

probable! In other words, back to the marketing scenario, the extent to which a particular model dominates is purely a consequence of the history of the market and not a deterministic process. That science might frequently use these deterministic end results as the basis of investigation and attempts to probe for deterministic causes is another issue. A far more serious consequence of such stochastic process is the possible feedback chain of erroneous reports it might start off in science. As described earlier, such stochastic events based on the permissi-

bility of the statistical codes of conduct adopted by the scientists might start a chain of false discoveries that might never appear to be the global errors in science. It appears it is very imperative to evaluate the extent to which our scientific information is clouded with such global errors generated purely by chance and nurtured by the prejudices of scientific community. As Bulstrode⁶ quips in *Nature*, 'The logical conclusion is, sir, your journal may be merely noise'.

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COMMENTARY

A survey of Himalayan resources

David A. Spencer and Rasoul B. Sorkhabi

Himalayan geology is increasingly drawing the attention of the international geological community. In response to this 'global age of Himalayan geology', several community services and information networks have appeared in recent years. Recently, we conducted an international survey among Himalayan researchers to evaluate how they use these resources, and to find what improvements can be made to them. The survey was sent out in February 1996 to some 500 active Himalayan researchers in various countries, whose names were available to us. There was a truly international participation in this survey, reflecting the current range of researchers from many countries. The survey was also posted twice on the electronic mail network 'HimNet' (4 and 25 February 1996), which has a distribution to 580 researchers. There is a large overlap between our survey database list and the HimNet subscription list. A total of 258 replies to the survey were received, which account for nearly 40% of our mailing list. Here we briefly report the results of the survey. Although this survey is meant to assess the state of networking and information resources among Himalayan geologists, the ideas and results derived from our survey may

also be useful for development of networks and community services in other fields of geological research and scientific activity.

HimNet (Himalayan Network)

HimNet (HimNet@erdw.ethz.ch) is an e-mail Internet link for researchers working in the Himalayan region (Afghanistan, Pakistan, China, India, Nepal, Bhutan, Bangladesh and Burma). It aims to provide a rapid method of communication and dissemination of information on Himalayan geosciences. HimNet sends direct e-mails to its subscribers. Launched by David A. Spencer in August, 1994, with an initial subscription of 40 people, the number of subscribers has constantly increased over time to 580 (Figure 1).

By May 1996, 27 news packages have been sent to subscribers in 32 countries. Although predominantly related to the geosciences, Himalayan researchers in several other fields (from biology to linguistics) also subscribe to HimNet. Last year, a World Wide Web Home Page (<http://www.lehigh.edu/~inees/himnet/himnet.html>) was set up, and is maintained by Peter K. Zeitler (Lehigh University, USA), allowing access to all the back

issues of HimNet through the WWW or FTP (ftp to dharma.geo.lehigh.edu; User ID: anonymous; Password: your e-mail address; Directory: /pub/himnet).

Virtually all of those who responded to the survey (92%) knew about HimNet; 66% subscribed to it. As for the 34% who did not subscribe to HimNet, the lack of internet connection was cited as the main reason by them (63%). This was especially so in the Himalayan coun-

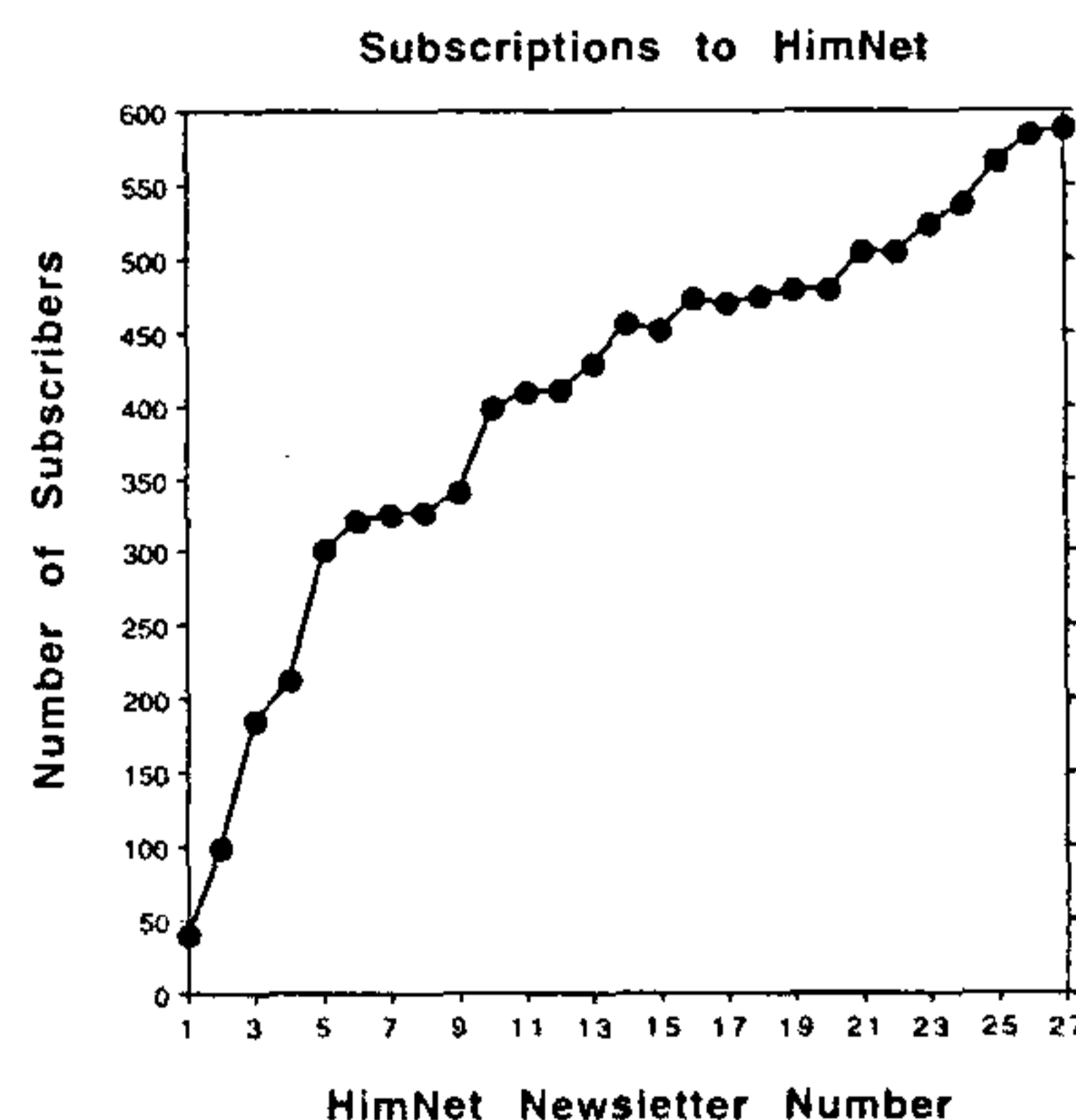


Figure 1. Subscriptions to the Himalayan Network (HimNet).

tries, where internet connections are not available, or they are too expensive (charged per page) or official permission is required to have an access to e-mail. Other reasons for not subscribing to HimNet included phobias to mailing lists, the fact that the postings took up too much disk space or simply not having time to read it.

The most popular features on HimNet were the Latest Himalayan Papers (91%), Latest Himalayan books (85%) and Conference Announcements (82%). It seems that subscribers use HimNet mainly as source of information, rather than as a medium for discussion. This was also clear from the fact that nearly two thirds of those who subscribed (62%) had never made a contribution to HimNet. Nevertheless, 96% of the subscribers thought that HimNet is a valuable research tool; 61% rated it as excellent and 34% as good.

Himalayan Notes

Himalayan Notes is an international news bulletin on the earth and environmental sciences of the Himalaya-Tibetan region. Founded in early 1993 by Rasoul B. Sorkhabi, it is published twice a year in March and September. *Himalayan Notes* attempts to foster up-to-date information on south-central Asia's geosciences, provide a platform for discussions and exchange of ideas and act as an informational bridge between Himalayan and foreign scientists. It also aims to draw people's attention to the unique geology, environmental problems and global significance of the Himalaya and Tibet. Geoscientists, and others working or interested in the Himalayan-Tibetan region, have subscribed to *Himalayan Notes*. Moreover, some institutions and libraries in Europe, America and the Himalayan countries subscribe to this newsletter. It is also exchanged with some Himalayan periodicals on a regular basis. Regular sections in each issue of *Himalayan Notes* include: In brief (meetings and other short news items), In press (coverage of Himalayan geology in the press), Research line (latest papers, maps, theses, and books), Institutions, Book reviews, Conference reports, Travel accounts and Profiles of Himalayan researchers. At present, *Himalayan Notes* is coordinated by a group of regional editors (in Europe, India, Pakistan, and

Nepal) and a managing editor in the USA.

Nearly 78% of the people surveyed were aware of *Himalayan Notes*, although only 26% subscribed to it. This is mainly because the sending of a small subscription fee for non-USA subscribers was difficult (the overseas bank charges would cost more than the subscription fee!). This problem could be resolved by accepting payment with credit cards. The most popular features of *Himalayan Notes* were the Research Line (read by 98% of subscribers), Conference reports (89%), Book reviews (89%), In brief (86%) and In press (82%). Only half of those subscribed read the travel accounts (52%) and articles about the institutions (48%). Therefore, the subscribers used *Himalayan Notes* mainly as a source of research information, rather than a magazine with feature articles. Similar to HimNet, 57% of the subscribers had never made a contribution to *Himalayan Notes*. Nevertheless, 93% of them thought that it was a valuable information tool and 75% were content with it being published twice a year (18% suggested that the frequency of publication should be increased to four times a year). Although *Himalayan Notes* is predominantly seen as a source of research information, a clear 95% agreed that social issues and cultural aspects of the Himalayan region may be addressed in *Himalayan Notes* from a scientific standpoint and with regards to the natural environment. Most subscribers seem to be satisfied with *Himalayan Notes*, rating it good (68%) or excellent (27%).

The Himalaya-Karakoram-Tibet workshops

Initiated by Michael P. Searle in 1985, the first Himalaya-Karakoram-Tibet (H-K-T) workshop was held in Leicester, Great Britain. Subsequent H-K-T workshops were held in Nancy, France (1986); London, Great Britain (1987); Lausanne, Switzerland (1988); Milan, Italy (1990); Grenoble, France (1991); Oxford, Great Britain (1992); Vienna, Austria (1993); Kathmandu, Nepal (1994); Ascona, Switzerland (1995); and Flagstaff, USA (1996). Proceedings volumes resulting from the H-K-T workshops form an excellent source of up-to-date geological information. These workshops continue to be one of the main forums for pres-

entations on all aspects of Himalaya-Karakoram-Tibet geology.

Virtually everyone who responded to the survey (98%) knew about the H-K-T workshops and 57% had attended at least one of them. The majority of people (89%) who had attended an H-K-T workshop had made a presentation (either oral or poster), indicating that the workshops are clearly seen as a 'participation' event rather than a 'spectator' event. The workshops are also used as an opportunity to meet colleagues (91%), listen to lectures (94%) and discuss Himalayan issues (91%). Although only 56% were interested in the publication of proceedings volumes resulting from the workshops, over 72% stated that they had referred to at least one of the papers published in the past H-K-T proceedings volumes. Nearly half (43%) of those who had attended the workshops considered them too expensive. Nevertheless, 82% considered that the H-K-T workshops mark an important event in their research calendar.

Perhaps one of the most surprising results was that nearly two thirds (65%) suggested that the workshops be held once every 2 years rather than every year (supported by 32%). There were even a few suggestions for holding the workshop every 4 years! The main reason for reducing the frequency of the workshops was that 'because they are too frequent, there is a tendency for delegates to repeat the previous year's talk'. A suggestion was also given that 'because every country is expensive for someone from somewhere, the workshop should (as has been in the last 3 years) be rotated every year to different continents so that all would have a chance to attend. This is only fair'. To date, nine of the eleven H-K-T meetings have been held in Europe. Overall, 57% thought the workshops have been 'good' and 43% rated them as 'excellent'.

International Society of Himalayan Geoscientists

Recently, Rasoul Sorkhabi has brought forward the suggestion that there is a need for the creation of an International Society of Himalayan Geoscientists because, as history shows, scientific disciplines are better developed when their respective communities have become organized, with efficient ways of exchanging information, regular publications and

meetings. 72% of those who responded to the survey felt that it was necessary to establish an International Society for Himalayan Geoscientists. Such a society should mainly be involved in organizing the Himalaya-Karakoram-Tibet workshops (93%), promoting the importance of research in the Himalayan regions (88%) and representing the scientific community (76%). Its other goals may include publishing a newsletter (75%), publishing a research journal (68%) and running an electronic network system (82%). Although not seen necessarily as a 'funding agent', 76% (especially those from the Himalayan countries) suggested that such a Society should try to arrange funds from international or Western world funding agencies to enable students and researchers from the Himalayan countries to attend international meetings. Half (53%) of those who supported the idea of founding an International Society for Himalayan Geoscientists indicated that they were willing to get involved in its establishment.

However, there were also some arguments against the formation of the Society. For example: 'Such organizations divert energy away from research'; 'Official organizations actually hinder cooperation, especially between young and old scientists'; 'No need for another society. A formal organization would not improve our situation unless a lot of effort and time is devoted to it.' Most of those who were against the formation of a Society were the more established and experienced Himalayan geologists from Europe or the USA, while virtually all of the researchers from the Himalayan countries supported the idea.

Summary and concluding remarks

(1) Overall, the Himalayan research community appreciate the importance of networks and information resources available to them; however, only a minority of them actively contributed to the community services.

(2) Both HimNet and *Himalayan Notes* are relatively newcomers to the scene of Himalayan research. HimNet is free of charge, while *Himalayan Notes* requires subscription fees to cover the cost of printing and postage. This, and the fact that HimNet is a faster method of communication are the main reasons for the large disparity between the numbers of their subscribers. Nevertheless, both of these media enjoy large support. The subscribers use them largely to obtain information rather than for discussion. Since both HimNet and *Himalayan Notes* are produced by volunteer efforts of several individuals, their future activity cannot be ensured unless they are run by some commercial body or rotated voluntarily among active Himalayan researchers. The establishment of an International Society for Himalayan Geoscientists would provide suitable channels for such volunteer efforts.

(3) The Himalaya-Karakoram-Tibet workshops are seen as the main gathering opportunity for most Himalayan researchers. Nevertheless, the majority of the surveyed people thought that these annual workshops are too frequent. Although the idea of holding the H-K-T workshops every two years needs to be closely examined, it should be noted that over the past decade, these annual meetings have become increasingly popular and have produced a large amount of geological publications on the Himalayan region (few tectonic regions and geological workshops have been so prolific).

(4) Most researchers support the idea for the creation of an International Society of Himalayan Geoscientists. Nevertheless, to succeed it would require a great deal of time and energy. As history shows (for example, the Geological Society of London was founded in 1807 by George B. Greenough; the Geological Survey of Great Britain during the 1830s mainly through the efforts of Henry De la Beche; the Royal Geographical Society in 1830 under the leadership of Sir Roderick Murchison and the US Geological Survey in

1879 by Clarence King and John Wesley Powell) most of the scientific and professional societies were founded through the cooperation of a few pioneer, like-minded individuals, not necessarily the consensus of a whole community. Indeed, the majority support of the Himalayan research community for founding a Society is a very positive sign of its success. Through determination and devotion of founders during the early years of a Society and providing useful services, scientific societies have filled a niche among their communities and succeeded. There is no reason to believe that the establishment of the suggested International Society of Himalayan Geoscientists should be any different from past historical experiences. Opportunities for such ventures are open to all Himalayan researchers in all countries. There are already several networks and resources, such as HimNet, *Himalayan Notes* and the H-K-T workshops, as well as other specialized periodicals such as the *Journal of Himalayan Geology* (published semi-annually by the Wadia Institute of Himalayan Geology, India) and the *Himalayan Research Bulletin* (two semi-annual periodicals in North America and Europe which focus on social sciences). Although all these resources can form vital elements of any international society, they are currently scattered mini-islands; they can better develop under an umbrella of an international society with high scientific and democratic standards.

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