ABSTRACT  The following text investigates the rhetoric and designs of the pioneering industrial designer, Norman Bel Geddes, and the way in which they exemplified a subjective approach to design practice, focusing on the firm’s work for the radio manufacturer the Philadelphia Storage Battery Company (Philco) in the 1930s. The research investigates how the public image of the visionary designer was strategically produced and enthusiastically, as well as critically, received. This article shows that the Bel Geddes’s firm engaged in objective design research, which was further guided by subjective design choices. This tension between the objective and subjective lay at the heart of Bel Geddes’s design practice and helped his company to produce products that appeared simultaneously modern and fantastic – practical and visionary. This approach had wide appeal in the 1930s, but later lost its attraction.

KEYWORDS: modernism, taste, Bel Geddes, industrial design, subjectivity
Introduction
This article examines the place of subjectivity in design biography, using the case study of Norman Bel Geddes’s life and work and focusing on his design of radios for the Philadelphia Storage Battery Company (Philco) in the 1930s. The article explores how Bel Geddes used his carefully crafted public persona – the celebrity designer as practical visionary – as a sales tool, promoting himself as a designer of immense vision to excite public interest and attract clients. Clients were encouraged to view Bel Geddes as a keeper of scientific knowledge and aesthetic expertise with the ability to interpret consumer desires. Yet, Bel Geddes’s subjective design preferences often outweighed the firm’s supposedly objective design research. As a result, Bel Geddes was able to create products with avant-garde appeal through an infusion of visionary romance. Thus, subjective responses were integrated into the design and development process. Through his attention-grabbing designs and prolific publicity Bel Geddes crafted a progressive image as a technological utopian and streamlining pioneer (Figure 1). In the 1930s this approach helped Bel Geddes to achieve design celebrity. However, in the postwar years such a romantic image fell out of favor in both the design community and within Bel Geddes’s own firm.

Figure 1
“A PEEP INTO THE FUTURE By – The Spectacular NORMAN BEL GEDDES former Detroit Artist”, Detroit News, January 1, 1933. (Harry Ransom Center, The University of Texas at Austin.)
Typical publicity for Bel Geddes proclaimed, “Practical visionaries like Norman Bel Geddes are helping us to learn how to play the game of tomorrow” (Anon. 1932). The practical vision referred to here is rooted in subjectivity: it is a design approach that transforms imagined creations into physical realities. It originates in the individual and is made real through the manifestation of utopian ideas and objects of personal value. The idea of creativity originating from personal expression underlines the subjective origins of design activity. Subjectivity in art “depends on the expression of the personality or individuality of the artist” (O.E.D. 2013). The expression of personality was essential to the operation of Bel Geddes’s firm. His monumental imagination and grandiose schemes kept the spotlight on his work and personality for decades. In fact, from the very beginning of his creative life in the 1910s when he collaborated on his little magazine of art and philosophy, InWhich, he insisted that only his name permeate the publication (Anon. 1915). This approach became the norm in his design office after the late twenties, when he began his industrial design practice, and was enshrined in the office procedures of the 1940s. Equally important to maintaining the office was the presentation of Bel Geddes as a taste expert, one whose aesthetic judgment emanated from intangible and individual subjective knowledge. In this article I will investigate the origins of Bel Geddes’s personality-driven approach to design and interrogate his use of subjective knowledge, whether the construction of his persona or his role as a taste expert, as tools for maintaining his design celebrity and creative practice.1

Between Object and Subject in Biography

In order to more precisely understand Bel Geddes as a designer of subjective vision, the following section explores scholarly definitions of subjectivity, mapping them on to Bel Geddes’s professional activities. It also investigates the design archive as a subjective construction. Susan Crane advises against a binary approach in writing history. She notes that historians are aware of the constructed nature of the stories they tell. Yet, they tend to “obscure” their historical subjectivity in an attempt to appear objective. Crane offers a way out of this paradox, arguing that, “[s]ubjectivity and objectivity are related, not opposed… we could never attempt one without the other” (Crane 2006: 434), and as historians we should acknowledge this. Likewise, I accept that my research on Bel Geddes is a fabrication guided by real historical documents – factual information and promotional statements emanating from the Bel Geddes office: press releases, interviews, advertising, memoranda, etc. In line with Crane, I attempt to explore the practical and the visionary not as opposites, but as linked in a shifting unity.

