INTERNATIONAL ASSOCIATION OF SEDIMENTOLOGISTS

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NEWS LETTER

ASSOCIATION NEWS

Membership has been increasing at an exceptional rate in the last 2 months. Though I do not have the latest figures, over 60 new members joined in the month before mid-May and 54 of these were from North America.

The reason for this is the promotional sheets which the President and his associates despatched to all SEPM members who are not already members of IAS. This has been achieved with the active help of the officers of SEPM who made their address list available. I should like to express the thanks of the Association to SEPM for the assistance they have given and for their time and trouble.

We have also had the help of Elsevier Publishing Company who are about to despatch advertising leaflets for both membership of IAS, for Sedimentology and for the Special Publication, without any despatch cost to ourselves. This is an outstandingly generous gesture from the company which helped so much in the creation of our Journal and which saw it through its early days.

The Treasurer has problems in equating many money orders and cheques to individual members, especially when he gets a money order, sometimes with no name on it which he has to match with a member. Recently he managed to fit a payment from a bank in New York on behalf of R. Traner Smit to R. Tavener-Smith of Durban, but it is not always that easy. Please ensure that your payment has your name clearly stated.

Does anybody know the whereabouts of Edward J. Kochem, T. Reimer, or Jerry D. Alagood? Mail to them is being returned without a new address.

I am glad to publish the first letter for the correspondent column.

WORLD NEWS

CANADA (from Andy Baillie)

The Geological Society of America Penrose Conference on Late-Orogenic Sedimentation and Tectonics of the Cordilleran and Appalachian Orogens was held at Banff, Alberta, Canada, April 4-8, 1976. This successful conference, organized by Gerhard H. Eisbacher of the Geological Survey of Canada and Franklyn Van Houten of Princeton University, brought together forty active Canadian and U.S. investigators from industry, government, and university. Conference sessions were essentially discussions of the regional structural framework in which late orogenic basins developed, and a characterization of the paralic to non-marine clastic deposits as they reflect tectonic events.

The conference proved a most successful step in encouraging exchange of ideas among the commonly specialized and fragmented fields of structural geology, sedimentology, and stratigraphy.

Dr. Jean Lajoie, of the University of Montreal, has been elected President of the Geological Association of Canada.

FRANCE (from J. Delfaud)

La formation d'un groupe voué à l'études des sédiments continentaux (le G.E.F.S.E.C.) a été proposé le 17.12.1975 à la réunion de l'A.S.F. Il a recueilli actuellement plus de 75 adhésions. Les travaux de ses membres, répartis en plusieurs équipes, ont porté cette année sur les sujets suivants:

Les Alpes de Provence (Forcalquier, Manosque, Apt et Cavaillon) ont été parcourues par l'excursion n° 2 du Congrès de Nice, sous la direction de Y. GUBLER (Paris), J. TRIAT (Marseille), G. TRUC (Lyon), etc. Les recherches échelonnées depuis 1968, portaient sur de nombreux domaines: alterations, dépôts détritiques et divers, évaporites, milieux paléogéographiques, écologie. Elles ont abouti à une synthèse poussée de ces bassins. Débordant les limites de ce terrain, A.M. BODERGAT (Lyon) a situé les diverses formes de Microcodium parmi les activités biologiques du sol.

Plus au Sud se placent aussi les études de J.P. DURAND sur les minéraux argileux du bassin de l'Arc et de ses bordures.

Une autre équipe, centrée à Marseille, avec F. TESSIER, J.R. LAPPARTIENT, D. NAHON, J.M. TRIAT, grâce à l'étude des ocres d'Apt et de certains affleurements sénégalais du Continental intercalaire, ont posé la distinction entre terrains continentaux et terrains continentalisés postérieurement à leur mise en place en régime margin.

Dans l'Est de la France se situent les travaux du "Groupe du Trias" avec M. DURAND et R. MEYER (Nancy), J. PERRIAUX (Grenoble), J.L. GALL

FRANCE (Continued)

(Strasbourg) et L. COUREL (Dijon). Paléogéographie, paléopédologie, écologie et géochimie des formations sont étudiées. L. COUREL a aussi fait porter ses travaux sur les altérations du socle dans le Massif Central. C. LUCAS (Toulouse) a étudié dans les Pyrénées les faciès détritiques et la paléopédologie du Trias.

Dans l'Orléannais, L. RASPLUS (Tours) a distingué des faluns du Blesois les sables superposés de caractère estuarien, mais continentalisés par la pédogénèse.

Le Bassin d'Aquitaine a été visité par l'exursion n° 4 du Congrès de Nice sous la direction de P.J. COMBES (Montpellier), F. CROUZEL (Toulouse), P. FREYTET et J.P. PLAZIAT (Paris), M. GOTTIS, M. LENGUIN et M.P. MOULINE (Bordeaux) et R. MEYER (Nancy). C'était l'aboutissement de travaux menés depuis longtemps sur les altérations des bauxites, les divers types de cônes alluviaux, la paléopédologie, les calcaires palustres et lacustres et les "stomatolites", sur des milieux continentaux échelonnés depuis le Sénonien jusqu'au Miocène supérieur. En bordure Sud du même bassin, il faut signaler les études de B. CROCHET (Toulouse) sur les Poudingues de Palassou.

