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Introduction

I think that what we need to think about is how we can move from a situation in which authoritative knowledge is hierarchically distributed into a situation where it is, by consensus, horizontally distributed—that is, where all participants in the labor and birth contribute to the store of knowledge on the basis of which decisions are made. In our technocratized systems we need to ask: What would have to happen for the woman to truly become a part of the decision-making process? What if her knowledge, both bodily and intellectual, were to be accorded legitimate status? What if she had a place in the professional participation structures set up around the birth? Could there *be* a translation process between what the woman knows and what the staff understands to be the situation? Could there be a mutual accommodation of these divergent ways of knowing such that one single authoritative knowledge structure emerges? This, I believe, is the challenge for the future of childbirth in the technologized Western world as well as in the developing countries of the Third World.

—Brigitte Jordan, “Introductory Remarks to the Symposium on ‘Birth in Twelve Cultures: Papers in Honor of Brigitte Jordan’,” Annual Meeting of the American Anthropological Association, San Francisco, CA, December 3, 1992

The birth process is a universal part of human female physiology and biology, but in recent decades anthropologists have come to understand that birth is almost never simply a biological act; on the contrary, as Brigitte Jordan has written, “birth is everywhere socially marked and shaped” (1993[1978]:1). It was the 1978 publication of Jordan’s *Birth in Four Cultures*—a small book that was at once accessible, comprehensive, and groundbreaking—that most saliently served to focus anthropological attention on childbirth as a subject worthy of in-depth ethnographic fieldwork and cross-cultural comparison, and that inspired many others to enter the field. As Faye Ginsburg and Rayna Rapp pointed out in their recent review, “Jordan’s empirically based comparative study of birth in its full sociocultural context gave new legitimacy to the grounded study of human reproduction in anthropology” (1991:320–321). Adds Robert Hahn (personal communication, 1992), “Jordan’s work is not only a landmark cross-cultural study of childbearing, but also an insightful analysis of methodological issues in anthropology”; he calls Jordan “midwife to the anthropology of childbirth.”

During anthropology's first century most anthropological fieldwork was carried out by males, who in general were not interested in or were denied access to the birth experience in the various cultures they studied (McClain 1975, 1982). But we cannot blame the lack of early interest in childbirth solely on male ethnographers. It is noteworthy that even the handful of well-known female ethnographers of the first half of the 20th century paid little or no attention to birth. This omission reflected not only gender bias in anthropology, but also the general bias of earlier generations of American anthropologists toward social and cultural phenomena and away from biology.

Jordan's "biosocial" approach worked to rectify this imbalance in anthropology, as well as to counterbalance a growing medical bias toward the physiological, and often pathological, aspects of childbearing. She provided detailed ethnographic accounts of childbirth in a Mayan community in Yucatán, contrasting this woman-centered communal style of birthing with the highly technologized birthways of the United States and the midwife-attended births of Holland and Sweden. Her biosocial perspective, with its emphasis on the "mutual feedback" between biology and culture, gave her a comparative framework for integrating "the local view and meaning of the event, its associated biobehaviors, and its relevance to cross-system issues regarding the conduct of birth" (1993[1978]:11). In other words, she analyzed each culture's birthways as a system that made internal sense and could be compared with all other systems—a holistic conceptualization that enabled her to avoid reifying any one system, including American biomedicine.

Jordan made it clear that the wholesale exportation of the American system of birth to the Third World was having extremely detrimental effects on indigenous systems, reminding us that these systemic effects were also individual and personal—felt by women in their bodies. Recognizing the need for strong policy recommendations, Jordan presented an alternative model for the "fruitful accommodation" of the biomedical and indigenous systems—a model that would allow "not only an analysis of Maya practices according to the criteria of medical obstetrics, but also an analysis of medical obstetric practices according to the criteria of the indigenous system" (1993[1978]:136). Such a dialogic approach would show, for example, that from a Western point of view Maya women encourage pushing much too early in labor, often resulting in a swollen cervix and a more painful and difficult labor than is necessary. Likewise, from a Maya point of view medical practitioners in the clinics would be seen to be acting inappropriately when they forbid women to be accompanied by other women for support—a primary criterion of indigenous Maya birth—as well as when they demand unnecessary genital exposure, which the Maya perceive as shameful. Such dialogue would lead to mutual accommodation of both systems (see Jambai and MacCormack, this volume), rather than to the top-down imposition of Western birthways that has typified most development programs to date (see Sesia, this volume).

