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Technical Versus Public Spheres: A Feminist Analysis of Women's Rhetoric in the Twilight Sleep Debates of 1914-1916

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Twilight Sleep (TS) describes the delivery, via an injection, of an amnestic drug cocktail to a parturient woman throughout labor. In order to understand the development of modern-day rhetoric surrounding childbirth methods and procedures, this article explores the debate over TS between the public and technical sphere in New York City between 1914 and 1916 and examines the ways in which this debate altered obstetric health care for middle- and upper–class White women. The public response to this campaign posed a direct challenge to male obstetricians in New York City, many of whom were ill-equipped, both literally and figuratively, to use this procedure. Using a feminist rhetorical criticism, we examined the pro-TS rhetoric of women writers in New York City, the methods they borrowed from the women's movement, and the ensuing dialogue between the public and technical spheres. For this study, we analyzed journal and newspaper articles, a pamphlet, a collection of pro-TS organizational documents, letters to the editor, and books published about TS and the history of birth. Lastly, we analyzed theoretical notions of childbirth in women's health and communication studies. After examining the TS debate, we found that birth practices for middle- and upper-class women in New York City shifted and the obstetric community gained ascendancy over female midwifery. We also found that in certain instances, the rhetoric of pro-TS activists was more technically accurate than the rhetoric of some physicians. Hence the TS debate emerged from an argument over the right to use technical language in the technical and/or the public sphere. Conclusions and implications offered by this historical, feminist analysis question our current understanding of women's health and birthing practices, doctor–patient communication, and patient empowerment and access to technical knowledge.

> Physicians' claims to scientific authority were only as good as lay people's willingness to grant it to them.—Marli F. Weiner (Weiner & Hough, 2012, p. 10)

Scholars have studied Twilight Sleep (TS) and its impact on obstetric care, the important role it played in giving doctors more control over birth (Hairston, 1996; Pitcock & Clark, 1992; Wertz, 1996), and its importance as a female-led grass-roots campaign (Chen, 1997; Showalter, 1989; Wertz, 1996). However, scholars have yet to examine the TS debate of 1914–1916 in New York City (NYC) and the impact this debate had on the ascendancy of obstetricians, nor have scholars examined the use of technical language in the public sphere during this debate. In this study, we are focusing on female rhetoricians in NYC and their pro-TS activism in the public sphere, along with male obstetricians in NYC who are vying for legitimacy in the wider field of medicine. In this debate, pro-TS female activists acting in the public sphere co-opted the dominant discourse

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of technical language in order to legitimize their demand for a particular birth method (Jordan, 1997). To examine the nature of communication between spheres in this campaign, we define "public" as female rhetoricians engaged in the pro-TS campaign as well as the authors publishing in support of that campaign. We examine the medical community of NYC between 1914 and 1916, referring to it as the "technical sphere of medicine" (TSM). We understand these spheres as discursive spaces. Hence, we focus on pro-TS arguments, articulated by women, made in the public sphere, using technical language, as well on as the reaction in the TSM to that use of technical language. Finally, we explore the ways in which pro-TS arguments shaped doctor–patient communication, patient empowerment, and implications of this communication for women and the obstetric community, then and now.

Historians suggest that the TS "furor" hit NYC in early 1914; it became an immensely popular birth method with middle- and upper-class White women in NYC and in the public sphere between 1914 and 1916. In this study, we examine pro-TS rhetoric utilized by female authors in NYC between 1914 and 1916 and the ensuing debate between the public and the technical spheres. The public discourse we analyzed focused on publications by female authors in newspapers and letters to the editor, magazine articles, a pamphlet, and a collection of pro-TS organizational documents. To craft an accurate historical context for these authors and their rhetoric, we assessed relevant newspaper and journal articles and books on TS and birthing practices and women's health. In this analysis, we provide the historical context for TS, review literature on technical and public spheres, examine the nature of the arguments emerging from the interaction of those spheres, and offer two findings from our historical analysis of public discourses. We found that birth practices for middle- and upper-class women in NYC shifted—ultimately, the obstetric community gained ascendancy over female midwifery. We also found that in some cases the rhetoric of pro-TS authors was more technically accurate than the rhetoric of some physicians, which prompted a debate over the right to use technical language in the technical and/or the public sphere.

Ultimately, the TS debate helped shift birth into hospitals and cemented the ascendancy of both obstetricians and the TSM. We offer conclusions and implications for our understanding of the gendered politics of women's health and birthing practices, doctor–patient communication, and patient empowerment. Current implications stemming from this historical event include the impact on doctor–patient communication and patient empowerment and the shifting contours of public and technical spheres given the access to technical language in the age of the Internet.

THE HISTORICAL CONTEXT OF TWILIGHT SLEEP

Throughout the 19th century, the professionalization of medicine occurred slowly, hampered by hundreds of privately owned and operated proprietary schools. These schools lacked common educational standards, unified instruction, and standardized examination. Upon graduating, physicians often began private practices, which were similarly unregulated at the local, state, and federal levels (Shyrock, 1966). Established in 1807, NYC's College of Physicians and Surgeons did not conduct entrance examinations until 1888 (Dalton, 1888). Throughout the century, doctors competed with "irregular practitioners," or "quacks," for professional supremacy (Breslaw, 2012). By the early 20th century, doctors were still working to establish a technical sphere in which they alone could be the arbiters of birth and discussions of birth. However, they struggled to persuade a skeptical public (Breslaw, 2012). In 1910, Abraham Flexner's pivotal report highlighted the stunning lack of training many doctors received, as well as the inadequacies of American medical schooling. Flexner concluded that the adoption of technical, scientific knowledge in medicine and the creation of a set of universal training and education standards for medical students would modernize the American medical system.

When the TS "furor" began in NYC, both general physicians and obstetricians delivered babies, and both were active in the debate over drug use in delivery at that time. The main concern for many NYC obstetricians was how to place their medical practice "on a higher and more dignified plane" (Hellman, 1915, p. 131). Although doctors considered female midwives "irregular" practitioners, in NYC female midwives were legal physicians until 1907, and obstetricians were well aware that midwives attended more than 50% of NYC births each year (Child Hygiene, 1907). The report "Midwives of New York," by nurse Elizabeth Crowell, claimed that midwife-attended births in NYC doubled between 1891 and 1905, in response to demand from an exploding immigrant population. In fact, in the early 20th century, many midwives in NYC were immigrants themselves. The majority of new immigrants gave birth at home and preferred a female midwife (Child Hygiene, 1907). Thus, the popularity of midwives in NYC was an economic barrier to obstetricians—how could they gain market share?