Concentrant leurs efforts sur les modèles actuels, l'équipe de Rennes avec A. RUELLAN, J.M. RIVIERE, P. AUROUSSEAU et D. NAHON de Marseille, ont étudié en collaboration avec G. MILLOT (Strasbourg) les encroûtements calcaires au Maroc, en Mauritanie et au Sénégal ainsi que pédogénèse et altérations dans le Massif Armoricain, le Morvan, etc.

UNITED KINGDOM (from Peter Friend)

H.C. Jenkyns convened the general meeting of the British Sedimentological Research Group at Durham University last Christmas. The programme of the meeting followed the pattern of most of our previous general meetings, in that short (maximum 15 minutes) talks were invited on research actively in progress. Sixty talks were given in two heavy days of meetings, with simultaneous talks necessary for only one period. Of these sixty talks, about half were given by graduate students. The meeting was attended by over 200 people, including groups from Denmark, France, Holland, Norway and Spain. Excellent displays of specimens, photographs and diagrams were arranged, and it was possible to enjoy the atmosphere of old Durham Town as well. Three local field trips were arranged, to the Magnesian Limestone (Permian), and to biostromes and coal measures of the Carboniferous. This year's general meeting (15th-16th December, 1976) is to be convened at the University of East Anglia, Norwich, by I.N. McCave.

The British Sedimentological Research Group is now affiliated to the Geological Society of London. Publicity for our meetings is provided through the Geological Society's Newsletter, and summaries of many of our special meetings will be provided in the Proceedings bound in with the bi-monthly Journal of the Geological Society.

UNITED KINGDOM (Continued)

On 3rd March, T. Elliott (Reading University) presented a B.S.R.G. special meeting on "Ancient Delta Morphology". There were six talks with lively discussion sessions in between. J.M. Coleman (Louisiana State University, U.S.A.) provided an admirable review of delta form and process, and it is hoped that a version of this will be published by the Geological Society of London. G. Sestini was able to provide a long historical record for a present-day delta in the case of his study of the Nile. The remarkable Oxford school of facies modellers, represented by J.D. Collinson, T. Elliott, R. Young and H.D. Johnson, discussed some aspects of a number of ancient deltas. Carboniferous examples were from the Pennines and north Devon, in England, from northern Spain and western Ireland. A late Pre-Cambrian study from northern Norway was also described. These speakers demonstrated the importance of careful studies of ancient facies geometry, and showed clearly that our understanding of the processes of sedimentation can never depend on studies of present-day environments alone. Most speakers suggested some degree of river dominance in their deposits, and this prompted one questioner to suggest that this might merely reflect our difficulties in distinguishing tidal and wave effects. A similar problem was posed by F.R. Van Veen (Shell) who was going to discuss the regime of a Middle Jurassic delta in the Brent field of the North Sea, but was prevented from giving his full talk by projector failure. Discussion also raised the question of whether some of the rather small areas described were deltaic at all, in the sense of representing major fluvial depocentres. Meanwhile, elsewhere, (Proc. Geol. Ass. (1976), vol. 86, p. 389-438), P. Allen (Reading University) has now suggested that the Lower Cretaceous Wealden of the Weald, previously regarded by him as deltaic, is not deltaic, but formed in a "subsiding graben-basin, with "Maracaibo" sedimentary features, spasmodically open to the sea and margined by active horsts".

U.S.A. (from Lorin Contescu)

The Research Group on Turbidites and Deep Marine Sedimentation held its annual meeting at the Convention of the A.A.P.G. and the S.E.P.M. which took place in New Orleans (May 23-26). The meeting was attended by some 50 participants. The topic was: "SOURCE AREAS AND CONDUITS FOR MARINE TURBIDITES". Five papers were presented:

"Detrital modes of turbidite assemblages from different plate tectonic settings", Dickinson, W.R. (Stanford University). "Relationship of stable slopes to turbidites and deep water sedimentation during high stands of sea level", Doyle, L.J. (University of South Florida). "Microplates and subplates as possible source areas for turbidites in Tethyan and Atlantic settings", Contescu, Lorin R. (Roosevelt University). "Problems of internal and external sources in Carpathian Flysch", Picha, Frantisek (Czechoslovakian Geological Survey and Kuwait University). "Delivery of gravels to deep sea fans", Winn, Jr. R.D. (University of Wisconsin).

U.S.A. (Continued)

The next meeting will take place in Washington, D.C. (Mid June, 1977) and will deal with "NON-TURBIDITY CURRENT MECHANISMS IN TURBIDITE-LIKE SEQUENCES". Monty Hampton, from the U.S. Geological Survey, Menlo Park, proposed the topic and accepted to be co-chairman with Lorin Contescu.

