

Science, Multiple Modernities, and Culture

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Abstract

Women's concerns to develop knowledge about ourselves and the world around us that is for women, and not just for transnational corporations, militaries, welfare systems, and nationalist legal projects, are producing an important kind of epistemological and political subject. This subject is guided always by the idea of a cultural Other who has good reasons to disagree with some of the subject's most deeply cherished assumptions and beliefs, whose full humanity has been at least equally disvalued, and whose access to shaping public spaces has been at least equally restricted as that of the subject herself. Yet this subject is opposed to a laissez-faire "toleration" of social "differences" which are the result of injustices, and insists that compelling evidence can be provided to reveal such injustices.. This kind of subject disrupts conventional understandings of good science and real knowledge, as well as of modernity, civilization, and social progress. It offers the hope for a more effective political language for social justice movements than the languages on which we have had to rely.

1. A New Political Subject.

A new kind of subject of political action has begun to emerge from women's and postcolonial movements around the world. Such a subject is an important kind of transformative social actor in local and global politics. No doubt such a subject is not completely new to the world; yet nevertheless it has been visibly multiplying in recent years. This is not the only kind of important woman or postcolonial subject to organize in resistance to the dominant political economy, its ideals, institutions, practices, and cultures. But it is one with potentially important effects on dominant forms of global and local social relations.

In contrast to the "centered," singular, Rational Man of Western political philosophy, this subject is "decentered" in that it has begun to emerge in distinctive historical forms, with distinctive local projects and goals, in many cultures around the globe. This subject knows that there are Others who have good reasons *not* to share some of the subject's most deeply cherished assumptions and beliefs. (We should properly refer here to "subjects" of history and of knowledge, plural.) However, in each case such a subject insists on equal respect and equal material resources, equal recognition and distributive justice, not just for its own kind, but also for people in every kind of economically and politically exploited, oppressed, and dominated cultural group. That is, such subjects do not seek to replace existing elites with new elites, whether or not the envisioned new rulers claim to speak for "the people." Rather they want to enable, encourage, and create new kinds of political actors who tolerate no elites, as well as to create the institutional

settings in which such actors can thrive. Such institutions which can nourish these new subjects of history and knowledge include the family, religion and morality, as well as economic, governmental and educational institutions. Thus this kind of subject sees its own situation as improvable only through the transformation of social institutions.

It is this “leadership by the idea of the Other” which creates such a distinctive ethical and political subject of history.ⁱ But it also creates a distinctive subject of knowledge and of scientific projects. Since the production and management of information has now moved to the base of the global political economy, its “principled relativism,” as one observer has called it (or “strong objectivity,” as I have named it), offers also the possibility of a more useful scientific discourse.ⁱⁱ

Such historical actors thus are to be distinguished from ones who insist on democracy for only the few, and see their own role as that of “helping” what they take to be less fully human groups to live the ideals adopted by themselves, the chosen few. They are different also from revolutionary vanguards who are so certain of the truth of their own vision that they cannot see, or see as important, their vision’s own exclusions and forms of domination of other suffering groups. But they are also to be distinguished from the agents of any laissez-faire pluralism. These latter are too tolerant, for they fail to work to end disrespect and distributive inequality; they do not see any need to take seriously the importance of others’ disagreements with their own ideas and practices. They are satisfied by a shallow, “thin,” or weak pluralism. “Whatever,” they shrug, as long as their own beliefs and practices are not disturbed. This kind of self-satisfied “tolerance” is dangerous. Such anti-democratic pluralism de facto support continued inequalities and social injustices. The new subjects to which I point embrace a deep, “thick,” or “muscular” (“Amazonian?”) and critically reflexive egalitarian pluralism. This kind of pluralism is always guided by the suspicion that Others who disagree with me are in fact being misunderstood, wrongly neglected and disadvantaged by present goals, policies and practices in ways in which I, the speaker, have not fully comprehended and, in fact, may never fully comprehend. The idea of the Other is a guide rather than a nuisance or threat to their own beliefs, policies and practices.

Such new subjects can be found in the projects of many feminist and Third World environmentalist movements, in grass roots activists who have learned how to negotiate with the policies of international agencies and institutions, in health movement activists who are gaining access for the poor to patented pharmaceutical products, among activists who protest against the economic policies of the International Monetary Fund and the World Trade Organization, and in other resistance movements. I do not say that every resistance movement is guided by the idea of the Other; they are not. But at least some tendencies in some of them are so guided. Such subjects can also be found producing feminist and postcolonial critical evaluations of dominant understandings of progress, modernity, science and knowledge.