Jordan's contributions to the anthropology of birth did not end with the publication of *Birth in Four Cultures*, for which she won the 1980 Margaret Mead Award, nor with its 1980 or 1983 reissues.¹ She continued to pioneer advances in the field with a disturbing analysis (jointly carried out with Susan Irwin [1987]) of court-ordered cesarean sections, which illuminated the intensifying hegemony of the biomedical mode of birth; with her innovative and oft-cited study of the training

workshops given for Yucatecan midwives by physicians and nurses (1989); with her appraisal of the spread of what she terms “cosmopolitical obstetrics” and its effect on indigenous midwifery systems (1990); and most recently with the 1993 publication of a revised and expanded edition of *Birth in Four Cultures*, which includes an extensive new section on “authoritative knowledge” in childbirth (Jordan 1977, 1984, 1987a, 1987b, 1988, 1989, 1990, 1992; Jordan and Irwin 1987, 1989; Suchman and Jordan 1991)—the knowledge that counts, and on the basis of which decisions are made and actions taken:

For any particular domain several knowledge systems exist, some of which, by consensus, come to carry more weight than others, either because they explain the state of the world better for the purposes at hand (efficacy) or because they are associated with a stronger power base (structural superiority), and usually both. In many situations, equally legitimate parallel knowledge systems exist and people move easily between them, utilizing them sequentially or in parallel fashion for particular purposes. But frequently, one kind of knowledge gains ascendance and legitimacy. A consequence of the legitimation of one kind of knowing as authoritative is the devaluation, often the dismissal, of all other kinds of knowing. Those who espouse alternative knowledge systems then tend to be seen as backward, ignorant, and naive, or worse, simply as troublemakers. Whatever they might think they have to say about the issues up for negotiation is judged irrelevant, unfounded, and not to the point (Jordan 1989). The constitution of authoritative knowledge is an ongoing social process that both builds and reflects power relationships within a community of practice (Lave and Wenger 1991; Wenger 1990). It does this in such a way that all participants come to see the current social order as a natural order, i.e. the way things (obviously) are. . . .

Authoritative knowledge is persuasive because it seems natural, reasonable, and consensually constructed. For the same reason it also carries the possibility of powerful sanctions, ranging from exclusions from the social group to physical coercion (Jordan and Irwin 1989). Generally, however, people not only accept authoritative knowledge (which is thereby validated and reinforced), but are actively and unselfconsciously engaged in its routine production and reproduction.

It is important to realize that to identify a body of knowledge as authoritative speaks, for us as analysts, in no way to the *correctness* of that knowledge. Rather, the label “authoritative” is intended to draw attention to its status within a particular social group and to the work it does in maintaining the group’s definition of morality and rationality. *The power of authoritative knowledge is not that it is correct but that it counts.* . . .

I want to further point out that when we, as analysts, say that somebody “has” knowledge, authoritative or otherwise, this constitutes a commitment to try to come to an understanding of how participants in a social setting make that fact visible to each other, ratify it, enforce it, elaborate it, and so on, since we see knowledge not as a substance that is possessed by individuals but as a state that is collaboratively achieved within a community of practice (Lave and Wenger 1991; Wenger 1990). By authoritative knowledge I mean, then, the knowledge that participants agree counts in a particular situation, that *they* see as consequential, on the basis of which *they* make decisions and provide justifications for courses of action. It is the knowledge that within a community is considered legitimate, consequential, official, worthy of discussion, and appropriate for justifying particular actions by people engaged in accomplishing the tasks at hand. [Jordan 1993(1978):152–154]

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We dedicate this special issue to Brigitte Jordan and present in her honor these articles, all of which are theoretically linked through the medium of her concept of authoritative knowledge (occasionally glossed throughout the issue as *AK*). These works by diverse authors investigate the constitution of authoritative knowledge about birth as an ongoing social process that builds and reflects contested power relationships and cultural values in a wide range of communities, both local and global.

The first three articles, by Sesia, Browner and Press, and Georges, address prenatal care in Oaxaca, the United States, and Greece, exploring the dynamic interplay between biomedical hegemony and the choices women make. The authors make it clear that women must construct their choices in relation to and often in terms of the hegemonic ideology and ethos of Western biomedicine, which leaves little cultural space for alternative conceptions, and thus calls into question the notion of "choice" in relation to culture. Paola Sesia extends Jordan's (1987, 1993[1978]) analyses of midwifery training, describing how Oaxacan ethno-obstetrics, although profoundly disregarded in biomedical training courses, nevertheless remains vital and authoritative through the consensual demands of women. Carole Browner and Nancy Anne Press describe how a multiethnic group of pregnant women in the United States balanced prenatal biomedical advice against their own embodied knowledge, challenging biomedical authority when it was based solely on clinicians' judgments and acquiescing to it when it was backed by the power of technology. Eugenia Georges presses this latter point, describing the role of the multiple ultrasound scans routinely performed in Greece—which obstetricians promote and women actively demand—in the production of authoritative knowledge about pregnancy.

