mable. Plants have been selected against fire for millions of years, and recent impacts of American Indians are trivial, especially in the Sonoran Desert where the biomass is low.

The other chapters are similar. An extrapolation of Indian domestic grazing is developed through a curious numbers game from Comaduran's seeing 2000 horses. Dobyns' contention of Indian control of local geomorphology seems incredible in light of the Corps of Engineers' failure to do so at the present time. Periodic stream cutting may be a purely natural process. Dissection of southern California mountain streams during the 1969 floods, for example, was followed by an equivalent aggradation in 1978 due to minor differences in storm intensity and duration. His analysis of wood exploitation through agave roasting overlooks the fact that there is a minimum of one metric ton/hectare plant productivity in the Sonoran Desert, which doubtless exceeds Indian use, given their low population densities. The latter part of the book focuses on processes traditionally used to explain landscape changes: wood exploitation associated with mining, Anglo-European grazing, and arroyo cutting due to wagon roads or railroads.

The author has no sense of scale nor comprehension of the magnitude of physical processes shaping the Sonoran Desert landscape. His construction of historic or archaeological evidence based on the Comaduran report has the logic of an upside-down pyramid. This one rests on sand.

Worst of all is the polemic flavor of this volume; it reads like a sermon. The author is extremely opinionated and repeatedly castigates other disciplines as being "disingenuous" compared to his own. This unprofessional nature reflects poorly upon the editorial board of the Ballena Press. Hastings and Turner write that the investigation of landscape changes is "a better subject for study than for debate." One only wishes Dobyns had taken this advice.

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A reviewer is sometimes constrained to ask why an author chose to write a particular book. Income from royalties is always a satisfactory answer, but People of the Magic Waters does not seem to be a strong prospect. Contributing to knowledge or expressing one's ideas is thought legitimate, even meritorious, in academic circles, but I could find nothing new and distinctive in this book. A desire to disseminate information to a moderately or slightly interested public may best characterize the authors, who had or have an association with the Riverside Municipal Museum, the sort of institution that serves a similar public.

The ordering of the presentation of data on the Agua Caliente segment of the Cahuilla...
Indian group seems designed to catch attention rather than to inform. It begins with Indian myths about the origin of the world, continues with the mythic justifications of tribal practices and beliefs and makes some statements about the supernatural. An account of some public and private ritual and ceremonial practices follows along with statements about political and familial organization, all taken largely from Lowell Bean's *Mukat's People*. Only then is there a brief discussion of the resources used and the crafts practiced which enabled this group to get a living from its habitat in precontact times. Finally a few statements are made about adaptations forced by successive contacts with Spanish, Mexican, and American intruders. Only on the last page does the reader learn that the 175 members of the Agua Caliente band own half of Palm Springs as well as additional reservation land and, by almost anyone's standards, are rich.

Although Brumgardt and Bowles have used reputable sources such as Lowell Bean, A. L. Kroeber, and Francisco Patencio for their world and tribal origin myths and beliefs, I get no feeling that they comprehend the fragility of the data. Comparing the inevitably inconsistent accounts of native informants, living and historical, just was not done. A tale was chosen and presented as though there were a tribal consensus of belief. Perhaps there is one, but no evidence is presented.

In dealing later with the much more objective and manageable data on subsistence ecology and technology, where there are excellent sources, there is a hastiness that only affords doubtful common names for the considerable variety of plants noted as being utilized. Descriptions of the artifacts of material culture are sketchy and sometimes questionable. David P. Barrows' Ethno-botany of the Coahuilla Indians of Southern California (published in 1900 and reprinted by Malki Museum Press in 1967) is infinitely superior ethnography. The interesting questions of whether irrigated crop cultivation antedated contact with Europeans and when pottery making reached the Cahuilla (probably quite late in precontact times) are not considered.

The adaptation to modern society that has gone on over the last century and a half, an area where the authors might have gathered new and interesting information, is handled with a few bland anecdotes. The present problems of the Agua Caliente band arise largely from their wealth that attracts predatory lawyers and legal guardians, including at least one judge. These are not mentioned, perhaps for fear of offending important people in Palm Springs where the book was published and most copies are likely to be sold.

*People of the Magic Waters* is not a bad book. It reads easily and most statements are taken from good authorities. It just does not add any information to that already readily available.

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Barrows, David P.

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