Crowell's 1907 report was quite a boon to obstetricians and physicians in NYC because it provoked a swift and momentous change in birth regulations at the state level. Unlike previous reports and publications, her report included a table with a section titled "criminal," and made no attempt to disguise the disdain for midwives among physicians, claiming they were "women of doubtful morality . . . ignorance and cupidity . . . ever the faithful handmaidens of crime [abortion]" (p. 673). As a result of Crowell's report,

NYC physicians successfully lobbied the state government for a host of new restrictions on midwives, including annual registration and supervision, and the limitation of midwifery practice to "natural" births not requiring instruments or medicine of any kind ("Bills," 1907; Child Hygiene, 1907; Mabbott, 1907). By the end of 1907, births requiring medicine were legally under the purview of doctors.

Cognizant of their new legal status, obstetricians in NYC focused on bringing birth into the hospital, where they used instruments and analgesics in a controlled setting; by 1916, hospital births among the middle and upper classes were on the rise ("Bills," 1907; Child Hygiene, 1907; Crowell, 1907; "Legislature," 1901). Many obstetric practitioners in NYC realized that medicinal pain relief in childbirth could act as a powerful draw to the hospital, taking clients away from local immigrant midwives, and thus ensuring a host of new patients and elevating obstetric professional status. Middle-class patients could pay for an obstetrician and demand pain relief, which distinguished them from the newest waves of immigrants who rarely accessed private doctors or new medical treatments, such as pain relief.

The patient demand for pain relief during childbirth grew steadily from the middle of the 19th century, prompting doctors to experiment with a host of drugs for obstetric use, including "bromethyl, chlorethyl, nitrous oxid[e], antipyrin, cocain[e]," and even "medullary narcosis via a spine injection," a method similar to one used in childbirth today (Ver Beck, 1915, p. 3). A Dr. M. W. Knapp submitted a piece to the *Medical Record* in November 1914 in which he attempted to dissuade practitioners from using anything other than his drug of choice: heroin. Still, obstetricians were eager to appear professional, and the long-term impact of narcotics on both mother and child was unclear. Hence, the issue of anesthesia and analgesia in childbirth remained hotly contested. By the early 20th century, drug-assisted childbirth still had detractors, though obstetricians such as Drs. A. J. Rongy, John Polak and others of NYC felt that the use of drugs in childbirth was a necessity. As. Dr. Rongy argued in 1914, "If pain can be relieved it is every physician's duty to do so, and no effort should be spared to accomplish it" (Rongy, 1914, p. 637). If the debate over drug-assisted childbirth in the public sphere is any indication, many women heartily agreed with Dr. Rongy.

The use of scopolamine in childbirth, an integral part of the method called "Twilight Sleep" (TS), became a topic of discussion in medical circles in the United States as early as 1907, when physicians such as William Holt addressed scopolamine use in American medical journals (Wolf, 2009). Dr. Holt pointedly referred to TS as a method for inducing amnesia, noting that it did not relieve pain and it produced a host of contraindications, prompting him to stop using the method. When a handful of American women traveled to Freiburg, Germany, to try the new birth method, they wrote about their experiences in popular women's magazines. Despite the fact that TS does not relieve pain, these women described their birth experience as painless. From 1914 to 1916, TS had a wide, faddish popularity among middle- and upper-class White women. Beginning early in the summer of 1914, the TS "furor" hit NYC, forcing obstetricians to respond to the women clamoring for the drug cocktail (Sandelowski, 1984). The extensive media coverage of pro-TS rhetoric demanding that obstetricians be trained in the new method also necessitated a response from the obstetric community using technical language. The debate over access to TS resulted from this intersection between the public sphere and the TSM.

While some obstetricians were interested in the professional benefits of pain relief and methods referred to as "painless," few in NYC were familiar with the TS method and fewer still had actually observed it. The "Freiburg Method," so popular with female authors, originated in Germany in 1902 with a Dr. Van Steinbuchel. Referred to in Germany as "Dämmerschlaf," the Frieburg Method of TS was adopted, and then adapted, by Drs. Gauss and Krönig at the Frauenklinik Clinic of Freiburg, Germany (Sandelowski, 1984). As a birth method, TS required the use of a unique narcotic cocktail, producing a psychological state between consciousness and unconsciousness in the patient (Leupp & Hendrick, 1915). The procedure known as "the Freiburg Method" works as follows: Once a woman enters the active stage of labor, the doctor administers an intramuscular injection of scopolamine and morphine or some other narcotic. Once the drugs take effect, a doctor performs a memory test on the patient; if the patient fails to remember what happened 15 to 30 minutes previously, no subsequent dosage of scopolamine (without morphine) is needed until the patient's memory returns (Leupp & Hendrick, 1915). Depending on the patient, varying quantities of scopolamine were administered at changing intervals—this variance, combined with frequent memory tests required vigilance, skill, and an ample, well-trained staff. The goal of the procedure was to keep the woman in an amnestic state in which she remained cognizant enough to take direction from the doctor. While the method did not eradicate pain, it produced a state in women in which they were not fully conscious, and therefore less nervous and more pliant. Any other state of consciousness would not work: complete unconsciousness could slow contractions and the infant's heart rate, while full consciousness prevented amnesia and therefore, did not eradicate the memory of pain (Leupp & Hendrick, 1915).

Dr. Polak of NYC insisted that for "exceptional results" individualized doses and birthing environments were required for each patient (Harrar & McPherson, 1914; Polak, 1915; Rongy, 1914). To ensure the best results, doctors carefully constructed the patient's sensory environment. The doctors at the Frauenklinik isolated patients in their first-class wards. Separate rooms allowed doctors to keep the rooms dark and quiet. In NYC, with only a handful of lying-in hospitals and few private wards, even obstetricians interested in the procedure had a hard time replicating Gauss

and Krönig's Freiburg Method. Still, there were attempts: The Jewish Maternity Hospital and the Lebanon Hospital also placed patients in darkened rooms and covered their eyes with smoked glasses or masks, stuffed their ears with cotton soaked in oil, and even covered the women's entire face with a towel if necessary (Wolf, 2009). Such extensive sensory deprivation measures prevented delirium, a side effect some patients experienced under TS with sensory input. Delirium caused patients to physically fight doctors and nurses or to leap out of bed and scream uncontrollably (Hamilton, 1914; "Hospital," 1917; Wolf, 2009). One laboring woman climbed onto the windowsill of her room; after three nurses subdued her, she remained in shackles for four days (Wolf, 2009). Aside from the rare occurrence of delirium, scopolamine's side effects included dilated pupils, flushed skin, extreme thirst, and elevated pulse (Hamilton, 1914; Polak, 1915). In some cases, forceps were necessary for delivery when labor slowed. Moreover, doctors did not know how women would respond to scopolamine in labor and could not reliably test patients beforehand. Given these contraindications, it is not difficult to understand obstetricians' reticence to adopt the birth method, despite the desire of doctors to improve their professional status in the TSM.

