

was divided into four occupational zones. The one next to the new Polish territory was assigned to Russia and is still occupied by Russian troops. It was named East Germany. Geographically speaking, it represents the central part of the old German Reich with the capital of Berlin as its center. The Russian czars had little, if any, influence on the German population next to the Russian border. They certainly had none on the population of what is now East Germany.

After having been under Turkish domination, Hungary was liberated by the Habsburg dynasty, and from the beginning of the 18th century it remained under Habsburg control. There surfaced, however, some Magyar opposition. It flared up in the Revolution of 1848 which led to the short-lived Hungarian Republic. Russian and Austrian troops subdued it. In 1867 Hungary became a constitutional kingdom in union with Austria. The Austro-Hungarian dual monarchy was an acknowledgment of Hungarian parity with Austria. Under those circumstances there were few opportunities for the czars to exert their influence and to prepare Hungary for Russian domination.

Finally, the concept of Russia's growing influence, first under the czars, and then

under Soviet domination until, finally, effective control was reached, does not coincide with the historical record. It is important to realize that there was a lapse of a generation between the end of the czars (1917) and the beginning of Soviet rule in Eastern Europe in 1945. Furthermore, effective control was obtained only by military occupation.

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Response: In reply to Rochester, the original Rand monograph on which my article was based included estimates of the U.S. costs corresponding to the costs of the Soviet empire. In brief, the corresponding costs for the U.S. "empire" as a share of the U.S. gross national product were one-third those of the Soviet Union when its empire costs were calculated in dollars—and one-eighth when the Soviet empire costs were calculated in rubles—for the 1971–1980 period. For the single year 1980, the corresponding U.S. costs were approximately \$11 billion compared with \$41 billion and 42 billion rubles for the Soviet Union. Rochester's suggestion about including a cost-benefit

coefficient for each type of U.S. and Soviet empire expenditure is an interesting idea, although it would be difficult to translate into practice.

In reply to Dudley, by defining the terms "empire" and "imperialism" as I did, I sought to give them as precise and nonpejorative meanings as possible, to the extent that these quite ambiguous terms and concepts permitted. If one reads historical literature on, for example, the Roman, Ottoman, and British empires of the past, one finds that the terminology is usually much less precise than what I used in the *Science* article.

I would not take issue with Volkmann's review of the history of Soviet relations with Eastern Europe. Moreover, nothing in my article conflicts with his assertion that Soviet control in Eastern Europe was obtained by military occupation.

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AIDS and Female Circumcision

Uli Linke's letter (17 Jan., p. 203) about AIDS in Africa suggests that contact with blood during intercourse may be an indirect consequence of the African practice of female circumcision. It then describes an extreme and rare form of female circumcision—infibulation. Infibulation is found only in a part of northeastern Africa (1), outside the region where AIDS has been reported, and is very different in its social and biological effects from the kind of female circumcision that is practiced more widely in Africa.

A secondary problem with the logic of hypothesizing that AIDS is transmitted by a traditional custom is that in Africa it appears to be primarily an urban disease, as it is in the United States. Traditional customs, such as female circumcision, have their origins in the rural sector. I think it would be more productive to look at data pertaining to life in African cities and to examine such phenomena as male labor migration, often described as being disruptive to marriage and family life.

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REFERENCES

1. R. O. Hayes, *Am. Ethnol.* 2, 617 (1975).