Dual-Career Couples and Academic Science

C. Susan Weiler and Paul H. Yancey

THE BETTMANN ARCHIVE

Mycenean gold mask of Agamemnon who, in Greek legend, was king of Mycenae or Argos. In legend, Agamemnon sacrificed his daughter, Ipgigeneia, in order to fight in the Trojan War. Upon return, he was slain by his wife, Clytemestra. (See engraving, p. 219.) In The Fragility of Goodness, *author M.C. Nussbaum, cited in this article, has compared the modern dilemma of having to choose between conflicting family and career responsibilities with the Greek tragedy,* Agamemnon, *in which "a previously guiltless man" is placed "in a situation in which there is open to him no guilt-free course."*

Society is increasingly accepting women in the work force, couples are having fewer children and sharing more responsibilities, and employers are increasingly faced with the task of recruiting and accommodating both men and women who are making career decisions constrained by family considerations. The rapidity of these transformations has left individuals, institutions, and society unprepared to cope with the ramifications. Virtually all professional employment sectors are experiencing difficulties in recruitment and retention of individuals involved in dual-career relationships, and most are beginning to respond to the challenge. Those institutions that best enable employees to balance family and career demands will have a competitive edge in the recruitment and retention of personnel.

As explored in this article, individuals, academic institutions, and the scientific community will need to change if academic science careers are to be more compatible with the family unit for both men and women. The traditional barriers to women in science make recruitment into science somewhat more difficult than in other fields; yet the national imperative to increase science participation makes it particularly crucial that representation by all segments of society be increased (National Science Board 1986).

Individuals and institutions have generally treated the conflict between family and work as a "women's problem." Because of the increased participation of women in the workforce and sharing of family and career decisions, this conflict is increasingly shared between men and women. Because individuals of both sexes are increasingly making career decisions based on their partner's career needs as well as their own, institutions must address the dual-career issue in order to attract and retain their preferred candidates. Few institutions have as yet responded to this new challenge. Rather than treating dual-career issues as a "problem," we encourage academic institutions to view the accommodation of dual-career couples as an opportunity to take the leadership position that will attract and retain more talented people in academia.

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In the sections to follow, the article describes (what the authors see as) the major challenges of accommodating dual-career couples in academic science, and some of the ways in which institutions are responding. The authors hope that this essay will inspire more discussion and work on this important topic. Although this article is confined to the topic of dual-career couples in academic science, the proportion of dual-career couples is increasing in virtually all fields and thus, needs to be addressed beyond the disciplinary boundaries.

PERCEPTIONS CONCERNING HOUSEHOLD RESPONSIBILITY

The fact that there have been and are so few successful married female scientists is often used to support the conjecture that household duties and a scientific career are not compatible, except for martyrs or geniuses. However, the historical record demonstrates that family in and of itself has not been the major barrier for women; perceptions and discrimination have been greater obstacles (Abir-Am and Outram 1987; Cole and Zuckerman 1987; and Rossiter 1982). For instance, institutions (including the women's colleges) for many years hired only single women and required them to resign if and when they married because the conflict was considered too great for anyone to manage. Although the rules have changed, the attitude persists.

Because women have traditionally been responsible for most household and child care, the burden of this perception has discouraged girls from pursuing mathematics and science courses, which provide the necessary background for careers, and has made it more difficult for women to pursue science careers once trained. Today, the trend toward household equity means that some men are now also victims of societal and professional perceptions.

The fact is that most women today work and for many reasons have fewer children than previously. Furthermore, men are taking a more active role in household maintenance and child rearing. Although it is more difficult to balance family and career than career alone, particularly when children are involved, it is by no means impossible for scientists or for other professionals. The proportion of dual-career relationships is likely to increase further before stabilizing. When the scientific community considers family responsibilities and science as incompatible, the conjecture becomes a self-fulfilling prophesy: individuals wishing to balance family and a science career experience unnecessary difficulties obtaining and retaining positions and may ultimately be forced to choose between family and career. If science is to be considered a viable dual-career option, perceptions and attitudes about the compatibility of family and a science career must change not only within the scientific community but outside it. The decision to combine family with career is a personal one, and societal or professional attitudes should not limit those men and women who choose to do so; indeed, their efforts should be supported. It is doubtful that perceptions will change without strong leadership within institutions and the scientific community, and without highly visible dual-career success models at all levels.

Academia must do a better job of accommodating dual-career couples if it is to compete with other employment sectors for faculty in the years ahead.