Bel Geddes’s self-presentation as a practical visionary was key to recording his own life story. It was played out on an almost daily basis through the construction and dissemination of his professional
persona in internal memos, press releases, publications, and in his own autobiography, which he began drafting in the early 1950s. As early as 1924 he had developed the motto “Imagination creates the actual” (Meikle 1979: 50). A promotional pamphlet for Bel Geddes’s 1932 design monograph, proclaimed, “Horizons is a glimpse of the future… written by… a man with the vision of a Jules Verne but combining the hardheaded practicalness [sic] of a successful business man to-day…” (Anon. ca. 1932). The concept could also be applied to domestic goods where objective technical expertise and a subjective aesthetic knowledge might produce a more saleable product. A 1934 Bel Geddes design report noted that the firm’s design for an Electrolux vacuum cleaner emphasized “practicality” in order to “appeal to women” (Anon. 1934). By 1952 Bel Geddes proclaimed the “principle story” of his autobiography was “how [a] visionary thing was made into a reality by applying imagination to everyday living that would improve it.” The Bel Geddes archive is suffused with promotional rhetoric of this kind, presenting the firm’s practical vision as a unique, adaptable, and beneficial perspective. Whether attracting businessmen or appealing to the public, at different times throughout the life of the office either the rational or the romantic was foregrounded. Because of this sliding scale approach, the concept resisted fixed binary oppositions and acted as a flexible and coherent system of promotional representation for Bel Geddes’s work and life.

While it had long been a commonplace to accept biography as a factual genre, with the linguistic turn of the 1970s its fictional nature was more forcefully argued (White 1978). Observing the fictional aspects of biography, Rosalind Barber has noted that “[h]istorical biographers construct narrative by imaginative interpretation of evidence” (Barber 2010: 165). Evidence of Bel Geddes’s ideas and creations are found in his vast archive which ranges from meeting minutes to consumer surveys, photographs, newspaper articles, and much more. The historian’s engagement with and analysis of a designer’s archive is a hugely subjective exercise, despite the seemingly objective qualities of the evidence. The Bel Geddes archive is unusual not only for its vast scope, but also because it is the only complete collection of papers by a leading American first-generation industrial designer to have been so thoroughly and self-consciously constructed and reconstructed by the designer (Maffei 2000; Feo Kelly and Baer 2012).

Of course, archives and the archival material they preserve are transformed through many processes, including intuitive, aesthetic, and practical decisions. Memoranda and consumer research reports are two such groups of artifacts that can be found in abundance in the Bel Geddes archive. But how objective are they? Before meeting minutes are filed they must go through a series of significant changes. They originate as thought, are converted to speech, then recorded in writing. Next, deletions and insertions take place before
a final document is produced for approval and further verification. Finally, the completed minutes are stored in a filing system of Bel Geddes’s making, one which is organized according to his own subjective preferences.

Much of the textual output of the offices of designers is promotional and will normally be guided by a commercial imperative. Quantitative consumer studies may seem objective on the surface. However, these can be designed to conform with particular outcomes, for example to promote a designer’s preferred aesthetic or to appeal to the economic needs of the client. Promotional writing in trade magazines, newspapers, and elsewhere will have likely originated from press releases crafted by press officers and, in the case of Bel Geddes, must meet with his final approval. Such writing will be aimed at depicting the designer and client in the best possible light. Thus, there will be little or no room for critical expressions.

When it comes time to preserve and archive such documents an additional process of subjective intervention inevitably occurs. Letters, pamphlets, photos, and more are then edited and curated. Career failures might be removed while successes might be highlighted. In the first instance this can take place in the design office archives, then perhaps by the designer and his heirs, and later by institutional archivists, assuming the material meets institutional needs and archivists’ criteria. Each of these individuals will shape the evidence of a designer’s life according to their interests, whether they are commercial, personal, academic, or institutional. Perhaps this makes the genre of design biography one of the most subjectively orientated of design history writing. Regenia Gagnier identifies a number of categories of analysis used in her study *Subjectivities: A History of Self-Representation in Britain, 1832–1920* (1991). These include the subject from his or her own experience and the subject as known by others. The latter – Bel Geddes’s construction of his public persona and expression of his design preferences – is the primary focus of this study. Gagnier notes that, importantly, this external representation reciprocally shapes the subject, resulting in the “construction of the self in opposition to others” (1991: 9). She observes that this is particularly acute in the case of group subjectivity, for example, communities, classes, and nations. Bel Geddes was a prominent representative of his primary community, the industrial design profession, and his active public self-representation as a logical and creative professional would have also been aimed at members of business communities, whether investors or industrialists. By 1931 Bel Geddes was a member of one of the country’s first professional design organizations, the American Union of Decorative Artists (AUDAC, founded in 1928). Bel Geddes would later become a founding member of the Society of Industrial Designers in America in 1944 (Sparke 1983: 34). Despite his professional activities, Bel Geddes’s visionary approach was seen as a threat to the commercial success of the industrial design profession. George Nelson, writing
in *Fortune* magazine in 1934, noted that American industry viewed Bel Geddes, and his “visions of sugar plums,” with some suspicion (1934: 88). Bel Geddes tirelessly countered this image with one of himself as a visionary of great expertise, the industrial designer as organizational mastermind and creative seer, whose imaginative powers and scientific knowledge ensured design success for his clients. Following Foucault, and continuing with her categories of analysis, Gagnier rejects the notion of inherent genius as an element of subjectivity, arguing instead that the subject is shaped by knowledge, especially that of social institutions “that circumscribe its terms of being” (Gagnier 1991: 9–10). Bel Geddes presented himself not as a genius, but the nearest thing: a visionary. This did not, however, keep others from referring to him as an intellectual prodigy. Henry Dreyfuss wrote that Bel Geddes was the “only authentic genius this [industrial design] profession has ever produced” (Flinchum 1997: 27).

