



## The *Übermensch* meets the “One Best Way”

### Barbara S. Burks, the Gilbreth family, and the eugenics movement

Arthur G. Bedeian and Shannon G. Taylor

*Department of Management, College of Business, Louisiana State University,  
Baton Rouge, Louisiana, USA*

#### Abstract

**Purpose** – The purpose of this paper is to shed light on the eugenic beliefs of behavioral geneticist Barbara S. Burks and scientific-management pioneers B. Frank and Lillian M. Moeller Gilbreth.

**Design/methodology/approach** – Drawing on personal communications with the Gilbreths' daughter, Ernestine Gilbreth Carey, and archival records, this paper clarifies the relationship between Barbara S. Burks and the Gilbreth family.

**Findings** – This research establishes that the unnamed psychologist described in an unflattering manner in the best-selling book on the Gilbreth family, *Cheaper by the Dozen*, was not Barbara S. Burks.

**Originality/value** – Based on information that only Ernestine Gilbreth Carey could have provided, this paper sets the record straight regarding the Gilbreths' involvement with eugenicist Barbara S. Burks.

**Keywords** Genetics, Genetic engineering, Scientific management

**Paper type** Research paper

The most famous attempt to merge Scientific Management and eugenics was the demonstration project of Frank Bunker Gilbreth [...] The principles of efficiency [...] could make superior, Anglo-Saxon children “cheaper by the dozen,” as Gilbreth put it. The failing intellectual and racial balance of modern society could be restored by modern industrial methods of mass production applied to human breeding and education (Merkle, 1980, p. 204n).

What is now known as the “nature-nurture” debate was an emerging topic of great interest among psychologists in the first three decades of the twentieth century (Rosen, 2004, p. 6). Of particular concern among reformers in the USA was whether the country's mounting social and economic ills were caused by those deemed less intelligent and, thus, as having less to offer society and further, whether it was a waste of time, energy and money attempting to uplift the unfit if their genes were the root cause of their mental condition (Prothero, 2004). The study of heredity on mental development had its roots in



the early work of English statistician Galton (1883, pp. 24-5), who, influenced by his cousin evolutionary theorist Charles Darwin's belief that human traits could be inherited, coined the phrase "eugenics" (from the Greek meaning "good in birth") to describe a social philosophy that advocated the selective breeding and genetic engineering of the human species. As Prothero (2004, p. D10) notes:

By the turn of the century American intellectuals were seeking to make the world a better place by persuading idiots, imbeciles, and morons – all terms of art at the time – to have fewer babies, and "Grade A" specimens to have more.

Stanford University Psychologist Lewis M. Terman was among the first scientists to empirically explore the distribution of what were termed "socially valuable hereditary capacities" (Osborn, 1937, p. 389). In 1924, Barbara S. Burks, then a Stanford University senior, completed a report for Terman titled *I. Q. Farming*. Of present interest is that the report took as its focal example the husband-and-wife team of B. Frank and Lillian M. Gilbreth, scientific-management pioneers whose life work was the quest for the "one best way" to do any task (Gilbreth, 1925, p. 35). Biographer Minton (1988, p. 144) notes that Terman, known for his studies of gifted children, was "continuously on the lookout for newspaper articles and other materials on [...] families that had a large number of gifted children" and suggests it is likely that Terman prompted Burks to contact the Gilbreths and request that they and their then 11 children participate in Terman's gifted study.

