Manaslu, Makalu and Palung plutons are grouped together even though these granites come from two different belts with different petrologies and chemistries, and differ in age by nearly 500 Myr (refs 7, 8).

A whole rock Rb–Sr isotopic age determination has been published[11] on samples of the Manaslu leucogranite that I collected in 1974. The age, given as 29 Myr in the text and as 28 Myr in the table, was first questioned by Vidal[12]. Subsequent studies by Vidal on the same samples and also new samples collected in 1975 have confirmed the complete lack of an isochron: the data only give a scatter diagram[13,14] of which Allègre at least was aware.

Furthermore the initial Sr ratios are said to be "around 0.780", a value obtained as some average between the value of 0.7408 for the Manaslu granite (Higher Himalaya, probably Miocene) and 0.8000 for one sample of the Palung granite (Lesser Himalaya, Lower Palaeozoic). Can such averaging have any geological or geochemical significance?

Let us now consider the Himalayan data in Table 1 of Allègre and Ben Othman[1]. For the Ladakh batholith, on samples collected by a group including myself, HB 74, a diorite, is a tonalite, and HB 68, a granodiorite, is actually a quartz–monzodiorite. In addition to this inversion, the values for ε^{i}_{Nd} in the two columns of their Table 1 are neither the same nor correct when recalculated using the data given in the other columns. The sources or the reliability of the 'real age' values listed are difficult to establish: 28 Myr is from the no longer valid isochron for the Manaslu; 26 Myr for the Makalu has never been published; and 51 Myr for Ladakh deserves an explanation given that many others have failed to obtain an age. There are also inconsistencies with the $^{87}Sr/^{86}Sr$ ratios given for Ladakh in Table 1. The ratios were never published by Hamet and Allègre[11]; in fact the two samples were only collected during the summer of 1976.

Finally many of the references given concerning the Himalayas are misleading, inadequate, or ill referenced.

Although I have only looked closely at the Himalayan section, the above comments must question their conclusions. Despite this, the Allègre and Ben Othman article presents an important group of Nd isotopic results. But surely progress in geochemistry cannot be made by ignoring the geological relationships.

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1. Allègre, C. J. & Ben Othman, D. *Nature* **286**, 335–342 (1980).
2. Gansser, A. *Geology of the Himalayas* 289 (Interscience, London 1964).
3. Le Fort, P. *Am. J. Sci.* **275**A, 1–44 (1975).
4. Le Fort, P. *Bull. Soc. géol. Fr.* **15**, 555–561 (1973).
5. Le Fort, P. in *Recherches géologiques dans l'Himalaya du Népal, région du Nyi-Shang*, III, 49–65 (CNRS Paris, 1975).
6. Le Fort, P. in *Recent Researches in Geology* Vol. 2, 76–90 (Hindustan, Delhi, 1975).
7. Le Fort, P., Debon, F. & Stebbins, J. *6ème Réun. a. Sci. Terre, Orsay* 243 (Soc. géol. France 1978).
8. Le Fort, P., Debon, F. & Sonet, J. *Geol. Bull. Univ. Peshawar* (Pakistan) **13**, 51–61 (1980).
9. Gansser, A. *Mém. Bur. Rech. géol. Minier.* **115**, 140–148 (1980).
10. Le Fort, P. *Rev. Géogr. phys. Géol. dyn.* **13**, 5–12 (1971).
11. Hamet, J. & Allègre, C. J. *Geology* **4**, 470–472 (1976).
12. Vidal, Ph. *Geology* **6**, 196 (1978).
13. Bordet, P., Colchen, M., Le Fort, P. & Pêcher, A. *Am. geophys. Un., final report of the Int. Geodyn. Program, Working Group No. 6* (in the press).
14. Le Fort, P. *J. Geophys. Res.* **86** (in the press).
15. Debon, F., Le Fort, P. & Sonet, J. *Symp. on Qinghai-Xizang (Tibet) plateau* (Academia Sinica, Beijing, 1980).

