

20 Years of HPCC

Frank Wales

Abstract

This paper summarises the history of the club, and also summarises how the book that Włodek and I edited to celebrate 20 years of HPCC, 'RCL 20', came about.

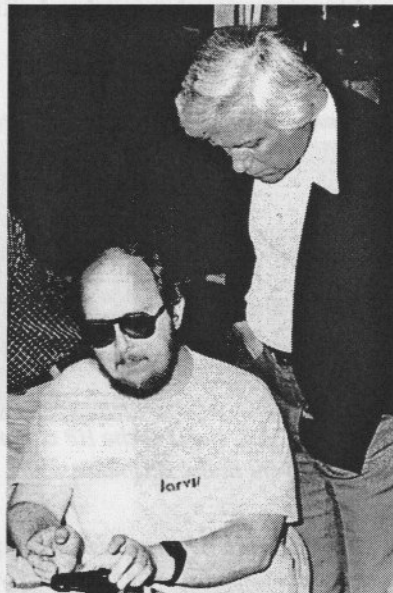
In the tradition of special editions of DVDs, I'm also going beyond the conference presentation and including behind-the-scenes details and an "editor's commentary" about what it took to create RCL 20 from scratch.

Introduction

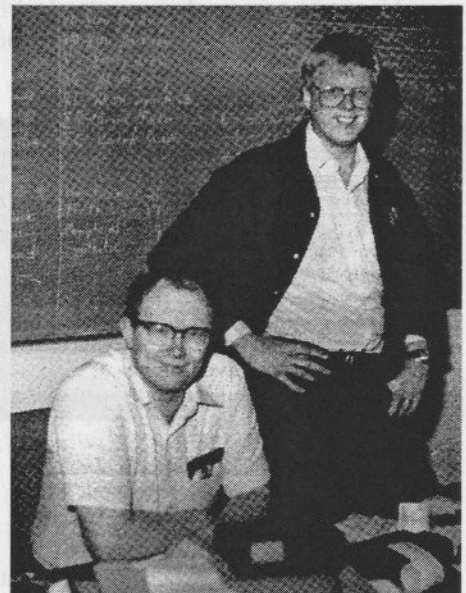
HPCC was formed in 1982 as PPC-UK, the British chapter of the international group PPC. The 20th Anniversary conference seemed a suitable time to look back over the history and development of the club. In thinking about how best to achieve this, it became apparent that it would make sense to set the club in the wider context of the development of personal computing devices. It also became clear that it would take more than a reminiscing issue of *Datafile* to do justice to what we wanted to say, and so early on, Włodek and I decided to write a book; but more about that later.

HPCC: Getting Started

Hewlett-Packard's introduction of the HP-35 in 1972 started a line of small personal computing devices that would continue through the HP-65, 67 and 41, and that ultimately created the need for user groups to support the use of these amazing little gadgets. In 1974, Richard Nelson started publishing *65 Notes* as the newsletter of what became the *HP-65 Users Club*. This provoked an identity crisis in 1977 when the HP-67 and HP-97 arrived, which was resolved by renaming the club to *PPC* (with unspecified derivation), and renaming the publication *PPC Journal*. The introduction of the HP-41C in 1979 helped to push PPC's growth to its peak in the early 1980s.



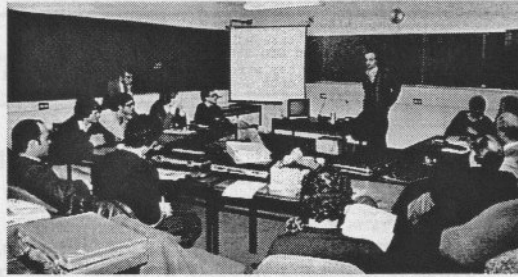
Jim deArras shows how adding memory to his HP-41C yields 831 registers, 1980



Richard Nelson & Keith Jarrett working on the PPC-ROM, 1981



PPC Eastern Conference, Philadelphia, USA, 1982



One of the initial meetings convened by David Burch to get PPC-UK started, 1982

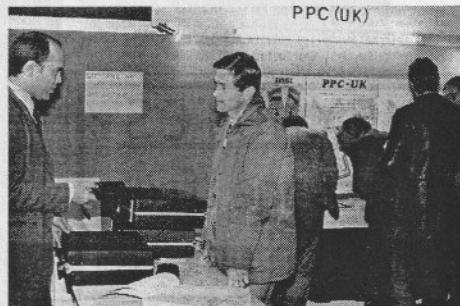
By this time, many of those people who would ultimately become founder members of PPC-UK were members of PPC, but it wasn't until David Burch decided to write his letter to *PPC Journal* in early 1982 that the notion of creating a chapter, or locally organised group, of PPC members in the U.K. turned into a reality. By April 1982, David had had enough responses from around the country to start planning meetings, getting together material for a journal of our own, and even contemplating a conference. The first issue of what was to become *Datafile* was posted in the early summer, starting a publication that has been produced with almost alarmingly dependable regularity ever since.

Conferences & Meetings

The initial meetings of club members happened in places like Graeme Cawsey's house in Lechlade (near Swindon), and Zengrange's offices in Leeds, but these were clearly exceptions to whatever rules would follow. David felt that it was important to start PPC-UK with a bang, and that drove him to organise our first conference in the autumn of 1982, at the grand-sounding *Great Northern* railway hotel at King's Cross station in London. Not only did an unreasonable quantity of excitable geeks turn up, but we also had PPC founder, and honorary member number 1, Richard Nelson fly over from California to wave the official PPC (barcode) wand of success at us.



