Blue Book Notes: The Millennium

1 Introduction

This is the 1000th blue book note! In celebration of this event I have written a meta-note: a retrospective of blue book notes.

2 History

The first blue book note is dated 20th November 1976. So they are just past their 18th birthday — coming of age! how appropriate! However, it is a bit more muddy than that. Notes 226 – 232 predate the birth of the note series. They were things I wrote earlier and found when I was sorting out my files. The earliest (226) is dated 19th November 1971 — and there are also notes from 1973 and 1975.

The first notes were placed in a blue ring-binder. Soon we had collected so many notes that we had to switch to a large, blue lever-arch file. Now we are on the 12th such lever-arch file. They fill a whole shelf of a large bookcase and some are stuffed behind the others so they all fit in. I believe I have read all but about 6 of them!

We also have files of other colours:

Black: for trip reports. Now up to number 246 and into the 3rd lever-arch file.

Green: for automated proofs. Now up to 103.

Orange: for shared code. This one never really took off. It only has 17 entries.

Blue II: for short curriculum vitae. Most current and ex-members of the group have pages.

Blue book notes are intended for short descriptions of current thinking. There is no quality threshold: half-baked ideas, problems for which you have no solution, position papers — anything will do. The idea is to get your thoughts down on paper so you can share them with other members of the group, record them while they are still fresh, or try to sort out your ideas. It is surprising how often the last one works. The effort of explaining your idea to someone else often clarifies it to the point when the solution suddenly becomes obvious, or a half-baked idea starts to take shape. Thus blue book notes are not just for recording and broadcasting, but also for solving. They also often prove to be the starting point for a more considered publication. Many conference papers have started as a collection of a few blue notes. Many thesis chapters start life as blue notes. Lastly, blue notes have served as one of the glue that hold the mathematical reasoning group together; they constitute a shared experience.

Why blue? Well there is a bit of arrogance here. Wittgenstein was famous for collecting many of his philosophical ideas in two notebooks: the blue and brown books, which were published posthumously. We started blue notes and trip reports at the same time. The trip reports were originally kept in a brown, single-fold file. This rapidly got too small and we switched to a lever-arch file, but unfortunately, we could never get a brown one, so we made do with black.

The famous footnote\(^1\) made its first appearance on 18th July 1988 in note 429. The background to this is that a robotics group working paper had come in for a lot of flak from a critic for being half-baked. Jim Howe issued a decree that working papers should no longer be advertised and distributed and steps were taken throughout the Department to ensure that non-archival publications were not wrongly interpreted as archival. The footnote was our attempt to do this for blue notes. It ensured that people understood this was a working document, not meant to be the last word and, therefore, not for general citation. In practice, despite the footnote, we have distributed blue notes fairly freely to our close colleagues, provided their attention was drawn to the footnote.

The footnote has caused problems. Where a paper by a different author draws on ideas in a blue note, the paper author feels obliged to give due credit for the idea, but is not permitted to cite the note. One compromise has been to cite the note in a footnote as a “personal communication”, quoting the number. Sometimes this causes people to write in for copy, but we can use our discretion in deciding whether to let them have it. The best solution is for the author of a note with a good idea to publish it him/herself in an archival paper.

\(^{\text{1}}\)See footnote above this.
The blue note \texttt{\LaTeX} format seems to have made its first appearance on 19th March 1 in note 356. Besides giving a uniform appearance to blue notes and making it easier for people to write them, the idea was to save paper and, hence, trees\textsuperscript{2}. The format is wider and longer than the standard \texttt{\LaTeX} article style. Later this format found its way into blue-book style file. This makes life even easier for Edinburgh-based DReaMers, but harder for people outside the group who do not have ready access to the style file.

3 Availability

All blue notes are (or should be) advertised on the dreamers email alias. This includes, not just Edinburgh-based DReaMers, but ex-members of the group who want to stay in touch. Ex-members are also frequent contributors. For instance, Toby Walsh and David Basin are still more prolific than many Edinburgh-based members of the group.

Notifications of new blue notes usually announce the electronic location of the \texttt{dvi} file so that people can read them on their screens or print them out. Non-Edinburgh DReaMers can also \texttt{ftp} them. Recently, we have set up a central area for blue notes, namely: /usr/local/lib/notes/archive/blue. The command \texttt{submit blue} will send them there.

4 Some Statistics

It is interesting to look at the statistics for blue notes. Figure 1 is a bar chart showing the productivity of all authors who have written two or more notes. It is no surprise that I come out on top. I have the distinct advantage of having been here the longest. It is more interesting to see who else has been very prolific. I guessed that Toby would come second; since he has been producing notes over a shorter period than me, he probably has the highest rate of productivity. Many of the high scorers are still around, but many of you may not know Leon Sterling or Bernard Silver, ex-RAs who developed \texttt{PRESS}, Dave Plummer, who worked on the Gazing technique, or Martha Palmer, who did the natural language semantics work on \texttt{MECHO}.

Note that some of the most prolific authors are also some of the most successful researchers. It is difficult to know whether this is cause or effect — I think a little of both. On the causal side I think that writing these notes gives a huge stimulus to research, so that prolific blue note writing leads to research success.

It is also interesting to see how productivity has varied over the years. Figure 2 is a graph showing how the number of blue notes produced in each year varied during the 18 year life of the series. There is a lot of noise, but the figures show a growth in productivity. Some of the change is accounted for by the change in the size of the group over the period — we have mostly grown bigger. But writing blue notes has also become more common. Most current group members appreciate their methodological value and use them to good effect. It is interesting to note that most of the most prolific authors are still closely associated with the group.

5 Conclusion

Blue book notes have been one of the most successful and admired features of our research group. I am sure they are a major factor in ensuring that it continues to flourish. Members of the group are strongly encouraged to write blue notes to help set down and debug their ideas and to communicate with others. And when you have written one, why not consider offering a DReam talk to complement it?

I look forward to the next 1000 blue book notes.

\footnotetext[2]{Whether saving paper does save trees was once hotly argued on daydreamers, but as this debate never found its way into a blue note, it is lost to posterity.}
The Y axis lists the names of the people who have written more than one blue note, in reverse order of productivity. The X axis shows the number of blue notes that each has produced. Where a note has multiple authors it is counted multiply, i.e. there are no fractional attributions.

Figure 1: The Number of Notes by Author
The Y axis lists the years since the earliest notes. The X axis shows the number of blue notes produced in each year. The figures are slightly unreliable because some notes are missing, or out of chronological order and some people failed to put a date on their notes.

Figure 2: The Number of Notes by Year