Aside from the contraindications of the birth method itself, physicians in the TSM in NYC resisted TS because influential NYC women launched the pro-TS campaign, which eventually became national in scope. Though rhetoric in the public sphere sparked interest at the national level, NYC housed the headquarters of the Twilight Sleep Association (TSA), which organized the pro-TS campaign in the public sphere, and liaised with local physicians such as Dr. Rongy (Dennett, 1874–1945). Each time TSA member and prominent pro-TS writer Mary Boyd was lecturing in NYC, she drew close to 300 women (Dennett, 1874–1945).

On November 18, 1914, pro-TS activist Mrs. Francis X. Carmody displayed her healthy baby, 16 months old, to attendees at a talk held at the Gimbel Brothers department store in Brooklyn, NY ("Mothers Discuss 'Twilight Sleep,'" 1914). Ecstatic, she described a "painless" delivery, a voracious appetite immediately after the birth, and a miraculously short recovery time. She ended her presentation with the popular mantra of the TS movement, "You women . . . will have to fight for it, for the mass of doctors are opposed to it" (p. 18). The gathering at Gimbel Brothers was one of many campaign tactics used by members to foment public interest in TS (Sandelowski, 1984). Many pro-TS activists were active in the suffrage movement, so they understood how to capitalize on the surge of public interest (Sandleowski, 1984). The women of the pro-TS campaign used their social networks to draw attention to TS, provoking a flurry of newspaper and journal articles, public meetings, and even a moving picture of the procedure—one of the first medical moving pictures shown and marketed to "women only" ("Twilight Sleep Movies," 1915).

This campaign is unique in medical history because activists directed their rhetoric toward a particular medical discipline while co-opting technical language to communicate with their peers in the public sphere (Hairston, 1996). Though pro-TS rhetoric continued into 1919 and beyond, debate between the technical and public spheres was most intense in NYC from 1914 to late 1916. Ultimately, doctors survived a "serious attack on the bastions of medical authority," finally ensconcing obstetrics as a serious subfield within medicine (Hairtson, 1996, p. 498; Wolf, 2009). Hairston suggested that in exchange for the ascendancy of obstetricians, women received meaningful reforms in health care, including a maternal death rate that continued to fall for the next decade. Yet this debate also had unintended consequences for activists co-opting technical language in the public sphere—the pro-TS campaign helped bring birth into the hospital, normalized the use of stirrups for birth and gynecological care, and ensured the long-term medicalization of the birth process, for good or ill (Caton, 1999).

TECHNICAL VERSUS PUBLIC SPHERES

Medical controversies exist in both the technical and public spheres (Keranen, 2005; Lynch, 2011). Communication scholars are well equipped to examine the technical and public spheres and the debates between them as well (Carmack, 2014). The historical TS debate reflects the wider arguments over information in the public and technical spheres. In these spheres individuals are making critical decisions regarding how debates are created and resolved (Carmack, 2014; Goodnight, 1982). People within each sphere share similar beliefs, assumptions, values, and thought processes, (Rieke, Sillars, & Peterson, 2009), and the outlines of spheres depend upon various elements such as knowledge, jargon/language, and values. Goodnight (1982) classified three major types of spheres: personal, technical, and public. We did not have access to the personal sphere, including (but not limited to) transcripts of doctor–patient conversations, medical records, and personal diaries. For the purposes of this article, we focus on public and technical spheres and a historical moment where the technical and public spheres collided during the public debate over the TS (see Carmack, 2014; Goodnight, 1982).

As Jordan (1997) suggested, there are moments when "equally legitimate parallel knowledge systems exist and people move easily between them . . . but frequently, one kind of knowledge gains ascendance and legitimacy" (p. 56). The pro-TS debate is emblematic of a moment when both technical and public spheres had legitimacy with the public. Ultimately, the debate between the public and technical sphere ensured the ascendancy of technical language, and thus, the TSM became the accepted arbiter of birth.

As Jordan (1997) argued, "alternative knowledge systems . . . tend to be seen as backward, ignorant and naïve" (p. 56). Once the technical language espoused by obstetricians gained ascendancy, the invalidation and devaluation of public debate regarding birth became both acceptable and normal.

Eventually, a renewed support for midwifery in the 1960s sought to reestablish the value of the public sphere, which activists created using the knowledge women had about their own bodies as expressed through a decidedly feminist rhetoric. Activists in the 1960s appeared to be mere "fringe actors" to those in the TSM—as such, the perspective espoused by actors in the public sphere appeared backward, ignorant, and naive (Jordan, 1997). Moreover, pro-midwifery activists refused to use technical language as the legitimate form of discourse, further ensuring the perception that they were ignorant extremists. Yet as both Jordan (1997) and Starr (1982) have proposed, medical authority was not monolithic until well into the 20th century. Thus, the pro-TS movement of the early 20th century initially validated the public sphere by suggesting that the medical or obstetric community did not have unquestioned cultural authority.

Technical Spheres

Arguments developing from the technical sphere are often scientific, depending on specially designed language, knowledge, and education for communication. Arguments in the technical sphere, usually made by professionals in law, education, and medicine, focus on scientific fact and often diminish nontechnical knowledge and experience (Blok, Jensen, & Kaltoft, 2008; Gross, 1994) while swaying individuals' understanding of science and medicine (Keranen, 2005). For the purposes of this article, we are studying the TSM, which focuses specifically on physicians and other medical technicians (Mishler, 1984).

Individuals in the TSM must be trained in or have practiced medicine, thereby having the ability to speak with the "voice of medicine" (Mishler, 1984). The TSM often relies on the "deficit model of science," which states that the public is uninformed about science and medicine and cannot make knowledgeable choices (Carmack, 2014; Gross, 1994). To this technical sphere, the public appears uneducated and easily duped by unobjective biases (Carmack, Bates, & Harter, 2008). As such, women's participation in the TS debate could not be valued. As Lay (2003) argued, by the mid-19th century, the embodied knowledge of pregnant women was "disqualified as inadequate, low down in the hierarchy;" this view of gender-specific, public knowledge continued into the TS debate and beyond (p. 62).