David Burch and Richard Nelson at the first PPC-UK conference, 1982



The PPC-UK stand at the HP computing event at the Barbican, 1983

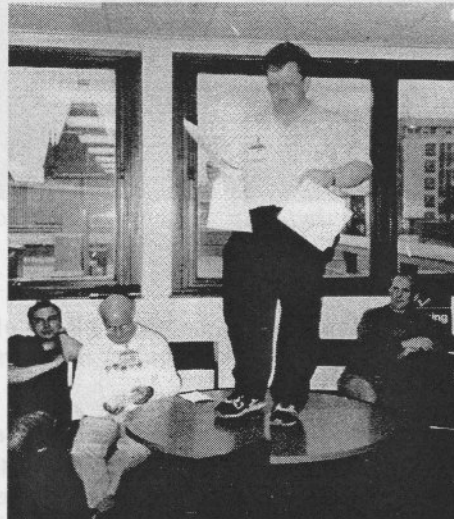
Instead of having a conference in 1983, PPC-UK took a stand at an HP-organised computing exhibition at the Barbican in London; that helped us get the message out to many ordinary users that support and information far beyond what was in the manuals was available. Since 1984, however, the club has concentrated on having at least one 'special' meeting per year.

There were conferences in each of 1984 and 1985 in Chelsea, but since 1987, there has been a regular pattern: a major conference every five years, and mini-conferences in intervening years—hence, in this 20th anniversary year, we have a major conference.

However, one meeting a year isn't enough to keep happy those people who wish to meet up more regularly, so various non-conference meeting schedules have been tried out over the course of the club's history. The most enduring has been the regular meeting at Imperial college in London, on the second Saturday of every month since 1983 (except when this is Easter Saturday, when it's the third Saturday instead). Other regular meetings outside of London have also happened from time to time, as have one-off meetings, such as with Bill Wickes at HP Bristol, or at airports when particular people (or equipment!) worth meeting are passing through.

Datafile

The other thing David felt strongly about was the need to have a regular newsletter of some kind. As well as being a clear benefit of membership, it would also serve as the principal vehicle of participation for those who could never make it to a meeting. Its early issues were the clear sign that the new club was up and running, and, after the initial problem over whether we could use the name *HP Source*, it quickly became called *Datafile*.



*Mark Cracknell makes a stand
over an editorial decision*

David was the editor until the end of volume 4. Since then, the journal has been edited by the late Mark Cracknell, Les Finch, Roger Wiley, and presently Bruce Horrocks. During those periods when no volunteer has stepped up to take on the editorial task, an editorial committee has always condensed from the mist of the club's most active members to make sure that *Datafile* gets produced regularly even *without* an official editor. This mechanism of co-operative production is surely unique to HPCC, and is part of what keeps the club alive.

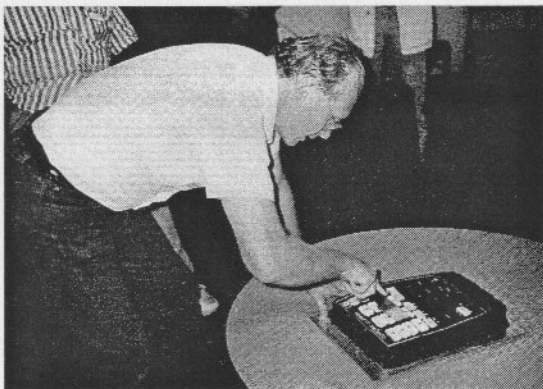
Datafile is now approaching the end of volume 21, having gone through various sizes, colours and flavours, with no apparent end in sight. For those of you without the space or inclination to have over one hundred issues on your shelves, Jake Schwartz has methodically and meticulously scanned the first 20 volumes into PDF format, and publishes them now on a single CD-ROM.

Growing up

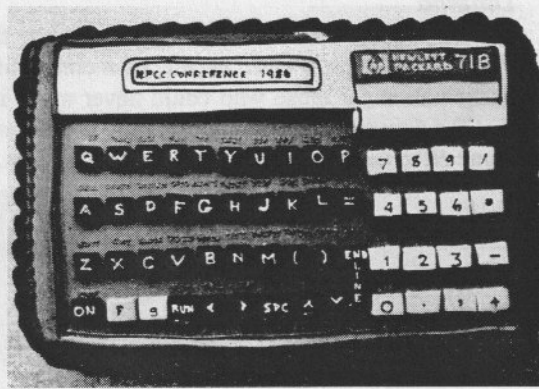
Being a British club, we have also acquired the appropriate elements of formality and bureaucracy over the years, including the club committee, the club bank account, the annual general meeting,

the treasurer's report and the club library. Perhaps most obviously, we also acquired a formal written constitution, which helps determine what the club is and isn't, and which is now printed in the club member pack to ensure that all members know the nature of what they've joined.

After the unexpected demise of PPC a few years after PPC-UK formed as a chapter of PPC, our committee decided it would be best to rename the club in a way that made it clear that the management of PPC had no claim on our club or its assets. Consequently, we became HPCC, which (according to the constitution) means "Handheld and Portable Computer Club" while allowing the alternative unofficial interpretation of "Hewlett-Packard Calculator Club". This has subsequently given the club the flexibility to discuss non-HP machines from time to time, and those members who occasionally get excited by this are pointed politely at the club's constitution.



Richard Nelson cuts a calculator cake baked by
Simon Bradshaw's mother



The 1986 conference HP-71B cake

HPCC still continues today, in no small part due to the heroic efforts of its volunteer committee, but also due to the continued and renewing enthusiasm its members seem to have for little computers, and the things one can do with them.

As long as HP and others continue to make interesting machines, and perhaps even when they no longer do, HPCC members will enjoy playing with them, working with them, and occasionally taking them to bits. They'll keep sharing ideas and solutions, even sometimes arguing about what can and can't be done with them, and about what might have been if only *obviously* good ideas or that *clearly* better way of doing things hadn't fallen by the wayside. And ultimately, they'll continue to use little gadgets as a tenuous pretext for learning and making friends long into the future.