The first notice and a call for papers will be sent in December to the Group's members and to non-members who are interested in participating or presenting their views and research results in this field. The latter are invited to send their names and addresses no later than November, 1976 to the Convener: Dr. Lorin R. Contescu, Dept. of Geology, Roosevelt University, 430 S. Michigan Avenue, Chicago, Illinois, 60605, U.S.A.).

CORRESPONDENCE

Dear Dr. Reading,

I am writing you this letter in order to express my concern about the sedimentological terminology now in use (especially the one related to the recently developed Global Tectonics jargon). It is very disturbing to see how old mistakes are repeated again and how little we have learned from the past.

In the last three decades or so the geosynclinal theory (and its sedimentological implications) turned into a maze of contradictory ideas due in a large measure to a chaotic terminology, which in turn resulted from the superficiality with which we operated with concepts and the carelessness in defining them. The same word meant different things to two geologists and the same meaning was expressed through at least two different words. The result was more than confusion, it was the development of parallel languages and code-words leading to a deaf's dialogue.

I see with alarm the same trend developing again with respect to the sedimentary concepts related to Global Tectonics (partly as a consequence of the confused terminology in plate tectonics). Terms such as micro-continents, microplates, subplates are taken rather lightly and used quite loosely, without mentioning if they are synonymous or, if not, what are the differences between them. The sedimentary environments, in terms of plate tectonics, are becoming as confused and confusing as those previously utilized by the geosynclinal hypothesis. As Prof. Pettijohn rightly remarked, the maze of exogeosynclines, ideogeosynclines, taphrogeosynclines, epieugeosynclines, etc. etc. is simple replaced by the labyrinth of fore-arc, retro-arc, inter-arc, intra-arc, back-arc (and the like) basins. Is this progress, is it really worth?

Notions like mélange, olistostrome, etc. are either becoming interchangeable or mutually exclusive. What are the differences between debris flows and grain flows? And what about contourites and the like? Most of these terms (and others as well) were thrown "en passant" without careful, precise definition and later caught on.

I am not at all against new notions and names (in fact, I am personally guilty of introducing or redefining some). What is upsetting and dangerous is their misuse. New terms, like I said, are introduced casually, almost surreptitiously and later adopted by someone else with a slightly (or not so slightly) different meaning, only to be used by a third person in a different way or context. Nobody cares to mention if the concept he borrowed has exactly the same sense given by the initial author, or whether it was amended and in what respect (not to say that few bother to justify the alteration they made).

It is true that we all are human beings and the temptation of being first to invent a new (and if possible an imposing and sonorous) name is great indeed. Then, we must also consider the bandwagon syndrome, also very strong (past generations of geologists rushed madly to own a piece

of the geosynclinal and/or sedimentological real estate, so that overnight almost every lake or pond became a geosyncline, every sandstone a turbidite and each turbiditic layer a full fledged flysch).

Today history repeats itself as everybody wants now a part of the plate pie: trenches, troughs, subduction zones, tectoclines, arc-trench gaps, aulacogens, etc. etc., succeed one another in an endless cavalcade, submerging us in semantic sinks and enmeshing everyone in terminological mélanges.

We are, however, not only human beings, but also scientists, so that some self-discipline and self-criticism are in order. We should therefore think twice (at least) before inventing, introducing, adopting, adapting, reshaping words. The trend toward terminological anarchy must be stopped and, if possible, reversed toward more nomenclatorial discipline.

It is probably too late for terms linked with geosynclines and geosynclinal sedimentation to be saved, for the point of no-return apparently has already been reached. I do have hopes, however, for the notions in sedimentary tectonics related to plate tectonics. The theory is still young and growing, so that the need for words expressing new findings and concepts is objective and justifiable and thus must be acknowledged. What cannot be accepted is both the urge to invent new names without strong justification and the negligence with which already existing ones are used.

Efforts toward a more accurate and adequate terminology were made and among the latest are those of Ken Hsu, who must be commended for his useful contributions. Alas, his was a voice in the wilderness and I suspect one of the reasons has something to do with the means he chose (full fledged articles). A more persuasive way might be that of a free exchange of opinions and of healthy criticism concerning the history, evolution and semantics of sedimentological terms. Such an appraoch is more inducive for follow-up discussions and feed-back comments.

Three ways (not necessarily exclusive) can be conceived to pursue the the goal of nomenclatorial "house-cleaning": (1) Trading opinions in the News Letter (and/or in Sedimentology); (2) Rather informal meetings of the interested persons to map an acceptable strategy (possibly at the next Sedimentological Congress); (3) A more formal meeting, or even a symposium as a forum for discussions and, if possible, for decisions.

As I mentioned in my "Rapporteur's report" an agreement need not be normative (with, God forbid, an Inquisition-type watch dog commission); instead, members should voluntarily use restraint and utilize the notions as they were initially defined.

As a first order of business, I would suggest a discussion of the sedimentological terms associated with plate tectonics (depositional environments, different series and formations, as well as different mechanisms of sedimentation) to try to find some common ground, lessen the tyranny of the words and improve our common scientific language.

L.R. Contescu

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