Public Spheres

Individuals often speculate that anyone in the public belongs in the public sphere. However, the public sphere is limited to individuals who are interested in participating in social issues and includes individuals with and without specialized knowledge (Reike, et al., 2009). Unlike the technical sphere, the public sphere is highly ideologically diverse and allows for different knowledges, values, and beliefs to frame arguments. Arguments in the public sphere rely on an interactional framework model (Gross, 1994). According to Gross, an interactional framework model values both public and technical arguments within a debate. In interactional framework theory, both public and technical arguments are valuable, and communication is "a two-way flow between science and publics" (p. 6). Often, conflict stems from whose arguments to value (Carmack, 2014; Heiss, 2011). Additionally, technical and public spheres are reciprocally influential yet depend on the role of experts to construct acknowledged arguments (Keranen, 2005). In the TS debates of NYC, female TS advocates familiarized themselves with technical language and translated this language for use in the public sphere and in the debate between the public and technical sphere.

Scholars highlight the difficulties of translating technical language for use in the public sphere. For example, Fabj and Sobnosky (1995) examined how AIDS activists used the strategies of redefinition and translation to claim authority to speak about the disease. AIDS activists challenged norms of public discourse when they redefined medical issues as public health issues and used technical data as evidence to support their activist work. The use of technical language to elucidate the argument between the technical and public spheres occurred during the TS debate in NYC as well.

In the case of the NYC TS debates, public authors were mostly women, many of whom either experienced TS themselves or accompanied a friend or family member to the Frauenklinik in Freiburg, Germany. This embodied knowledge was unavailable to many male doctors. Thus, public, female authors had access to an "insider" or technical view unavailable to a majority of American obstetricians at the time. Despite the privileged access and knowledge of public authors, medical practitioners rejected the notion that women could use technical language to argue for TS. Hence, many physicians and obstetricians initially attempted to ignore the claims of female authors and to reject the birth method outright.

In 1914, the public would not stand for this behavior from the TSM, and an argument between the technical and public spheres, debating the safety and efficacy of the procedure, ensued. Rundblad, Chilton, and Hunter (2006) found that public sources often attempt to validate their position by referencing sources that are respected by the audience. In the case of these TS debates, one public author addressed her book to the "great mother-public," certain that this public would advocate on its own behalf (Ver Beck, 1915). The discourse in the public sphere of NYC provided an ample amount of data for the researchers to analyze. Moreover, the data suggested that the dialogue between public and

technical spheres was parallel. Ultimately, the technical language of obstetricians gained legitimacy, becoming the ascendant, and thus almost universally accepted, language of birth (Jordan, 1997).

In order to understand the present-day rhetoric surrounding childbirth methods and procedures, this article explores the dialogue between the public and technical sphere in the TS debate in NYC between 1914 and 1916 and examines the ways in which this debate altered obstetric healthcare for middle- and upper-class White women. Through a feminist rhetorical perspective, we analyzed journal and newspaper articles, a pamphlet, a collection of pro-TS organizational documents, letters to the editor, and books published about TS and the history of birth.

METHODS

Data Collection

Technical and public actors discussed TS extensively in both technical and public publications in NYC, the epicenter of the pro-TS movement, particularly from 1914 to 1916. Since the 1970s, historians have investigated this birth method and its impact on medical history at some length. For the purposes of this study, the authors analyzed 10 journal articles published between 1907 and 1916, and 12 journal articles published between 1971 and 2000. The authors also studied one pamphlet, four magazine articles published between 1907 and 1919, 10 newspaper articles, four letters to the editor, seven books published between 1875 and 1919, and 16 books studying health care and birth methods, particularly TS, as well as books published about TS and the history of birth. Lastly, we analyzed theoretical notions of childbirth in women's health and communication studies.

Data Analysis

In order to examine how women made sense of and articulated their understanding of TS and the response from doctors, we used books; magazine, journal, and newspaper articles; a pamphlet; and a collection of TSA documents as our site of analysis. The use of public texts as units of analysis allows us to examine a social phenomenon experienced by individuals in their own words, without prompts from researchers (Lindlof & Taylor, 2002). Studying these texts is appropriate because female activism occurred primarily in the public sphere in the early 20th century.

We approached the texts from a feminist rhetorical criticism approach in which we used a combination of rhetorical and qualitative textual analyses, which allow researchers to marry descriptive accounts with the deeper meanings behind the texts (Foss, 2004). Our study is grounded in the assumption that men and women have had dissimilar access to networks of power. This dissimilarity of access directly influences the communication strategies used by individuals in the TS debates in NYC from 1914 to 1916. This approach enabled the researchers to illuminate how communication can enable and constrain women within a debate. Moreover, communication enables female empowerment (Griffin, 2009). We argue that the inclusion of a bottom-up perspective, focusing on the language used by women, serves to validate women's voices, embodied experiences, and knowledges in a cultural and professional context in which they were routinely silenced. This historical focus, which seeks to recover and validate women's knowledge and experiences in both the public and technical spheres, is itself a feminist act.

The authors read the texts in their entirety several times, making note of initial findings of analysis that emerged in the data (Glaser & Strauss, 1967). The authors came together after their first analysis of the data, discussing potential findings, and were continuously engaging with and identifying concepts until findings crystallized. We provide exemplar comments from the texts in order to illustrate these findings. The findings emerged from the language used in the debate by those in the public sphere as well as the TSM. To identify findings, the authors examined the argument between the technical and public sphere, using the interactional framework model, and feminist rhetorical criticism as a guide for identifying our findings.

ANALYSIS/FINDINGS

The Argument Over Twilight Sleep

The TS debate appeared in the TSM as early as 1907, and reverberations in popular magazines continued into the 1920s. We focused on 1914–1916 because popular magazines and local newspapers helped stimulate interest in the public sphere as well as interest and outrage in the TSM. After examining the contours of the TS debate, we found that birth practices for middle- and upper-class women in NYC shifted, giving the obstetric community ascendancy over female midwifery. We found that in certain instances, the rhetoric of pro-TS activists was more technically accurate than the rhetoric of some physicians. Thus, the TS debate emerged from the collision of the public sphere and the TSM, in which actors disagreed about the use of technical language in the technical and/or the public sphere.

The extensive media coverage of the debate between the spheres forced medical technicians in the TSM to address the use of technical language by authors in the public sphere. Hairston (1996) examined the full-scale public debate TS provoked, pitting female authors and patients against physicians, who were protecting their position as gatekeepers of technical language. Hairston suggested that the debate between the public sphere and the TSM became hyperbolic, putting everyone in the debate on the defensive. The condescending response from the TSM only encouraged

pro-TS activists, including authors, to lean on successful tactics from the women's movement to advocate for the birth procedure of their choice. Pro-TS activists used technical language and nontechnical language, in the public sphere, speaking past male doctors and directly to women. As one article quipped, "Every woman actually confronted with an imminent birth is filled with a living fear of death that few men can grasp" (Tracy & Boyd, 1914, p. 69). This embodied knowledge, expressed in the public sphere, using technical language created a new kind of discursive space in which doctors were forced to remain on the defensive, adopt the procedure, or wait until the furor over TS died down.

