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# Letters

## Research in Italy

The observations by David M. Gates on basic research in Europe (1) offer a sound basis for the further intensive analysis of comparative scientific institutions. His findings on research in Italy are strongly supported by observations of scholars in other fields. To a great extent, handicaps to research in sociology and anthropology are much the same as those reported by Gates (2).

Italy has made great strides in the development of the social sciences since the demise of Fascism. Neo-Hegelian idealism as fostered by the Croce school of historicism has hampered, if not hindered, the growth of empirical social sciences. Anthropology has, for the most part, been limited to a stilted pattern of growth. Narrow strictures have forced a continuation of physical anthropology in the mold of Lombroso. Aside from the anthropological offerings in medical schools, one finds "criminal anthropology" offered in the curricula of law faculties. In recent years, however, there has been a renewal of interest in cultural anthropology on the part of younger ethnologists. The Italian government, through the Ministry of Education, opened a Museum of Italian Ethnology in 1956, which is dedicated to the development of comparative ethnological studies (3). Of course, one should not ignore the research which has continued in archeology and ethnology under the direction of the Pigorini Museum and the Ministry of Education.

Within the realm of the social sciences generally, Italians are beginning to make excellent contributions to the development of logic, epistemology, and the philosophical basis of science (4). Despite the roadblocks established by the adherents of Croce, advances have been made in the post-World War II period. A problem similar to that noted by Gates besets sociology—a plethora of journals exists, some of them of questionable quality. Here, too, easy publication has fostered an emphasis on quantity. Yet we should not overlook the pressures on our side of the ocean to publish or perish.

In Italian anthropology and sociology the concept of teamwork has, until recently, been largely unknown. The work of the individual researcher has been uncoordinated and buried in obscure journals. As in the physical sciences, government-sponsored centers are attempting to coordinate and initiate research in needed areas. Inadequacies of library facilities hamper the work of the researcher (5). At this juncture it should be noted that American scientists can aid their Italian colleagues by donating needed books and journals to the libraries

of the various university faculties in Italy.

Finally, a minor note of issue with Gates. Technically, the only degree granted by Italian universities is the *laurea*, which carries with it the title of *dottore* but is roughly equivalent to the American master's degree. The academic recognition which corresponds to the American Ph.D. is the *libera docenza*, obtained after rigid qualifications on publication have been met and after national noncompetitive examinations have been held by a committee of professors. Hence, Italy has an academic recognition rather than a degree which is equivalent to the Ph.D. (6).

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4. J. B. Ford, *Am. Sociol. Rev.* 22, 725 (1957).
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6. R. C. Simonini, Jr., *Bull. Am. Assoc. Univ. Professors* 40, 563 (1954-55).

## State of the Physical Sciences

In a recent review of *Matter, Earth, and Sky*, by George Gamow, the reviewer, W. P. Binnie, stated in his final paragraph that the reader will "find the author to be an illuminating writer on scientific matters as well as a provocative prophet" [*Science* 128, 587 (1958)]. Binnie then quotes Gamow himself, as follows: "To sum up, we can say that the state of physical science today can be compared with the state of geography a few centuries ago: There are no Americas to be discovered any more."

It is astonishing to me that a physicist who has been acclaimed one of the foremost interpretative writers in the field of science today should have such a smug and short-sighted view concerning the likelihood of future discovery. There should be no question in the minds of scientists concerning the possibility that the well of new facts to be determined is drying up. With all the Americas discovered, we are now on the verge, thanks to physics, of discovering the universe, with its infinite numbers of geophysical Americas.

I would like to submit to Gamow and Binnie that not only will there always be Americas to be discovered but, further, that only he who has faith in their existence will be able to recognize them when he glimpses them from afar.

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