nib)