Doctors in NYC, active in the TSM, were aware of pro-TS articles even before their publication. In May 1914, a letter to the editor appeared in *The Lancet-Clinic*, excoriating Tracy and Leupp's article, "Painless Childbirth." The letter, written by one Dr. W. M. Gillespie (1914), demanded a reaction to the *McClure's Magazine* article from "Dr. Krönig and his associates" (p. 639). Gillespie exclaimed that "it is up to [Krönig and Gauss] . . . to correct through *McClure's* the misleading statements of these two sensational ladies" (p. 639). He called Tracy and Leupp's arguments "fatuous" and their reasoning "sophistical" (p. 639). He bemoaned the state of medicine: "How are we to insist upon the distinction between physicians and quacks when men supposed to represent the respectable profession instigate or permit accounts of new methods . . . with the deliberate purpose of reaping pecuniary profit from such publicity?" (Gillespie, 1914, p. 639). In an effort to maintain civility, Dr. Gillespie requested that the editor send two copies of the *McClure's Magazine* article and his letter, "in order that [Drs. Gauss and Krönig] may protect their good names if any injustice has been done to them either in the article in *McClure's* or in these comments" (p. 639). In July 1914, Dr. Krönig's response appeared in *The Lancet-Clinic*. He claimed that any pictures in the article were used without permission and that the information itself was purchased. He said that he and his staff put up an "energetic protest against the article," and concluded "with respect to the many errors in facts, I can only call attention to the many scientific publications which have, in the past, come from my Clinic about the same question" (p. 17).

One month later, in August 1914, Constance Leupp responded directly to Dr. Krönig's letter, and her response appeared in *The Lancet-Clinic* as well. Leupp firmly defended her right to investigate and discuss technical knowledge of medicine. She said, "We feel that we can show quite as clear [a] title to integrity, intelligence and disinterestedness . . . as the physicians and medical editors who have disapproved our methods" (p. 163). Leupp claimed that she and her fellow female authors "know the particularities of the medical profession too well" to suppose that the profession would support the decision to publish technical knowledge in a popular magazine (p. 163). In this instance, Leupp addressed the TSM directly, simultaneously acknowledging the fault lines of the debate and the source of the argument. Leupp and other authors continued to use technical language to inform the public about TS. More importantly, the argument in *The Lancet-Clinic* illustrated that pro-TS writing appeared in the TSM as well. The behavior of Leupp and other authors bypassed technical notions of acceptable behavior by public actors, as well as of proper behavior for "ladies."

In response, medical practitioners defended their territory by pointing to errors in the publications of pro-TS authors. For example, Tracy and Leupp's claim that TS allowed for "painless childbirth" is inaccurate. Although they (1914) explained that TS was actually "*clouded consciousness,* in which there was complete *forgetfulness* of the course of birth" (p. 41), Tracy, Leupp, and other public authors still referred to the method as "painless." Tracy and Leupp were specific about the effects of TS—that it prompted an analgesic and amnestic state in patients and not an anesthetic one; their article's title, "Painless Childbirth," negates this effort.

The erroneous conflation of technical terms was an ongoing source of frustration for physicians. Some felt compelled to respond in an effort to defend their position on TS. Dr. Minas A. Gregory addressed the public directly. In a *New York Times* article, he (1915) said:

> There is great misconception on the part of the public regarding this treatment. People think that it is painless or at least almost painless. This is not so; there is as much pain as in the ordinary childbirth. The only difference is that the patient does not remember having the sensation of pain . . . when the mother comes to she thinks she has not suffered. ("Doctors disagree," p. 7)

Female authors used technical language to describe an embodied experience, and some were more proficient with technical language than practitioners in the TSM. However, their claims were not always accurate, despite their use of technical language.

Regardless of technical errors in publications in the public sphere, the clamor among women for TS, particularly in NYC, only intensified between 1914 and 1916. Dr. Henry William Smith (1914) claimed that "woman is the ruler in America, and what she wishes is never denied her," in reference to the rising popularity of new birth methods (p. 89). Dr. Polak (1915) said his patients "demand it and [I] have simply attempted to supply the demand" (p. 1024). A number of articles in *The New York Times* suggested that doctors were well aware of public demand and attempted to respond to it, either through further training in the Freiburg Method or by offering alternative pain-relief methods. Headlines like "Twilight Sleep has come to stay" (1914), "Twilight Sleep vindicated" (1914), "News of the week: Twilight Sleep hospital" (1914), "Assails opponents of Twilight Sleep" (1914), and "Deny insanity is due to Twilight Sleep" (1914) suggested that the argument over TS repeatedly resurfaced in

the public sphere. Despite the assertion that pro-TS authors were quacks and fame seekers, NYC doctors could not quell local interest in the birth method. Still, throughout the debate physicians rarely, if ever, validated the views expressed in the public sphere. One physician referred to articles in the public sphere as "amusing" and full of "twaddle" and "rigmarole" (Bogart, 1916, p. 40), despite the technical acumen of some of the writers.

Pro-TS Activism and the Rise of the Obstetrician

The public response to pro-TS rhetoric in the public sphere began in earnest in June 1914, when Marguerite Tracy and fellow TS enthusiast Constance Leupp published an article called "Painless Childbirth" in *McClure's Magazine*. Immediately after the article appeared, thousands of women from all over the country wrote to the editor, begging for more information and a list of doctors willing to utilize the birth method (Tracy & Leupp, 1914). The public response was so immense that Tracy wrote another article for *McClure's Magazine,* "More about Painless Childbirth," in an attempt to disseminate more information and combat the vituperative criticism coming from the TSM (Tracy & Leupp, 1914). In April 1915, Constance Leupp and Burton Hendrick co-authored still another article in *McClure's Magazine*, focusing specifically on the response to the TS "furor" in the technical sphere. Other articles appeared in *The Ladies' World* and *Good Housekeeping;* some magazines merely reprinted popular articles, spreading the pro-TS activist message to an ever-widening audience. Pro-TS activists were in favor of physician-assisted birth in the hospital setting, and this debate is—in part—responsible for the ascendancy of obstetricians with middle- and upper-class White women in NYC. Part of the reason public support for this campaign intensified in NYC between 1914 and 1916 was that many pro-TS authors used technical language or translated it for public consumption, which gave their publications credibility in the public sphere.

Tracy and Leupp's (1914) foundational article "Painless Childbirth" introduced American women to the "Dämmerschlaf" of Germany. In the beginning of their article, the authors claimed that "this method has now been used in five thousand cases with practically unvarying success. Not a single fatality to the mother can be charged to it" (p. 37). In this piece, the authors wax saccharine; referring to an "intuitive pilgrimage," quoting women saying TS is "like a fairytale" (p. 38). The article included a series of photographs: stylish, happy, physically sound mothers holding their TS babies, as well as immaculate, attractive children birthed through TS, illustrating the absence of any long-term negative impact on children.