**Practical Vision: Balancing Subjectivity and Objectivity**

The following section outlines Bel Geddes’s early years, exploring the way in which he initially developed his subjective vision. Modernity has been understood as a period marked by the evolution of individual subjectivity, transforming societies, the material environment, and individual identities. Bel Geddes aimed to transform the designed world, himself, and the consumers of his ideas, images, and creations. Late modernity was characterized in part by the intensification of consumer culture, the wholesale alteration of the physical landscape, and the increased freedom to shape one’s self. A guiding attraction of twentieth-century consumerism was the possibility of self-realization through the purchase of goods (Jackson Lears 1994: 9). The tendency to construct one’s own subjectivity, whether through shopping or social role-playing, “manipulating the self in order to manipulate others” (Riesman et al. 1969: 149), is not unique to Bel Geddes’s era, but has been recognized as a hallmark of modernity (Kellner 1992; Jackson Lears 1994: 37). Bel Geddes harnessed the flexible nature of identity in shaping his image and those of his audiences, be they theater-goers, consumers, or visitors to the Futurama, his vast model of the world of tomorrow at the New York World’s Fair, 1939–40. His self-awareness of this process is evident in the 1954 draft title of his autobiography, *I Designed My Life*.

In his professional life he remade his own subjectivities according to his varied audiences, advancing from one creative field to another including vaudevillian, portraitist, advertising artist, stage designer, and architectural and industrial designer. Constructing and maintaining his public image was key to the success of his business. He presented himself as a visionary artist to his stage design students, as a tough-minded businessman to industrialists, as a hardened modernist to architects, and as a technological prophet to the public at large. His knowledge of the irrational and the rational, his efforts
to balance the two, and his career shift away from the supposedly artistic world of theatre towards the ostensibly logical sphere of industry and manufacturing, echo a similar transformation within American culture during the first half of the twentieth century: in aesthetics – from expressionism to functionalism; in prophesying – from spiritualism to technological and consumer forecasting; in national direction – from westward expansion to the inward conquest of the self.

Subjectivity is defined as “the fact of existing in the mind only” as well as “the quality or condition of viewing things chiefly or exclusively through the medium of one’s own mind” (O.E.D. 2013). During a period when supposedly objective, rational modernism was rising in prominence, Bel Geddes explored the interior world of the self: the spiritual and psychoanalytical. In his youth his mother and then later his first wife made him aware of the religion of Christian Science, which prized the power of the mind, not only to heal the body, but to envision an ultimate reality beyond the physical world. During the 1920s while teaching a stage design course in New York City (Bel Geddes, n.d. d.), he adopted the ideas of the influential avant-garde set designer E. Gordon Craig who wrote of imagination as the most powerful of human faculties. Craig and Bel Geddes were part of a trend in avant-garde stage design known as the New Stagecraft, which sought to intensify the mood of the play through simplicity in setting and the use of expressive lighting effects.

Evidence of Bel Geddes’s fascination with imagination and pragmatism can be traced to Craig, who in 1912 described “imagination” as “the most precious possession of mankind.” “Mysterious” and “eternal,” it is “this which heals, by which you see, by which you hear, by which you understand and are converted to the truth of life . . .” (Craig 1921: 72, 73). By 1915 Bel Geddes wrote in his little magazine InWhich of the need for “living imagination” (Bel Geddes 1915) (Figure 2). In 1922 he asserted, “Imagination’ is not synonymous with fantastic or fantasy: it means the devising of ideal constructions from concepts, free from practical limitations” (Bel Geddes, n.d. a). In his copy of Le Corbusier’s The City of To-morrow and Its Planning (1929) Bel Geddes underlined the architect’s axiom, “What gives our dreams their daring is that they can be realized” (Le Corbusier 1929: 139) and wrote below it: “A dream is an idea to be translated into a reality.”

