ideas to justify their actions and policies. He also is at pains to criticize the ways in which Marxists have defended both the original doctrine and Russian communism. An author index gives some guidance to the ground covered, but the book inexplicably lacks a subject index.

Historians working in the Marxian tradition blame a variety of macrostructural forces for the warping of an initially promising October Revolution. Some Marxian historians (however odd this may seem) blame Josef Stalin personally for terminating a costly but still promising experiment. The practitioners of "revisionism" (mainly American historians) remain loosely within the Marxian tradition, although some of them do not like the Marxian label and present themselves as positivists, researchers in the relatively neglected area of social history. They focus on the "lower" levels of the system. Their tendency to render Russian communism less monstrous than their predecessors did, their eschewal of overt moral judgements, and their reduction of the body count in their assessments of Stalin's terror make some of them look like apologists for his regime.

Walicki judges all such efforts misguided. Fully aware of the rich array of Marxisms, not to speak of the different phases and tensions within the works of the founding fathers, he finds still useful a version of the totalitarian model reviled by the revisionists. Marx, Engels, Lenin, and Stalin were all responsible for totalitarianism in some fashion, the former two for providing ideas with a totalitarian tendency, and the latter two for the costly effort to realize the communist utopia. Lenin and Stalin surely drew inspiration from Marx and Engels; Lenin most certainly supplied Stalin with many of his ideas and political gadgets; and Stalin in his own brutal way undoubtedly tried to finish building the communist utopia begun by Lenin.

Granting all of this, I believe that Walicki understates the extent to which ideas can be transformed in practice. We simply cannot predict how ideologies, whether religious or secular, will be used in the game of politics. Nor can we understand some of the important outcomes of leader-centered regimes without looking at the psychology of the leaders and their ability to mobilize people for ruthless action. Walicki avers that "the ruthless logic of Leninist ideology" (p. 411) required a ruthless leader like Stalin and offers a counterfactual experiment, in which he imagines how Stalin would have ruled without communist ideology (p. 453). Very likely, Stalin would have developed different policies and identified different "enemies." But surely Walicki attributes too much to the logic of ideas and too little to the processes that permitted leaders like Stalin and Adolf Hitler to obtain dictatorial power, target victims, and exterminate millions with the complicity of millions more. In leader-centered movements, the psychologies of the leaders (which are not simply the product of logical ideas) and the motives (usually, quite varied) of their followers play crucial roles. Ideas are transformed by personalities, domesticated, and reshaped at different levels of a system to serve a variety of passions and interests.

Many different religious and secular ideologies have been used to justify mass murder. Within Christianity, those seeking scriptural justification for militancy and violence readily find it. That is not to say that ideologies are unimportant; rather, they must be weighed carefully with other factors. Walicki quite rightly concedes that utopian ideologies with totalitarian tendencies produce different results depending on who uses them and in what historical conditions. Thus, even though we can indeed identify tendencies in ideologies, we still cannot predict how they will be used. Perhaps most important of all, we cannot predict whether an ideology that justifies violence will be used to justify mass murder. The history of ideas, alas, provides very little help.

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NEAR EAST

PETER CHRISTENSEN. *The Decline of Iranshahr: Irrigation and Environments in the History of the Middle East, 500 B.C. to A.D. 1500.* Translated by STEVEN SAMPSON. Odense, Denmark, Museum Tusculanum Press, University of Copenhagen. 1993. Pp. 351.

Iranshahr refers to "greater Iran," from Baghdad and Basra to Herat and Marv. Peter Christensen strives for a macro-historical overview of that region, focusing on irrigation, settlement, disease, and human-induced environmental change for the period 500 B.C.–A.D. 1500. He claims that Western historians, influenced by "Orientalism," have tended to characterize Middle Eastern history as one of retrograde social evolution and progressive decline in Islamic times. He then disposes of four old postulates regarding Middle Eastern history: the impacts of climatic change and nomadic invasions, the fatalistic theocracy of Islam (as impeding economic development and political stability), and oriental despotism, with its theses of overcentralization and resistance to innovation.

After this grand but simplistic introduction, Christensen examines the several lowland regions with large, complex networks of canal irrigation (lower Mesopotamia, Khuzistan, Sistan), contrasting them with the basin oases of the Iranian plateau, where smaller irrigation systems depended on *qanats* or stream manipulation. He argues that Sasanian overexpansion of lowland irrigation networks created ecological systems particularly vulnerable to disasters because of their fragile environments: "The strong manipulation and coercion of the environment ... caused hydrological changes, expansion of wind-blown sands, and salination" (p. 247). That in turn magnified the impacts of plague and epidemics, wartime destruction, political troubles, and administrative incompetence. By contrast, the highland regions were less severely affected by disease and experienced different

demographic trends, with growth or decline determined by "local hydrological conditions," and the severity and frequency of natural disasters. Thus, "the societies of Iranshahr reveal particular internal dynamics which sprang precisely from the conditions of agriculture, i.e. the clash between the environment and technological limitations of agricultural production and the political demands for surplus" (p. 252).