Here's to HPCC's next 20 years!

RCL 20

At the start of 2002, I happened to be talking with Włodek about nothing in particular, when it came up that a particularly useful program of mine¹, originally published in the then-still-unnamed club journal in the summer of 1982, was still being used by at least one club member in 2002. I, in turn, mentioned this to my wife, and she suggested that perhaps we should mark this event in some way.

After some initial discussion, Włodek and I settled on the idea of putting together a collection of reminiscences of the first 20 years of the club in book form, to be published in time for the 20th anniversary conference in September 2002. It would include how HPCC got started, and how it

¹ *Dungeon of Death*, V1N2

developed, and would also let us write a few things in memory of members like Mark Cracknell, Gerry Rice and John French. The conference would also act as an immovable deadline for planning and scheduling, which helps to concentrate the mind when one is in the midst of writing and editing.

By creating a book, rather than just an extended conference presentation or a special issue of *Datafile*, we felt that we could create something that would mark a moment in time in a distinctive way, that would get down on paper what HPCC and HP calculators have been all about for us, and that could perhaps even be appreciated by those outside our world who wonder why on earth we're in it.

We also realised that if we were to have any hope of recouping the cost of actually publishing such a book, we ought to try to attract a readership beyond a subset of past and present HPCC members. This implied we should also be writing about the broader context of the development of personal computing devices, the user groups that have coalesced around them over the last generation, and what it is about these little machines that has sucked us all in, and ultimately changed our lives.

All this led us to wonder how best to organise the contents of such a book, and so in May 2002 we used a combination of dinner at my place, flip charts, whiteboards and *Post-It* notes to create three lists:

- potential topics addressing the areas we'd discussed
- potential authors to write about them, favouring HPCC members where it seemed right to do so
- a timeline of significant HPCC events as the basic structural element of the book

We then rated all the topics that we wanted articles about, and started allocating potential authors to them on an "if we're really lucky" basis.

As an interesting device in setting context, Włodek wanted to start with the science-fiction story that HP commissioned in the late 1970s, about the speculative future HP gadget nicknamed 'Beep'. We also wanted to include personal anecdotes by long-time calculator hackers, founders of calculator clubs, and the HP engineers who worked on the machines we've been using for so long. Finally, if we had time, we wanted to include smaller items, *Reader's Digest*-style, of quotes, facts, and other short space-filling items.

Ultimately, we would get almost everything we originally hoped for into the book, including the 'Beep' story (whose permission came through from HP at the last moment); only the 'filler' items were dropped, due to lack of time.

RCL 20: Making it happen

I took the zillion notes we'd produced in our planning meeting, typed them into a spreadsheet to calculate some initial word-counts, drew up a preliminary schedule, and wrote a letter of solicitation to be sent to potential contributors. Włodek had found a printing company who could print on our schedule to a reasonable budget. Much e-mail and telephoning went back and forth between us, revising and honing the plan and the ancillary information.

Meanwhile, life went on; pages flew from the calendar. The project was subjected to the usual random delays, business and academic emergencies and holidays that just jumped on us out of nowhere. When it seemed like we were about ready to roll, I wrote some restricted-access web pages based on the plan at that point, to act as a central source of information for the contributors as the project would progress.

Finally, in the wee small hours of July 24th, Włodek and I started sending out our solicitations to potential contributors. As the mostly positive and enthusiastic replies came in over the next few days, we knew that we might actually end up with something approaching our hopes when we

started. We also knew we were now *really* committed to making something happen that would live up to the efforts of the people we'd got involved.

August saw arriving articles, various communications with authors, and also a few further waves of solicitations as we thought of other people to get involved and chased up no-shows from the first attempt. We jiggled the plan to fit the material that was coming in, without losing sight of the overall goal. I kept the web site up-to-date with developments, and by early September I was making almost daily updates on progress, including in-progress edits, cover and font mock-ups, and other details.

In order to meet the nine-week start-to-print schedule we'd set ourselves, we were not only editing the book, we were copy-editing it, designing it and producing it as print-ready artwork, to be delivered on CD to the printers on or around September 8th. Consequently, the schedule, as published on the project web site, included this planned item from the beginning:

September 7th—much swearing at copy preparation products

Little did we realise that we would end up over budget on swearing by about 300%, despite a lot of expert assistance on Microsoft Word's foibles from my wife Paola, who knows more than any reasonable person should be required to about this crock of software.

In spite of our computers' best efforts to mangle and destroy our work, we managed to get the first 100 copies done, dusted and delivered on time, with (literally) a few hours to spare before the start of the 20th Anniversary conference in London. In fact, just enough time for me to write my conference presentation on my laptop! (And no, I did *not* use PowerPoint.)

RCL 20: Summary

RCL 20 contains:

- 190 A5 typeset pages, 28 articles by 20 authors and 2 editors
- a diversity of contributors:
 - the founders of PPC, CHiP, PAAHC and HPCC
 - 5 founder members of HPCC
 - 5 HP calculator engineers
- the stories of EduCalc & Zengrange
- the "Thank you, ...Beep!" short story

Although it took long days and sleepless nights, we're glad we did it, and we hope that it provides something of value to read both now and in the future.

I'd also like to take this opportunity to thank all the contributors once again for their excellent work under a tight schedule, my co-editor Włodek for putting up with me during the whole process, and my wife Paola for doing much of the heavy lifting during the project without complaining that she actually had better things to be doing.

RCL 20: bonus collector's edition special feature

It's become a new tradition on the DVD "special editions" of movies that the film-makers get to witter on for ages about how much effort went into their movie, and all the behind-the-scenes stuff that the average person doesn't know about (in some famous cases, the bonus features are better than the film).

