

extra-Canadian areas under *other* and the descriptors prescribed for funding designation will reap a rich harvest of confusion from mistakes. Finally, the form appears designed for use in English only.

Instead of using such forms, evidently designed so as to be convenient only to key-punch operators, we are submitting the information requested on the old forms which were infinitely more convenient to the researcher.

As constructive suggestions, we also propose (1) that two typewriter-sized forms be devised, one containing the essential coded information, and one to allow for "free" typing of the abstract and references. Even better, (2) why not dispense with the computer bureaucracy and devise one form that can be typed and then directly photo-offset, much like the G.S.A. abstract form. We admit that these could not be cross-referenced so elegantly, but who *relies on* (not just "would prefer") this cross-referencing? The photo-offset volume could be subdivided into major topics (Geophysics, Geochemistry, Sedimentology, etc.), and it would be up to the *user* to scan the volume and extract the information.

Finally, can we (the users, and pawns in the computer game) afford this computerised volume? With 30 universities, averaging 15 faculty each, with four projects per faculty member (including his graduate students), and 14 punched cards per project (new form), we are looking at punching over 25,000 cards *before* any government projects are included. The only benefit we can see is that cutting down the trees to make paper for the punch cards will create more outcrop on the shield.

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### ... give it a chance

As Layout Editor for Geoscience Canada, the above letter from Professors Shaw, McNutt, and Walker came to my attention at press time and I was invited to respond. I am sure that many geoscientists share their views, so some background information is perhaps worthwhile.

Few individuals will likely dispute the need for periodic objective inventories of research activity in the geosciences. These are essential as reference sources within the science and also for use by those who wish to argue for a larger slice of the scientific pie for earth sciences (see Neale and Wynne-Edwards, *Geoscience Canada*, February, 1976). The Canadian Geoscience Council has been attempting to document current research activity. First, Neale *et al.* (GSC Paper 75-6) provided a status report based on almost 70 discipline-subdiscipline reviews. Second, the 1975 CGC Report (Barnes *et al.*, GSC Paper 76-6) reviews other aspects of current research emphasizing research related to one sector - Canadian petroleum exploration geology. Third, an attempt to provide a more objective status report similar to the Neale *et al.* (1975) volume is currently in progress.

The Canadian Geoscience Council recently assumed sponsorship of the Current Research in the Geological Sciences publication. The CGC Editorial Committee (C. R. Barnes, Chairman, G. D. Garland, Vice-Chairman, T. E. Bolton, G. W. Mannard, N. Morgenstern, E. R. Parker, G. Perrault) attempted to use the Current Research volume as part of a critical analysis of the level and organization of geoscientific research in Canada. It was found to be unsuitable because few projects were reported from the industry sector. In an attempt to make the volume more complete, to allow cross-referencing, to produce lists of current theses, to provide up-to-date print-outs of current research to those involved in producing subdiscipline reviews or with other needs, etc., it was decided to revise the form and employ computer-processable methods.

To answer the specific comments raised in the above letter:

a) there were unfortunate delays in designing and printing the actual form prior to its mailing. These will be corrected for next year. The intent was for an 11 x 14 in. form (for ready copying) with the boxes spaced at regular typewriter-letter intervals.

b) having completed my own set of forms manually I can assure the writers that it does not take a day to complete, but rather a couple of hours (depending on the number and detail of the reports).

c) In any such first attempt, some future modification of the coding may be necessary. The writers criticize the list of discipline categories. Attempts were made to reduce and standardize the list rather than to perpetuate the eternal subdivision of earth sciences; no classification will adequately package a continuum of activities. One important point was to provide a similar list to that used in the next (and hopefully future) CGC status reports. Thus, long-term trends can be identified and some information can be quantified with assurance. The list of categories was approved by the Committee and then by CGC Council (with two representatives from each of the twelve geoscience societies); thus input from many specialists was provided.

d) adequate space is available for the most important reference on each project published during the past year.

e) the great majority of research reported in Current Research is from within Canada; to code all extra-Canadian areas would be cumbersome and is not warranted by the relatively few projects concerned.

f) estimating the funding should be relatively simple, but less so for those in industry and perhaps certain sectors of government; the experiment seemed worth attempting.

g) the ever-efficient Tom Bolton knew that the writers preferred the English form; a French version was mailed to francophone geoscientists.

h) most of the constructive alternative suggestions were considered earlier by the Committee. We simply feel that the present system offers more advantages. Annual updating of previously reported projects will be easier and the entire volume can be printed (photo-reduced) directly from the final computer print-out (cf. new GAC membership booklet).

i) 14 cards is the maximum required per new project, many will be less. Even by doubling the figure of 25,000 cards (but far less in future years), the paper consumed (and *recycled*) will represent less than a single tiny tree somewhere out there on the Shield (albeit on a vital contact).