Bel Geddes’s notion of practical vision was perhaps most articulatedly expressed in Horizons (1932), a design primer and monograph of his progressive visualizations and streamlined designs, and was more famously materialized at the New York World’s Fair (1939–40) in his designs for General Motors’ Futurama, an educational ride depicting a high-tech world of 1960, which encouraged a subjective, immersive experience of a flight into the world of tomorrow. The concept of the practical visionary allowed Bel Geddes to don a number of guises, whether pioneering modernist, ingenious Yankee, or man
of tomorrow. This strategy helped Bel Geddes to sell his image to a diverse audience, including culture elites, industrial clients, and the public. Bel Geddes appealed to a public fascinated by stories of technological prophecy and invention, placing himself in the pages of the nation’s popular media alongside H.G. Wells, Thomas Edison, and Henry Ford, celebrated for their machine-age insights and technological triumphs.

Five years after America’s first major industrial design offices were established, the writer Gilbert Seldes reflected on the roots of the professions that traded on fantasy and desire: “two of the most powerful influences” on the origins of industrial design were “advertising agencies and the makers of scenery for the theatre” (Seldes 1932). Teague had for many years been a successful advertising illustrator, Loewy had worked in fashion illustration, and Dreyfuss and Bel Geddes had maintained significant careers in stage design (Meikle 1979: 43, 139). Bel Geddes described his transformation from stage design to industrial design as a natural evolution and saw numerous commonalities between the two fields. He believed they both depended on detailed planning and seamless presentation and insisted that each must be “done with an eye to pleasing and intriguing the on-looker. Industry… would be stagnant otherwise and certainly could not achieve popular success” (Anon. ca. 1940).
Bel Geddes’s move from theatre to industrial design was not surprising. For many years he had seamlessly mixed theatrical and commercial design. While producing the artistic and philosophical InWhich magazine in 1915 he broadcast his services as a designer of personal monograms. As a young advertising artist Bel Geddes was obsessed with stage design. And, throughout his industrial design career, he maintained a substantial sideline in set design. By 1927 he described industrial design as a hybrid profession, balancing the “opposites” of the businessman and the artist. Believing he possessed this “peculiar blending,” he viewed his own mental discipline as key in combining “practical” and “aesthetic” thought. Reflecting Mind-cure ideas, Bel Geddes explained that such equilibrium was all “a matter of consciousness” a “mind point of view which demanded clear thinking” (Bel Geddes n.d. b). Reflecting on his own life story, Bel Geddes explained the need for imagination and fantasy in both stage and industrial design, “Once he [Bel Geddes] dreamed in the make believe world of the theater. Now he dreams in an industrial world of the future” (Bel Geddes, n.d. b). Believing that the theatre “was not the center” of “national life,” Bel Geddes “wanted to be in the thick of things… industrial designing” (Nelson 1934: 94), and proclaimed, “I gave it [stage design] up to try something more important” (Anon. n.d. a). Accordingly, Bel Geddes’s promotional language altered from that of a dreamy artist to a hard-nosed businessman, evidencing his ability to juggle a number of subjectivities. While his 1920s New York City stage design lectures emphasized aesthetic ideas based upon mysticism and Theosophy, Horizons presented a significant evolution towards machine-age rhetoric, while maintaining a visionary outlook. Thus, Bel Geddes fused the seeming objectivity of industry with the fantasy of consumerism.

Bel Geddes described his moment of conversion to America’s new objectivity during a weekend with his friend Ray Graham of the Graham-Paige motor company. Graham offered Bel Geddes $50,000 to design automobile bodies, hoping the large sum would tempt the successful stage designer. According to Bel Geddes, it was then that “designing for industry took a definite form in my mind.” The invitation “sent the blood rushing…. I burnt [sic] all over[,] what an opportunity!” On his train journey back from his meeting he viewed from the locomotive window a “dozen reapers mowing down a wheat field almost at a single strip then… twenty [silos] in a row,” and envisioned “numerous instances of introducing new ideas on a bigger scale in business toward economy” (Bel Geddes, n.d. c). Bel Geddes would later develop these ideas and images on a prodigious scale in Horizons.

However, despite his epiphany and its accompanying stock modernist industrial imagery, Bel Geddes knew that his designs would have to seduce rather than shock American consumers. In the US design press of the late 1920s and early 1930s, promoters of a modern American design movement wrote of the need to
embrace “charm” and “personality” in design and reject what they viewed as startling “modernistic” design, which many design pundits considered to be a bizarre and extreme interpretation of modernist design (Maffei 2003). Bel Geddes knew that to sell goods to a mass of American consumers he would have to temper his avant-garde ambitions and infuse his work with subjective appeal. By infusing personality into forms based in modernist objectivity Bel Geddes bridged mass culture and the avant-garde.