Coincidentally, Lillie had studied with psychologist Edward L. Thorndike during a brief stint at Columbia University, likely having taken his course in genetic psychology (Lancaster, 2004, p. 55). Obviously impressed with Thorndike, who would become a major figure in the eugenics movement, Lillie wrote in her autobiography that "once his student, you remained so all your life" (Gilbreth, 1998, p. 76). In that, Thorndike and Terman had worked with Yale University Comparative Psychologist Robert M. Yerkes in developing intelligence tests for group administration (Feldhusen, 2003), it is easy to suppose that Lillie was receptive to Burks's entreaty that the Gilbreths take part in Terman's gifted study. Lancaster (2004, p. 55) even declares "Eugenic beliefs were instrumental to Frank and Lillian Gilbreth's later decision to have twelve children" and recounts that as believers in eugenics "they applied their theories to themselves and produced their own large family" (p. 98; also see Lancaster, 2003). How the Gilbreths' (1970, p. 96) eugenicist belief in the importance of producing better humans squares with the often told story of Frank and Lillie making a pact on their honeymoon to have "an even dozen children . . . six boys and six girls" is unclear. Lancaster (2004, pp. 7 and 99) offers that part of the reason for the Gilbreths' dozen children was Lillie's Victorian reluctance to discuss birth control with Frank. Lillie was with child within six weeks following her marriage to Frank and bore their remaining 11 children at roughly 15 month intervals from 1905 to 1922.

The era during which the Gilbreths were producing their own large family was a time when immigration, especially from Asia and southern and eastern Europe, had caused great concern among eugenicists. This concern centered on a supposed declining birthrate among better educated professional men and women and a concomitant fear that the less fit were reproducing at a much higher rate and, thus, jeopardizing the country's genetic reservoir. It was with this in mind that Burks contacted the Gilbreths. Responding positively to Burks's request to participate in

Terman's gifted study, Lillie granted Burks permission to obtain the mental-test scores of the Gilbreth school-age children from their teachers and all the Gilbreths old enough to do so completed the forms used in Terman's study. It was Lillie's hope that Terman's research would "inspire the high type of Americans who should have more children to double or triple their output!" (Burks, 1924, p. 4).

The test scores Burks collected revealed that Frank's IQ exceeded all but 1.33 percent and Lillie's all but 0.12 percent of the white recruits tested in World War I (Sokal, 1984, p. 286). All the children were gifted as well, with IQs above 135. Consistent with the eugenic philosophy endorsed by Terman and Thorndike, Burks (1924, p. 9) concluded:

It is from men and women with intelligence like this that our spiritual and material progress has sprung. It is such men and women who have made the great scientific discoveries, written the great books, composed the great music, and served as great statesmen. May their kind increase!

As fate would have it, during the preparation of Burks's report, just a month shy of turning 56, Frank Gilbreth unexpectedly passed away due to arteriosclerosis. As a sidebar, whereas Frank's ashes were scattered on the Hudson River, his brain was removed by Boston Psychopathic Hospital Neuropathologist Myrtelle M. Canavan and placed in the Warren Anatomical Museum at Harvard Medical School as a specimen to be compared with those of "feebleminded and criminalist persons." Canavan had attended the Gilbreths' School of Scientific Management, where she was tested for her efficiency in transferring bacterial cultures (Gay, 1938, Figure 11), and prior to his death Frank had arranged for "Mortuary Myrt" to see that his brain would be preserved. As Gilbreth (n.d., p. 233) told Canavan, "My hat size is seven and three-eighths, in case you want to get a jar ready."

In contrast to the Nietzsche overtones now associated with the eugenics philosophy, the Gilbreths did not advocate the notion of the *Übermensch* or superior race. Lancaster (2004, p. 98) writes that the Gilbreths were "positive eugenicists," and notes that rather than calling for such things as the sterilization of those deemed unfit, simply applied eugenics in their own hereditary capacities[1]. Curious in this regard, on November 4, 2004, one of us (AGB) had the occasion to speak with Ernestine Carey Gilbreth, the Gilbreths' third oldest child, and asked whether the psychologist she and her brother Frank depicted in their best-selling book about the "galloping Gilbreths," *Cheaper by the Dozen* (Gilbreth and Carey, 1948, pp. 181-7), was, indeed, Barbara Burks. To provide background for his query, the next day AGB sent Ernestine a copy of Burks's report on the Gilbreth family, which she apparently had never seen.