So, I'm taking this opportunity to use the conference proceedings to cram in a bunch of extra material about what it takes to create a book from scratch, in these days of desktop publishing, e-mail and digital printing. Perhaps seeing the process in more detail like this will inspire you to write your own book (or, alternatively, scare you off the whole idea).

Feel free to fast-forward over this piece if you like.

RCL 20: Design and production

One of things we wanted to do was create a book that wasn't just interesting to read, but that would also stand out as well-designed, and that would bear physical and stylistic comparison with anything you can find in a bookshop today.

Despite both being computer geeks, my wife Paola and I happen to know something about design, and so we decided to see if we could apply our knowledge to the process of creating a coherent and attractive book design in the time available.

This meant addressing three areas:

- Overall book layout
- Choice of typefaces
- Cover art

It also meant taking on the task of actually formatting and laying out the whole book digitally. As it happens, this was not an additional burden, since our desire to have the book ready by the conference meant that we couldn't afford the time to involve anyone else to do this anyway.

Overall book layout

We arrived at an overall book layout by grabbing a bunch of representative books from our shelves, going through them, and noting particular design feature we liked or disliked. We then discussed general book conventions, and principles of design, including relevant user-interface and information design features, and generally cogitated for a while.

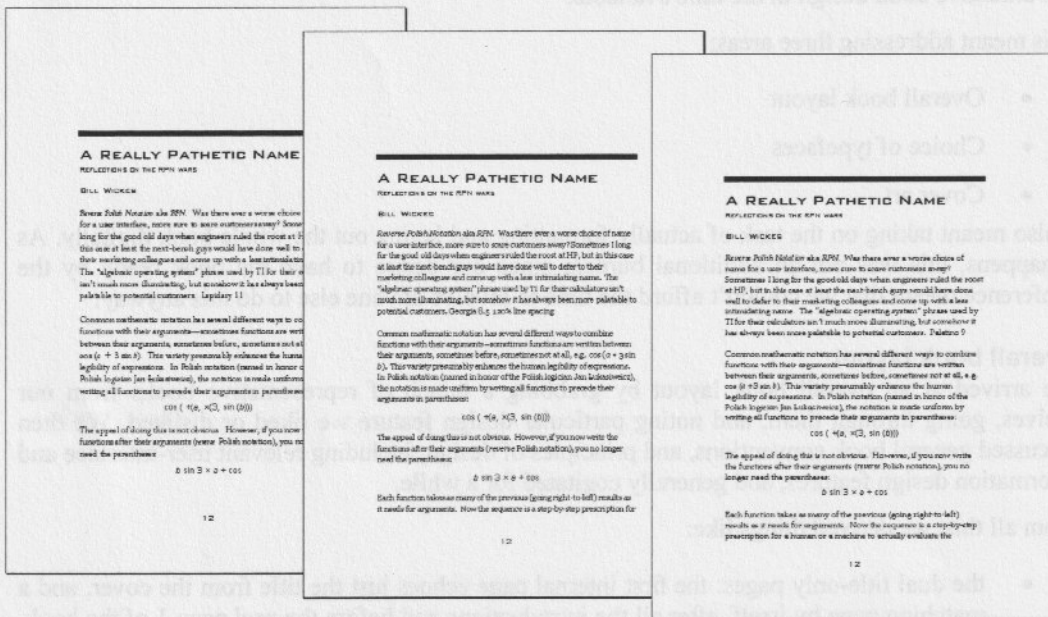
From all this, we derived things like:

- the dual title-only pages: the first internal page echoes just the title from the cover, and a matching page by itself, after all the introductions and before the *real* page 1 of the book, signals the actual start of the book proper
- the section and chapter structure of the book, and how it ought to be represented visually:
 - each section must start on a right-hand page, with a distinctive layout
 - each chapter must start on a right-hand page, with the left-hand facing page reserved for an introductory statement by the editors
- the user-interface feature that blank pages within the body of the book should have page numbers but no headings to clarify that they ought to be blank

- the rules on when page headers should appear, and the way the article title and author name must be placed on the outside edges of the page, both to emphasise them and to aid navigating through the book
- that normal body text should be left-justified, but *not* right-justified, for maximum ease of reading
- that there must be a decent index that includes at least every person, every significant date and every calculator referred to in the main text (a side-effect of making the index easy to use is that every author is listed separately under both their first name and their last name)
- that every contributor's picture should appear in the book, to put faces to the writers (in fact, we weren't able to get good pictures of everyone, despite a lot of hassling and nagging and Googling, but we got more than we expected to)

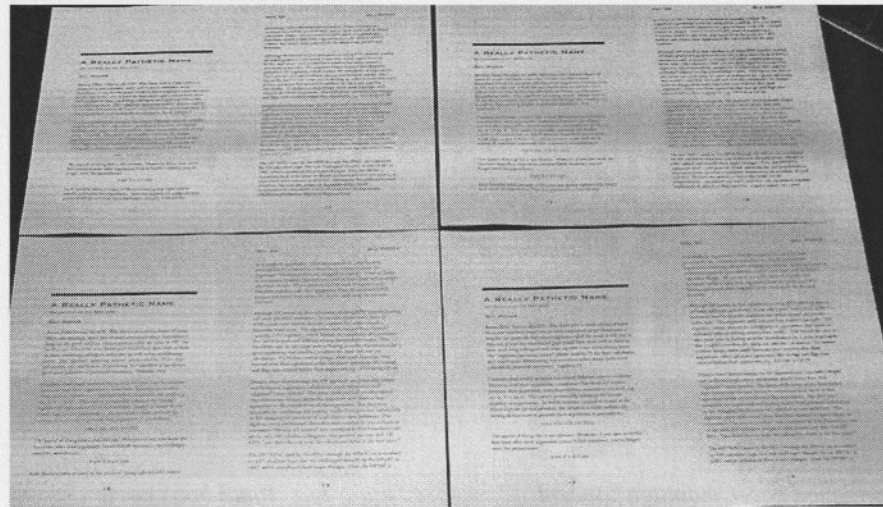
Choosing typefaces

By mid-August, we had candidate layouts, and some actual material in hand to edit; this let us start auditioning typefaces, something that's hard to do with the fake Latin and "quick brown fox" passages we had initially created for layout tests, because you don't *read* those, you just *look* at them. I had already picked *Bank gothic* as a modern and striking title & heading font, and Paola and I had created an initial page layout. We now had to find a complementary typeface for the main text of articles that was elegant and classic. We prepared 31 candidate examples in a variety of typefaces and point sizes based on a draft of Bill Wickes's article²; we then printed them all full-size, and read and rated them for both readability and style.