**Aesthetic Subjectivity and Design Authority**

Focusing on his designs of Philco radios in the early 1930s, the section below analyses the way in which Bel Geddes used a combination of subjective knowledge, especially his own aesthetic judgment, and consumer research to shape and promote his designs. As his organization developed Bel Geddes increasingly sold the expertise of his firm to new clients based on two seemingly irreconcilable aspects of design knowledge: subjective taste and objective consumer research. From this two-pronged attack Bel Geddes could dismiss claims of being a mere stylist and deflect criticism that he was offering a service equal to that of any engineer or market researcher. Instead he could offer his taste, intuition, and imagination, as well as his quantitative research based on consumer surveys and demographic data. In many cases Bel Geddes understood that objective arguments for design outcomes were easier to defend. Yet, ultimately, and often in spite of research findings, Bel Geddes imposed his own subjective preference, for simplified, modern design.

Those who blamed the economic crash of 1929 on under-consumption, including advertisers, engineers, and designers, called for the objective study of consumer behavior. Just as new technologies had rationalized production, it was believed that a new science of consumer engineering would rationalize consumption and stabilize the economy. In their 1932 book *Consumer Engineering*, Egmont Arens and Roy Sheldon called for sociologists and psychologists not merely to create demand, but to respond to it and to discover what people wanted through consumer surveys and scientific theory, thus promoting consumption while avoiding another economic depression (Arens and Sheldon 1932: 2, 14, 19). Supporting this project, American industrial designers offered their services as essential intermediaries (Blaszczyk 2000) between supposedly fickle consumers and vulnerable producers. Key to the functioning of industrialized society, consumer “translators” ranged from designers and department store buyers to manufacturing personnel who “facilitated communication between consumers and producers” (Horowitz and Mohun 1998: 2–3). In 1930 the industrial designer Ben Nash urged manufacturers to hire design consultants to interpret the “dangerously inarticulate” consumer in order to avoid “overproduction, dealer complaints, distress prices and returned goods” (Nash 1930: 36, 85). Likewise, Bel Geddes presented the
consumer as an increasingly powerful and potentially ruinous force whose desires required expert mediation. This representation was an effective strategy, helping the emerging design profession to attract clients enthralled by consumer expertise.

After 1930 Bel Geddes’s staff energetically engaged in consumer research and believed that consumer wishes should not be blindly obeyed, but monitored and interpreted by design consultants through surveys and interviews. This approach put designers in an enviable position. Clients were encouraged to regard designers as the primary translators of consumer desires with access to scientific authority and economic influence, yet they also had to trust their subjective aesthetic judgments. So, while industrial designers like Bel Geddes broadcast their scientific services, their design activities were ultimately determined by their personal taste. Thus, consumer analysis seemed to allow Bel Geddes, his competitors, and consumer experts to express the “inarticulate longings” of consumers (Arderly 1924; Scanlon 1995: 10), who, according to Bel Geddes, “do not know exactly what they want, but they do know that they want it. They want something new but they are going to be timid about accepting it” (Bel Geddes 1946). Emphasizing the unique advantage that individual design knowledge provided a client as late as 1943 Bel Geddes and company maintained, “In our work we have found that due to lack of imagination of the dealer or consumer, it is impossible to obtain from him any valid improvements or suggestions” (Bel Geddes ca. 1943). In 1946 Bel Geddes asserted, “The successful designer is a leader, otherwise the results of his thinking are obsolete by the time they are on the market” (Bel Geddes 1946). This approach, exemplified in the Philco radio case study below, was based largely on personal and often intuitive design experience. It filtered, transformed, and sometimes ignored consumer preferences discovered through market research, allowing Bel Geddes to promote his preferred aesthetic, which was both modern and popular and aimed at consumers of average taste and income, whether informed by quantitative research or personal whimsy, but always presented as an interpretation of mass taste.

As the Bel Geddes office developed, its consumer research became increasingly sophisticated. In the early 1930s Bel Geddes and company merely surveyed the product preferences of consumers and dealers through interviews and questionnaires. This approach was employed in the designs of stoves for the Standard Gas Equipment Company (1930) (Figure 3) and radios for the Philadelphia Storage Battery Company or Philco (1930). By the mid-thirties, however, the office had produced extensive sociological and demographic reports that optimistically forecast trends in consumer desire, education, and income, and offered designs intended to appeal to a range of middle-class tastes. In his research Bel Geddes sought large consumer groups with the most ordinary outlooks but the strongest spending ability. “The important factor in conducting a survey of this
kind,” he explained in Horizons, “is to pick the right individuals from whom to get information. The survey should represent the average mass viewpoint, the viewpoint of the greatest buying power” (Bel Geddes 1932: 230). Despite his personal appreciation of pioneer modernist design and the ultimate streamlined form, Bel Geddes warned designers against avant-garde experimentation: “If he does something tricky, a few people will be enthusiastic about it, but the majority will not” (Bel Geddes 1946).