Here I focus briefly on two themes in this work: what difference to such projects is made by recognition of the humanity and agency of women North and South? And, in particular, to their humanity and agency with respect to the production of empirical knowledge?

2. Women's humanity, women's agency.

Historian Joan Kelly-Gadol (1976) argued that standard conceptions of human history assumed that woman's situation was not a social matter.

Throughout historical time, women have been largely excluded from making war, wealth, laws, governments, art, and science. Men, functioning in their capacity as historians, considered exactly those activities constitutive of civilization: hence, diplomatic history, economic history, constitutional history, and political and cultural history....[Yet] the moment one assumes that women are a part of humanity in the fullest sense, the period or set of events with which we deal takes on a wholly different character or meaning from the normally accepted one. Indeed, what emerges is a fairly regular pattern of relative loss of status for women precisely in those periods of so-called progressive change...Suddenly we see these [purported progressive ages] with a new, double vision--and each eye sees a different picture." 16-17.

Kelly-Gadol argues that the second eye reveals how standard ways of periodizing history, identifying the significant categories of social analysis, and theorizing social change cannot do justice to women's humanity too. Subsequent historians have shown how periodization schemes, the categories of social analysis and theories of social change all must be revised to capture women's humanity--the humanity of men's Others. The same can be said for capturing the humanity of cultures at the periphery of the European Enlightenment--the humanity of Europe's Others. For example, modernity, and the causes of modern sciences' great successes both look different once women in the North and Third World women and men are regarded as fully a part of humanity.

Kelly-Gadol focused on women's humanity. But what about women's agency, women's active participation in social relations? What difference does women's agency make to such moments of purportedly progressive change as modernity and the emergence of its sciences? Historians have identified how modernity is always defined as a virile, manly practice, of nations, states, international agencies. It has again and again been defined against women's typical assignment to family roles and against the priority of family concerns for public policy, as well as against women's assigned kinds of labor, and the meanings of the feminine. Far from leaving Western traditions behind, as the modernists claimed, Western modernity in fact reinvented traditional gender relations to the benefit of men. In the West, modernity is defined against a feminine Other. Thus modernity in the West has attempted to preserve what it perceived as the traditional life of women; it reinvents women as pre-modern. However, women's full participation in public life disrupts these practices and meanings of modernity. If women are fully involved in public sphere activities, those spheres cannot function to support at least traditional meanings of modernity. Women's participation in public spheres changes modernity as it changes women, too. Indeed, the so-called "culture wars" in the U.S. and elsewhere are in part waged against the social changes brought about by late 20th century women's movements, as can be easily verified by listening to the rants on U.S. right-wing "talk radio." .

In typical exceptionalist and triumphalist histories, Western modernity is always also

defined against a supposedly primitive or not-fully-civilized Other. Women's full participation in public life outside the West has had radical effects on those cultures' attempts to install their own kind of modernity which incorporates women's traditional roles and gender meanings. Turkish sociologist Nilufer Gole (2000) has argued that Islamic women's full participation in the public sphere within Islamic cultures has created a kind of "forbidden modernity." Contemporary Islamism "seeks past-oriented change, hierarchical conceptions of gender relations, and submission of self to religious precepts" and thus "rejects the dominant features of modernity" (93) Yet, paradoxically, "contemporary Islamist movements endow Muslims with a collective identity that works critically against both traditional subjugation of Muslim identity and monocivilizational impositions of Western modernity. As such, Islamism can be thought of as a critical introduction of Muslim agency into the modern arenas of social life.." (93)

Within this Muslim modernity, women's agency is playing an important role. "The place of women in contemporary Islamism begets a constant challenge that necessitates the redefinition of the frontiers between modernity and identity, between political ideology and social practices....Islamic politics enables Muslim women to participate in public life, to organize meetings, to publish articles, to establish associations, to abandon the private domestic sphere and its traditionally defined roles. Islamism serves as the legitimization of their public participation both in practice and in ideology.." (99) Such participation changes Islamism as it changes the women, Gole argues. "Against the utopia of the 'Islamization of the whole society,' women develop their own subjectivity and personal life strategies, breaking the preestablished boundaries of the all-encompassing category of the "generalized Muslim other. Adopting the categories of self used by Seyla Benhabib (1992), we can say that Islamist women criticize the 'generalized universal' Muslim identity that projects the male point of view, and seek to be recognized as the 'concrete other'" Gole argues. (101)

This kind of entrance of women as active agents of history in public spaces around the world is transforming the world no less than women ourselves, not to mention men.ⁱⁱⁱ Yet it is important to link changes in thinking about authoritative knowledge, such as science, to changes in the spheres of human activity of interest to conventional political and ethical theory. Consider, for example, the feminist science critiques North and South.