Comparative text layouts for typeface selection

² Bill was the first person to submit a completed article. Yay! Plus, the first page of his happened to require all three typefaces, which made it an ideal test piece.



Full-sized printouts for reading tests

This process ultimately gave us 10½ point *Venetian* as our main text, with the plain *News gothic* chosen for captions and inline examples. By combining a modern typeface with a classic one, we felt we were reflecting both old and new together, which we felt was consistent with the book's overall theme of looking back over time.

Cover art

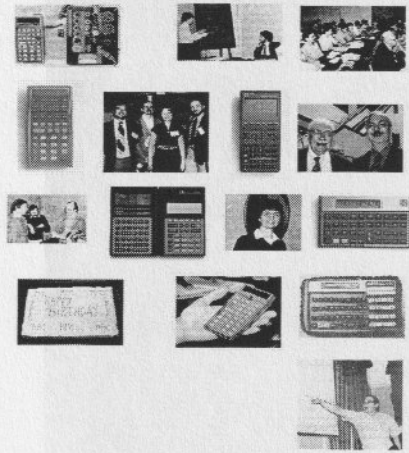
The most obvious “designed” element is the cover. Research shows that the cover is the number one thing that attracts people to a book, or puts them off even picking it up, before they find out what it's about. Consequently, we wanted to have a contemporary, attractive, full-colour cover.

The cover layout that we chose has a striking piece of art on the front, with complementary flat colour panels on the back to support the blurb (the words on the back cover that tell you what the book is about) and the barcode in a readable way. It also has a simple black-and-white spine whose layout matches the front and the back, and that makes the book easy to find when it's edge-on on your bookshelf. The textual design of the inside is represented on the cover, and the whole thing is clear and easy to read.

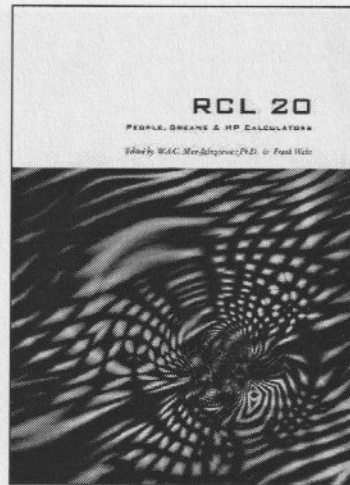
The front cover layout was also meant to be suggestive of calculators and calendars:

- the white area with clear, right-justified rectangular writing at the top above a darker more textured area echoes the placement and appearance of a calculator's digital display over its keyboard
- the square patterned area underneath a stripe of white with just a few bold letters on it suggests the general layout of classic monthly calendar designs

A further idea, to incorporate images of calculators and people in a some kind of pattern on the cover, got scrubbed after a few attempts because it never came out looking right. We set ourselves pretty strict deadlines to either do something with this idea, or forget it, so that the project didn't lose momentum over dealing with details.



Abandoned cover montage concept



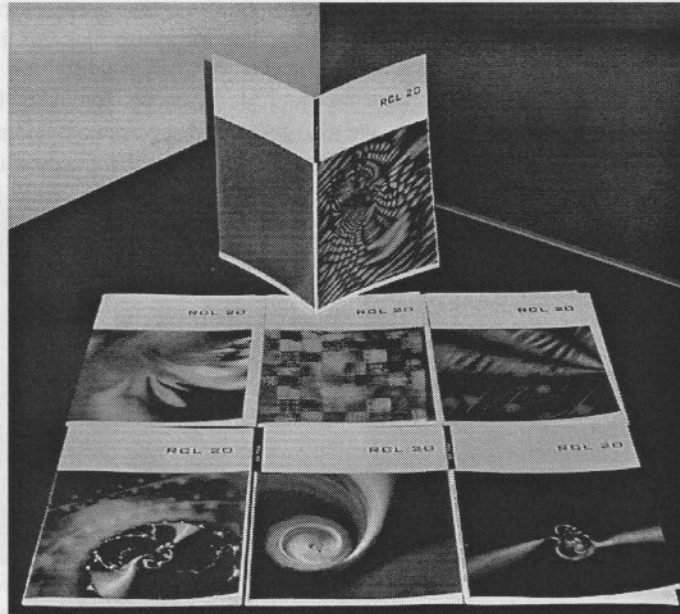
Final book cover

Paola creates abstract computer art for fun, and we decided to incorporate one of her works as the front cover art. To choose which one, she created 70 digital cover mock-ups in the computer, and I then rated every single one of them on attractiveness and appropriateness as a book cover. Using these ratings, we then created, and re-rated, a succession of shorter lists of covers until we were down to seven.



Digital cover mock-ups for initial rating and shortlisting

To make the final choice, we then created full-colour, full-sized physical mock-ups of the seven candidates to hold in our hands and compare under artificial light and daylight, before settling on the final cover art, and confirming the layout.