Throughout his creative life Bel Geddes had been fascinated by the masses, including mass production, mass taste, and mass politics, whether socialist or capitalist. The industrial design profession associated the mass market with the notion of “average taste” and pitched its products accordingly at “all but the poorest and the wealthiest households” (Kaplan Nickles 1999: 10). In 1932 the trade journal Product Engineering proclaimed that good design should “hit the average taste” and “aim generally at producing a quiet, unobtrusive effect” (Lee 1932: 201). In 1940 Harold Van Doren suggested that designers should take a “middle course” and provide the public with “the very best it will absorb, and not one bit more” (Van Doren 1940: 45–6, 54). Raymond Loewy would later develop an acronym for this tendency, the MAYA principle, the “Most Advanced Yet Acceptable,” a design aesthetic that sought a balance between the reassuringly familiar and novel styling (1951: 278). Bel Geddes’s
design for mass consumption tended to conform to these principles. The irony is that Bel Geddes’s idea of mass taste often seemed to reflect his personal design preference.

In the decades leading up to his entry into the industrial design profession in the late twenties Bel Geddes witnessed a dramatic shift in consumer taste and resulting sales strategies – a shift from a sales appeal based on function and price to one focused on taste and class. Bel Geddes was aware of the diminishing influence of Fordism, named after Henry Ford’s sales strategy used at the Ford Motor Company after the introduction of the 1908 Model T, which provided a single, “universal” design at the lowest possible price. This marketing approach was superseded by Alfred Sloan’s more successful annual model changes at General Motors in the 1920s, which used a “price pyramid” to aim a variety of models at a broad range of customer groups. Ford thought he could sell a product based on objective qualities of low price and functionality. Sloan realized that subjective preferences based on social status and individual taste is what really mattered. Fordism was dominant in the 1910s and 1920s during the rise of a national mass market where a number of firms, including Ford, General Electric, Coca-Cola, and many others, developed dominant positions, national and international brands, and increased in scale through mass production of inexpensive goods.

At this time firms began systematically collecting marketing data, while organizing and educating the mass market. Increased commercial competition during the 1930s intensified market segmentation and increased supposedly objective consumer research, including the study of demographics, focusing on age, income, and education, and psychographics, the quantitative investigation of consumer attitudes. This information was used to divide markets into segments large enough for scale economies (Tedlow 1979: 4–7). General Motors, a leader in consumer research during the 1930s, aggressively surveyed its consumers in an effort to maintain its profitability (Marchand 1998: 230). However, the effectiveness of such attempts to understand consumers could not be substantiated (Clarke 2007). Following the increasingly sophisticated consumer research within the motor industry, manufacturers in other sectors consulted outside experts who presented their knowledge of consumers as a kind of business science (Meikle 1979: 16, 17, 70). Bel Geddes’s consultancy services relied on his self-presentation as an expert in objective consumer research alongside his reputation as a prophet of good design. Rather than seeking a uniform mass market, as Ford had done with the Model T, Bel Geddes sought to divide the remaining middle market into several segments. Bel Geddes’s embrace of market segmentation reflected his efforts to satisfy clients yet coexisted with his personal preference for modern design. This tendency was perhaps most clearly expressed in his work for Philco, a leading manufacturer of radios.
Shortly after the stock market crash, in 1930 Philco spent nearly $10,000 to fund Bel Geddes’s consumer research (Anon. 1931a). While nearly 10 million families owned radios in 1929, this figure had jumped to an estimated 12 million the following year. Revealing the cultural importance of the radio in public life, the US government included the question, “Do you own a radio?” in its national census of 1930 (Kimball 1930: 231–3; Meikle 1979: 8). Philco had entered the field in the late twenties, shifting its emphasis from battery to radio production. The company made an impressive start in 1929 (Ramsdall 1931: 17–19): through its introduction of smaller radios, and aggressive marketing and advertising, by the end of 1931 Philco had captured 40 percent of the radio market (Anon. 1931d: 69).