However, the language became technical when Tracy and Leupp (1914) described the method itself. The authors discussed asepsis, hypodermic anesthesia methods, and the low mortality rates at the clinic. Before the introduction of TS, the mortality rate at the Frauenklinik was 3.4%, and after its introduction, the mortality rate dropped to 1.3% (1914). Next, Tracy and Leupp (1914) addressed a common complaint among medical practitioners—the difficulty of keeping the drug in a safe, stable state. The authors noted that "it has hitherto been a drug which [was] required to be very meticulously handled or it changed chemically. It was necessary . . . to wash out the glass bottle destined for the solution in hydrochloric acid" (p. 40). Naming the acid wash necessary for keeping scopolamine stable seems like superfluous information for an article in a popular women's magazine. However, Tracy and Leupp were arming their readers with technical language—language women could use dispute their doctors' reservations against using TS. Like many other public authors, Tracy and Leupp touted the supremacy of the Freiburg Method, claiming that "the safety of the Twilight Sleep [is] based solely upon the testing of the powers of memory" (p. 42). The article prompted hundreds of responses and requests for a list of doctors using the TS method.

Public writers felt emboldened by TS's growing popularity and continued to use technical language in their publications. In October 1914, Marguerite Tracy wrote another article for *McClure's Magazine*, this time with Mary Boyd, a woman who had experienced TS herself (Tracy & Boyd, 1914). Entitled "More about Painless Childbirth," the article began by tracing the history of obstetric anesthesia. To defend TS as the newest and safest form of obstetric anesthesia, Tracy and Boyd included pro-TS quotations from preeminent physicians representing prestigious societies such as the American Gynecological Society. Again, the authors utilized technical language, such as "hypalgesia" (pain-lessening) and "semi-narcosis," and commented on effective scopolamine–morphine dosage (pp. 63–68). In a departure from the first *McClure's Magazine* publication, Tracy and Boyd (1914) discussed the disadvantages of earlier forms of obstetric anesthesia, including *chloroform à la reine*, and even conceded that TS caused "rare" cases of "dementia" (pp. 64 and 68). Here, the inclusion of contraindications mimics discussions of drugs and their uses in the TSM, giving the article a well-researched, professional medical tone. Tracy and Boyd concluded the article by supporting physician-assisted hospital births: "Just as the village barber no longer performs operations, the untrained midwife of the neighborhood will pass out of existence under the effected competition of free painless wards" (p. 69). Despite the fact that TS did not create painless childbirth, the claims of pro-TS activists continued to privilege technical language at the expense of others in the public sphere, such as midwives.

Ultimately, Tracy, Boyd, Leupp, and other public authors were not adversaries of physicians. Public supporters of TS preferred hospital births with physicians in attendance, because this would allow patients access to the Freiburg Method. However, pro-TS activists in the public sphere

wanted a specific response from the TSM including access to various birth methods, including TS. Although activists failed to achieve universal access to TS, by the early 1950s, the vast majority of middle- and upper-class White women labored in hospital wards, and drugs erased their memories of the process (Caton, 1999; Wertz, 1996).

"Shocking the Profession": Using Technical Language in the Public Sphere

The second finding emerging from the research is that in some cases, female authors had a deeper technical knowledge of TS than did some physicians at that time. Shannon and Truit (1919) wrote about the rancor between pro-TS activist authors and physicians resulting from the use of technical language in popular magazines. They noted that discussion of technical medical methods in a magazine was "exploitation" that "shocked the profession and [public writers] found themselves styled adventuresses, quacks and frauds generally" (p. 462). Shannon and Truit concluded that some female authors had a better understanding of the Freiburg Method than many American obstetricians and practitioners at that time, whether or not their use of technical language seemed inappropriate to those in the TSM.

One public author who demonstrated a mastery of technical language superior to that of some obstetricians was Mrs. Frank Ver Beck, also known as Hanna Rion Ver Beck. In 1915, Ver Beck published a lengthy monograph entitled *The Truth About Twilight Sleep*. In the foreword, she referred to her intended audience as "the great mother-public," and suggested that "the very audience then . . . in crying need of information on this subject . . . are not reached and remain in ignorance [of TS]" (foreword). In this text, Ver Beck referenced an article she wrote for *The Ladies' Home Journal*, published the criticisms the article drew from the TSM, and systematically refuted them. Furthermore, Ver Beck situated the role of pro-TS rhetoric in translating technical language for the public sphere: "But for the word-of-mouth propaganda of mothers who have had the Dämmerschlaf and the investigation of the method by American writers, [the public sphere] would still have no knowledge of scopolamine" (p. 43).

To gather research for her work, Ver Beck (1915) traveled to Germany and Britain, spending 6 months studying and translating 200,000 pages of German medical records for the benefit of her readers. Hence, her technical knowledge of TS was extensive—she even accused a Dr. Green of confusing asphyxia with oligopnea, and suggested that physicians with high rates of oligopneaic newborns were "careless" and should study the Freiburg Method more closely (p. 309). Ver Beck included Dr. Gauss's formula for TS drugs in solution as "*separate* solutions prepared by a pharmaceutical chemist .03 per cent solution of crystal scopolamine hydrobromic in sterilized distilled water and one per cent morphin muriaticum solution" (p. 81). This formula was the preferred dosage ratio for the Freiburg Method and ensured the stability of the drugs in solution (Ver Beck, 1915, p. 81). Compare Ver Beck's use of technical language to that of actors in the TSM in a publication of the journal *Surgery, Gynecology and Obstetrics,* published in 1914. Here we find doctors expressing uncertainty about the procedure and the dosage necessary to achieve TS. In fact, a Dr. Gustav Kolischer wondered whether he was using twice the amount of scopolamine required. Another doctor stated, "I should be very grateful to Professor Krönig if he would tell us the exact time when he begins to use these drugs and the dosage" (Lynch, 1914, p. 654). It is astonishing that Ver Beck, a female activist and public author, used technical language with ease at a time when some American doctors remained uncertain about procedural basics like timing and dosage. This is not to suggest that public authors were more knowledgeable than obstetricians and other practitioners. Instead, it illustrates the reality that some rhetoricians were well-versed in technical language and could speak with an authority close to or above that of some within the technical sphere.