Full-colour, full-sized physical cover mock-ups for final artwork selection

Photos

We scanned, cleaned and digitally adjusted over a hundred photographs from back issues of *Datafile*, *PPC Journal* and other sources to create a shortlist from which to pick the images that are in the book, including the author pictures at the back. We also obtained clearance to reprint for all the images that we actually used.

Most authors contributed both a current image and a biography, but in a few cases we had to write the biography ourselves from what we know of the person, and had to find reasonable images from other sources; where we really couldn't find a good enough picture, we chose to go with none.

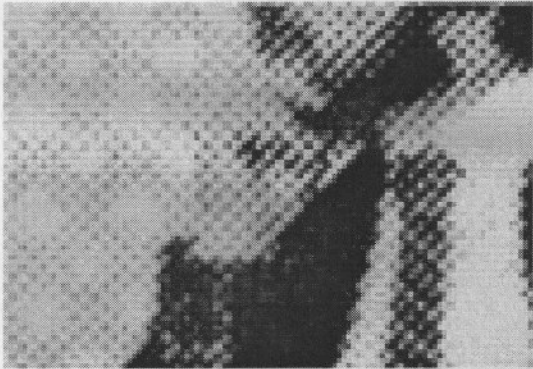


Digital contact sheets for picture selection

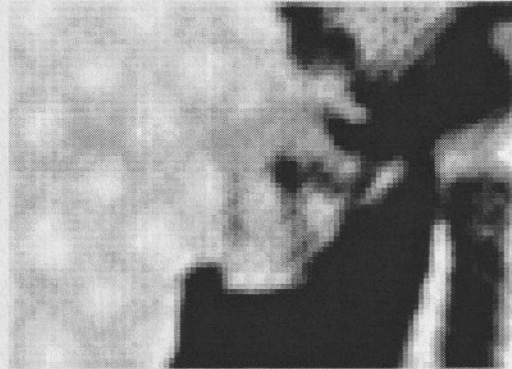


Close-up of digital contact sheets for picture selection showing annotations and comments

Because many of the pictures were scanned from issues of *Datafile* or *PPC Journal*, it meant that they were fuzzy, and suffered from half-toning artifacts. Half-tone is the printing process that uses tiny variable-sized black dots to print photographs: below on the left is a close-up of the scanned image on the next page showing those tiny dots. Having fine structure like this in an image is a nightmare for digital editing, and also for re-printing the image. Consequently, we took the time to reduce the dot structure of each scanned image as much as possible. Because the images were being printed small, perhaps an inch or so high, we also increased the contrast to improve clarity in the final print version. On the right is the same area from the dot-reduced, cleaned-up image.



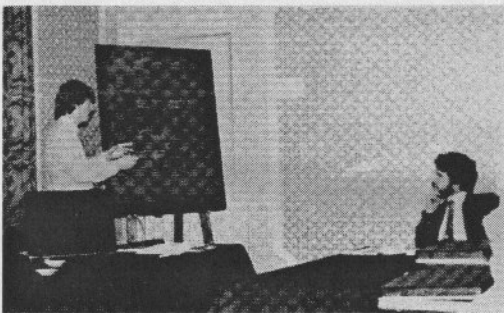
Detail of initial scanned image showing half-tone dots and low contrast



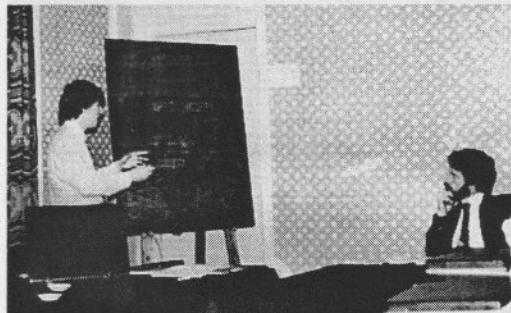
Detail of final image, showing dot reduction and contrast enhancement

To make images acceptable for re-printing, we took the time to correct blemishes, marks and other defects in each scanned image. We also took the time, where it seemed appropriate, to crop or reframe images to improve their appearance, taking into account that a lot of subtle detail would not be clear at the final printed size.

As an example, here are the “before” and “after” images for a photo showing me, in desperate need of a good hair cut, expounding to David Mulhall on synthetic programming at the 1982 London conference. The “before and after” half-tone images on the previous page are taken from these two images, showing close-up comparisons.



Initial image as scanned from PPC Journal



Cleaned-up, reframed image used in RCL 20

Although this image also appeared in the *PPC-UK* journal, its green colour and print quality meant that the *PPC Journal* version of the picture gave a better starting point. Nevertheless, the initial image was too flat, had many marks and scratches, and was too wide to look right on the page of the book.

So:

- we softened the half-tone texture of the image
- we sharpened the image (look at the detail on the blackboard)
- we increased the contrast (shirts are mid grey, shadows dark grey in the original, but white and black in the final image)
- we cropped the image to discard a portion of its edge, effectively zooming in and reducing the amount of distracting, irrelevant detail
- we cut a portion of the centre of the image out while preserving David's eyeline, apparently pushing us closer together to make a better composition

The end result is a series of subtle changes that make the image look and print better in the final work without materially altering any aspect of the "truth" of what the image represents. Pretty much every image in *RCL 20* went through similar processing, along with many that didn't make the final edit, but that were cleaned up anyway in case we selected them. We even did this to the pictures of the editors, which were shot to professional standards on high-contrast black-and-white film at the beginning of September 2002—we figured the least we could do was get decent pictures of ourselves in the book!

Putting it all together

The authors submitted their work in a mixture of plain text and word-processed formats. I printed out each article as it arrived, read through it with an editor's eye, and then replied to the author with any suggestions I thought were necessary; Włodek did similar reviewing and comments, and helped keep up the momentum while I was away during early August.