Bel Geddes’s Philco survey questioned 100 radio dealers and 288 consumers (Anon. 1931a). In addition to the surveys, informal conversations were conducted with “various people concerning [the] radio,” including Bel Geddes’s friends and family. Hardly objective choices of research respondents, these tastemakers included Helen Lansdowne Resor, a central figure at the J. Walter Thompson advertising agency (and mother of Frances Resor Waite, Bel Geddes’s wife); and Lee Simonson, the influential author, stage designer, and friend, who, along with Bel Geddes, was a pioneer of the modern stage design movement in America known as The New Stagecraft, which emphasized simplicity and intense drama (Anon. n.d. b). Thus, Bel Geddes’s seemingly “objective” consumer research can be understood as a smoke-screen, adding an appearance of scientific rationality to what was a largely subjective design method. This apparently logical approach may have had more appeal to his business-minded clients. During an era when period styles dominated furniture sales the tastes of survey respondents reflected an overwhelming rejection of simple, unornamented radios, and a preference for designs that “would harmonize” with existing “furnishing.” The study revealed that consumers desired, in order of preference, tone, price, reception, and style, with “modernity” appearing near the bottom of the list at fourteenth (Anon. n.d. b). The emphasis on function and price seemed to leave little room for modern styling. In Horizons, on the other hand, Bel Geddes attempted to strike a balance between avant-garde and widespread allure, presenting a radio aesthetic that rejected period styles, embraced “simplicity,” and “appeal[ed] to popular taste.” Aware of the public’s desire for visual harmony, yet keen to sweep away the trappings of the past, Bel Geddes wrote that a radio cabinet need not be “of a definite period, that is, Tudor, or Louis XIV, or Jacobean,” but should “have a form that would be appropriate anywhere” (Bel Geddes 1932: 231). Despite the Philco respondents’ rejection of “modernity,” two years later Horizons promoted a modern machine-age aesthetic. “Essentially the radio is one of the most representative products of the modern era, an era in which the mechanistic and the aesthetic are related. Its future design will proceed upon this basis” (Bel Geddes 1932: 241). Bel Geddes’s
prophetic and authoritative pronouncement evidences a design outlook based more on individual taste, than quantitative research. Here Bel Geddes was rejecting his firm’s supposedly objective research in favor of his subjective preference for modernist design.

While Bel Geddes longed to introduce modernism to the American public, the home furnishing trade proved conservative, either rejecting novel styling or calling for its gradual introduction. During the late twenties and early thirties a small number of American designers encouraged a restrained form of modern design, characterized by horizontal lines and pure geometric forms, as opposed to the “modernistic,” angular styling associated with the Paris Arts Décoratifs exhibition of 1925. “Modernistic” styling was thought by many American designers and commentators to have turned the public against modernism altogether. In the early thirties the latter rejected it as an “insane and bizarre” foreign idiom, while “frank” and simple design, based upon the supposedly American trait of “practicality,” was met with approval (McDonnell 1932: 32). Good modern American design was considered to be characterized by subjective qualities of personality and charm (Maffei 2003). In 1931 Bel Geddes joined the debate:

For the majority of people, to describe a room as being decorated in the modern style instantly calls up a lurid picture of angular gadgets on box-like furniture in nursery colors. Such work is simply bad work, which can occur in any age in history, and it is sheer ignorance to believe that it represents good modern design. Freaks are inevitable in any era, but it is not the freaks which live, but the honest creations grounded in the essentials of proportion, color and texture … (Anon. 1931b)

Bel Geddes’s comment emphasizes not scientific consumer research but aesthetics. Such knowledge, and any claim of “good” taste, is deeply subjective. It is the result of individual aesthetic judgment, based on the subjective knowledge gained from a diverse range of sources, including accumulated design experience and one’s social class.

Despite the conservative preferences of the Philco respondents, Bel Geddes illustrated the most aesthetically progressive of his Philco designs in Horizons and called for the application of modern design to radio cabinets, proclaiming, “Radios are still in their horseless carriage days” (Bel Geddes 1932: 240). To illustrate his point he compared a full-blown period-style Philco radio of 1930 (Figure 4), with his simply designed Philco Lazyboy of 1931 (Figure 5) – a low cabinet radio with tabletop controls, dark grained wood, and beaded molding (Anon. 1946). The manageable size of the Lazyboy capitalized on the recent craze for smaller “midget” sets, which by 1930 represented 50 percent of radio sales in the US (Anon. 1931c). Far from modern, Bel Geddes’s other designs for
Philco also included simplified period features, dark woods, and carved moldings. However, these more traditional cabinets were not promoted in Bel Geddes’s visionary design monograph. The Bel Geddes office followed its standard practice, and at the end of the project produced an official job summary. Normally used to reflect on the successes and failures of the job, generate publicity, and attract new clients, the Philco job summary ignored the results of the survey and suggested that improved visual design had substantially increased the company’s sales (Anon. 1946). According to Bel Geddes, his designs for Philco helped the company gain 50 percent of US radio sales, reach peak production of 4 million sets, and resulted in the building of a new factory by the end of 1932 (Anon. 1943). Essentially, Bel Geddes was making a grand claim that

Figure 4
Radio designed by Philco engineers, 1930, reproduced in Horizons.
(Harry Ransom Center, The University of Texas at Austin.)
the commercial success of Philco’s products – and by extension the products of all of his past and future clients – was dependent on his subjective knowledge. This boast, of course, did not acknowledge Philco’s recent aggressive advertising, marketing, and promotion of smaller radios.

