icy of supporting legislation which will be helpful in its overall effect. However, we would rather see no action than compromise action that would open the way to censorship of science. If damaging amendments were to be added to H.R. 5191, NSMR would oppose its passage, because *human* welfare is our first concern.

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Homo habilis

All anthropologists will be grateful to Tobias for his lucid article, "Early man in East Africa" (2 July, p. 22). A great deal more study will be required, however, before it will be possible to arrive at any agreement on the probable status and affinities of *Homo habilis*. Tobias believes that *H. habilis* stands in a position intermediate between the australopithecines and the pithecanthropines. It is a reasonable conclusion. But to judge from the available data, it would be equally reasonable to conclude that *H. habilis* was, in fact, an early pithecanthropine. There is nothing in the published data that would not conform to the requirements of the latter hypothesis. Applying Occam's razor, *H. habilis* could perhaps more appropriately be regarded as an early representative of *Homo erectus*. Such a ligature can allow for the slight morphological differences that exist between *H. habilis* and *H. erectus* and for the recognition of any other differences that may exist between them, without separating them into distinct species. These are matters that can only be resolved by further study.

Tobias writes, "Since they are contemporary with *H. habilis*, the australopithecine populations represented by the actual fossils recovered to date are clearly too late—and possibly slightly too specialized—to have been on the actual human line . . ."

Tobias suggests specialized large teeth. But large teeth represent a persisting ancestral trait, not a late specialization. In *A. boisei*, the teeth were in process of undergoing reduction. The anterior teeth are small, while the molar-premolar series are large.

Tobias' statement that the fossil australopithecines "are clearly too late . . . to have been on the actual human line" is, as it were, putting the chart before the horse. That some australopithecines were contemporaries of some habilines does not necessarily imply that the former could not be ancestral to the latter. Tobias' statement has no more validity than would the statement that a grandparent could not be a contemporary of his grandchildren—or put more generally, that ancestors and descendants cannot be contemporaries. Or put in still another way, that the descendants preserving an ancestral morphology cannot be the contemporaries of descendants of that ancestral type presenting a somewhat different morphology. The coelocanth constitutes an outstanding example to the contrary, and the coexistence of Przwalski's horse and the modern horse constitutes yet another.

It would be difficult at the present stage of our knowledge to designate any of the known australopithecines as ancestral to later hominines, but there is nothing in the morphology of any one of them that would preclude their standing in the direct line, as ancestors, of such later hominines.

One last point: An article so well illustrated that does not include a photograph of the skull of *H. habilis* is akin to a production of *Hamlet* without Hamlet.

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The suggestion that *Homo habilis* be classified under *H. erectus*, proposed as well by D. R. Hughes of Cambridge (*The Times*, London, 10 June 1964), goes further than I believe the available evidence permits. Between the two extremes of this view and the opposite one, that we should call the hominid *Australopithecus habilis*, the interim solution of a lowly species of *Homo* seems a reasonable compromise. Only the discovery of more specimens and refined statistical comparisons can resolve these slightly diverging viewpoints.

Montagu accepts that large teeth represent a persisting ancestral trait. I believe a better case can be made that enlargement of the cheek-teeth was a secondary specialization. The fact that *A. boisei* had enlarged cheek-teeth proves nothing, because we do not know for sure if he was older than the smaller-toothed australopithecines of Taung and Sterkfontein Lower Breccia. It would seem that moderate-toothed *H. habilis*, large-toothed *A. africanus*, and massive-toothed *A. boisei* were roughly contemporary: which was ancestral to which? When we look back to the Mio-Pliocene hominoids, we find support for the idea that the modest dentition of *A. africanus*, with front and back teeth in harmony, was closer to the possible ancestral dentition—if Simons' view on the facio-dental affinities between *Ramapithecus* and *Australopithecus* is correct [*Proc. Nat. Acad. Sci. U.S.* **51**, 528 (1964)]. On these and other grounds, enlargement of the cheek-teeth in some australopithecines is a departure and a specialization.

My point that the fossil australopithecines were too late to be ancestral related specifically to the Lower Pleistocene *populations* of australopithecines, not (as Montagu seems to imply) to the taxon *Australopithecus*. All evidence certainly points to *Australopithecus* as an ancestral taxon. I was concerned specifically with the populations represented by the known fossils. Previously, it could be averred that the Lower Pleistocene populations of *A. africanus* moved forward by phyletic evolution to become the Middle Pleistocene populations of *H. erectus*. Now that we have found a hominine in the Lower Pleistocene, we must infer that earlier populations than those represented by the known fossils moved forward phyletically to become *H. habilis*—unless we hold to a polyphyletic evolution of *Homo* at several time-levels. These earlier populations must have dated from a period earlier than the Bed-I habilines—that is, from the first half of the Lower Pleistocene or even from the Pliocene.

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Teaching by Research Fellows

Having read John Walsh's report on the effects of federally supported research on higher education (News and Comment, 2 July, p. 42), I would like to offer a suggestion. The government, perhaps in collaboration with the universities and colleges, should offer, to qualified individuals, teaching-postdoctoral fellowships of 3 to 5 years' duration that would require the recipient to devote a part of his time to teaching. (Alternatively, the present fellowship and grants programs could be