Constance Leupp and Burton Hendrick[1] (1915) also took the opportunity to correct erring practitioners in their article called "Twilight Sleep in America." This article traced the rising popularity of TS and the technical sphere's reaction to growing public enthusiasm for the method. Leupp and Hendrick suggested that public interest in TS was so immediate and so intense that "it was about the only subject not smothered by the European war" (p. 25). They recounted the negative reaction of many medical journals and then claimed, "scattered pieces of information began to leak through to the public," and even noted that some in the TSM were shifting their stance on TS (p. 26). Here Leupp and Hendrick used the traditional divide between the technical and public spheres to their advantage, demonstrating that the TSM could not reject a method in direct opposition to public opinion. Still, they called the position of most doctors "deprecating and judicial" (p. 27). Like other pro-TS activists, the authors saved special criticism for doctors failing to follow the specificities of the Freiburg Method. Using technical language, the authors distinguished between "scopolamine-morphine anesthesia," and "Twilight Sleep," arguing "merely injecting scopolamine-morphine into the system of a parturient woman will not produce a painless childbirth" (Leupp & Hendrick, 1915, p. 30). Noting that TS was not a method of anesthesia, the authors explained that TS created analgesia and amnesia. Leupp and Hendrick argued that initial attempts by American doctors (in 1907 and 1908) failed because the dosage was too large and that without a memory test, American doctors could not hope to attain the "crepuscular condition" (p. 33) of TS. After criticizing the method of American doctors, Leupp and Hendrick

[1]Burton Hendrick is the only male author in our study. However, Constance Leupp's work without Hendrick was also very significant for the pro-TS movement.

(1915) concluded, "The fact is that not until the latter half of the year 1914 [did] American obstetricians give the Freiburg treatment a genuine trial" (p. 34), coinciding with initial publications by pro-TS authors in the public sphere. In their article, Leupp and Hendrick exhibited a detailed knowledge of the technical language of TS, both in 1907–1908 and in 1914. Finally, the authors corrected perceived flaws in practice and questioned the initial conclusions regarding TS in the TSM.

Notwithstanding the publications of Tracy, Boyd, Ver Beck, Leupp, Hendrick, and others, the TSM refused to acknowledge the technical acumen of public authors. In *The Lancet-Clinic*, Dr. Gillespie (1915) wondered whether "seekers after sensational material have taken advantage of the doctors" (p. 639). Even if public authors had a superior embodied knowledge of the Freiburg Method of TS, doctors could not have acknowledged it; to do so would risk their professional standing by placing their technical language on a par with that of the public sphere.

Whether or not NYC doctors wanted to use TS, Dr. Polak (1915) and others acknowledged the role patient demand played in their decision to learn more about the procedure. Determined to provide TS for laboring women, the Jewish Maternity Hospital of NYC hired a German doctor to oversee the execution of the Freiburg Method in its maternity ward (Van Buren, 1914). Dr. Knipe rented a private residence on Riverside Drive, which became a free-standing clinic devoted to providing TS ("Hospital," 1917). To bring birth into the hospital or to achieve professional ascendancy over midwives, doctors had to participate in the debate over TS—whether or not technical language used by pro-TS activists was accurate. Obstetricians in NYC wanted to bring birth into the hospitals to secure their professional standing and the future of their practice; narcotic and opiate-based pain relief in a secure hospital setting made them attractive candidates to oversee early-20th-century childbirth.

CONCLUSIONS/DISCUSSION

This analysis explores the dialogue between the public and technical sphere in the TS debate in NYC between 1914 and 1916 and examines the ways in which this debate altered obstetric healthcare for middle- and upper-class White women. In this debate, the public sphere became a discursive space in which public actors utilized technical language. After analyzing a wide range of primary and secondary sources, we concluded that once the debate over TS ended, birth practices for middle- and upper-class women in NYC shifted and the obstetric community gained ascendancy. Also, we found that in certain instances, the rhetoric of pro-TS activists was more technically accurate than the rhetoric of some physicians, despite being experts from the public sphere, prompting an argument between public and technical experts in the public sphere.

As Brelaw (2012) argued, "medical absolutism" is a theme throughout American medical history; the notion that the TSM has an exclusive right to determine theory, procedure, and practice is not a new idea. In one sense, the TS debate is just another chapter in the long history of the battle between technical and public spheres (Breslaw, 2012). However, TS is a distinct moment in that history because the debate became a focal point over which women could contest the claims that a male doctor was the expert voice on birth. The TS debate also questioned the notion that patients could not reliably speak about medical subjects and should not be so presumptuous as to do so. In NYC in 1914, obstetricians aimed to become birth experts with unquestioned authority (Hairston, 1996; Starr, 1982). In the case of TS, public and technical spheres came into conflict when pro-TS female activists co-opted technical language, used it in the public sphere, and ultimately, further legitimized the technical language of obstetricians (Jordan, 1997). Hairston's (1996) work provides an in-depth, comprehensive history of the TS debate, yet our analysis extends Hairston's research. While Hairston focused more broadly on the TS debates, our research focused on the collision of the technical and public spheres created by pro-TS activists and physicians in NYC creating a space that was neither fully technical nor fully public. We aimed to reveal the dialogic elements of the debate, focusing on the ways the public received technical language from various sources. Hairston did not focus on the technical or public construction of language or on the role the TS debate plays in doctor–patient communication today.

In the TS debates of 1914–1916 in NYC, pro-TS activists had a legitimate voice in the public sphere, though ultimately, obstetricians became the dominant influence in the birthing room (Jordan, 1997). The TS movement brought birth into the hospital and made pain assistance normative (Wolf, 2009). For this reason, TS is an important chapter in the history of American childbirth. The collapse of midwifery in NYC in the early 20th century paved the way for middle- and upper-class female activists to seek out doctors in their effort to use the birth method of their choice. It would be four decades before grass-roots female activism and childbirth would overlap in a major movement again; this time, middle- and upper-class women reconsidered midwifery. By the 1960s, these women were looking for a natural, less anesthetized approach to childbirth—a conscious one, rooted in a deep emotional connection to the coming child, and a cognizant, embodied experience. A drug-induced failure to remember the birth process no longer represented female empowerment; by the 1960s, the dominant birth discourse did not favor medicalized birth. Instead, for many female activists, hospital births were emblematic of the unquestioned hegemony of the technical sphere and the failure of doctors to listen to individuals in the public sphere, particularly women involved in debates about birth.

Despite scholarly claims that TS disappeared in the early 1920s, the method continued in various forms for more than

40 years (Caton, 1999; Davis-Floyd, 2007). By 1938, the city of Boston used the method in all deliveries (Wertz, 1996). Significantly, TS did not remain confined to the maternity ward: in 1929, five inmates at New Mexico Girls' Welfare home received TS injections after "being captured from an escape from the institution" ("Twilight Death," 1929, p. 1). In 1935, police in Kansas City used the drug cocktail, known as a "birth pain opiate," to "gain confession" ("Twilight Sleep," 1935, p. 4). Throughout the 1940s and 1950s, women expressed "their gratitude at being able to sleep through childbirth," suggesting that doctors went beyond the amnestic haze of TS and elected full anesthesia for laboring women (Sandelowski, 1984, p. 72). Today, doctors use TS for colonoscopies and other unpleasant exploratory procedures, though the content of the drug cocktail differs from the original TS cocktail (Oppermann, 2005).