**Conclusion**

From the late twenties to the postwar period a number of intersecting historical processes appeared to determine the fate of the visionary, celebrity designer. The culture of celebrity and the public acceptance of fame transformed from an appreciation of inherent greatness to cynicism towards manufactured personalities (Gamson 1992). Equally important was a trend in marketing, which increasingly emphasized objective and ostensibly scientific research. This was the case at Bel Geddes’s firm after the start of the war where it led to an increased focus on quantifiable design research over visionary practice (Maffei 2012). In the postwar period the industrial design profession seemed to turn its back on Bel Geddes’s brand of visionary genius. Perhaps this was because individual celebrity designers...
developed group identities and in-house design rose in prominence as the glamour of the grandiose, creative visionary began to fade (Sparke 1983: 35–6; Pulos 1986: 422). With the professionalization of the industry, evidenced in particular by the founding of the Society of Industrial Designers in 1944, the design community began to more rigorously police its ranks in order to achieve professional status, even prohibiting general and unfounded forecasts (Van Doren 1940: 31). In a time of postwar plenty, the “world of tomorrow” images, so popular during the depression decade of the 1930s, seemed to have lost their appeal, thus curbing the practice of the visionary celebrity designer. In the postwar years “[t]he celebrity system of the 1930s had all but vanished” (Meikle 2005: 161). Niels Diffrient, a second-generation industrial designer and partner at Henry Dreyfuss and Associates, explained the change:

I think that they [Bel Geddes, Loewy, and Teague] were used to the flourish, and [...] it was high drama to them, and they played it like theatre. And they wanted to be stars in their own rights. And when the star era began to wane, I think they all generally lost an interest. (Flinchum 1997: 126)

Bel Geddes spent much of his time in the 1950s writing his autobiography, which would remain largely unpublished. It was to have covered his boyhood and his entire career in theatre, industrial design, and architecture (Anon. 1957a, 1957b). Beyond the problem of the sheer scope of the book, which snowballed to over a million words (Anon. 1941), the publisher warned Bel Geddes that he was “too close to the material to have any objectivity” (Otis 1958). A shortened version of the book, entitled Miracle in the Evening, which appeared in bookstores in 1960, shortly after Bel Geddes’s death in 1958, reflected editorial cuts and emphasized a single aspect of Bel Geddes’s career – the theatre. The focus on theatre and the exclusion of Bel Geddes’s name from the title pointed to the fading appeal of the flamboyant first generation of industrial designers.

The entire output of Bel Geddes’s life can be seen as one monumental autobiographical project: a vast and almost geological accretion of words, images, and objects. To aid the creation and dissemination of his ideas, Bel Geddes needed hundreds, if not thousands, of supporters, including those who worked for his firm, those who looked after his archive, and historians like myself. However, despite the involvement of various actors with differing perspectives, what remains is a largely singular image of a creative seer who emphasized aesthetic and scientific expertise to construct an appealing early twentieth-century character – the grandiose designer of subjective vision.

This article has shown how Bel Geddes employed a range of strategies to promote his services as a designer, emphasizing his scientific and artistic expertise, his visionary outlook and his ability
to interpret consumer longings. Throughout his career Bel Geddes would highlight these various qualities to differing degrees to appeal to a range of audiences, from industrialists to exhibition visitors. Although Bel Geddes’s firm engaged in quantitative consumer research, his personal preferences predominated. As a result subjective responses were strongly assimilated into the design process.

Notes
1. Previous scholarship on Bel Geddes has explored his contribution to the development of the streamlined aesthetic, his participation in the expansion of American consumer culture (Meikle 1979) and his contribution to the profession of design consultancy (Meikle 1979; Sparke 1983). My research adds to this literature by explicitly focusing on the subjective aspects of Bel Geddes’s design practice. Recent scholarship on the intersection of public persona, design, and the avant-garde includes Tom Tredway’s “Inside Out: Schiaparelli, Interiors and Autobiography” (2013).
2. Research for this article is based on the Norman Bel Geddes papers at the Harry Ransom Center, Austin, Texas. The archive includes rough sketches, final renderings, photographs of finished models, as well as memoranda charting the development of jobs. In addition, it holds clippings covering the launch of designs, correspondences with friends, family, and colleagues, and a draft of Bel Geddes’s autobiography, as well as Bel Geddes’s personal collection of books on everything from scientific management to Theosophy and from consumer forecasting to Fordism. The papers are divided into three series: Industrial Design and Theater Files, 1873–1964 (1915–58); Office and Clipping Files, 1917–61 (1945–58); and Personal Files, 1870–59 (1930–58). The Industrial Design and Theater Files alone are made up of 570 document boxes, 110 oversize boxes, forty-eight models, seven bound volumes, ninety-nine flat file drawers, thirty-six framed/oversize items, thirty-seven rolled items, ca. 1600 sound recordings, and ca. 325 reels of film (ca. 400 linear feet): http://norman.hrc.utexas.edu/fasearch/belgeddes.scope.html

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