The conceptual separation between mother and fetus so fundamental to Western obstetrics has legislative ramifications that Jean Heriot examines as they were expressed and enacted in debates in the Mississippi legislature in 1990–91. Heriot focuses on the cultural conjoining of medical/scientific, religious, and legal systems of *AK* in the multiple anti-abortion bills proposed in Mississippi. Like Heriot, Deborah Fiedler explores intracultural differences in systems of authoritative knowledge about birth. Fiedler compares midwifery and obstetrical systems of authoritative knowledge in Japan, showing how territory and technology work to consolidate the authoritative status of the obstetrician; nevertheless, as Fiedler illustrates, Japanese midwives continue to play a key role in maintaining the cultural definition of birth as a healthy and natural, not a pathological, event.

Carolyn Sargent and Grace Bascope describe cross-cultural differences in systems of *AK*. Their comparison of ways of knowing about birth in Texas, Jamaica, and Yucatán reveals the startling contrasts—first described by Jordan (1993[1978])—between top-down systems, in which the woman herself is granted no authority of knowing, and lateral systems, in which *AK* is communally shared between the woman and her female attendants. Such communion is also a key feature of independent midwifery in the United States; the interplay between midwives' *AK* and the embodied inner knowing of home birth mothers is explored by anthropologist Robbie Davis-Floyd and midwife Elizabeth Davis, who examine independent midwives' willingness to rely on intuition as a form of both spiritual

and embodied AK. These home birth midwives have woven a connection-based philosophy, in a conscious attempt to provide a strong cultural alternative to the visual, conceptual, and even legislative separation of mother and child facilitated by the new reproductive technologies and described in the preceding articles by Browner and Press, Georges, Heriot, and Sargent and Bascope.

Like Sesia's Oaxacan study, Jambai and MacCormack's analysis of women's reproductive care in Pujehun district, Sierra Leone, reveals a viable midwifery-based indigenous system of authoritative knowledge—one that has remained astonishingly vital even through the near-total disruptions caused by regional warfare. Unlike Oaxacan midwives, however, the midwives in Pujehun district have benefited from the complementary coexistence of biomedical and traditional systems of AK—a complementarity that has its roots in the women's secret society of Sande.

The three commentaries, by an evolutionary anthropologist (Wenda Trevathan), an obstetrician (Bethany Hays), and a community midwife (Ina May Gaskin), extend the scope of this volume back in evolutionary time and forward into the future of childbirth in the United States.

The utility and power of the concept of AK are evident throughout this collection. Taken as a whole, these studies show how authoritative knowledge is produced, displayed, resisted, and challenged in social, clinical, and political interactions.² They illuminate the links between control of technology and the hierarchy of relations between specialists and patients (Georges, Browner and Press, Fiedler, Sargent and Bascope), and clarify the articulation between the production of authoritative knowledge and the distribution of power in societal institutions (Heriot, Fiedler). The inherent authority of Western technomedicine, which is increasingly taken for granted on a global scale, is not assumed here; rather, these case studies from Central and North America, the Caribbean, and societies in Europe, Asia, and Africa illustrate the global spread of obstetrical orthodoxy and its dynamic (and sometimes suffocating) relations to local ideas and practices. While serving to remind us that orthodox "ways of knowing" increasingly dominate obstetrics worldwide, the articles by Sesia, Sargent and Bascope, Davis-Floyd and Davis, and Jambai and MacCormack also demonstrate the continued and/or renewed viability of indigenous and midwifery models of AK, the resilience of low-technology birth systems, and the possibility for interactional cooperation and accommodation between biomedicine and other ethno-obstetrical systems.

In so doing, these studies expand and enrich the concept of authoritative knowledge. As Davis-Floyd and Davis demonstrate, independent midwives in the United States honor women's own authoritative knowledge about birth in a lateral way that makes the woman and the midwife equal collaborators in the birthing enterprise. The traditional midwives of Oaxaca (Sesia) and of Yucatán (Sargent and Bascope) hold positions of cultural authority but share their birth knowledge with other experienced women; thus experienced birth-givers are honored for their own accumulated AK, whereas first-time mothers are expected to defer to the collaborative wisdom of the elders. This sort of collaborative construction of authoritative knowledge about birth reinforces Jordan's emphasis on the potential for consensual and interactive systems of AK.