While technical language empowers the physician, public language continues to play a peripheral role in patients' hospitalized births, and the use of technical language in the public sphere continues to draw skepticism from practitioners. In 1992, Drs. Pitcock and Clark wrote about the TS movement in the *American Journal of Obstetrics and Gynecology.* They argued that TS advocates "demanded control of the birthing process," using an "impassioned feminist idiom," illustrating that the use of technical language is still considered an intrusion by extremists into the TSM (p. 583). Moreover, Pitcock and Clark's work refused to acknowledge the arguments emerging from the debate over various forms of childbirth. Using "feminist" as a pejorative, the authors argued that pro-TS activists used an "angry rhetoric." However, the rhetoric of feminist actors may well seem "angry" in a framework that willfully refuses to acknowledge the legitimacy of nontechnical language (p. 584). Pitcock and Clark (1992) claimed that the "situation in 1914 was far more complicated than the propaganda blitz or rallies at Gimbel's department store indicated," again invalidating activities in the public sphere (p. 583). The unquestioned superiority of the TSM in the authors' depiction of the TS debate suggests just how complete the dominance of the technical sphere is in the birthing room today (Jordan, 1997). More importantly, it suggests that the current binary conceptualization of technical versus public spheres is insufficient. A term or set of terms to describe the current intersectionality of public and technical language is lacking; how do we understand the location of the debate? By studying the TS debate, we learn how individuals in the technical and public sphere must communicate better with each other, particularly when the debate involves actors in both spheres.

Recently, scholars have played with this binary language, challenging the definition of "natural birth" itself. As Turner (2002) maintained, the concept of "natural" has shifted over time. In the early 20th century, experiencing pain was considered unnecessary and even backward; for some in the 1960s, personal empowerment was linked to experiencing birth pain without drugs. Turner's own birth experiences forced a reassessment of her notion of "natural." She said:

> If childbirth is natural and compelled by its innate characteristics, why does it require facilitation? I had an IV, a Jacuzzi, motherwort, and physical aid pushing back the cervix; was that "natural" or "American natural" or "midwifery natural?" (p. 662)

Ultimately, the notion of "natural" birth changes over time—tracking these changes and analyzing historical constructions of "natural" or "medicalized" birth can inform the TSM. Moreover, studying shifting definitions of "good" birth can help form a new linguistic space beyond the binary—one informed by and validating both technical and public language.

Again, studying this medical history is instrumental in understanding the ways in which the public can engage doctors, how language, and thus knowledge, is given validity and ascendancy, and when and how individuals try to co-opt technical language to be "seen" by those in the technical sphere. During the TS debate in NYC, the public was addressing doctors with technical language in the public sphere (e.g., *McClure's Magazine*) and "flipping the script" regarding who was technically ascendant. As Fabj and Sobnosky (1995) have argued, "Activists challenge public images of medicine and science, by arguing that doctors' . . . efforts are driven by private and political concerns" (p. 164). Pro-TS activists challenged the choices physicians made, such as when Tracy and Boyd (1914) blamed elongated labors on physicians' lack of training and expertise, rather than on their choice to attempt the complex Freiburg Method of TS. Following Fabj and Sobnosky (1995), we maintain that the public can both challenge and expand ideas of "expertise" in health care and can reconfigure boundaries between public and technical spheres.

The direct response of doctors to the use of technical language in the public sphere is rare today. Therefore, there are a number of practical implications for this work. Studying a historical dispute over technical language in the public sphere allows scholars to reexamine patient empowerment. Some doctors were resistant to TS (with good reason by today's standards), yet many women demanded it. There is a movement in health care today for patients to be empowered; however, there may be negative potentialities when patients become "too" empowered (Sharf, 2005).

Studying this historical dialogue also helps contextualize present-day doctor–patient decision making and communication. In the TS movement, the dialogue between technical (doctor) and public (patient) is the focus. Today, doctors continue to navigate the commercialization of medicine and their involvement in this commercialization, while responding to patients requesting and advocating for specific medicines or procedures (e.g., laser eye surgery, a heavily advertised drug, etc.). For example, "the Octomom" (Nadya Suleman) convinced her doctor to implant 12 embryos, and he chose to perform a procedure made unsafe by the number of embryos implanted. The consequences of the decision

in this scenario negatively impacted the doctor's professional standing, the patient, her octuplets, and the children she already had (Duke, 2011). Both the historical TS debate and the Octomom controversy reveal the tension between the notion that the "customer is always right," the notion of patient advocacy, and the acceptance of a trained physician's advice. How are patient advocacy and physician expertise at odds with the consumer-based structure of modern medicine (Starr, 1982)? This question deserves closer examination; the patient empowerment movement remains underexamined as well. Ultimately, the doctor–patient relationship ceases to exist if either party becomes too powerful. How will this power be shared and/or negotiated in the commercialized, commoditized, "wireless" landscape of modern medicine?

Despite the continuing authority of the technical language of medicine, the Internet is a constantly developing discursive space in which individuals can interact with both technical and public arguments, at a time and place of their choosing, through various social media outlets (e.g., blogs, WebMD, and Facebook). The Internet allows the public to approach medical technicians such as doctors with a confidence born out of access to technical knowledge, yet without the experience of using that knowledge. Moreover, arguments between the public and technical spheres are not formally monitored on the Internet—rather, they run parallel to public arguments. Today women who are pregnant can find ample support for hospital birth, cesarean (C-) sections, epidurals, cord-blood banking, water birth, midwife-assisted home birth, unassisted home birth, and even the consumption of their own desiccated placenta on the Internet. As Jordan (1997) surmised, perspective particular to one sphere often come into conflict; the Internet continues to complicate who can participate in technical medical conversations and whose arguments are legitimate at any moment.

The definition of legitimate arguments changes over time. For women, the contours of legitimate birth methods and practices change over time—those changes happen in a social context, where very personal birth decisions provoke open debate in the public sphere. While TS was once an empowering birth method, today women can choose from a variety of birth methods, validated by the technical sphere of medicine or not. The choices available to women and their partners now result from long-term, constant advocacy by women in both the public and technical sphere. Women want access to the birth method of their choice, and to the birth experience they find most empowering. We need a language capable of assisting patients as they advocate for themselves, be it in the public sphere, the technical sphere, or the space in between.

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