TIME CONSTRAINTS AND CONFLICTS

While it is possible to balance family and career, it is by no means easy in any field—including science. In 1885, mathematician Sofia Kovalevskaia wrote to a friend, "All these stupid but unpostponable everyday affairs are a serious test of my patience, and I begin to understand why men treasure good, practical housewives so highly. Were I a man, I'd choose myself a beautiful little housewife who'd free me from all this" (Abir-Am and Outram 1987, p.186). Kovalevskaia's sentiment is still expressed today—both men and women are longing for someone to fulfill the role of a traditional housewife! In 1987, 65 percent of women with children under 18 were working (as compared to 8.6 percent in 1949), and 60 percent of working men are presently married to women with outside jobs (Galinsky and Stein 1989). Time allocation and too much to do are often considered the greatest disadvantages of dual-career relationships (Weishaar, Chiaravalli, and Jones 1984).

The daily conflicts alluded to by Kovalevskaia are experienced by virtually all dual-career couples. Nussbaum (1986, p.34) has compared the modern dilemma of having to choose between conflicting family and career responsibilities with the Greek tragedy *Agamemnon,* in which "a previously guiltless man" is placed "in a situation in which there is open to him no guilt-free course." All parents and partners are subject to cases where decisions concerning participation in conflicting family or professional events must be made, and some level of guilt is likely to follow regardless of the decision.

There is no reason why the conflict and stress levels must be as high as they are at present. Historical trends and continued perceptions of household work and child care as primarily "women's work" have made the task of balancing family and career harder for women than men, and probably contributes to the present high rate of divorce (Hochschild 1989). Relief from

the present burdens will, in part, require a greater willingness by men to share household duties. Although their share is increasing, the highest of recent estimates of men's contribution to household work is less than one-third of the time spent by women (Cowan 1983). But as their hours increase, men are also experiencing family and career time conflicts. Outside help with cooking, cleaning, and child care provides a partial solution, and financial assistance from institutions could reduce the burdens even further.

Institutional assistance is particularly important in science fields; experiments must generally run to completion once started, and field work in remote locations is sometimes required. The difficulties can be lessened by a willingness on the part of institutions and funding agencies to provide more funding for technicians and other staff support during child-rearing years.

High-quality and affordable day care is a particularly critical issue. Unless couples with children can juggle work schedules in a way that enables one or the other parent to be with a dependent child, outside help with child care is needed. In many cases, the lack of part-time and extended-leave options means that many parents who would prefer to stay home with their small children cannot. Yet convenient, high-quality day care is often unavailable even to the dual-career couples who can most afford it (Galinsky and Stein 1989). If parents are forced to choose between career and family due to the unavailability of satisfactory child care, many, if not most, will choose to quit work. Furthermore, women will probably continue to be more likely than men to drop out for family reasons. The loss of talented scientists, particularly women scientists, is something that academia, industry, and society cannot afford.

On-site and subsidized child care are effective ways to increase the availability and affordability of child care, and also to increase work productivity (less stress and fewer lost hours). The recent concern about child care at the national level and the increase in the number of institutions providing on-site child care are welcome signs that the situation is improving.

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A copper engraving depicting the slaying of Agamemnon.

SCIENCE ETHOS

A different tactic may be equally important: a change in the science ethos. One definition of ethos is "the moral factor which influences a man's actions." Virtually all professions were determined in times dominated by men, in particular those with a wife who stayed home to do the housework and raise children. Women have consequently had difficulties penetrating the upper strata of the professions (Hahler 1988; Rossiter 1982; Schwartz 1989), and men who share household and family responsibilities are also experiencing difficulties.

The science ethos is particularly rigid. It is essentially that of "a construction of life around the pillar of work" (Rayman and Burbage 1989): a 24-hour per-day commitment, a perception that successful science cannot be done part time. It is difficult, if not impossible, to move up the career ladder if one even temporarily steps off or adjusts a work schedule for family reasons. The family role has changed for both men and women, yet the expectation of a full-time commitment has not.

In light of their increasing participation, women and men with working spouses should be given the opportunity to redefine the science ethos. We do not expect the ethos to change drastically, nor should it change much if science in this country is to remain at the cutting edge. Nevertheless, flexibility that would not seriously impair the progress of science seems possible. Schwartz (1989) points out that even if a woman drops out entirely for five years when her children are small, she would still work 38 compared with the typical man's 43 years. There is no reason this small difference should limit

a parent throughout his or her professional life. Academic institutions generally provide extended leaves of absence to professors who need time off to write books or conduct research at other institutions. It therefore should have the capacity to grant one-, two-, or three-year leaves (or reduced teaching loads) to individuals wishing to spend time with young children or other dependents. It is doubtful that many women or men will be able to reenter science after a lengthy and complete absence, even with reentry programs (Rossi 1965). Therefore, it is particularly important in the sciences that full-status, part-time positions be available.