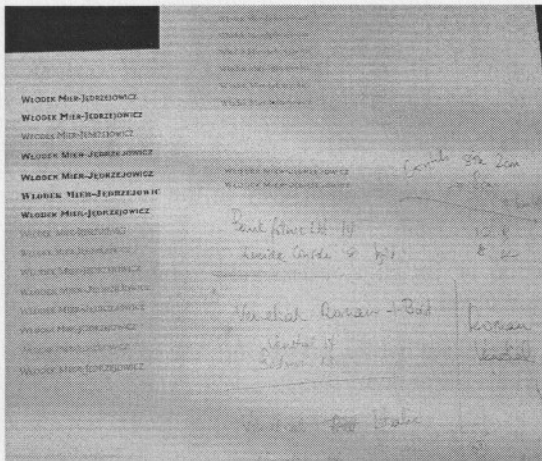
Once we had the final draft from each author, Paola took it and incorporated it into the master Word document that she had prepared based on our layout and design. I then copy-edited the material in place, making minor adjustments to punctuation, phrasing and so forth so that all the material had consistent surface and presentational characteristics, while keeping each author's distinctive voice intact.

Part of the editorial challenge on *RCL 20* was to combine material written by British, American and other nationalities, where the conventions of spelling, punctuation, grammar and idioms are different. We chose a policy of copy-editing each contributor's piece according to the current conventions of their country, which means that spelling and grammar are not consistent *between* articles, but will be *within* articles. This policy only caused a problem for those authors from one country who have lived in another for so long that they themselves are no longer consistent; I asked them to choose a country for editing purposes!

Final preparations

During final copy-editing in the first week of September, we also started to prepare a concordance of the text as the basis for the index.

We also started to address close-up details of the text layout (within the limits of Word and time):



Datafile Datafile

Ligated (top) and standard type-setting

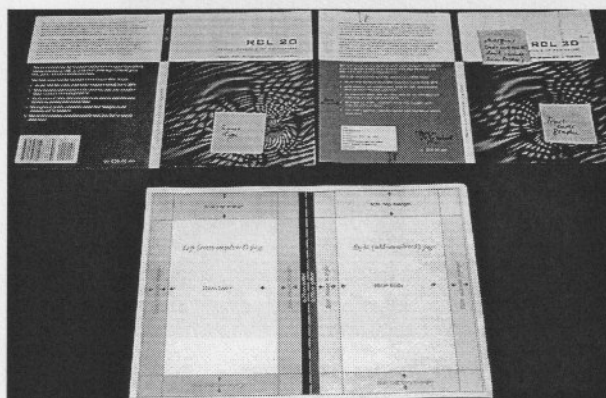
Tests to get Włodek's name looking right in print

normal	Włodek Mier-Jędrzejowicz & Frank Wales
faux italic	<i>Włodek Mier-Jędrzejowicz & Frank Wales</i>
true italic	<i>Włodek Mier-Jędrzejowicz & Frank Wales</i>
normal	Ten jumping wizards lock hastily before quovax
faux italic	<i>Ten jumping wizards lock hastily before quovax</i>
true italic	<i>Ten jumping wizards lock hastily before quovax</i>
faux bold	Ten jumping wizards lock hastily before quovax
true bold	Ten jumping wizards lock hastily before quovax
faux bold italic	<i>Ten jumping wizards lock hastily before quovax</i>
true bold italic	<i>Ten jumping wizards lock hastily before quovax</i>

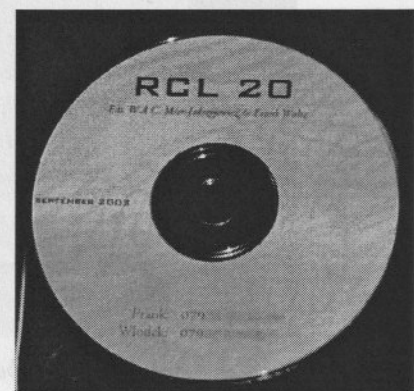
Comparison of faux italic and true italic fonts for Venetian

- we ligatured all the *fi* and *fl* combinations
- we replaced Word's *faux* italic fonts with true italics for our chosen typefaces
- we standardised the punctuation and hyphenation throughout the text
- we converted all appropriate sequences of capital letters to small caps
- we finalised the page numbers for the index and contents
- we finalised the title verso text (all the small print facing the contents page)

- as the book's publisher, Włodek allocated his next available ISBN to the book
- we got a corresponding ISBN barcode for the back cover generated (amazon.com won't handle a book without a barcode on the back)
- we sent off the registration form for the "Cataloguing in Print" database used to notify British libraries of upcoming books
- we wrote the blurb, and chose a sub-title that was in plain English to explain the title to those who don't even know how to say it, never mind understand it
- we finalised all the introductory paragraphs, section names and related structural items in the book
- we created a concordance of all the significant terms in the book, and used it to write the index, making sure that each reference to a specific model (such as the HP-41C) also counted as a hit on the more general name (HP-41)
- we fixed as many kerning problems as possible; this is where Word, for no very good reason, positions neighbouring letters with either too much or too little space between them—to fix these problems, we have to manually adjust the positions of the individual letters in the surrounding text until it all looks right; it doesn't help that how it appears on screen in these cases is never how it prints—this single item of fine adjustment took up more time than any other, and we still didn't get them all in time for the first print run
- we generated multiple printouts of Włodek's name in all the typefaces used in the book (including on the cover), and scoured hundreds of fonts looking for the right accented characters to compensate for the deficiencies in how our selected fonts represented the 'ł' in his first name and the 'ę' in his surname, so that his name was always spelled correctly in its Polish form
- we configured our computers with printer drivers that matched the book printer's equipment, and generated first-pass PDF files for the book and the cover at the appropriate 400 dot-per-inch resolution
- we then printed the book PDF files at double size, and proof-read the whole book again, and generated a list of final changes and corrections before creating the final PDF files for the book printer (which total 35MB)