Fiedler's study of Japanese birth supports Jordan's point that AK is usually possessed by those who control the artifacts necessary to produce the work, whereas the chapter by Sargent and Bascope shows that even when those artifacts are absent, as in Jamaican hospitals, it is possible for medical personnel to maintain a monopoly on AK about birth. These authors thus underline Jordan's emphasis on the association between AK and the distribution of power within a social group, noting that AK is not only re-created through discourse, but can be embedded in status and social position.

Heriot extends the concept of authoritative knowledge to include the "mediated knowledge" expressed in the language of proposed legislative bills that sought to limit abortion—a knowledge created in terms of the underlying assumptions of patriarchy, religion, biomedicine, and science. Heriot shows how the very pervasiveness of these underlying assumptions renders them invisible and therefore unquestionable by legislators and opponents alike.

The articles by Georges and Browner and Press most closely focus on women's choices; they show that even when a certain type of AK seems at first glance to be entirely top-down, closer scrutiny often reveals that those who appear to be its victims are in fact consensual participants who both derive benefit from the cognitive and procedural status quo and actively participate in its construction. Those who resist the status quo must work to develop alternative systems of AK that are strongly cohesive and clearly enough articulated to withstand tremendous pressure from the orthodox establishment (Davis-Floyd and Davis, this volume; see also Daviss 1997; Szurek 1997; Wagner 1997). There are profound differences in relation to the birthing body between biomedical and alternative approaches: the article by Davis-Floyd and Davis and the commentary by Gaskin illustrate the valuation, indeed the privileging, of women's body knowing in alternative birthing systems, while the articles by Georges and Sargent and Bascope reveal the near-complete devaluation of women's body knowing in medicalized birth.³

Jambai and MacCormack suggest the possibility that truly integrated and successful systems of AK can derive some benefit from top-down teaching but must also grow grassroots-style, from the bottom up, if they are to be flexible enough to meet the changing needs of a given population. The grassroots system they describe benefited from just the sort of "mutual accommodation" between local and biomedical ways of knowing about women's health care that Jordan first called for in 1978; this system demonstrates enormous adaptability and resilience, even in the face of war. Sesia's study on Oaxacan prenatal care also demonstrates the resilience of grassroots systems of AK in the face of tremendous pressures from biomedicine. Indeed, in Oaxaca as in Sierra Leone, control of authoritative knowledge related to reproduction and birth becomes visible as a potent site of cultural preservation and renewal, reinforcing Ginsburg and Rapp's (1995) emphasis on reproduction as a site of defense of cultural identity.

Wenda Trevathan's commentary extends the notion of AK about childbirth backward into the history of human evolution, posing the question of when, if ever, anatomically modern human females were the sole possessors of authoritative knowledge in childbirth. Indeed, the ethnographic record makes it clear that systems of AK that define solitary birth as the norm or the ideal—like those of the Bariba of Benin (Sargent 1982, 1989) and the Ju/'hoan (Bieseke 1997)—are

extremely rare. Trevathan's emphasis on the survival value of other women's assistance at childbirth suggests an evolutionary basis for the rich birthing cultures that have developed in countless human societies, and points to the strong evolutionary advantages of the systems of AK developed through these birthing cultures, as well as to the advantages of what Trevathan labels "social birth."

The sociality of birth is a central theme in all of the studies in this volume. Cumulatively, these studies demonstrate (1) the viability and resilience of midwifery-based systems that involve lateral sharing of AK between mother and midwife; and (2) the perceived advantages and the problematics of hierarchical, top-down systems of AK that vest both authority and knowledge in experts and the technologies they control—systems that sometimes meet and sometimes obliterate the individual and cultural needs and desires of birthing women. As the articles by Georges and Browner and Press make clear, no simple dichotomies exist between women and biomedical authority and technology; instead their occasional antagonism is more than counterbalanced by their frequent complicity. This complicity is keenly felt by obstetrician Bethany Hays, who notes in her commentary that she is "nudged by the system to take control of birth in a thousand visible and invisible ways"—a nudging often reinforced by patients who choose to "give themselves over" to her authority and control. Yet her own preference is to resist this trend whenever possible, and to work to create a model of birth that gives authority to the inner knowing of the birthing mother, and provides her with caregivers who utilize both their technical skills and their own intuitive knowledge to assist the mother to access that inner knowing. In her desire for such an ideal Hays seems to be asking for a conjoining of the woman-centered models of our evolutionary past and the ethnographic present described by Sesia, Jambai and MacCormack, and Davis-Floyd and Davis—in other words, for a union of communitarian birthing systems with the occasionally lifesaving technical expertise of Western obstetrics.