Based on inadequate or partly antiquated archaeological data and only those Arabic and Farsi/Pahlavi sources available in translation, one major difficulty with this work is the paucity of reliable evidence and the absence of detailed regional analyses. That does not make for good "environmental history." For example, Nanette Marie Pyne's *The Impact of the Seljuq Invasion on Khuzistan* (1982) illustrates how archaeology, numismatic evidence, and written records can be used to show how this area was devastated by the Arab Conquest, only recovering about 870, with its irrigation system and towns again laid waste by the Seljuqs ca. 1015. Environmental degradation and epidemics had little to do with the course of events. In lower Mesopotamia, the immense Sasanian irrigation network of ca. 550 was structured as a lattice of intersecting canals enclosing geometric basins. This completely disappeared with the Conquest, to be replaced eventually by a different system with transverse and radial canals. But fifty-five percent of the former cultivated land remained unsettled, and, according to Robert McC. Adams's *Heartland of Cities* (1981), between 800 and 950 some eighty-five percent of the residual, Early Islamic sedentary population disappeared from the countryside. The catastrophic disjuncture of the 630s suggests fundamental social disruption, while Late Abasid permanent abandonment was a result of arbitrary increases of the land tax, destruction by war, and massive rural flight. There were also unfavorable climatic trends, namely a greater incidence of catastrophic floods, coeval with deeper waters in Lake Van. By 628 the Tigris was shifting its course westward, ponding up the Euphrates into a vast swampland until after 1300. Transverse canals were particularly susceptible to destruction or siltation by major flood events.

A second flaw of this provocative work is its poor grasp of the social and ecological variables basic to irrigation agriculture in desert settings. Great irrigation networks are fragile because they are artificial, i.e. managed systems that require much capital or labor to maintain, and exponentially more to reconstruct. The desert may return after abandonment, not because of prior modification but because of human disengagement. Critical here are land tenure and the mobilization of labor. When rent, tax, or work demands become impossible, Middle Eastern peasants have commonly abandoned their farms to enter the broad spectrum of pastoral pursuits that fill out the gap between cultivation and fully mobile, nomadic herding. Beyond the reach of the tax-collector, such pastoralists reverted to a simpler lifeway in what was a fiscal wasteland but not a deserted landscape. That is the true meaning of "decline" in irrigable, Middle Eastern environments. In Europe, "Western" mixed farming is less specialized but also less productive, and temporary abandonment does not return the land to desert, so that renewed settlement requires little community coordination or start-up investment. In other words, "Western" agrosystems are comparatively stable and not liable to catastrophic simplification. That—and not ecological impairment—is the basic difference between Europe and the Middle East in the *longue dureé* of demography and agrarian production.

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MAYA SHATZMILLER. *Labour in the Medieval Islamic World.* (Islamic History and Civilization, Studies and Texts, number 4.) New York: E. J. Brill. 1994. Pp. viii, 450. $137.25.

This study stands at the cutting edge of the economic history of the pre-modern Islamic world, and by extension, the pre-modern world. Traditionally the medieval Islamic world has been seen as a passive entrepôt devoid of manufacturing and industry and enriched only by the passage of long distance trade. Decline in that trade is seen as the corollary to economic decline. While economists have long abandoned the notion that foreign trade was the engine of economic development, that assumption is fundamental to the work of an earlier generation of historians. Maya Shatzmiller's study challenges and finally lays to rest that fundamental assumption.

Part 1 provides the theoretical framework, historical context, and analysis of the twenty-five sources used. Data is systematically culled from nineteen primary sources—eleven *hisba* manuals (market regulations), and eight literary sources, as well as six secondary studies, such as Goitein's study of the Geniza documents.

Part 2 is a comprehensive list of occupations categorized on the model of modern census takers' occupational classifications. Classification is by raw material and finished product. Degree of specialization by analyzing occupations categorized as primary (extractive, agriculture, and mining), secondary (manufacturing), and tertiary (industrial, professional, and public services). The number of occupations indicates the relative size of particular sectors and industries, and the degree of specialization indicates the distribution of labor within each sector. Analysis of labor division and distribution by economic sector is then broken down by region: Egypt, Iraq, Muslim Spain, North Africa, Syria, and Tabaristan. Time analysis is from the eighth to eleventh centuries and the twelfth to fifteenth centuries.

Shatzmiller's premise is that a reconstruction of labor across economic sectors will reflect the degree of specialization of labor within individual trades, the degree of division within sectors, and the distribution