Academia has many potential advantages over other professions in terms of enabling dual-career couples to balance family and career responsibilities. Because college and pre-college calendars correspond fairly closely, it should be easier for academic parents to spend nonschool hours with their children than for parents in nonacademic fields. College teaching schedules are also fairly flexible and can generally be shuffled around as needed, even on short notice. Because faculty generally have private offices, children can also be accommodated at work when necessary. Furthermore, much of the routine academic work could be conducted at home as well as at the office. The recent breakthroughs in telecommunication provide greater opportunity for individuals to work at home and from remote locations.

So far, however, faculty have been discouraged from realizing much of this potential. For instance, while it is generally accepted that faculty can rearrange classes to facilitate participation at conferences, or work at home on a specific professional project, individuals who request faculty and other meetings at times that will accommodate day-care schedules, or choose to conduct routine work at home during the day for personal reasons are often considered unprofessional. Flexibility should be accommodated for both professional and personal reasons.

The federal government has developed policies to facilitate employee care of both dependent children and elders through generous leave programs, work force re-entry provisions, flexible, and compressed work schedules, and permanent part-time employment options (US Office of Personal Management 1988). Industry has also begun to respond to the challenge (Galinsky and Stein 1989). On-site day care, shared positions, part-time positions, and stop-the-clock tenure policies are becoming more common in academia. If academia is to compete with industry and government for personnel, it must continue to develop and institute policies that will accommodate dual-career couples.

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Presently, in the few situations where the above options are available, persons using them are either expected to produce as if working full time, or dismissed as dilettantes. Performance expectations and evaluations should be prorated to the portion of time worked; after all, quality should be more important than quantity. Schwartz (1989) has been criticized for limiting her argument to women, and care must be taken to ensure that policies do not become "mommy tracks" (Ehrlich 1989). Specifically, both partners should have the option to "detour" and then return to the "fast track;" and attitudes must make the transition possible.

JOB PROCUREMENT

A fourth challenge for the dual-career couple is the limitation imposed by the need to find two satisfying jobs within a reasonable commuting distance. Almost four-fifths of the married women scientists in a recent study (Cole and Zuckerman 1987) were married to scientists, a proportion the authors considered typical. Thus, dual-career couples with a female scientist are generally faced with the task of finding two scientific jobs within a reasonable commute. This is often a more difficult task for Ph.D's than other professionals.

The difficulty is compounded by the reluctance of most employers to hire couples or accommodate spouses. Traditional barriers for married women have often been replaced with hidden nepotism rules which make it difficult to obtain two jobs at the same institution. Unless a position can be negotiated at the time of the primary candidate's hiring, the trailing academic spouse (usually the woman) is generally left to campaign by herself for a position that she is fully qualified for at an institution which will not look at her because she is already there, and/or because of her spouse's affiliation.

Individuals suffer when satisfactory jobs cannot be obtained for both partners, and institutions suffer when qualified individuals turn down or quit jobs due to lack of opportunities for their spouse. No one wishes to hire a less qualified individual to accommodate the primary candidate. At the same time, however, partners should not be penalized because of their personal relationship; institutions should develop policies to ensure equal consideration of academic partners when employment options are available.

Corporations are increasingly developing specific policies to accommodate dual-career couples (Galinsky and

Stein 1989, and some universities are following the trend (University of Wisconsin 1988). A recent study by Pennsylvania State University concluded that when a dual-career family relocated (generally for the husband's job), the trailing partner usually suffered a career setback; the setback generally takes years to overcome, and may be permanent. Programs for dual-career couples generally concentrate on referral services to facilitate consideration of the trailing partner at nearby institutions. While referral services may work for some individuals and in large metropolitan areas, they may not be adequate in all localities, or for academic spouses; the spouse's institution may represent the only professional employment option. The situation is particularly difficult for scientists, who generally require access to laboratory space and equipment.

If the trailing partner is not to be permanently left in a position with low pay, prestige, and promotion potential, a long-term position with institutional support and recognition must be available. Academia is beginning to use creative options such as "floating" positions (designated pool of positions which are assigned to individuals rather than departments and are returned to a central pool) and "pre-fills" (hiring candidates before a regular tenure-track position opens up) to enhance recruitment (University of Wisconsin 1988). While the creation of full-time tenure-track positions is possible at some academic institutions, it may be too costly for others. A shared position is a low-cost solution for couples in the same field. Alternatively, the creation of part-time tenure-track "floating" positions would enable institutions to accommodate more individuals for a given number of positions, and provide a mechanism for attracting couples with backgrounds sufficiently different that one position could not be shared. The American Association of University Professors has developed guidelines for part-time faculty (Stern et al. 1981).