*Cover and content layout information
for the printer's guidance*



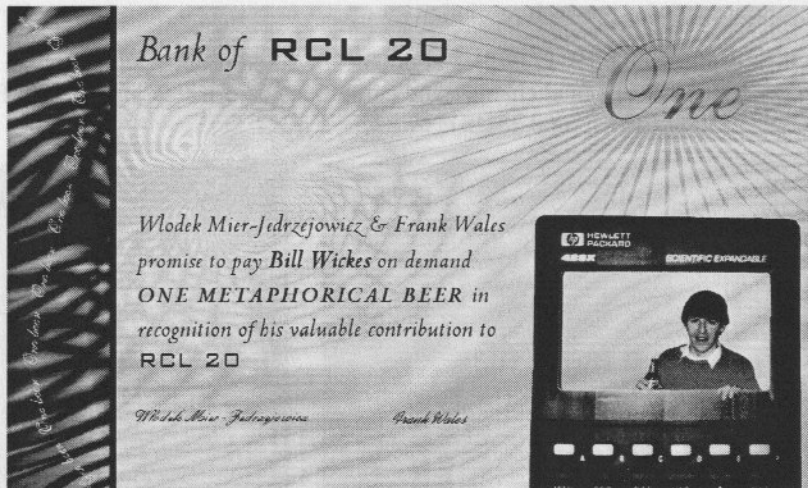
*One of the CD-ROMs we burned for
the printer*

- we also created instructional mock-ups and layout diagrams for the printer to show them how the content and cover should be arranged for printing, burned all the data to two identical CD-ROMs, and printed a double-sided final copy of the text for their reference
- I then drove from my home in south-west London to Eastbourne on the south coast, met with the supervisor at the print company, and handed over the data, paperwork and instructions—it was now September 11th, and we were ten days from the conference
- one week later, I drove back, accompanied by Włodek, Paola and Richard Nelson, and we saw the first copy being printed; we checked it, and gave the printer some final adjustments to make for the production run
- we then took Richard to the sea side and let him enjoy the delights of an English fish-and-chip restaurant, and a walk on a pebbly beach



Richard Nelson discovers that, on a clear beach, you can seek forever

- Paola created ‘metaphorical beer’ tokens to give to contributors along with their free copy of the book, as a souvenir of their contribution



Metaphorical beer tokens for contributors, since our initial solicitation promised them each a copy of the book and a beer—and yes, I really am standing inside a seven-foot tall HP-48SX while having a drink

- Włodek and Richard returned to the printers on Friday 20th, picked up the 100 printed copies and brought them back to London in time for the conference.

Even with all that, we’re still weren’t actually done. But at least we could relax a bit.

Since the conference:

- we have distributed free copies of the book to all the contributors who weren't there in person
- we've registered the book with Whitaker's, official custodians of the U.K. "Books in Print" database
- a copy of the book has been sent to the British Library, to fulfil our legal duty under British law
- five other copies might be requested by major libraries in Britain and Ireland, and so we have to set copies aside for them too

We're now in the process of finding potential outlets for the book, so with luck and a following wind it'll be available through book shops (and perhaps the odd web site) before too much longer.

Vital statistics

I'll round off with some facts and figures about the book's preparation:

- the text and cover were both edited using Microsoft Word 97 on Windows 95 and Windows ME (we tried using Word 2000 on Windows 2000 Professional, but it irrevocably destroyed the data files not once, but *twice* during start-up—if we were to do it again, we'd probably use T_EX instead)
- images, including photos, slides and negatives, and those taken from *Datafile* and *PPC Journal*, were scanned on an Epson 1200 flat-bed scanner with photo hood
- all images, including those sent to us electronically by contributors, were digitally cleaned and enhanced using Paint Shop Pro 7, Kai's Photo Soap and the Gimp
- all data is held on Linux-based network data servers running Samba with RAID and a two-tier backup system for user data
- to preserve work after the early losses, I wrote a system that generated rolling backups of all the working areas every fifteen minutes
- we ended up with just under 2 gigabytes of data, in the form of documents, images, Postscript and PDF files and other material
- we generated 21 versions of the master document, each being separately archived after a significant piece of progress had been made
- the final printer-ready output was created with Adobe Acrobat Exchange version 3
- all output files were proofed digitally before printing using Adobe Acrobat Reader on Linux, to make sure that fonts and images were properly represented without any Windows dependencies
- draft output was printed on an HP Laserjet 2100M and a DeskJet 890C
- final output was created on Xerox DocuTech and DocuColor digital offset presses by Antony Rowe Limited
- we got through approximately 1,400 pages, and several print cartridges, during the proof-reading and correction process
- we exchanged 438 e-mail messages with contributors and each other, totalling 12MB
- we spent an unbelievable amount of time on the phone, driving around, and meeting

people to discuss things and make progress

- and, yes, we covered all the costs of all the above out of our own pockets

Although we'd do some things differently if we were starting again, overall I believe we achieved more than we hoped we could, in less time than we planned to when we started. In the process, we learned a lot about state-of-the-art book publishing, and I hope I've conveyed some of this information to you.

If you manage to get hold of a copy of *RCL 20*, I hope I've helped you to see something of the effort that went in to making it, and making it special.

I hope I've also helped you to judge whether we attained our goals of creating a fitting memento of HPCC's first twenty years, of getting down on paper how these little gadgets have changed our lives, and of acknowledging those many people who made HP calculators, and HPCC, happen.

Thanks for listening.



On the beach at Eastbourne, September 18th 2002. About 3:45pm.

As Richard Nelson tries attracting babes with his HP calculator, Frank points out an amusing typographic error on a nearby sign, and Wlodek's self-defence hair takes aim at a circling sea gull. (Picture by Paola Kathuria, behind the scenes as usual)