3. Multiple sciences; multiple modernities.

Feminists North and South have long criticized discrimination against women in the social structures of science, the sexist biology and social sciences which persistently define women as defective or immature humans, the sexist and androcentric misuse and abuse of the results of scientific research and its technologies, discriminatory science education practices which have served boys far more effectively than girls, and the androcentric standards for good science and real knowledge--the androcentric philosophies of science and epistemologies. (Harding 1991) Women have emphasized the different effects that various aspects of these problems have had on women in different classes, races, and cultures around the globe. (Harding 1998)

Looking at modern Western sciences and their technologies with both eyes open--one on their effects on women and the other on their traditional justifications--has created the kind of double-vision Kelly-Gadol identified. Both women's humanity and women's agency have been

ignored in conventional accounts of Western sciences and technologies. Feminists have challenged the traditional periodization of the history of science, the failure to see gender as a relevant category of analysis here, too, and the standard theories of social change, which have obscured the effects of women's labors on the advance of scientific knowledge. And they have challenged the conception and standards for "scientific progress" which continue to guide the conventional exceptionalist and triumphalist accounts of Western sciences.

Yet the standpoint of women in the North on scientific and technological modernity and progress has not been radical enough, controversial though it remains in conventional science, science policy, and philosophy of science circles. Especially powerful criticisms of Northern epistemologies and philosophies of science, different from the ones raised by Northern feminists, have emerged from the analyses of the mutual constitution of modern sciences in Europe, on the one hand, and five centuries of European expansion, on the other hand, from the Voyages of Discovery to late 20th century Western development policies and the latest U.S. invasions of Afghanistan and Iraq.^{iv} Modern Western sciences and their philosophies are also culturally and historically local knowledge systems, we can now see, inextricably linked to the projects of their cultures-- both progressive and regressive. At their origins, the flourishing of these sciences in Europe and the so-called voyages of discovery each required the success of the other for its own success. To be economically and politically viable, the voyages needed much more information about the astronomy of the Southern hemisphere, what we would today call the oceanography and climatology of the oceans the voyagers would travel, cartography, the flora, fauna, and peoples whom the voyagers would encounter in the lands they would conquer and colonize, local threats to health and how to negotiate them, and much more. And the emerging European sciences needed the funding and prestige which their service to the voyages gained for them, and the access to the widest possible range of heterogeneous nature which the voyages provided for them. The flourishing of modern Western sciences and European expansion were inextricably linked.(Harding 1998)

Today, some 5 centuries later, the production and management of scientific information have again entered into an intimate relation with European expansion. It has moved to the base of the global economy where global financial transactions, international politics and militarism, corporate manufacturing, agriculture and trade, and the illegal drug, sex, and guns industries, as well as movements of resistance to these phenomena, are all managed electronically. Women's resistances to destructive forms of Third World "development" and globalization, which needed to appropriate women's rights and labor, their humanity and their agency, have been crucial to developing new forms of political subjectivity.

The anthropologist Bronislaw Malinowski pointed out to Westerners almost a century ago that the scientific impulse can be found in every culture.(Nader 1996) Indeed, no culture could survive if it did not have a powerful interest in understanding the empirical regularities and causal tendencies in the natural and social worlds on which it depends. Yet only one system of knowledge about natural and social worlds has gained dominance globally. To be sure, modern Western sciences and technologies have had beneficial consequences, too, though these have tended to favor the already economically and politically advantaged groups around the globe. Yet their dark

side, from which their defenders try to isolate them from any responsibility, is that their successes have been at least as much a consequence of European/American capitalism, imperialism and colonialism as they have been of a distinctive method, ontology, critical attitude toward traditional belief, or some other purportedly distinguishing “internal” feature said to be the cause of their technological superiority and global renown. Modern Western sciences and technologies are “local knowledge systems,” albeit very powerful ones, no less than the knowledge systems of the Others which they have set out to conquer and replace.