As Frank Jr relates in a later sequel, *Time Out for Happiness* (1970, p. 128), as the Gilbreth System grew in popularity, the Gilbreth home became "a gathering spot for professors, management people, and eggheads in general." In particular, in *Cheaper by the Dozen* Frank and Ernestine mention a woman psychologist who would visit their home in Montclair, New Jersey, every two weeks to give the Gilbreth children intelligence tests. The psychologist was interested in preparing a paper about the effects of Frank, Sr's teaching methods on the children's IQs. Described as "thin and scrawny" and with a black moustache, Frank Jr and Ernestine reported that the Gilbreth children "hated her and suspected that the feeling was mutual" (p. 138). The psychologist interviewed the children separately, asking questions they considered "embarrassing and insulting."

---

In response to AGB's November 5, 2003, letter, Ernestine promptly replied:

The eugenics  
movement

November 12, 2003

Dear Art:

It was good to hear from you [...]

I appreciate the recent arrival of your new letter and newly copied enclosures [...]

I recall Barbara Burke [*sic*] vividly and can assure you that the character under question today was not the one drawn by my brother Frank and me in our writings. She was a very pleasant, scholarly and quiet-natured visitor rather than a composite of other psychologist visitors mistrusted by us children as an unwelcome outsider [...]

---

219

Sincerely,

Ernestine/s/

(Letter from Ernestine G. Carey to Arthur G. Bedeian) (Carey, 2003).

This characterization is admittedly at odds with Terman's candid depiction of Burks shortly after her death. In writing to psychologist Ruth Tolman, sister-in-law to University of California, Berkeley Psychologist Edward C. Tolman, Terman (1943) observed:

Barbara did not make many close friends and [...] not infrequently she offended people. Among her class mates and teachers at Stanford, admiration for her ability was somewhat tempered by her tendency to rub people the wrong way.

In a follow-up note, some four months later, Ernestine reaffirmed her description of Burks:

Dear Art:

I want to be sure to thank you again for your fascinating, historic materials centered on the identity of Barbara Burkes [*sic*]. Certainly of the psychologists visiting us all over the years, she was *the warmest-natured and best-informed*. We sensed always as children our parents' continued respect for her.

February 21, 2004

Sincerely,

Ernestine/s/

(Letter from Ernestine G. Carey to Arthur G. Bedeian) (Carey, 2004).

It appears that Burks left a lasting impression on Ernestine. In the ensuing years, Burks would go on to a distinguished, but all too short career as a research associate at both the Carnegie Institution (Cold Spring Harbor, Long Island, and New York) and Columbia University. She expanded her interest in behavioral genetics to include themes in personality, social, developmental, and educational psychology, as well as testing and research methodology. Nonetheless, King *et al.* (2000, p. 213) refer to Burks as an "enigmatic figure in psychology." This perhaps may be explained by the fact that Burks died a widow and, ironically, childless, at the young age of 40, as the result of presumably taking her own life. The *New York Times* (1943, p. 44) headline reporting her death reads: "WOMAN DIES IN PLUNGE; Body of Ex-Research Worker Lands Under Hudson Bridge". At Burks's death, psychologist Murphy (1943, p. 346) wrote:

The qualities which her friends and comrades in research will forever remember were her burning eagerness, her profound generosity, her militant intellectual honesty, her freshness and enthusiasm; above all, the sense that every new discovery about man is overwhelmingly vital and important.

With Burks's passing, so ended an interesting chapter in the eugenics movement, as well as scientific management's further interest in the Gilbreths' belief that the principles of efficiency could be applied to making superior children "cheaper by the dozen" (Merkle, 1980, p. 204).

#### Note

1. The term "positive eugenics" was coined by Saleeby (1909, p. 497) and refers to encouraging those with "better heredity" to reproduce more abundantly. It stands in contrast to "negative eugenics," which involves restricting those with "worse heredity" from reproducing.

