



## Letter to the editor

## Comment on 'Architecture, gods and gobbledygook'

Peacock (2008) provides a useful caution against the unnecessary proliferation of synonymous geological terms. I am entirely in agreement that such proliferation should be avoided. However, I wish to take issue with his example of 'architecture'. Peacock makes two arguments against the use of the term architecture; first, that it implies the existence of a (perhaps divine) architect, and second that it is synonymous with the term 'structure', and adds nothing but confusion to the literature.

While I would tend to agree somewhat with the first point, it seems that it is difficult to avoid such implications. Peacock mentions the term 'tectonic', one definition of which in the Oxford English Dictionary is '...pertaining to building, or construction in general; constructional, constructive: used esp. in reference to architecture and kindred arts.' But a similar problem arises in the use of the term of structure: The Oxford English Dictionary provides two definitions of 'structure': (i) the action, practice, or process of building or construction, and (ii) manner of building or construction; the way in which an edifice, machine, implement, etc. is made or put together. Thus the term 'structure' also has connotations of building or construction. Peacock asks 'Who is the architect?', but one might just as well ask 'Who imparted the structure?' The answer in both cases is that natural processes created the 'architecture' or the 'structure': I would argue that neither term implies a divine 'builder'.

It could also be argued that 'architecture' does have a usefully distinct meaning from 'structure'. It has perhaps been poorly defined, but in the study of fault zones 'architecture' has been used to refer to the overall arrangement of structural elements (such as gouge zones or subsidiary brittle structures) within the fault zone (e.g. Caine et al., 1996; Heynekamp et al., 1999; Faerseth et al., 2007). This usage is compatible with that of Hancock (1985; p. 447), where it is stated that "The architectural style of a joint system, as defined here, describes the spatial relationships of neighbouring surfaces". It has also been used in sedimentology, in a similar way, to describe the overall arrangement of sedimentary facies elements within a depositional system (e.g. Dreyer, 1994; Boris and Thomas,

2007). In the case of fault zones, using 'structure' instead of 'architecture' would lead to the same term being used for the fault zone as a whole, for the subsidiary structures within it, and for the overall arrangement of elements within the fault zone. In sedimentology, it would lead to the use of the term 'structure' for sedimentary facies elements that are not normally thought of as 'structures' by structural geologists. So, I would suggest that replacement of the term 'architecture' by 'structure' could create as many problems as it would solve. To conclude, use of the term 'architecture' in the earth sciences is defensible, as long as it is adequately defined.

## References

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