It has been difficult for Westerners to wrap their minds around the idea that modern, Western sciences, for all their virtues, remain fully embedded in the economic, political, and cultural projects of their particular societies, whether these be the societies of 15th century Spain and Portugal or 21st century transnational corporate societies, nationalist societies, environmentally concerned societies, or societies seeking social justice. Such a recognition of the historical, cultural specificity of Western knowledge production, and of its consequent inevitable limitations, calls for a modesty about any conceptual framework and the institutions, cultures and practices developed within it. There will always be cultural Others who have perfectly legitimate disagreements with the ways we see the world and engage with it. The fact of the full humanity of European women and people living in the societies Europe and the U.S. have considered as their contrasting Others insures that this is so. The new agency of these groups in local and global public spheres insures that those spheres will have to change to meet the fully human needs of these groups, too.

4. Projects for Today. Today recognizing women’s humanity and enabling women’s agency are increasingly important projects for many tasks around the world. One important one is to critically evaluate what to save and what to reject of our local cultures’ particular historical, scientific, technological, and political legacies. The challenge is neither to romanticize nor demonize our own cultural legacies, nor those of Other cultures. Women’s full participation in this “modern” project is transforming the women who participate no less than the evaluations of such legacies. Women who become active “subjects” of history and knowledge, always aware of the historical situatedness of our own thought and projects, contribute to fashioning a new kind of global political subject.

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References:

Benhabib, Seyla. 1992. Situating the Self: Gender, Community, and Postmodernism in Contemporary Ethics. New York: Routledge.

Gender, Technology, and Development. 1996ff. New Delhi/Thousand Oaks/London: Sage Publications.

Gole, Nilufer. 2000. “Snapshots of Islamic Modernities,” Daedalus: Journal of the American Academy of Arts and Sciences Vol 129, no. 1, p91-118. See also her 1996. The Forbidden Modern: Civilization and Veiling. Ann Arbor, Mich.: University of Michigan Press,

Harding, Sandra, ed.. 2004. The Feminist Standpoint Theory Reader: Intellectual and Political Controversies. New York: Routledge.

----- 1998. Is Science Multicultural? Postcolonialisms, Feminisms, Epistemologies Bloomington, Ind.: Indiana University Press.

-----1991. Whose Science? Whose Knowledge? Thinking From Women’s Lives. Ithaca, N.Y.: Cornell University Press.

Indigenous Knowledge and Development Monitor. [Http://www.nuffic.nl/ciran/ikdm.html](http://www.nuffic.nl/ciran/ikdm.html).

Kelly-Gadol, Joan. 1976. “The Social Relation of the Sexes: Methodological Implications of Women’s History,” Signs: Journal of Women in Culture and Society Vol 1, no. 4.

Nader, Laura, ed. 1996. Naked Science: Anthropological Inquiry into Boundaries, Power, and Knowledge. New York: Routledge.

Sachs, Wolfgang, ed. 1992. The Development Dictionary: A Guide to Knowledge as Power. Atlantic Highlands, N.J.: Zed Books.

Selin, Helaine, ed. 1997. Encyclopedia of the History of Science, Technology, and Medicine in Non-Western Cultures. Dordrecht: Kluwer.

Smith, Dorothy. 1990. The Conceptual Practices of Power: A Feminist Sociology of Knowledge. Toronto: University of Toronto Press.

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i. I thank Noah Delissovoy for suggesting guidance by “idea of the Other” as a way to characterize a new kind of political subjectivity.

ii. Fredric Jameson, “History and Class Consciousness as an ‘Unfinished Project’” in Harding 2004, p. 143-152; Sandra Harding, “Rethinking Standpoint Epistemology: What is ‘Strong Objectivity’”, in Harding 2004, p. 127-140.

iii. I do not mean to suggest that women’s situations North and South are identical. Nor do I mean to appropriate Gole’s research for ends some readers may find still Eurocentric. Rather I point to the importance of her insights here for understanding what happens to institutions when women begin to participate in the public sphere from which they have been excluded.

iv. For glimpses of such accounts, see Gender, Technology, and Development, 1996 ff., Harding

1998, Indigenous Knowledge and Development Monitor, Sachs 1992, Selin 1997.