Stratigraphic Visage — A note for discussion

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Abstract: Although facies has been used universally in a horizontal sense to describe stratigraphic relationships, no acceptable term to describe comparable vertical changes has been established. This note introduces a term which describes vertical change in lithology at a single locality in order to encourage discussion on this matter.

Riassunto: Sebbene facies é doprato universalmente con un senso orizzontale per descrivere affinite stratigrafie, non c'é stabilito una parola accettabilmente per descrivere comparabile aspetti verticale. Questa nota presenta una parola che descrive aspetti verticale nella lithologia a una localitá affine di stimolare discussione su questa problema.

1. Introduction

Vertical change in lithologic composition within a stratigraphic sequence has long been recognized by stratigraphers. Most geologists are aware of the importance and significance of vertical changes, whether this be gradational change within a stratigraphic unit, gradational boundaries between formations reflecting environmental changes or an expression of Walther's law of vertical facies changes in several successive units.

Despite this general recognition of vertical stratigraphic changes in facies, no well accepted terminology yet exists describing this common phenomenon. If these changes are in successive units, present lithostratigraphic or biostratigraphic nomenclature provides a makeshift descriptive basis. A purpose of this short note is to solicit and encourage international discussion from readers of Newsletters on Stratigraphy. In addition, a term which perhaps can clarify this concept and provide greater precision in stratigraphic communication is proposed to stimulate discussion.

2. Historical summary

Gressly's (1838) introduction of the term facies for distinct lithological or paleontological characters in a stratigraphic unit included a recognition of both horizontal and vertical changes. Greatest emphasis, however, was placed by Gressly on horizontal variation because these were changes with which he primarily was concerned in his study of the Jura Mountains. Simultaneously and independently, a similar expression of the facies idea was proposed by Prevost (1838) who considered only horizontal, or temporally equivalent, aspects of lithic changes. Gressly and Prevost

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