ALLÈGRE AND D. BEN OTHMAN REPLY—LE FORT'S does not really challenge the main point of our interpretation, namely the participation of recycled crust in the formation of the Himalayas granitoids. His detailed points do not challenge the increase of such recycling with time.

We stated that the granitoids seem to be slightly different and not well dated either. Space constraints prevented any details; however, these would not have affected our conclusion. As the ages range from Trias to Miocene, the ε_{Nd} initially determined is independent of age. The quoted values of the $^{87}Sr/^{86}Sr$ initial ratio (~0.780) are indeed not very precise as we stated but, despite the spread in the data our basic conclusion is correct. In any case, they are very different from mantle values around 0.702 to 0.705. A detailed age discussion would not be warranted at this stage. We believe that the Ladakh granitoids' origin is only a minor problem here. We used the expression "associated with" because we did not want to enter into the debate about their origin. Le Fort interprets it as an island arc but others differ especially with respect to the age of collision which seems to be Cretaceous (F. Proust and M. Colchen, personal communication), whereas Ladakh seems to be a complex body with different plutons which give a variable age from 45 Myr (ref. 1). Again, we did not want to contribute to this controversy as our objective is very general and we wanted to consider the tectonic situation at large. Whatever the detailed geodynamical process presumably Ladakh would still be "associated" with the Asia–India collision.

Andrieux *et al.*[2] have already presented a tectonic interpretation of the general area of Makalu; thus a discussion of Makalu would be irrelevant to our paper. We are more interested in their place in general tectonics. For example Le Fort previously interpreted[3] this kind of granitoids as linked with the so called "reverse metamorphism" of the MCT. We know now that this "reverse metamorphism" is a theoretical model which is no longer consistent with recent field data[4].

Note that we have tried to avoid such genetic debates and that we only consider the large tectonic relationships from this point of view. Mattauer[5] was the first to interpret the Hercynian chain in western Europe in terms of collision tectonics. Granitoids are part of an orogenic segment. As we clearly stated, we use this type of general argument to put the Hercynian granites in such categories.

Le Fort mentioned inappropriate referencing. We agree that we could have provided a much more complete set of references; however, given the scope of our paper we only had space to refer to a few important papers. But we note that as three of the key references given by Le Fort are 'in the press' they cannot be quoted by us.

We thank Le Fort for pointing out that there are obvious dangers in developing a general model such as ours on the basis of a small number of samples. And, of course, we agree that, ultimately, close attention has to be given to the detailed regional geology. Nonetheless, we feel that our more global approach has an important role to play. The required corrections affect neither the conclusion of our paper nor the general line of reasoning.

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1. Maluski, H. *Bull. Soc. Géol. Fr.* (in the press).
2. Andrieux, J., Brunel, M. & Hamet, J. *Coll. Int. CNRS* **268**, 31–40 (Ecologie et Geologie de l'Himalaya, 1976).
3. Le Fort, P. *Am. J. Sci.* A **275**, 1–44 (1975).
4. Brunel, M. & Andrieux, J. *C. r. hebd. Séanc. Acad. Sci., Paris* **D291**, 609–612 (1980).
5. Mattauer, M. *Earth planet. Sci. Lett.* **28**, 144–154 (1975).

Corrigendum

In the letter 'Ordering of aluminium and silicon in synthetic faujasites' by S. Ramdas, J. M. Thomas, J. Klinowski, C. A. Fyfe and J. S. Hartman (*Nature* **292**, 228–230; 1981), the sixth paragraph should begin 'Closer examination of Fig. 2 reveals that para occupancy of type II rings begins at Si/Al = 1.40 and not at Si/Al = 1.67 as postulated by Dempsey *et al.*[2]. We suggest . . .'.

Erratum

In the letter 'The phosphatidylinositol cycle and the regulation of arachidonic acid production' by E. G. Lapetina, M. M. Billah and P. Cuatrecasas (*Nature* **292**, 367–369; 1981), the last sentence of the first paragraph should read 'The correlation in platelets of a phosphatidylinositol response and the deacylation of the resultant phosphatidate by a specific phospholipase A_2 might suggest that these phenomena are applicable to activations in other cell systems'.