Finally, I would like to thank those who completed the forms. With cooperation, this volume will become a more complete and more widely used reference source.

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### Point Contrepoint

Bien que je partage les opinions de M. K. Seguin (Geoscience Canada, 1975, v. 2, p. 231) sur «l'effrayante quantité d'articles et de revues géologiques», il ne nous propose pas de solutions pratiques à ces problèmes. Ce qu'il nous conseille à faire (il écrit de *deux* nouvelles voies mais j'en compte quatre) me semble comprendre:

- (a) réduction du nombre de revues et de notes;
- (b) augmentation de l'efficacité du filtrage d'articles (reviewing);
- (c) publication de sommaires au lieu d'articles normaux;
- (d) facilitation des contacts au niveau personnel entre savants.

Il se plaint aussi de «l'absence de clarté des communications écrites et . . . du jargon géologique».

Cependant il ne me paraît possible ni d'empêcher la publication des revues ni d'empêcher un auteur d'essayer de faire publier ses recherches; je dirais même plus que ces deux conseils me paraissent insouhaitables, et c'est pareil pour son idée de supprimer ou abrégés des articles normaux en faveur de courts sommaires. Un besoin d'augmenter les possibilités de contacts personnels j'accepte volontiers, mais celui-ci n'a rien à faire avec un autre besoin, qui est de diffuser les résultats de recherche par le mot (et le chiffre) écrit.

Face à l'inondation de publications, nous devons trouver les moyens d'identifier beaucoup plus soigneusement les articles qui méritent *pour chacun* à être lu. Pour suivre cette voie, il faut lire surtout les sources secondaires, les Mineralogical Abstracts, les Bullétins signalétiques, les Current Contents. Ce dernier me paraît à l'heure actuelle le seul moyen d'essayer de rester au courant des titres qui paraissent chaque semaine. Pour qu'une telle revue secondaire soit l'aide indispensable de nos safaris bibliographiques, il nous faudrait chacun choisir soigneusement chaque mot des titres de nos articles et de nos résumés, autrement les autres, nos lecteurs, n'auront pas des moyens de savoir si nos articles méritent ou ne méritent pas d'être retirés du flot.

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### L'étudiant de 1er cycle en géologie

Dans les universités canadiennes et plus spécifiquement canadiennes françaises, lorsque les étudiants de géologie parviennent à communiquer avec le corps professoral (ce qui n'est pas toujours le cas), on constate qu'il existe un malaise pour ne pas dire un conflit entre les deux groupes. Reste à savoir pourquoi cette absence de communication existe, qui en est (sont) le(s) responsable(s) et comment on peut remédier à la situation.

Chez le groupe des éducateurs universitaires, la qualité de l'enseignement laisse généralement à désirer. En partie à cause d'une préparation insuffisante dans les sciences fondamentales au niveau secondaire et en partie à cause de l'absence de recyclage d'un bon nombre de cours universitaires, les étudiants de 1er cycle en géologie sont mal outillés pour déboucher sur le marché du travail et souvent guère mieux pour entreprendre des études plus poussées. Les exigences des cours, en particulier, apparaissent souvent insupportables aux étudiants, non pas à cause de la trop grande quantité de matière vue dans le cours mais plutôt à cause de son manque d'originalité, de l'approche vieillotte ou trop conservatrice utilisée dans sa présentation ou tout simplement parce que les sujets traités ne sont pas à la fine pointe de l'actualité.

Au lieu d'une participation active, l'éducateur se heurte alors à une confrontation froide des étudiants. Dans bon nombre de cas, l'étudiant subit les cours et les laboratoires dans le but d'obtenir de bonnes notes et éventuellement un diplôme au lieu d'y assister pour acquérir une connaissance approfondie du sujet. Comment remédier à la situation avant que le corps professoral perde tout contrôle et toute confiance; là réside la clef du succès dans ce domaine.

De l'avis même des étudiants, il s'agit de structurer de façon intelligente ce qu'ils désirent. Dans cette optique, le corps professoral devrait être en position de décider des mesures à prendre. Après consultation auprès des étudiants, il semble que l'on devrait porter une attention particulière aux points suivants: