

Editorial

HPToday and *HPTomorrow*

HPToday was conceived jointly between Malcolm Anderson and myself during my sabbatical at Bristol University in 1999. We discussed then how a section of the journal that could ‘counter the fossil record of papers published in the regular journal section’ could perhaps help to invigorate discussion and debate on topics important to the HP readership. Now, after 5 years I am turning over the editorial reins to Jim Buttle, with this issue marking the commencement of Jim’s tenure as *HPToday* editor. This short Editorial reflects on the past and future of this section of the journal.

SOME REFLECTIONS ON INVITED COMMENTARIES

Shortly after commencement of *HPToday* I paid a visit to Sam Colbeck, then editor of *Water Resources Research* (WRR). He had just commissioned an Invited Commentary to WRR by Rodriguez-Iturbe on ecohydrology in the January 2000 issue. At the time I was a bit dismayed, thinking that WRR might steal the thunder from the *HPToday* Invited Commentaries. Colbeck told me that while he did not intend to have commentaries in each issue of WRR, he had hoped that they could appear from time to time on topics important to the WRR readership. However, extracting a commentary from would-be WRR authors proved very difficult. This, and the fact that Rodriguez-Iturbe set a very high bar with his 2000 submission, meant that none followed from 2000 until the present.

Indeed, early commentaries were difficult to commission in *HPToday*—at least with any regularity. Keith Beven at Lancaster University was a ready source of commentaries and ideas. After he foolishly mentioned over beer one evening that he ‘had perhaps a number of commentaries locked up inside him’, I drew upon his writing generosity many times in the first year or two. More than a few colleagues mentioned to me in that period that perhaps I should rename the section ‘Beven*Today*’! Like Rodriguez-Iturbe, Beven set a high standard for others in *HPToday* to follow.

I am very thankful to commentary authors who have contributed many thought-provoking ideas over the past several years. Some topics, like ecohydrology, have been thoroughly discussed and debated (e.g. Bond **17**: 2087–2089 and many others). Some commentaries, like Jim Kirchner’s double paradox (**17**: 871–874), have been a catalyst for many a proposal, workshop and meeting since their publication, even provoking a counter paper on resolving the double paradox (Bishop *et al.* **18**: 185–189). Similarly, arguments for thresholds for soil water transport (Torres **16**: 2703–2706) and hillslope complexity (Sivapalan **17**: 1037–1041) have been hotly debated in papers subsequent to their publication as Invited Commentaries.

Paradigm shifts in our approaches to modelling in hydrology have been chronicled: from how to go from landscape space to model space (Beven **15**: 323–324), to modelling as collective intelligence (Beven **15**: 2205–2207), to the need for new benchmarks in hydrological modeling (Seibert **15**: 1063–1064), model equifinality (Savenije **15**: 2835–2838), model uncertainty (Hall and Anderson **16**: 1867–1970) and model evaluation (Wagener **17**: 3375–3378). I consider these commentaries (and other model-related commentaries not listed above) to capture much of the state-of-the-art debate on the subject. As models are our *de facto* theory in catchment hydrology, I consider these to be useful benchmarks for the pulse of the field at this stage of our development.

Invited Commentaries in *HPToday* have described several new and existing national and international research initiatives, like CUAHSI in the USA (Moss **16**: 939–940), the IAHS (Hubert **16**: 1097–1099), the IAEA Hydrology Program (Agarwal **16**: 2257–2259), SAHRA (Sorooshian *et al.* **16**: 3293–3295), the Mackenzie GEWEX (Pietroniro and Soulis **17**: 673–676) and the PUB initiative (Sivapalan **17**: 3163–3170). Other commentaries have laid out grand challenges in the field, making a case for where we should be headed in research on: hydrograph separation (Burns **16**: 1515–1519), forest road hydrology (Luce **16**: 2901–2904), how we might better define streamside buffer zones (Buttle **16**: 3093–3096), soil water repellency (Doerr and Moody **18**: 829–832) and variable source-area definition (Ambroise **18**: 1149–1155). Some truly controversial and thought-provoking pieces have been published on global change and the water cycle (Vorosmarty **16**: 135–139) and general circulation model critiques (Franks **16**: 559–564). Perhaps the commentary that I am most proud of is that written by Clark Topp immediately prior to his retirement. Topp is the father of time-domain reflectometry and his piece on the state-of-the-art of measuring soil water content (Topp **17**: 2993–2996) is a valuable reflection on a career dedicated to this topic.

Finally, while Invited Commentaries comprise a very small fraction of material published in the 17 issues per year of the journal (20 starting in 2005), they make up about 20% of the top 10 downloaded papers in the past 3 years that such statistics have been compiled by John Wiley and Sons—usually populating the top five list. I encourage the community to make their views known to Jim Buttle as he considers what commentaries to commission next. Certainly, active engagement by the entire HP readership will be helpful to identify important topics to be covered and top individuals to represent them. Indeed, while the majority of the commentaries are invited by the *HPToday* editor, some are contributed.

SOME REFLECTIONS ON SCIENTIFIC BRIEFINGS

Scientific Briefings have appeared in fewer issues than I had expected. Although I received a steady string of them in the first couple of years, I applied a rather high review bar to these manuscripts and rejected over 50% of the submissions. My concern was that if some of the initially published Scientific Briefings were in any way substandard, this would set a dangerous precedent for future submissions and the overall quality of *HPToday* material. Since then, briefings have appeared sporadically. While their numbers continue to increase (six are now in the revision stage awaiting publication), I would like to alert the community to a little known fact that might increase the interest in this form of submission: **the Scientific Briefing bypasses the queue of papers in the HP ‘in press’ list to be published immediately following final acceptance by the *HPToday* editor!** This, if nothing else, should spur some increased interest in using this format as a way to get out timely results. They are peer reviewed in the same manner as a regular paper and are co-equal in terms of ‘countable’ peer-reviewed publications on one’s CV publication list.

So what is a Scientific Briefing? Definition of this paper has led to some confusion. Indeed, Malcolm Anderson and I debated their name and format, initially seeking something analogous to the journal *Nature*’s ‘Letters to *Nature*’. Indeed, HP had a ‘Letters’ section for many years prior to the creation of *HPToday*, but with little uptake. The term Scientific Briefing was used to distinguish these papers from the traditional technical note. We wanted a form of publication where a regular paper could be condensed for rapid dissemination—where the author would trade off full details for rapid appearance.

Other sections of *HPToday* have been an experiment-in-progress. Letters to the Editor, Book Reviews, Software Reviews and Web Site Reviews and Announcements, Conference Listings and Industry Updates have been included very irregularly. Indeed, Jim Buttle may wish to continue or discontinue some of these and perhaps add other, more pertinent, sections. One that we have talked about is a subsection on ‘Classic Papers in Process Hydrology’, similar to what the journal *Progress in Physical Geography* does with their classic papers. Another item that has been discussed since the start of *HPToday* is the Comment/Reply.

Although these remain within the purview of the main section of the journal, I could imagine these growing considerably in number and perhaps becoming a key component of rapid dialogue within *HPToday*.

CREDITS

I would like to thank, first and foremost, the reviewers that I have called upon over the past years: Drs Alila, Aljosja, Bates, Beven, Burns, Crozier, Dietrich, Dolling, Faustini, Genereux, Grant, Heinz, Hodson, Hooper, Gupta, Jones, Kirchner, Klingeman, Kroll, Lorenz, Kumar, Laffleur, Lancaster, Lange, Lanoil, Lany, Law, Link, Lischeid, Maier, Marks, McGlynn, Moench, Montgomery, Munro, Ormsbee, Parlange, Peters, Philips, Pietroniro, Price, Pyles, Rhoades, Rodhe, Roy, Siegel, Seibert, Selker, Sharp, Sherlock, Schoenholtz, Siegel, Sivapalan, Skaugset, Swanson, Tarboton, Unsworth, Uhlenbrook, Tague, Wagener, Welker, Wolf, Wolock, and Yanai. I express my most sincere appreciation for their efforts and tolerance of the growing-pains associated with launching a new journal section.

I very much appreciate the excellent help from various current and past sub-editors of *HPToday*: Paul Bates, Ted Endreny and Helmut Elsenbeer. I have been blessed with great assistance in the *HPToday* editorial office, initially with Petra Seibert, then Kendall Watkins, Kerstin Stahl and most recently with Marloes Bakker. I thank the main HP editorial office of Malcolm Anderson and Sue Amesbury for their great professionalism and the informal *HPToday* office in my lab—namely the post docs and graduate students—who have served as sounding boards for ideas pertaining to the journal. Finally, thanks to Jo Peirce, Wiley, for her production help over the years. Most of all, I thank the HP readership for their support and hope that this will continue for Jim Buttle as he now carries on the section. I encourage you, the readership, to make your views (good and bad) known and to work collectively to make this section stronger and more relevant to your research activities.

Jeff McDonnell

Oregon State University, Corvallis, OR, USA