#### References

- Burks, B.S. (1924), *I.Q. Farming*, Vol. 12, unpublished manuscript, Lewis M. Terman Papers (SC038, Box II, Folder 12), Stanford University Archives, Stanford, CA.
- Carey, E.G. (2003), "Letter to Arthur G. Bedeian," November 12.
- Carey, E.G. (2004), "Letter to Arthur G. Bedeian," February 21.
- Feldhusen, J.F. (2003), "Lewis M. Terman: a pioneer in the development of ability tests", in Zimmerman, H.J. and Schunk, D.H. (Eds), *Educational Psychology: A Century of Contributions*, Erlbaum, Mahwah, NJ, pp. 155-69.
- Galton, F. (1883), *Inquiries into Human Faculty and Its Development*, Macmillan, London.
- Gay, F.P. (1938), *The Open Mind: Elmer Ernest Southard, 1876-1920*, Normandie House, Chicago, IL.
- Gilbreth, F.B. Jr (1970), *Time out for Happiness*, Crowell, New York, NY.
- Gilbreth, F.B. Sr (n.d.), "Letter to Myrtelle M. Canavan", reprinted in Gilbreth, F.B., Jr, and Carey, E.G. (1948). *Cheaper by the Dozen*, Crowell, New York, NY.
- Gilbreth, F.B. Jr and Carey, E.G. (1948), *Cheaper by the Dozen*, Crowell, New York, NY.
- Gilbreth, L.M. (1925), *The Quest for the One Best Way: A Sketch of the Life of Frank Bunker Gilbreth*, Society of Women Engineers, New York, NY.
- Gilbreth, L.M. (1998), *As I Remember: An Autobiography*, Engineering & Management Press, Norcross, GA.
- King, D.B., Montañez-Ramírez, L.M. and Wertheimer, M. (2000), "Barbara Stoddard Burks: pioneer behavioral geneticist and humanitarian", in Kimble, G.A., Wertheimer, M. and White, C. (Eds), *Portraits of Pioneers in Psychology*, Vol. 3, American Psychological Association, Washington, DC, pp. 212-25.
- Lancaster, J. (2003), "Here I stand the case! Efficiency, eugenics and family life in the USA", paper presented at the meeting of the International Federation for Research in Women's History, Belfast, August 11-14, 2003.
- Lancaster, J. (2004), *Making Time: Lillian Moeller Gilbreth, a Life beyond "Cheaper by the Dozen"*, Northeastern University Press, Boston, MA.
- Merkle, J.A. (1980), *Management and Ideology: The Legacy of the International Scientific Management Movement*, University of California Press, Berkeley, CA.
- Minton, H.L. (1988), *Lewis M. Terman: Pioneer in Psychological Testing*, New York University Press, New York, NY.
- Murphy, G. (1943), "In memoriam: Barbara S. Burks: 1902-1943", *Sociometry*, Vol. 6, pp. 345-6.
- New York Times* (1943), "Woman dies in plunge; body of ex-research worker lands under Hudson Bridge", *New York Times*, May 26, p. 44.

- Osborn, F. (1937), "Development of a eugenic philosophy", *American Sociological Review*, Vol. 2, pp. 389-97.
- Prothero, S. (2004), "Bad science, misplaced faith", *Wall Street Journal*, April 22, p. D10.
- Rosen, C.S. (2004), *Preaching Eugenics: Religious Leaders and the American Eugenics Movement*, Oxford University Press, New York, NY.
- Saleeby, C.W. (1909), *Parenthood and Race Culture: An Outline of Eugenics*, Moffat, Yard, New York, NY.
- Sokal, M.M. (1984), "James McKeen Cattell and American psychology in the 1920s", in Brožek, J. (Ed.), *Explorations in the History of Psychology in the United States*, Bucknell University Press, Lewisburg, PA, pp. 273-323.
- Terman, L.M. (1943), "Letter to Ruth S. Tolman, Lewis M. Terman Papers", (SC038, Box 13, Folder 24), Stanford University Archives. Stanford, CA, August 6 (reprinted with permission).

**Corresponding author**

Arthur G. Bedeian can be contacted at: [abede@lsu.edu](mailto:abede@lsu.edu)