Such a union is in fact offered by independent midwives like Ina May Gaskin who combine an extensive knowledge of technology, biomedicine, homeopathy, and herbs with an extensive repertoire of skills and a profound respect for inner knowing, both their own and that of the women they attend. As Gaskin's commentary illustrates, the system of authoritative knowledge about birth that has been developed by North American independent midwives has grown, like many indigenous systems, out of their community's collective experiences of birth. Midwives themselves are condensing and codifying this midwifery AK into a cohesive, clearly articulated body of oral and written AK (see, for example, Davis 1983; Gaskin 1990[1977]; Frye 1995; Houghton and Windom 1996[1995]) that is increasingly being published, taught, and discussed worldwide. This cohering and globalizing of midwifery AK opens exciting possibilities that it can be shared with indigenous practitioners⁴—as is currently occurring in the Inuit community of Povungnituk (Daviss 1997)—to help them resist further biomedical intrusion and to create new community-based and woman-centered models of birth.

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In honor of Brigitte Jordan, and with great pride, we present this special issue. The mere existence of this collection is a tribute to the vitality of the broader field

of women's studies, as well as to the burgeoning anthropological interest in issues involving women's bodies, women's lives, and women's births.

NOTES

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The Xerox Palo Alto Research Center (Xerox PARC) performs pioneering research that covers a broad spectrum of research fields, ranging from electronic materials and device research through computer-based systems and software, to research into work practices and technologies in use. The center's mission is to pursue those technologies that relate to Xerox's current and emerging businesses.

The Institute for Research on Learning (IRL) is one of the few nonprofit organizations that examines in a rigorous, interdisciplinary, and collaborative manner what constitutes successful learning in schools and in the workplace. Its researchers represent a diverse array of fields, including education, anthropology, computer science, linguistics, cognitive science, and psychology. Because of its diversity, IRL's methodologies are wholly unique, emphasizing action research, participatory design, ethnography, and the creative use of video and video analysis. Susan Stucky, IRL's associate director, writes:

IRL is particularly pleased to be able to contribute to the publication of this special issue of the *Medical Anthropology Quarterly* in honor of Brigitte Jordan. Gitti is a valued member of our research community. Not only has her work on authoritative knowledge found its way into the Institute's work on many other settings besides the medical ones she pioneered, but she also continues to lead the way in bringing new insight to our general understanding of learning and work. Chief among her contributions is the further refinement of research methods for use in a variety of contemporary settings, especially in the workplace, where qualitative research is only just now gaining recognition and acceptance.

1. In recent years a career shift has taken Brigitte Jordan (Gitti) from direct work with birth to industrial research. These days she divides her time between the Xerox Palo Alto Research Center and the Institute for Research on Learning, where she specializes in adapting anthropological field methods to research in complex, high-technology work settings. She has not forsaken birth: one of her recent IRL publications is an exciting and progressive comparison of the hierarchical distribution of AK in hospital birth (see chapter 1) with the egalitarian and shared access to AK in the high-tech work environment of air traffic controllers (Jordan 1992).

2. Please note that none of the research reported on in this volume was initially undertaken with the idea of AK in mind. Rather, this concept was employed as an analytical tool after the ethnographic research was complete. We suggest that an exciting direction for future research would be to set out from the beginning to investigate the production, articulation, and (perhaps) the contestations of AK in specific areas of praxis, within specific communities, and during specific events and interactions.

3. By *body knowing* we mean the instinctive, sensory, and intuitive ways in which women know with and through their bodies.

4. For example, independent midwives in North America who have created and implemented an international direct-entry midwifery certification process for the Certified Professional Midwife (CPM) (see Davis-Floyd and Davis, this volume) are currently investigating the possibility of offering that certification to Hispanic *parteras* (traditional midwives) in the Southwestern United States and Mexico. The certification process involves

documentation of births and practical midwifery skills, a challenging written exam, and a skills assessment; offering it to traditional midwives would necessitate alterations which are presently being explored. These might include (1) identifying appropriate standards of care for specific communities; (2) expanding the certification process to reflect these standards and to respect the values and AK of the parteras, which can differ from community to community; (3) developing and offering skills-sharing workshops to give the parteras fluency in the AK of North American home-birth midwifery (the standard used to develop CPM certification) and the ability to utilize those home birth technologies (see Davis-Floyd and Davis, this issue, note 11) that the parteras would consider to be both appropriate and helpful; and (4) working in cooperation with the parteras to facilitate their integration of these technologies into their practices, and to help them gain access to the proper supplies on an ongoing basis. (For more information, contact the North American Registry of Midwives, c/o Sandra Morningstar, Wild Rose Lane, HCR 79, Box 14B, Kaiser, MO 65047-9711.)

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