CONTINUED DISCRIMINATION AGAINST WOMEN

Finally, all of the issues discussed above are compounded for women by the discriminatory pattern of hiring, salary, tenure, and other "microinequities" (Sandler and Hall 1986; Webster 1989, Widnall 1988). Despite years of affirmative action and articulation of the problem, female Ph.D.s obtain tenure-track positions and tenure at a much lower percentage than men, and are paid 5-18 percent lower salaries than men with comparable experience (Rayman and Burbage 1989). Balancing career and family is difficult in any case; lack of equal treatment makes it far more difficult for women to succeed than men. The trend in female representation in the sciences to date is not encouraging: only 15 percent of US scientists are female, compared with 44 percent for the national work force as a whole (National Science Foundation 1988), and women continue to be underrepresented in academic science relative to their proportion of Ph.D.s (Maitland 1988; Vetter 1989). The importance of appropriate female and dual-career role models cannot be overstated; it is therefore particularly important that women and dual-career partners are not relegated to second-class positions.

The historical record demonstrates that family in and of itself has not been the major barrier for women; perceptions and discrimination have been greater obstacles.

Past discrimination makes it impossible to sort out how much of women's low science participation is due to the other factors described above. The scientific community should do whatever it can to speed up the removal of unnecessary impediments which have traditionally made it difficult for women to balance career and family.

We are encouraged by the many recent efforts to both recruit and retain female scientists, such as NSFs Research Opportunities for Women and Visiting Professorships for Women programs. One important aspect of these programs in the context of dual-career couples is their objective to provide role models and help women scientists get reestablished after taking some time off, usually to have a family. As women gain equal access, these programs should be extended to male partners in dual-career marriages, in order to increase the visibility and acceptance of dual-career role models, and avoid the institutionalization of "mommy tracks."

FUTURE PROSPECTS

It is hoped that in the future men and women will not be forced to depend on positions and institutions chosen for compatibility with marriage rather than professional goals, or be forced to choose between marriage and career. As Rossi (1965, p. 1197) so eloquently stated, "Marriage, parenthood and meaningful work are major experiences in the adventure of life. No society can consider that the disadvantages of women have been overcome so long as the pursuit of a career exacts a personal deprivation of marriage and parenthood, or the pursuit of happiness in marriage and family life robs a woman of fulfillment in meaningful work." The same applies today to both men and women.

While the plight of dual-career couples in the sciences is presently discouraging, we believe that women and

men should be encouraged to pursue science careers, and particularly academic science. Women are underrepresented, underemployed, and underpaid in most fields, and dual-career couples have a difficult time in most. The gradual acceptance of the working wife, the tendency for husbands to share household responsibilities, and the projected shortage of scientists all suggest that the decades ahead will provide a "window of opportunity" in which women and dual-career couples will find it easier to balance family and career in the sciences. Many programs are presently being developed to recruit and retain female, minority, and disabled scientists. Thus, opportunities in academic science are likely to be particularly good.

Academia must do a better job of accommodating dual-career couples if it is to compete with other employment sectors for faculty in the years ahead. However, administrators should keep in mind that even the best policies are likely to fail unless they are supported by individual faculty members and departments. The requisite supportive climate is unlikely to occur without strong leadership at the highest levels, campus-wide dialogue, and incentive policies that use "carrots" rather than "sticks".

Those fields and institutions which can best recruit and retain women, minorities, and dual-career couples will reap the benefits of a larger applicant pool and a more productive and stable work force. The sooner academic institutions and colleagues view individuals in these groups as resources rather than problems, the greater will be the chance that individuals will choose academia and science over other options. To avoid further shortages of scientists, personal hardships, and recruitment and retention difficulties, it is imperative that the transformation start now, and that it be continued on the basis of equity as well as necessity. ❑

Note

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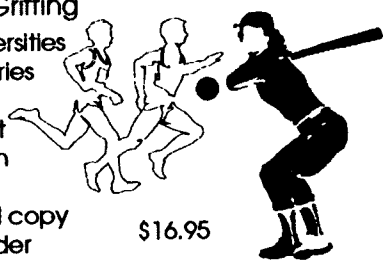

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